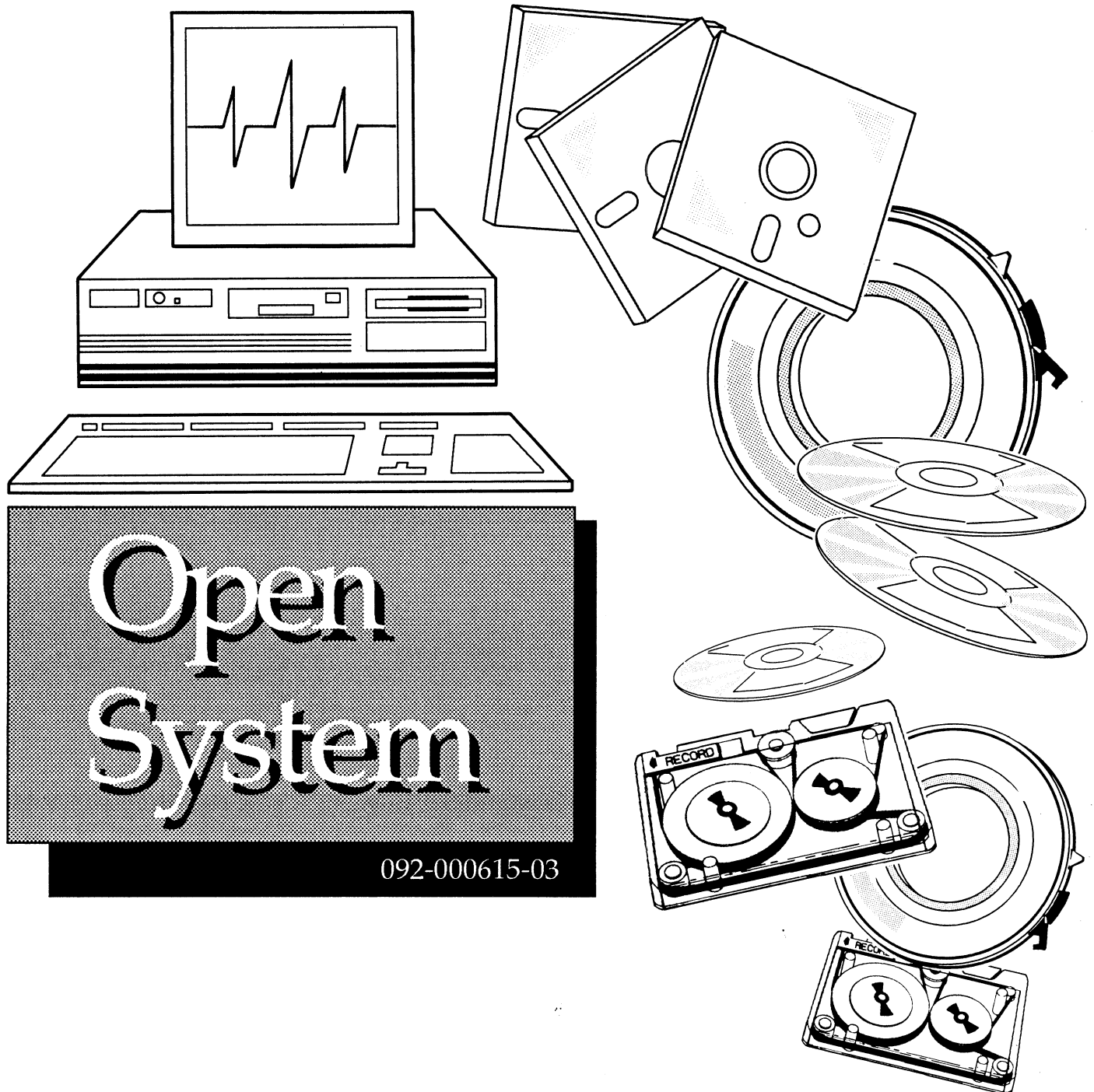


Products Newsletter

Software Technical Services



Open
System

092-000615-03

OPEN SYSTEM PRODUCTS NEWSLETTER

VOLUME IV - 1992

092-000615-03

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INTRODUCING THE SOFTWARE NEWSLETTER

A BRIEF SYNOPSIS

The Software Newsletter is distributed through the Software Subscription Service (SSS) to customers specifically subscribed to operating system software and is intended to serve subscribers licensed to use the applicable Data General software in Categories A and B.

The product activity section of the Newsletter contains new and revised software descriptions, programming notes, and software problem status. A brief description of each subsection follows:

1. Product Description

Briefly describes the product.

2. Software Status Report

Summarizes the product activity including: current revision and update, previous revision and SSS support window, documentation descriptions, and part numbers.

3. Programming Notes/Documentation

Contains programming tips and suggestions, frequently made mistakes, potential programming areas that may be encountered, or features documentation not available in other documents.

4. STR Answer Report

Summarizes Software Trouble Report (STR) problems and answers. Workarounds, if known, are provided. Information concerning the availability of a fix with a new revision or update is noted. Fixes will not be documented in the Newsletter and must be obtained by purchasing the current revision of the software. SSS/Support Plus subscribers automatically receive the new revision or update; non-subscribers must order a new revision through their local Data General Sales Offices.

The material in this Newsletter is for information purposes only and is subject to change without notice. It is circulated by the Software Subscription Service and all information contained in the Newsletter is the property of Data General Corporation (DGC) which assumes no responsibility for any errors which may appear.

Software releases, updates, and documentation are provided only under license. The standard Program License Agreement outlines the standard terms and conditions for purchase of a single copy or a subscription service for the above.

Questions on the material contained in this Newsletter should be directed to your VAR if you are the customer of a DGC VAR. All others, please direct your questions to the Systems Engineering group in your local DGC office.

SSS INFORMATION

The support window for the previous revision is 180 days. This window provides:

- increased flexibility to plan updating to new revs
- extended software support for the previous revision.

While it makes sense to update to the latest revision as soon as possible, we realize this cannot always be done quickly, particularly if remote systems are being used. The 180 day support window makes it easier for you to schedule an update at the most appropriate time for your system.

QUESTIONS ON AN SSS SHIPMENT ?

Please examine the contents of your SSS shipment as soon as possible. If there are any discrepancies found, please contact Data General Corporation in the following manner:

In the United States:

Please contact:

Data General Corporation Customer Services
at FAX (508) 366-1744 or (508) 870-1600 or
1-800-537-6084.

Outside the United States:

Please contact your Data General Sales Office. If, for any reason, you must reach us directly, we can be contacted as mentioned above.

When reporting a discrepancy, please have the following information available:

1. Your name, company name, phone number.
2. Name of company from which equipment was purchased.
3. Data General Software Subscription Service account number.
4. Summary of problem (specify missing, incorrect, defective materi etc.)

Data General wants to keep you a satisfied customer and will expeditiously service your inquiry. Please retain all Data General packing material until verification of order is complete.

INTRODUCING THE SOFTWARE NEWSLETTER



HOT OFF THE PRESS!**MARKETING ANNOUNCEMENTS/PRESS RELEASES****Data General Reports Net Income Of \$18.4 Million In Fourth Quarter;
Net Income Of \$85.6 Million For Fiscal Year**

Data General reported net income of \$18.4 million, or \$.50 per share on a fully diluted basis, for the fourth quarter of its fiscal 1991 year, which ended September 28. During its fourth quarter last year, the company reported a net loss of \$89.3 million, or \$2.93 per share, including a restructuring charge of \$71.7 million.

For fiscal 1991, Data General reported net income of \$85.6 million, or fully diluted earnings per share of \$2.45. The net income includes a one-time gain of \$13 million from the previously-announced sale of its Japanese subsidiary, Nippon*Data General in the third quarter. In fiscal 1990, the company reported a net loss of \$139.8 million, or \$4.65 per share, including the \$71.7 million restructuring charge.

Operating income for the fourth quarter of 1991 was \$19.6 million, compared with an operating loss of \$88.2 million for the fourth quarter last year, including the \$71.7 million restructuring charge.

Revenues for the fourth quarter were \$295.6 million, compared with revenues of \$308.5 million for the fourth quarter of 1990.

For fiscal 1991, the company reported operating income of \$83.0 million, compared with an operating loss of \$132.6 million for fiscal 1990, including the \$71.7 million restructuring charge.

Revenues for the year were \$1.23 billion, compared with \$1.22 billion for the previous year.

"We are pleased that our quarterly results again have been positive despite the continuing weak economy and the impact of the strong dollar on overseas markets," says Ronald Skates, Data General's president and chief executive officer. During fiscal 1991 the company reported four straight profitable quarters.

Mr. Skates says, "We believe our product strategy is on target with the needs of the marketplace. However, we continue to be very cautious for the short term in light of current economic conditions. Our primary concern continues to be the general economic weakness in the European marketplace, which has impacted the entire computer industry."

Mr. Skates notes that revenues during the fourth quarter were impacted by the sale of the company's Nippon-Data General subsidiary. Revenues from the Japanese marketplace were \$14 million lower than revenues from that market during last year's fourth quarter. Data General had stated that revenues in Japan would be reduced when it announced the completion of the sale in April.

"Revenues from our AViiON family of open systems again grew during the quarter with the major growth area continuing to be our AViiON server computers," says Mr. Skates. "During 1991, the second year of AViiON shipments, revenues for that family of products were in excess of \$200 million."

Mr. Skates adds, "During fiscal 1991 we have substantially improved the cash position of the company and its overall liquidity through our June convertible debenture offering, sales of facilities and the results of operations."

The AViiON line was strengthened considerably during the year with new products expanding the family's range at both the low and high ends. Included among them were the AViiON AV 7000 and AV 8000 servers, which offer mainframe performance (117 MIPS) at a fraction of mainframe cost. The company also introduced a series of standards-based communications and office automation products that allow Data General to integrate customers' existing desktop systems and communications networks, regardless of vendor.

To complement the powerful AV 7000 and AV 8000 systems, the company also unveiled a high performance HADA (High Availability Disk Array) storage subsystem based on state-of-the-art RAID (Redundant Array of Inexpensive Disks) technology. Data General believes it is the only major information systems supplier currently shipping RAID 5 mass storage systems.

In addition, Data General considerably enhanced its ECLIPSE® MV product line during 1991 with the addition of four new systems, the MV/5600™ DC, MV/9300™, MV/9600™ and MV 30000™, which improved the family's low-end and mid-range price/performance by as much as 40 percent. The company also introduced a series of communications products, including OpenMAC, that expanded the MV family's capability to function as a server within multivendor environments.

HOT OFF THE PRESS!

Data General Corporation
Condensed Consolidated Statements Of Operations

(In millions except per share amounts)

	<u>Quarter Ended</u>		<u>Year Ended</u>	
	<u>Sep. 28,</u> <u>1991</u>	<u>Sep. 29,</u> <u>1990</u>	<u>Sep. 28,</u> <u>1991</u>	<u>Sep. 29,</u> <u>1990</u>
Revenues:				
Product.	\$191.2	\$196.8	\$ 796.5	\$ 784.6
Service.	<u>104.4</u>	<u>111.7</u>	<u>432.4</u>	<u>431.8</u>
Total revenues.	<u>295.6</u>	<u>308.5</u>	<u>1,228.9</u>	<u>1,216.4</u>
Costs and expenses:				
Cost of product revenues . . .	99.2	109.6	407.9	422
Cost of service revenues . . .	60.8	69.5	251.6	269.2
Research and development . . .	25.8	34.6	102.0	14
Selling, general, and administrative.	90.2	111.3	384.4	44
Restructuring charge	<u>--</u>	<u>71.7</u>	<u>--</u>	<u>71.7</u>
Total costs and expenses. .	<u>276.0</u>	<u>396.7</u>	<u>1,145.9</u>	<u>1,349.0</u>
Income(loss) from operations. . .	19.6	(88.2)	83.0	(132)
Interest income	3.6	1.3	8.1	6.7
Gain on sale of subsidiary. . . .	--	--	13.0	--
Interest expense.	<u>3.7</u>	<u>2.9</u>	<u>12.6</u>	<u>10.7</u>
Income (loss) before income taxes.	19.5	(89.8)	91.5	(136)
Income tax provision (benefit). .	1.1	(5)	5.9	3.2
Net income (loss)	<u>\$ 18.4</u>	<u>\$(89.3)</u>	<u>\$ 85.6</u>	<u>\$(139.8)</u>
Primary earnings per share:				
Net income (loss) per share. . . .	<u>\$.53</u>	<u>\$(2.93)</u>	<u>\$ 2.62</u>	<u>\$(4.65)</u>
Weighted average shares outstanding.	<u>34.4</u>	<u>30.5</u>	<u>32.7</u>	<u>30.0</u>
Fully diluted earnings per share:				
Net income (loss) per share. . . .	<u>\$.50</u>	<u>\$(2.93)</u>	<u>\$ 2.45</u>	<u>\$(4.65)</u>
Weighted average shares outstanding.	<u>41.1</u>	<u>30.5</u>	<u>36.1</u>	<u>30.0</u>

In the current year the company increased the maximum amortization period of capitalized software development costs from two years to three years. The effect of this change in estimate was a decrease in cost of product revenues and an increase in net income of approximately \$3.0 million, or \$.09 and \$.07 per share on a primary and fully diluted basis, respectively, for the current quarter and \$11.0 million, or \$.34 and \$.30 per share on a primary and fully diluted basis, respectively, for the current fiscal year.

HOT OFF THE PRESS!

Data General Corporation Condensed Consolidated Balance Sheets

(In millions)

	<u>Sep. 28,</u> <u>1991</u>	<u>Sep. 29,</u> <u>1990</u>
Assets:		
Current assets:		
Cash and temporary cash investments.	\$ 149.1	\$ 74.8
Marketable securities.	92.0	--
Receivables, net	276.9	292.1
Inventories.	136.4	179.7
Other current assets	<u>39.0</u>	<u>49.0</u>
Total current assets.	693.4	595.6
Property, plant, and equipment, net	204.5	269.3
Other assets.	<u>46.1</u>	<u>44.5</u>
	<u>\$ 944.0</u>	<u>\$ 909.4</u>
Liabilities and stockholders' equity:		
Current liabilities:		
Notes payable.	\$ 5.7	\$ 63.3
Accounts payable	72.4	94.2
Other current liabilities.	<u>206.6</u>	<u>289.5</u>
Total current liabilities	<u>284.7</u>	<u>447.0</u>
Long-term debt.	<u>164.9</u>	<u>56.9</u>
Stockholders' equity:		
Common stock and additional paid-in capital. .	391.9	378.3
Retained earnings.	93.7	8.1
Cumulative translation adjustment.	<u>8.8</u>	<u>19.1</u>
Total stockholders' equity.	<u>494.4</u>	<u>405.</u>
	<u>\$ 944.0</u>	<u>\$ 909.4</u>

Making A Hit Record

Data General is going to be helping M.C. Hammer, the Rolling Stones, Harry Connick Jr. and other entertainers move up the charts. That is because more than 300 DASHER[®] personal computers (PC) are being installed in audio stores across the U.S. to monitor record, compact disk and tape sales. The information will help Billboard Magazine compile its weekly lists of the most popular songs in America.

More than \$1.2 million worth of DASHER/386-16z PCs, point of sale equipment and software are being leased by SoundScan, the firm which collects and tabulates data for Billboard Magazine. The systems will be installed in individually-owned record stores running software from Young Systems Limited, a Data General value added reseller.

The DASHER PCs were selected because of Data General's ability to provide support to stores across the U.S., attractive leasing arrangements from Data General Leasing and strong relationship with Young Systems Limited.

HOT OFF THE PRESS!**AViiON Software Support Enhancements**

Data General is pleased to announce the following software service enhancements for AViiON customers:

- * DASH electronic services
 - * DASH Basic.. Bulletin board, customer-to-customer E-mail.
 - * DASH Plus.. On-line software help facilities.
 - * DASH Plus replaces the DG/UX phone support heretofore bundled with an AViiON hardware service agreement.
- * Integrated Support Plan (ISP) now available for AViiON hardware service agreement customers to receive discounts on software services.

DASH Electronic Software Services

AViiON software services have been broadened with the announcement of **DASH** (Direct Access to Software Help). A suite of electronic services, DASH is designed to provide timely, easy to access information to assist in the use and operation of AViiON products. DASH services are delivered via toll free modem access, 24 hours a day, 7 days a week.

DASH Basic Services

Availability: Free to any Data General AViiON customer, whether or not they purchase any services.

A bulletin board feature that allows you to:

Read timely, important information about AViiON hardware and software products and services.
Information such as:

Tips on how to use products;

Interesting new applications;

New products and services announcements;

Post information for other bulletin board subscribers.

Customer-to-customer E-mail which allows customer-to-customer messaging for DASH customers.

DASH Plus Services

Availability: Free of charge only to Data General AViiON hardware service agreement customers.

Initially for DG/UX and packaged DG/UX products only, **DASH Plus** customers will be able to:

Under the **Electronic Search Program, ESP**, search our electronic information data base of known answers to DG/UX software questions and problems (to be available in December 1991).

Submit specific requests for assistance with DG/UX software problems. Response to these submissions will be before the end of the next business day.

Look up the status of Software Trouble Reports (STRs).

Place electronic orders for identified DG/UX patches or fixes. Wherever possible, we will deliver fixes electronically. As an added feature for "non-electronic distributed" fixes, we offer Express Media (over-night delivery) for a flat charge of \$150.

Both DASH Basic and DASH Plus (other than ESP) are available now and can be accessed by calling 1-800-DASH CSC with very easy-to-follow log on procedures.

HOT OFF THE PRESS!

DASH Plus is now provided free of charge with a Data General AViiON hardware service agreement. There is no extra paperwork to complete, the sign up of new AViiON hardware service agreement customers to DASH Plus will be handled automatically.

AViiON ISP Program Now Available

As a further benefit of a Data General AViiON hardware service agreement, the popular Integrated Support Plan (ISP... in which we grant discounts on software services to customers with Data General hardware service agreements) is expanded to include AViiON hardware service customers and provide software services discounts of 15%. Under ISP, Data General hardware service agreement customers will receive a 15% discount on Support Plus, Hotline Support Service (HSS) and Software Subscription Service (SSS) services (and all options and extensions) purchased on any system covered by any Data General hardware service agreement.

Call our Contract Telesales group at 1-800-343-8842 if you have any questions on Data General hardware or software services.

Purchasing AViiON software services "just got a whole lot easier".

DATA GENERAL ANNOUNCES NEW DASHER II-486/33TE BASED ON EXTENDED INDUSTRY STANDARD ARCHITECTURE (EISA)

WESTBORO, MA., -- Data General introduced the DASHER-II 486/33TE, expanding its line of PC products to include an EISA tower system based on the Intel 80486 processor running at 33MHz.

With a highly expandable tower package supporting over 2.5GB plus room for tape back-up, the 486/33TE personal computer uses the EISA bus which provides a high-performance multi-user platform.

The DASHER II-486/33TE has been tested to run Interactive and SCO UNIX, Novell operating systems and industry-standard MS-DOS. The 486/33TE has been certified by Interactive Systems Corporation and Novell Corporation to support the latest versions of I/UNIX and NetWare respectively.

"Positioned at the high-end of the PC product line, the 486/33TE is the power platform needed for multi-user solutions, and it also complements the Data General ECLIPSE/MV and AViiON open systems strategy," said Data General Director of Marketing for PC Business Unit, Ted Webber.

"Our customers have asked for greater disk storage capacity on our high-end PCs and the DASHER II-486/33TE fits this requirement. It also provides increased throughput over ISA PCs because of the EISA bus. The 486/33TE is a high powered multi-user PC that is cost-effective in today's economy," Webber concluded.

The DASHER II-486/33TE system unit uses a standard 8.33-MHz EISA I/O bus to which a range of options can be added. A single system board contains the processing circuitry for up to 64-MB of memory, 128-KB write-back cache, and a total of ten EISA expansion slots. Optional hard disks include high performance 330-MB and 1-GB SCSI drives and tape backup capacity over 500-MB.

Priced under \$10,000 U.S.list price the DASHER II-486/33TE includes 4 MB of memory and 330-MB hard drive.

Data General is a worldwide manufacturer of computer systems and servers for business, industry, government and education. The Westboro, Mass. company reported revenues of \$1.23 billion for fiscal year 1991.

HOT OFF THE PRESS!**DATA GENERAL EXPANDS HIGH AVAILABILITY DISK ARRAY PRODUCT LINE WITH NEW 2.5GB MODEL**

WESTBORO, MA., -- Data General Corporation announced a new 2.5GB High Availability Disk Array (H.A.D.A.) subsystem for its AViiON[®] line of open system servers. The new array uses RAID (redundant array of inexpensive disks) technology that gives users improved data protection and increased performance over conventional storage subsystems.

The new Model 7904 H.A.D.A. 2.5GB Disk Array complements Data General's Model 7902 H.A.D.A. 5.0GB subsystem. Packaged with five 500MB disk drives, an intelligent input/output processor and cabinetry, the 7904 2.5GB subsystem gives users a lower cost entry point into RAID technology, while providing the same functionality of the original H.A.D.A. 5.0GB subsystem, including multiple RAID level configurability, dual-porting and repair-under-power capabilities. Users with smaller storage capacity requirements who want to take advantage of RAID technology, now have an alternative to the Model 7902 H.A.D.A. 5.0GB subsystem.

With both Data General's H.A.D.A. 5.0GB and 2.5GB disk array subsystems, a faulty disk drive can be removed and replaced under power by the customer without interrupting system applications or loss of user data. After the drive is replaced, data is automatically reconstructed on the new drive by the host IOP without system intervention. This, and other modular-designed redundant options, help ensure optimum availability and reliability.

"The new 2.5GB disk array provides improved I/O performance, lower cost, and finer granularity for disk storage while retaining all of the capabilities and features of our original 5.0GB disk array," said John Hartjen, manager of peripherals marketing at Data General.

Hartjen added that the new 2.5GB disk array's improved granularity means that as storage requirements increase or change, users can add disk capacity in smaller, more economical increments to more precisely match their storage requirements. With the 500MB disk option, H.A.D.A. customers can buy drives in lower capacity increments and mix-and-match with 1.0GB drives to better meet their needs.

Users can also take advantage of a 2-stripe configuration of 500MB drives that offer the same storage capacity but provide higher performance than 1-stripe configurations of 1.0GB drives. By doubling the number of drives for a given capacity, more I/O requests can be serviced simultaneously, providing greater overall subsystem performance. The 500MB drive provides higher relative performance to Data General's current 1.0GB drives.

When configured as a RAID 5 array, the 2.5GB capacity provides 2.0GB for user storage and dedicates 0.5GB for redundancy.

Like Data General's other disk array subsystems, H.A.D.A. 2.5GB can be configured to address physical disk drives as a single addressable device, as a mirrored pair (RAID Level 1), or as a RAID Level 5 disk array group, as well as in any combination of these configurations, simultaneously.

The 2.5GB disk array shares the design of the original Model 7902 H.A.D.A. 5.0GB disk array subsystem received the prestigious Silver Award from the Industrial Designers Society of America in 1991. It was cited for excellence in design, drive module operability, and commitment to visual detail. The H.A.D.A. subsystem can package as many as 30 disks for a maximum storage capacity of 30 GB with 24GB of redundant storage.

The H.A.D.A. 2.5GB Disk Array subsystem is offered on AViiON 6000 series servers and AViiON 8000 series packaged systems with DG/UX 5.4.1. Subsystem Model 7904-V and 7904-W for AV 6000 series servers is U.S. List Priced at \$42,000. An add-in group of five 500MB disk drives (Model 7904-A) for the H.A.D.A. cabinet is available at \$23,000 U.S. List. A single 500MB hot repair disk drive add-in to an H.A.D.A. (Model 7904-ZA) is U.S. List Priced at \$5,000. These products are available in mid-February.

Data General is a leading manufacturer of computer systems for business, industry, government, healthcare, and education. The company reported revenues of \$1.23 billion and net income of \$85.6 million for fiscal year 1991.

HOT OFF THE PRESS!

DATA GENERAL'S DG/UX 5.4 FIRST UNIX SVR4 COMPLIANT OPERATING SYSTEM WITH SYMMETRIC MULTIPROCESSING TO RECEIVE POSIX AND XPG3 CERTIFICATION

Westboro, Mass., -- Data General Corporation announced that AViiON® systems running the DG/UX™ 5.4 operating system are certified for compliance with the POSIX and X/Open Portability Guide 3 (XPG3) standards, both of which are required by many governments and multinational companies to improve applications portability. Data General is the first vendor to offer an operating system based on USL's UNIX® System V, Release 4 that implements fully symmetric multiprocessing and is compliant with these two important standards.

Certification for compliance with POSIX -- which stands for Portable Operating System for Computer Environments -- was issued by the National Institute of Standards and Technology (NIST) in September, 1991. This certification verifies that DG/UX 5.4 successfully met the guidelines for POSIX compliance established in the Federal Information Processing Standards Publication 151-1 (FIPS PUB 151-1).

Steve Baxter, Vice President of Corporate Marketing, said, "the true benefit of POSIX compliance is in applications portability, as any source code written to the POSIX standard will run on Data General's DG/UX 5.4 with little or no modification. Considering that the U.S. federal government -- the world's largest consumer of information technology -- is the driving force behind the POSIX standard, the value of POSIX compliance cannot be understated."

Data General also announced that the X/Open Company Ltd certified AViiON systems running DG/UX 5.4 for compliance with the X/Open Portability Guide, Revision 3 (XPG3). This "XPG3 branding," as it is known, was issued in November, 1991.

"The emphasis of X/Open is on specifying a comprehensive application interface. XPG3 supports the POSIX interface, yet has a wider scope. This results in the availability of an increased number of applications for compliant systems like AViiON and maximizes the return on investment in software development made by both users and vendors. Certified compliance with XPG3 is of extreme benefit to our customers, and this is especially true in Europe where the standard originates," said Baxter.

Earlier releases of DG/UX were compliant with POSIX, X/Open, and key binary standards prior to the recent certification of DG/UX 5.4. Thus, applications ported to these earlier releases will run without modification on DG/UX 5.4, allowing existing customers to upgrade to the newest revision without reengineering.

"We have worked very hard to guarantee backward compatibility with DG/UX versions based on UNIX System V, Release 3 and believe we are one of the only vendors to do so," concluded Baxter.

One of the most robust commercial versions of USL's System V Release 4 currently available, DG/UX 5.4 offers fully symmetric multiprocessing, optional C2 and B1 security, and commercial extensions for high availability. In addition to adherence to the POSIX and XPG3 standards, DG/UX 5.4 is compliant with a variety of additional standards, including the Government OSI Procurement (GOSIP) specification; Berkeley Software Distribution Revision 4.3; the 88open Binary Compatibility Standard; the 88open Object Compatibility Standard; X-Windows Version 11, Release 4 and the OSF/Motif graphical user interface.

Data General is a worldwide manufacturer of computer systems and servers for business, industry, government, and education. The Westboro, Massachusetts company reported revenues of \$1.23 billion for fiscal year 1991.

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HOT OFF THE PRESS!**MARKETING ANNOUNCEMENTS/PRESS RELEASES****Data General First To Qualify For Worldwide ISO 9002 Quality Certification**

Data General has become the first major U.S. computer systems manufacturer to have all of its worldwide manufacturing and product distribution operations qualify for the international ISO 9002 quality-standard certification.

Data General production and distribution facilities in the U.S., Mexico, Germany and the Philippines have passed ISO 9002 audits and will be certified shortly. The company's largest manufacturing operation, in Apex, North Carolina, received ISO 9002 certification last August and was the first U.S. computer manufacturing plant to receive certification from Underwriters Laboratory.

ISO 9002 certification has become the international standard for quality plant and production operations. The guidelines were established by the International Standards Organization (ISO), based in Geneva, Switzerland.

In accordance with the rules of the European Standards Committee, all of its members -- virtually all Western European countries -- are bound to implement the ISO 9000 series of standards. To date the standards have been embraced by more than 30 nations including the United States and Japan.

"The ISO certification is doubly meaningful to us because it recognizes the commitment that Data General always has had to provide its customers with high-quality products and service," says Ronald Skates, Data General president and chief executive officer.

To achieve ISO registration, each Data General plant underwent a rigorous and lengthy audit process. They were evaluated on a variety of different functions including commitment to quality, statistical techniques and the quality of the components built at the plants.

HADA Product Line Expanded

Data General has introduced a new 2.5GB High Availability Disk Array (HADA) subsystem for its AViiON line of open system servers. The new array uses RAID (redundant array of inexpensive disks) technology that gives users improved data protection and increased performance over conventional storage subsystems.

The new Model 7904 HADA 2.5GB Disk Array complements Data General's Model 7902 HADA 5.0GB subsystem. Packaged with five 500MB disk drives, an intelligent input/output processor and cabinetry, the 7904 2.5GB subsystem gives users a lower cost entry point into RAID technology, while providing the same functionality of the original HADA 5.0GB subsystem. This includes multiple RAID level configurability, dual-porting and repair-under-power capabilities.

With both Data General's HADA 5.0GB and 2.5GB disk array subsystems, a faulty disk drive can be removed and replaced under power by the customer without interrupting system applications or loss of user data. After the drive is replaced, data is automatically reconstructed on the new drive by the host IOP without system intervention. This, and other modular-designed redundant options, help ensure optimum availability and reliability.

"The new 2.5GB disk array provides improved I/O performance, lower cost, and finer granularity for disk storage while retaining all of the capabilities and features of our original 5.0GB disk array," says John Hartjen, manager of Peripherals Marketing at Data General.

Mr. Hartjen adds that the new 2.5GB disk array's improved granularity means that as storage requirements increase or change, users can add disk capacity in smaller, more economical increments to more precisely match their storage requirements. With the 500MB disk option, HADA customers can buy drives in lower capacity increments and mix-and-match with 1.0GB drives to better meet their needs.

The 2.5GB disk array shares the design of the original Model 7902 HADA 5.0GB disk array subsystem received the prestigious Silver Award from the Industrial Designers Society of America in 1991. It was cited for excellence in design, drive module operability, and commitment to visual detail. The HADA subsystem can package as many as 30 disks for a maximum storage capacity of 30 GB with 24GB of redundant storage.

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The HADA 2.5GB Disk Array subsystem is offered on AViiON 6000 series servers and AViiON 8000 series packaged systems with DG/UX 5.4.1.

Subsystem Model 7904-V and 7904-W for AV 6000 series servers is U.S. list priced at \$42,000. An add-in group of five 500MB disk drives (Model 7904-A) for the HADA cabinet is available at \$23,000 U.S. list. A single 500MB hot repair disk drive add-in to an HADA (Model 7904-ZA) is U.S. list priced at \$5,000.

DG/UX 5.4 Receives A First

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HOT OFF THE PRESS!**MARKETING ANNOUNCEMENTS/PRESS RELEASES****DATA GENERAL IS FIRST UNIX VENDOR TO SHIP DAL
AViiON Provides Only DAL/AppleTalk Implementation for UNIX**

WESTBORO, Mass., -- Addressing the need for diverse client/server networking capabilities in today's distributed applications environments, Data General Corporation today announced Data Access Language (DAL) Server Software for the company's UNIX[®] system-based AViiON[®] Server family. Data Access Language for AViiON is the first DAL implementation with AppleTalk[™] support available for the UNIX platform.

Data Access Language for AViiON systems lets DOS-based PC and AppleTalk Macintosh users access SQL databases on AViiON servers, then transparently presents the data to these users in an easy-to-use format. This includes access and translation of information in Oracle, Informix, and Ingres databases provided on the AViiON server. In addition to being the only UNIX vendor to ship an AppleTalk version of DAL on a RISC platform, Data General is also the first UNIX vendor to offer direct sales and support of DAL.

This server software runs on the AViiON host and works with the Apple Macintosh[®] and DOS-based PC applications which support DAL to receive and execute application requests to the appropriate AViiON database. The information is then routed back to the application for desktop processing.

"Data Access Language for AViiON systems enhances a user's access to information from leading spreadsheet and database programs across several networking environments and provides immediate UNIX system-database integration for a user's existing applications," said Bill Zastrow, Data General vice-president, AViiON Office Systems Marketing. "This also complements our OpenMAC for AViiON Systems products, which provide AppleShare[®] software filing and print spooling in AViiON servers, as well as terminal access from Apple Macintosh environments."

"We are very pleased that Data General is supporting DAL and the integration it provides between Macintosh applications and AViiON databases. With the exploding popularity of relational databases on RISC and UNIX platforms, the Macintosh and AViiON systems combination is a very attractive platform for Data General and Apple customers," said Jim Groff, director of the Enterprise Systems Division Marketing at Apple Computer.

With DAL and OpenMAC support, AViiON can provide complete Apple file and print server functionality to Macintosh desktops over TCP/IP, Asynchronous, Ethernet[®], Token Ring, and AppleTalk networks. Macintosh users can easily access powerful UNIX applications via the LAN using the AViiON platform. With the DAL and OpenMAC announcements, Data General has earned a reputation as a leading supplier of scalable UNIX servers to the MAC user community.

Coupled with its OpenMAC products, Data General provides MAC users with a compelling platform for integrating UNIX applications and servers onto their network. Data General also offers Data Access Language (DAL) for ECLIPSE[®] MV/Systems.

Data General also announced aggressive DAL pricing -- up to 50 to 75 percent less than competitive offerings. DAL for AViiON is priced at \$1,000 to \$6,000, depending on the AViiON server being used, compared with prices of \$4,000 to \$12,000 from comparable competitive products. Data Access Language for AViiON begins shipping in April.

DAL is an Apple Computer product which is rapidly gaining acceptance as a preferred solution for users seeking integrated access to data over a variety of networks. DAL enjoys tremendous support from software developers and customers alike. For example, DAL support is integrated into Microsoft Excel[®], 4th Dimension, Wingz, and many other leading applications. Blyth Software has announced a PC version of DAL that allows PC software developers to add DAL support to their own products.

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Data General is a leading manufacturer of computer systems, servers, communications products, and of-office automation for business, industry, manufacturing, healthcare, education, and government. The company reported revenues of \$1.23 billion and profits of \$85.6 million for fiscal 1991.

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AppleTalk is a trademark of Apple Computer, Inc.

AppleShare is a registered trademark of Apple Computer, Inc.

Excel is a registered trademark of Microsoft, Inc.

Ethernet is a registered trademark of Xerox Corp.

Wingz is a trademark of Informix Software, Inc.

HOT OFF THE PRESS!**MARKETING ANNOUNCEMENTS/PRESS RELEASES****Data General Debuts Two High-Performance PCs**

WESTBORO, Mass., -- Data General Corporation announced two important additions to its PC product line. The first, the DASHER II-386/33L, is a full-sized, 33-MHz system offering the added configurability required by value-added resellers and power users. The second, the DASHER II-486SX/20A, is a high-performance system featuring a trimmed-down chassis and chip-level upgradability for exceptional investment protection.

"These two systems strengthen our already extensive line of PC products," stated Bob Mara, vice president of Data General's PC Business Unit. "They offer the performance, configurability, and competitive pricing that our customers and resellers demand."

DASHER II-386/33L

The DASHER II-386/33L is a high-performance IBM PC-AT[®]-compatible featuring the Intel 33-MHz 80386 processor. Base configurations include the CPU, 4 MB of memory, a socket for an optional 80387 math coprocessor, and a 64-KB external cache for improved processor performance. Also included are a standard AT I/O bus, Super VGA circuitry, four ports (one parallel, two serial, and one mouse), built-in floppy and AT disk controllers, and a 3.5-inch or 5.25-inch floppy disk drive.

The DASHER II-386/33L is packaged in a full-size chassis to leave ample room for expansion and configurability. It offers eight expansion slots, with one reserved for the video controller. Single inline memory modules (SIMMs) make it possible to expand system memory to 16 MB without using any of these slots. Additionally, all systems are equipped with four drive bays to accommodate a variety of storage devices, including IDE and SCSI.

DASHER II-486SX/20A

The DASHER II-486SX/20A, based on the 20-MHz Intel 80486SX processor, offers high performance in a small package. Despite its unassuming footprint, the DASHER II-486SX/20A provides sufficient mass storage and available I/O slots to serve as either a LAN server or UNIX[®] platform. Equally important, it can be upgraded to a 33-MHz 80486DX system by simply switching the CPU chip.

"In the past, a customer would have to buy a new PC or, at best, a new system board when their needs outgrew their PCs. With the DASHER II-486SX/20A, however, all they will have to do is snap in a new chip. It's simple, effective and very economical," stated Mara.

The DASHER-II 486SX/20A features a socket for the 33-MHz 80486DX chip upgrade or optional 80487SX math coprocessor, an 8-KB internal cache, 4 to 20 MB of system memory, built-in disk drive and video controllers, one parallel port, two serial ports, and a mouse port. An optional 64-KB external memory cache is offered for added CPU performance. Four 16-bit expansion slots are available for the addition of LAN, modem, and multiplexer controller cards. Up to three 3.5-inch and one 5.25 storage devices are supported.

A Full Complement of Software

The DASHER II-386/33L and DASHER II-486SX/20A are provided with a full complement of standard software, including MS-DOS[®] 5.0, Microsoft Windows[®] 3.0, system diagnostics, and security utilities. Optional software includes INTERACTIVE UNIX[®], Novell's NetWare[®] network operating system, and a host of third-party applications.

Additionally, a wide variety of software products are available to provide interoperability between DASHER PCs and Data General's AViiON[®] and ECLIPSE/MV[®] product lines.

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Data General is a leading manufacturer of computer systems for business, industry, government, and education. The company reported revenues of \$1.23 billion and net income of \$85.6 million for fiscal year 1991.

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DG/UX OPERATING SYSTEM

PRODUCT DESCRIPTION

DG/UX Release 5.4.2 for AViiON systems is the second full release of Data General's implementation of UNIX® System V Release 4.

New or expanded features in DG/UX Release 5.4.2 include:

- * Support for new computer systems and hardware, described in the section "New Hardware" below.

- * Support for the X Window System Revision 11 Release 5 (X11R5), OSF/Motif 1.2, and PHIGS Extension to X (PEX). See the DG/UX X Window System Release Notice for descriptions.

- * Redesign of the TCP/IP software for improved performance.

- * The ability to configure disk and tape devices with two hosts (dual-initiator configuration), and to reassign a disk from a failed host to a secondary system (failover).

- * CD-ROM installation

- * File buffering enhancements

- * Support for uninterruptible power supplies

- * Support for automated error-reporting (AV/ALERT)

- * Improved support for multiple languages and cultural conventions

- * Archiving improvements

- * Printer enhancements

SOFTWARE STATUS REPORT

Product: DG/UX Operating System

Model #: P001A

Current Rev. 5.4.2 SSS Shipped: 09/92

Previous Rev: 5.4.1

Support Effective Until: 04/01/93

Release Notice: 085-600317-00

In order to run this revision of DG/UX a system must include a minimum of 12MB of memory and a formatted system disk at least 322 MB. in size. Specific revisions or configurations of the following are also required: PROM, FLARE microcode, Token ring board models 7416-K and 7416-W, HADA-II, AV/4605 and AV/4625. Contact your Data General Support Center for detailed descriptions of these requirements. In addition, DG/UX 5.4.2 does not support hardware configurations which include the following controllers: VSC3i, VLCi, VFC and VMC.

DOCUMENTATION

Title	Part Number
AV X-30 Release Notice	085-600144-03
GNU-C Release Notice	085-600319-00
GNU Public License Agreement	085-600145-01
Looking Glass Release Notice	085-600318-00
X 11R5/5.4.2 Release Notice	085-600316-00
Guide to AViiON and DG/UX System Documentation	069-701085-02
Installation Roadmap	069-701084-02
Looking Glass User's Guide	069-100357-01
Using the DG/UX System	069-701035-02
Using the DG/UX Editors	069-701036-01
X Windows System User's Guide	069-100229-02
Customizing the DG/UX System	093-701101-02
Installing the DG/UX System	093-701087-02
Managing the DG/UX System	093-701088-02
Using the DG/UX Kernel Debugger	093-701075-02

DG/UX OPERATING SYSTEM

DG/UX OPERATING SYSTEM

STR ANSWER REPORT for DG/UX BASE SYSTEM FOR AVIION

- STR: NASC000005234
REV: 4.20 ORIG-ID: Q997306

PROBLEM SUMMARY:

The errors "Too much defining", and "No space" are returned from cxref when used with the included program files that have large include files.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- STR: NASC000007485
REV: 4.30 ORIG-ID: Q138983

PROBLEM SUMMARY:

Problems with DGUX 4.30 and D412 + terminal.

ANSWER SUMMARY:

As we discovered in our phone conversations, the problem with arrow keys not working with TERM=d412+ and unix mode enabled or with TERM=d412-dg and unix mode disabled was due to incorrect settings of the editread variables for DOWN (down arrow key). The line wrap problem that is seen when TERM=vt220 is resolved in DG/UX 5.4 and can be worked around with TERM=vt100 or vt220-fkw.

- STR: NASC000010548
REV: 4.30 ORIG-ID: Q341330

PROBLEM SUMMARY:

We received a 1000037 panic.

ANSWER SUMMARY:

We cannot determine the cause of the problem from the information supplied. Since the problem has not recurred, we are, with your permission, closing this STR. Should the problem resurface in the next 6 months, please call to reopen this STR and include the panic dump and system image.

- STR: NASC000010860
REV: 4.30 ORIG-ID: Q365565

PROBLEM SUMMARY:

All SYAC lines hung and a "tcloud -a" on the master console also hung.

ANSWER SUMMARY:

As we discussed in our telephone conversation, your problem was resolved by the installation of patch DGUX_4.32.01.51 and DGUX_4.31.00.21. If the

problem recurs, please open a new STR, referencing this STR number.

- STR: NASC000007966
REV: 4.31 ORIG-ID: Q171083

PROBLEM SUMMARY:

We have an AV4020 running DG/UX and we encountered a problem in using SCCS and the "delta" command. When many changes are made to a file, the file is corrupted. If only a few changes are made "delta" works correctly.

ANSWER SUMMARY:

The SCCS product is designed to handle files whose longest line is less than 1024 bytes. The problem with the delta command was due to a file that contained a line with more than 1023 bytes.

- STR: NASC000008512
REV: 4.31 ORIG-ID: E059974

PROBLEM SUMMARY:

Cxref program.c returns an error if termio.h is included in program.c. We feel that cxref is broken and should be fixed.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- STR: NASC000008520
REV: 4.31 ORIG-ID: Q208335

PROBLEM SUMMARY:

Error - "Make: Don't know how to make src/hello.c, error code 1", is returned from a recursive make file.

ANSWER SUMMARY:

Make looks for dependencies relative to the current directory. In your makefile, you first change directories, and then start a new make. This invocation of make is attempting to find src/hello.o relative to the new directory, which it cannot do.

- STR: NASC000009752
REV: 4.31 ORIG-ID: MIT-910624-B

PROBLEM SUMMARY:

Ctrl-S/ Ctrl-Q does NOT work with the recommended terminal settings.

ANSWER SUMMARY:

The d210 must be configured in ANSI mode (8bit/character,no parity,1 stop bit). DG/UX on AViiON does not support the d210 in DG mode. With stty start = ^q and stty stop = ^s, and term = d210,

DG/UX OPERATING SYSTEM

- STR: GER 000014856
REV: 5.40 ORIG-ID: ZD314
- PROBLEM SUMMARY:
AV300 hang and all SCSI devices were periodically accessed.
- ANSWER SUMMARY:
This problem will be fixed in revision 5.4.1 of DG/UX.
-

- STR: JAPN000000621
REV: 5.40 ORIG-ID: NDG 2484
- PROBLEM SUMMARY:
sendto(2) does not work correctly.
- ANSWER SUMMARY:
This problem will be fixed in a future revision of DG/UX TCP/IP.
-

- STR: JAPN000000627
REV: 5.40 ORIG-ID: NDG 2490
- PROBLEM SUMMARY:
Fingerd is fixed to "ux_kernel" domain.
- ANSWER SUMMARY:
The command has been modified to use getdomainname(), and the reference to 'ux_kernel' has been removed. This is fixed in DG/UX revision 5.4.1.
-

- STR: NASC000010390
REV: 5.40 ORIG-ID: Q326481
- PROBLEM SUMMARY:
Problem with mv command when moving a directory file.
- ANSWER SUMMARY:
The mv command behaves correctly in this case. This is based on the POSIX standard for rename().
-

- STR: NASC000010508
REV: 5.40 ORIG-ID: Q344036
- PROBLEM SUMMARY:
Problem with TRAP command in a Bourne shell script. TRAP is not working correctly for TRAP 2,3.
- ANSWER SUMMARY:
This problem is fixed in DG/UX Revision 5.4.1.
-

- STR: NASC000010549
REV: 5.40 ORIG-ID: IPG-CHKSYS
- PROBLEM SUMMARY:
The dg sysctl command in the script /usr/sbin/init.d/chk system returns an error if the current boot path contains any switches, such as run level.
- ANSWER SUMMARY:
This problem is fixed in DG/UX 5.4.1
-

- STR: NASC000010570
REV: 5.40 ORIG-ID: Q345438
- PROBLEM SUMMARY:
System up and running. After about 20 users login on their Xterminals, the system panics with code 3000032 PM_PANIC_KERNEL_EXCEPTION.
- ANSWER SUMMARY:
This problem will be fixed in revision 5.4.1 of DG/UX. Meanwhile, the problem can be avoided by increasing the configuration variable "NQUEUE" from the default 2048 to some larger value. This value is used to limit the number of streams queue pairs, and can be arbitrarily large if there is no need to limit the queue pairs. (The largest possible value is 2000000000).
-

- STR: NASC000010707
REV: 5.40 ORIG-ID: VERSYSS01
- PROBLEM SUMMARY:
User invoked make utility and compiles (using CC command) proceeded normally until system apparently hung.
- ANSWER SUMMARY:
This problem was actually the result of a hardware failure on the CPU daughter card. Once this card was replaced, your system no longer exhibited this behavior.
-

- STR: NASC000010712
REV: 5.40 ORIG-ID: Q354004
- PROBLEM SUMMARY:
DOS file interchange using dfm() on DG/UX 5.4 does not allow successful transfer of DOS or DG/UX files to either machines via diskette.
- ANSWER SUMMARY:
As we discussed in our telephone conversation, this problem has been fixed with the installation of DG/UX 5.4 Patch level 14 that was provided to you.

DG/UX OPERATING SYSTEM

- REV: 5.40 STR: NASC000010742
 ORIG-ID: Q357174

PROBLEM SUMMARY:

'Trap' does not function correctly in the Bourne shell for 5.4 as it did in 4.3x systems, in relation to the signal, SIGINT - 2.

ANSWER SUMMARY:

This problem has been fixed in DG/UX revision 5.4.1.

- REV: 5.40 STR: NASC000010759
 ORIG-ID: AAFY921

PROBLEM SUMMARY:

setvbuf and malloc are not working properly. The example program should print out "this is a test" and then the line from the input file. Instead it prints out the contents of the input file.

ANSWER SUMMARY:

The ELF base libc.a routine, setvbuf, was not allocating sufficient amount of memory with the malloc system call. This problem is fixed in DG/UX revision 5.4.1. A patch for DG/UX 5.4 named dgux_5.4.0.p16 has been made available to you.

- REV: 5.40 STR: NASC000010761
 ORIG-ID: Q362601

PROBLEM SUMMARY:

Running a Progress application that does cursor positioning works correctly on a terminal connected to a DUART. The same application when run on a SYAC causes the terminal to display incorrectly.

ANSWER SUMMARY:

In revision 5.4.1 of DG/UX there will be some changes which fix the problems in the driver related to SYAC handling of vertical tab and form feed delays. Until then, patch dgux_5.4.0.e32 has been applied to your system to correct the problem.

- REV: 5.40 STR: NASC000010765
 ORIG-ID: Q362534

PROBLEM SUMMARY:

When running an application on a DUART port, the application runs fine. When running the same application on a SYAC port, the cursor positioning commands cause the terminal to display incorrectly.

ANSWER SUMMARY:

In revision 5.4.1 of DG/UX, there will be some changes which fix the problems in the driver related to SYAC handling of vertical tab and form feed delays.

- REV: 5.40 STR: NASC000010785
 ORIG-ID: Q363758

PROBLEM SUMMARY:

5.40 SYSADM does not allow adding users whose name contains "_" or "-" in their name. The old SYSADM does allow this and the 5.40 manual "Customizing the DG/UX System" page 4-3 states these are valid username characters.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. Both "_" and "-" will be accepted in usernames. However, "-" (dash, hyphen) cannot be the leading character. Additionally, the help message has been updated to reflect this change.

- REV: 5.40 STR: NASC000010809
 ORIG-ID: Q365435

PROBLEM SUMMARY:

The "ps -lf" command does not work correctly under revision 5.40 of DG/UX. The nice value is not displayed in the "NI" column. The address is displayed in the "NI" column instead of the "ADDR" column.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- REV: 5.40 STR: NASC000010853
 ORIG-ID: Q368053

PROBLEM SUMMARY:

Cursor position does NOT work when a d410 is connected to a VDC, but does work when we telnet to the AV8000. Lines connected to a VDC have form feeds and vertical tabs padded with nulls when ofill is turned off.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4.1. Please note that when ff1 is set and ofill is not set, there will be a 2 second delay after formfeeds. Until 5.4.1 ships, you can use "stty ofill vt1 ff1" to work around the problem. There is no specification for what should be done when ofill and ff1 are set, but DG/UX will not generate fill characters or delays after a form feed.

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- STR: NASC000010865
REV: 5.40 ORIG-ID: Q366583

PROBLEM SUMMARY:

Under DG/UX revision 5.40 the tty numbering seems to be in error if a VDC/8P is the first cluster controller.

ANSWER SUMMARY:

DG/UX has always reserved 16 tty devices for each cluster, and this is considered correct behavior. On the VDC/8P there are actually 9 usable ports. The last port is the parallel printer port. This design allows users to power up VDCs after the system has been booted and start using the ports after the system has done an automatic down load (about a minute later).

- STR: NASC000010877
REV: 5.40 ORIG-ID: E61249

PROBLEM SUMMARY:

Problem with ofill and ff1 not working.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4.1. Please note that when ff1 is set and ofill is not set, there will be a two second delay after formfeeds. Until 5.4.1 ships, you can use "stty ofill vt1 ff1" to work around the problem. There is no specification for what should be done when ofill and ff1 are set, but DG/UX will not generate fill characters or delays after a form feed.

- STR: NASC000010886
REV: 5.40 ORIG-ID: E061197

PROBLEM SUMMARY:

Request to have the son ttymon process after it has been fork()'ed, to have only the devices associated with it open, all others closed.

ANSWER SUMMARY:

The requested behavior has been implemented in DG/UX 5.4.1. It is also provided in patch dgux_5.4.0.p23 to DG/UX 5.4 which has been supplied to you.

- STR: NASC000010896
REV: 5.40 ORIG-ID: Q371722

PROBLEM SUMMARY:

We uprevd our system to 5.40 and we received a panic of 2000075.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. Until then patch dgux_5.4.0.p26a has been supplied to correct the problem.

- STR: NASC000011000
REV: 5.40 ORIG-ID: Q377926

PROBLEM SUMMARY:

Printing from a DGUX 5.4 Aviion to another 5.4 Aviion does not work using lpNet The print job stays in the queue on the remote machine. Must drop back to pre-5.4 printing.

ANSWER SUMMARY:

This problem has been fixed for release in DG/UX Revision 5.4.1. The programs lpNet and Ipsched have been modified to correct the problem.

- STR: NASC000011019
REV: 5.40 ORIG-ID: Q370861

PROBLEM SUMMARY:

The -a option to cpio sets the file access time AND modification time to DEC 31 19:00 1969. This causes problems for the make utility.

ANSWER SUMMARY:

The cpio problem reported is fixed in DG/UX 5.4.1.

- STR: NASC000011042
REV: 5.40 ORIG-ID: E61358

PROBLEM SUMMARY:

The file /usr/spool/lp/admins/lp is incorrectly linked to /etc, instead of /etc/lp.

ANSWER SUMMARY:

The link has been fixed in DG/UX Revision 5.4.1.

- STR: NASC000011046
REV: 5.40 ORIG-ID: E61361

PROBLEM SUMMARY:

The "man" page for crontab is incorrect about the default editor used.

ANSWER SUMMARY:

The DG/UX 5.4.1 version of the crontab(1) man page is fixed to indicate that ed(1) is the editor used with -e if the EDITOR environment variable is not found.

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- REV: 5.40 STR: NASC000011074
 ORIG-ID: Q376438

PROBLEM SUMMARY:

We are having a problem with the way that the quit character is behaving under 5.40 of DG/UX. The quit character does produce a core file, but it logs us off the system.

ANSWER SUMMARY:

The problem has been fixed in DG/UX Revision 5.4.1.

- REV: 5.40 STR: NASC000011101
 ORIG-ID: Q377592

PROBLEM SUMMARY:

Customer is getting 0x60 iocb timeout message when he issues a shutdown command. There are still several processes running after the shutdown command completes.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- REV: 5.40 STR: NASC000011115
 ORIG-ID: Q380521

PROBLEM SUMMARY:

In order for binary cursor addressing to be used with our D460 terminals under DG/UX revision 5.40 we have to change the stty settings to "ofill vt1 ff1", however our application does not allow this and we need another solution.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. Meanwhile, patch 5.4.0.e03 has been supplied to correct your problem.

- REV: 5.40 STR: NASC000011161
 ORIG-ID: Q385506

PROBLEM SUMMARY:

Request the information required to produce our own tailored system media under DG/UX 5.40.

ANSWER SUMMARY:

The manual "Porting and Developing Applications on the DG/UX(TM) System" (069-701059) contains an entire chapter describing how to assemble a DG/UX release tape.

- REV: 5.40 STR: NASC000011179
 ORIG-ID: Q387370

PROBLEM SUMMARY:

Customer needs the replacement module for ld when it becomes available. DGUX 5.4 to correct the added swap space requirement.

ANSWER SUMMARY:

The problem has been fixed in DG/UX revision 5.4.1. Under DG/UX Revision 5.4, patch dgux 5.4.0.p26 has been supplied to correct your problem.

- REV: 5.40 STR: NASC000011184
 ORIG-ID: E61502

PROBLEM SUMMARY:

The trap command does not work under DG/UX revision 5.40 if it is invoked under the users initial shell. This did work correctly under revision 4.3x.

ANSWER SUMMARY:

This problem is fixed in the Bourne shell, sh, which is released with DG/UX revision 5.4.1.

- REV: 5.40 STR: NASC000011194
 ORIG-ID: Q388057

PROBLEM SUMMARY:

Problem with batch in dgux 5.4.

ANSWER SUMMARY:

The at(1) command is fixed in DG/UX 5.4.1 to not append extra newlines to scripts submitted for execution via batch(1) or at(1).

- REV: 5.40 STR: NASC000011199
 ORIG-ID: Q388171

PROBLEM SUMMARY:

When print jobs are submitted to a Termprinter via Lpsched only one Termprinter will actively print at a time. Print jobs submitted via Lpterminal work fine

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.1. The terminal printer interface model supports multiple jobs printing to the same terminal server simultaneously.

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- STR: NASC000011200
REV: 5.40 ORIG-ID: E61569

PROBLEM SUMMARY:

Sysadm addlp: returns an error "Printer does not exist".

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- STR: NASC000011201
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

The cpio command terminates prematurely when using the following command: "cpio -ivcdumb </dev/rmt/0".

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. The behavior seen when using the -u switch to cpio is not exhibited under DG/UX 5.4.1.

- STR: NASC000011206
REV: 5.40 ORIG-ID: Q390417

PROBLEM SUMMARY:

Restore will fail with a "Segmentation Fault" if it tries to restore itself.

ANSWER SUMMARY:

In DG/UX 5.4, and in System V.4, the notion of "text file busy" no longer exists. Therefore it is not possible to detect the condition described in this problem report - of restore trying to restore itself. In order to remain System V.4 compliant, no changes are anticipated in this area. We recommend that you copy restore to another location before executing it.

- STR: NASC000011207
REV: 5.40 ORIG-ID: Q390007

PROBLEM SUMMARY:

Panic 6000015 under DG/UX revision 5.40.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- STR: NASC000011208
REV: 5.40 ORIG-ID: Q390980

PROBLEM SUMMARY:

DG/UX panic 4000415.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p19 is enclosed to fix this problem in systems running revision 5.4 of DG/UX.

- STR: NASC000011243
REV: 5.40 ORIG-ID: Q392439

PROBLEM SUMMARY:

Problem with differences in cpio from rev 4.3x to 5.4. The cpio with the -O file switch works differently under 5.4 than 4.3x.

ANSWER SUMMARY:

The behavior of cpio with the -O switch has been changed by AT&T in System V.4. Although "cpio -ocvC65534 -O /dev/rmt/0 >/dev/rmt/0" worked in earlier revisions of DG/UX, our compliance with System V.4 requires that you now use "cpio -ocvC65534 -O /dev/rmt/0." This change will be necessary for all systems which are compliant with System V.4, including DG/UX 5.4.

- STR: NASC000011248
REV: 5.40 ORIG-ID: Q390312

PROBLEM SUMMARY:

We are not able to change the default TERM variable for /dev/console under 5.40. When we were running 4.32 of DGUX, we were able to change the TERM variable for the console in /etc/inittab.

ANSWER SUMMARY:

A new option, -T has been added to the ttymon(1M) command in DG/UX 5.4.1. This option allows the system administrator to change the TERM variable. This new option is documented in the ttymon(1M) man page.

- STR: NASC000011256
REV: 5.40 ORIG-ID: Q392928

PROBLEM SUMMARY:

Problem with 5.4 and echoing /O14's.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4.1. Until then, patch dgux_5.4.0.e03 is enclosed to correct your problem.

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- STR: NASC000011271
REV: 5.40 ORIG-ID: PL0017
- PROBLEM SUMMARY:**
The terminfo xterm entry has the wrong definition for function keys.

ANSWER SUMMARY:
The xterm(1) client is a VT102 terminal emulator. The VT102 does not have the function keys found on the AViiON keyboard. For this reason, the xterm-fk terminfo entry is provided for those who wish to use the AViiON function keys with the xterm(1) client.

- STR: NASC000011274
REV: 5.40 ORIG-ID: AA1208
- PROBLEM SUMMARY:**
Cron runs jobs at non-scheduled times.

ANSWER SUMMARY:
This behavior, and its workaround are document in the cron(1M) man page in the "BUGS" subsection.

- STR: NASC000011312
REV: 5.40 ORIG-ID: AA1212-2
- PROBLEM SUMMARY:**
lpstat hangs when the number of print request in the queue is greater than 130.

ANSWER SUMMARY:
This problem is fixed in DG/UX Revision 5.4.1.

- STR: NASC000011373
REV: 5.40 ORIG-ID: E61678
- PROBLEM SUMMARY:**
Problem with dd command reporting "dd: read error: No such device or address".

ANSWER SUMMARY:
This problem is fixed in DG/UX 5.4.1. The extraneous error message occurred because rdsd devices return errno=ENXIO on attempts to read past the end-of-medium. The dd command was modified to treat this as an end-of-file condition.

- STR: NASC000011376
REV: 5.40 ORIG-ID: Q387177
- PROBLEM SUMMARY:**
After 6-7 hours of running an ingres application DG/UX panics with code 2000075.

ANSWER SUMMARY:
This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p28 has been supplied to you to correct the problem until 5.4.1 of DG/UX becomes available.

- STR: NASC000011388
REV: 5.40 ORIG-ID: Q400267
- PROBLEM SUMMARY:**
We are trying to use the KORNSHELL on the d412, d200, d210, d211 terminals and the backspace key does not work. We are using the TERM variable d412, d200, d210, d211 and tried the -dg mode and they did not work either.

ANSWER SUMMARY:
The terminals listed are either not supported in DG mode or not recommended to be used in DG mode. Further it is possible to use the backspace key, if the terminals are set up as recommended in "Managing the DG/UX System" (093-701088) and the proper stty setting for erase is used. The appropriate setting is stty erase \^?.

- STR: NASC000011394
REV: 5.40 ORIG-ID: E061637
- PROBLEM SUMMARY:**
When U_ASIZE was exceeded in the accounting package we lost one day's accounting.

ANSWER SUMMARY:
The U_ASIZE value has been increased from 1000 to 4096 in the DG/UX 5.4.1 accounting software.

- STR: NASC000011419
REV: 5.40 ORIG-ID: Q387177
- PROBLEM SUMMARY:**
We are getting a 2000075 panic when we read an ingres database from tape via an ingres program.

ANSWER SUMMARY:
This problem will be corrected in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p28 has been supplied to you to correct the problem until 5.4.1 of DG/UX becomes available.

- STR: SWE 000000424
REV: 5.40 ORIG-ID:
- PROBLEM SUMMARY:**
The sysadm Networking->TCP/IP->Resolve Address->Add operation find both the primary

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hostname and all its aliases when it is checking if it is possible to add a server.

ANSWER SUMMARY:

This problem is fixed in DG/UX revision 5.4.1.

- ACCOUNTING STR: NASC000009789
REV: 4.31 ORIG-ID: Q285022

PROBLEM SUMMARY:

Our monthly accounting reports are full of garbage. We feel the system is making erroneous entries into the accounting files. We feel that there is a problem in the operating system causing this.

ANSWER SUMMARY:

We were unable to reproduce your problem under DG/UX 5.4. Please consider going to DG/UX 5.4. If you are able to reproduce this problem under DG/UX 5.4, please submit another STR with similar materials, and cross reference this STR number.

- ACCOUNTING STR: NASC000011181
REV: 5.40 ORIG-ID: MN-2

PROBLEM SUMMARY:

Script ckpacct will turn on accounting in some cases even if \$account_START = "false" in dgux.params.

ANSWER SUMMARY:

The description of the problem indicates that the system is configured improperly. However, DG/UX 5.4.1 has been enhanced to deal with the improper configuration more robustly.

- AS STR: NASC000010722
REV: 5.40 ORIG-ID: BAA-911010

PROBLEM SUMMARY:

DGUX as: symbol table has insufficient entries for my large assembly file 'as: "file.s": symbol table overflow'

ANSWER SUMMARY:

This deficiency in the assembler is fixed in DG/UX 5.4.1.

- CFLOW STR: JAPN000000539
REV: 4.31 ORIG-ID: NDG 2401

PROBLEM SUMMARY:

cfLOW(1) prints illegal line numbers

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- CPIO STR: INTL000000179
REV: 4.32 ORIG-ID: ALEX BOEY

PROBLEM SUMMARY:

Backups to 3 1/2" diskette using CPIO cannot continue to second volume, at the end of the first diskette, it fails with I/O error no 6.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. The cpio command has been modified to detect the fact that a diskette to which it is writing is full and to prompt for a new diskette.

- CPIO STR: UKSC0000051773
REV: 4.32 ORIG-ID:

PROBLEM SUMMARY:

Customer uses CPIO in a shell script which is invoked by the CRON. His problem is that when a backup exceeds 150mb (i.e. 1 tape) he does not get any error message requesting the tape to be changed. The error is not mailed to root.

ANSWER SUMMARY:

There are really two problems reported here. First, error messages are not mailed to root. This problem is fixed in DG/UX 5.4. The second problem is that cpio reads operator input from /dev/tty, and when run from a cron job, there is no way to notify cpio that a new tape is inserted. The ability for cpio to read input from an alternate source is added in DG/UX 5.4.1.

- CPIO STR: JAPN000000625
REV: 5.40 ORIG-ID: NDG 2488

PROBLEM SUMMARY:

cpio cannot extract control point directory

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.1.

- CPIO STR: NASC000011012
REV: 5.40 ORIG-ID: Q374633

PROBLEM SUMMARY:

When making backup tapes using cpio to a QIC-525 tape, cpio aborts with a "IO Error # 5" after dumping about 150 MB to the tape.

ANSWER SUMMARY:

The behavior seen here occurs because the wrong type of tape is being used. If you wish to write in QIC-525 format, you need to obtain and use a tape compatible with the 3M DC6320. Note that QIC-525

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ANSWER SUMMARY:

This problem was fixed in revision 5.4 of DG/UX. The cisc() controller was incorrectly masking interrupts during its configure routine and then calling unwired routines. If a page fault occurred, the page could never be read in because interrupts were masked.

- DOCUMENTATION STR: NASC000011064
REV: 5.40 ORIG-ID: E61367

PROBLEM SUMMARY:

Cannot find procedure under 5.4 for repairing a damaged root file system.

ANSWER SUMMARY:

The procedures for repairing damaged DG/UX system files is documented in "Managing the DG/UX System" (093-701088) on page 3-17.

- DOCUMENTATION STR: NASC000011186
REV: 5.40 ORIG-ID: 126128-02

PROBLEM SUMMARY:

After a system reboot, the LOAD process which runs for each VDA/255 configured never terminates.

ANSWER SUMMARY:

After researching your problem, we have determined that DG/UX is functioning as it should. LOAD is not supposed to terminate - it continues to run and monitor events on the VDA/255, reacting to them as appropriate. For example, if power is lost to a VDC, it will automatically be reloaded after power is restored.

- DUMP STR: INTL000000163
REV: 4.31 ORIG-ID: SF00020

PROBLEM SUMMARY:

After selecting a filesystem to restore, filesystem /db3 in our case, "sysadm filerestore" skipped 2 filesystems and positioned the tape at /ora instead.

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.1 of DG/UX.

- DUMP2 STR: NASC000011263
REV: 4.30 ORIG-ID: Q388899

PROBLEM SUMMARY:

Dump2 fails with "Can't get semaphores: No space left on device, unable to initialize shared memory".

ANSWER SUMMARY:

This error message is occurring because the system-wide limit on the number of allocated semaphores has been reached. Check to see if there is some program running that is using semaphores and not "cleaning up" when finished. Alternatively, you may be running other software that requires a large number of semaphores and simply need to increase the system limit.

- DUMP2 STR: NASC000009897
REV: 4.31 ORIG-ID: Q300153

PROBLEM SUMMARY:

Problem with dump2/fsdump not using block size specified in /etc/dumptab.

ANSWER SUMMARY:

The commands dump2 and fsdump use the block size specified in /etc/dumptab in DG/UX 5.4.1.

- GETTYDEFS STR: JAPN000000618
REV: 5.40 ORIG-ID: NDG 2481

PROBLEM SUMMARY:

The erase char of 9600bps entry has been set to ^h.

ANSWER SUMMARY:

This inconsistency will be fixed in DG/UX 5.4.1.

- KERNEL STR: INTL000000227
REV: 4.31 ORIG-ID: BEL91051

PROBLEM SUMMARY:

System panic 2000075

ANSWER SUMMARY:

This problem has been fixed in revision 5.4 of DG/UX. A patch to revision 4.31 is also available from your Data General Support Representative to correct this problem. The patch number is 4.31.00.49.

- KERNEL STR: INTL000000235
REV: 4.31 ORIG-ID: BEL91053

PROBLEM SUMMARY:

System hang.

ANSWER SUMMARY:

The dump submitted with this STR does not contain any useful information. This is probably due to the way in which the system had to be shut down. Please reopen this incident and submit a new dump tape if this problem occurs again. Also note that the support

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window for revision 4.31 of DG/UX has ended. Please upgrade to a current revision before submitting new problem reports.

- KERNEL STR: ITAL00000099
REV: 4.31 ORIG-ID: MI-91-02 (DGM)

PROBLEM SUMMARY:

When running the attached test program with the enclosed system configuration file, dg/ux either panics or hangs.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: JAPN000000616
REV: 4.31 ORIG-ID: NDG 2479

PROBLEM SUMMARY:

Unknown LDU sealed, status = 4006006.

ANSWER SUMMARY:

After researching this problem, it was determined that the DG/UX software was functioning as it should. The problem is apparently due to a problem with the "diac" device which is not a part of the standard DG/UX release.

- KERNEL STR: JAPN000000617
REV: 4.31 ORIG-ID: NDG 2480

PROBLEM SUMMARY:

Panic 1000001

ANSWER SUMMARY:

The materials submitted with this STR did not include a system dump, although the tape label indicated that a dump was on the tape. If this problem recurs, please submit another STR with a system dump and matching kernel image.

- KERNEL STR: NASC000009377
REV: 4.31 ORIG-ID: Q254693

PROBLEM SUMMARY:

Syac 0x60 panic host code:0xF5.

ANSWER SUMMARY:

The problem that you are experiencing is a hardware problem related to your VDA-128. Please contact your local Data General office who is investigating the problem reported.

- KERNEL STR: NASC000010990
REV: 4.31 ORIG-ID: Q376405

PROBLEM SUMMARY:

Problem with LDU Sealed error number 13000062. Problem occurs even after installation of patch DGUX_4.32.01.20.

ANSWER SUMMARY:

This STR has been closed as per our telephone conversation. If the problem should recur, please submit an STR along with a dump using the LDU SEALED isolation patch that has been supplied to you.

- KERNEL STR: UKSC000051229
REV: 4.31 ORIG-ID: DG/UX - LDU S

PROBLEM SUMMARY:

Customer experiences ldu seals on AV6020 running DG/UX 4.31

ANSWER SUMMARY:

It is believed that this problem occurred as the result of a hardware failure. Since the hardware was replaced, the problem has not recurred. In case the problem does occur again, a diagnostic patch has been installed which will cause the system to panic with a 2000063 panic code. A dump taken following this panic will provide us with the information we need to isolate the problem.

- KERNEL STR: UKSC000053863
REV: 4.31 ORIG-ID: AVIION HANG

PROBLEM SUMMARY:

DG/UX 4.31 system hanging approx every 30 minutes, requires hot key sequence to interrupt and continue.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: FRA 000000673
REV: 4.32 ORIG-ID: PICARD B:FRAN

PROBLEM SUMMARY:

setgrp(2) system call causes problem in a program.

ANSWER SUMMARY:

It has been agreed that the setpgid(2) system call would better fulfill the needs of this site.

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- KERNEL STR: HOLL000000403
REV: 4.32 ORIG-ID:

PROBLEM SUMMARY:

System hangs on Aviiion 5200 running DG/UX rev 4.32. There seems to be an I/O deadlock. The system is hanging about three times a day.

ANSWER SUMMARY:

After researching this problem, we have determined that it is most likely a controller hang. The 4.3x cird driver does not attempt to recover from board hangs. We recommend a thorough system inspection: make sure the system board is at the current revision and ECO level, check the VME board jumpers and pins and the backplane jumpers.

- KERNEL STR: INTL000000182
REV: 4.32 ORIG-ID: 805584

PROBLEM SUMMARY:

DG/UX Panic. Fatal Code Syac 0x60 Panic Code: 0x05, 0x0505, 0x00FF

ANSWER SUMMARY:

We understand that this syac panic has not been a problem since you installed patch dgux_4.32.01.51 and had the syac board replaced. If your syac fails again, your DG support representative can provide you with a syacdmp command that will help us diagnose your problem. This command will be provided in a future revision of DG/UX.

- KERNEL STR: INTL000000208
REV: 4.32 ORIG-ID: SW00510

PROBLEM SUMMARY:

1000036 panic.

ANSWER SUMMARY:

Analysis of the dump submitted with this STR has led to the conclusion that this was the result of a hardware problem on your system.

- KERNEL STR: INTL000000233
REV: 4.32 ORIG-ID: VZ-0003-91

PROBLEM SUMMARY:

Terminals suddenly hang. Machine displays "Syac 0x60 panic, host CODO: 0xff".

ANSWER SUMMARY:

Your system dump did not include the kernel image that was booted (/dgux file). Without this file we can not analyze your dump. The procedure for adding this to your dump tape is provided in the DG/UX

release notice. The host code reported should be only a 2 digit hex number of the form: 0x??.

- KERNEL STR: INTL000000234
REV: 4.32 ORIG-ID: VZ-0002-91

PROBLEM SUMMARY:

Terminals suddenly hang. Customer shutdown the machine and start up solving the problem for a short time.

ANSWER SUMMARY:

Your system dump did not include the kernel image that was booted (/dgux file). Without this file we can not analyze your dump. The procedure for adding this file is included in the DG/UX release notice. If this problem can be reproduced, please resubmit this STR with a system dump and the steps/code necessary to reproduce this failure.

- KERNEL STR: INTL000000319
REV: 4.32 ORIG-ID: SW00794

PROBLEM SUMMARY:

The message "Unknown LDU sealed, status - 4006010. Run fsck to restore" appeared numerous times on the master console.

ANSWER SUMMARY:

After researching this problem, we have determined that the software is functioning as it should. The SCSI disk device at ID 0 returned a SCSI "Unit not ready" status. This indicates a potential problem with the disk.

- KERNEL STR: NASC000010148
REV: 4.32 ORIG-ID: RAYSIGLOSS

PROBLEM SUMMARY:

When the CPU is saturated (no idle time available), a POSIX signal from a high priority process (low nice value) to a low priority process (high nice value) is lost.

ANSWER SUMMARY:

The results exhibited on your system are not due to a software bug. The results are due to the way your process priorities are set. What has happened is that the priority for the low priority process is set so much lower than that for the high priority process that the low priority process never gets CPU time - therefore it never sees the signal.

DG/UX OPERATING SYSTEM

- KERNEL STR: NASC000010218
REV: 4.32 ORIG-ID: Q316697

PROBLEM SUMMARY:

No documentation is available on obtaining access to the information in the siginfo structure from within a signal handler defined by a call to the signal() function.

ANSWER SUMMARY:

The requested information will be included in the online man page distributed with revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000010531
REV: 4.32 ORIG-ID: JKT-001

PROBLEM SUMMARY:

Panic 20000005.

ANSWER SUMMARY:

This problem was resolved in revision 5.4 of DG/UX. Patch 4.32.01.50 will correct this problem on you revision 4.32 system.

- KERNEL STR: NASC000010773
REV: 4.32 ORIG-ID: Q363232

PROBLEM SUMMARY:

System performance degradation occurred. Response time on terminals and printers amounts to a few seconds every several minutes. Once system was reset the problem cleared up.

ANSWER SUMMARY:

This problem has been corrected in revision 5.4 of DG/UX. Patch 4.32.01.51 is also available to correct the problem if an upgrade to revision 5.4 is not feasible at this time.

- KERNEL STR: NASC000010956
REV: 4.32 ORIG-ID: Q375136

PROBLEM SUMMARY:

System panics with 1000001 and 6000015 when making backups to a QIC-150 tape under revision 4.32 of DG/UX.

ANSWER SUMMARY:

Analysis of the dumps submitted did not indicate the cause of these panics. However, the cause of these panics is likely to be a faulty piece of hardware. It is our understanding that the Field Engineer has replaced the CPU memory board and since the replacement hardware has been installed, you have not

had any more panics. This STR is being closed with the approval of your FE BM.

- KERNEL STR: NASC000011492
REV: 4.32 ORIG-ID: Q408097

PROBLEM SUMMARY:

Received panic 1000037 on AV4120. The only unusual activity was a failure of de3270 to be able to respond properly to a bind request to the IBM system.

ANSWER SUMMARY:

This panic is due to a hardware parity error. In order to clear the panic, you must cycle the power on the system. If this problem occurs often with the same memory address, the appropriate memory board should be replaced.

- KERNEL STR: UKSC000050495
REV: 4.32 ORIG-ID: DG/UX PANIC 2

PROBLEM SUMMARY:

AV/5120 system panic 2000107.

ANSWER SUMMARY:

This panic is fixed with DG/UX TCP/IP patch #51.

- KERNEL STR: UKSC000050539
REV: 4.32 ORIG-ID: ASSORTED PANI

PROBLEM SUMMARY:

AV/5120 panic'd 3 times over 3 days with following panics: 121000071, 2000107, 2000075. This STR is against the first panic - 121000071.

ANSWER SUMMARY:

This panic is fixed with DG/UX TCP/IP patch #51.

- KERNEL STR: UKSC000051427
REV: 4.32 ORIG-ID: EXATAPE CPIO

PROBLEM SUMMARY:

A cpio backup dump of disk to 2GB Exabyte tape drive always fails at the same point, after dumping ~300MB of data. When cpio fails it causes a system hang.

ANSWER SUMMARY:

Analysis of the dump submitted with this STR pointed to faulty hardware. The disk upon which the /usr file system resides was subsequently replaced. It has now been several weeks since the new disk was installed and the problem has not occurred since then. We are therefore concluding that the faulty disk caused this problem. If the problem should recur, however, please resubmit this STR.

DG/UX OPERATING SYSTEM

- KERNEL STR: UKSC000052215
REV: 4.32 ORIG-ID: PANIC 6000016

PROBLEM SUMMARY:

AV/4000 became very slow during normal operation then panic-ed with panic code 6000016.

ANSWER SUMMARY:

This problem is fixed in revision 5.4 of DG/UX. Additionally, this problem is corrected in patch 4.32.01.19 and all later patches to the ts.a kernel library. The most current patch to revision 4.32 which contains this fix is patch 4.32.01.51.

- KERNEL STR: UKSC000052814
REV: 4.32 ORIG-ID: DG/UX 4.32 DU

PROBLEM SUMMARY:

Terminal Hang on AV4020 running 4.32 with patch 4.32.01.51 installed.

ANSWER SUMMARY:

A syacdump of the hung terminal line is needed in order to continue investigation of this problem. Since that cannot be provided due to hardware configuration modifications, this STR is being closed. If it becomes possible to provide the syacdump, please reopen this STR so that we can continue investigation of this problem.

- KERNEL STR: UKSC000053495
REV: 4.32 ORIG-ID: PANIC 4000007

PROBLEM SUMMARY:

DG/UX 4.32, Hardware av4200. Syac panics ie (0xdb 0x16) while processing. Patch 4.32.01.51 had been applied but system had hit a 4000007 panic.

ANSWER SUMMARY:

In researching this problem, and evaluating the dump provided, we believe this problem is a known duart bug. This bug is fixed with patch 4.32.01.51 which is NOT part of the kernel image provided with the dump. Please have this patch installed, and build and new kernel. The problem should not reoccur.

- KERNEL STR: NASC000010501
REV: 4.34 ORIG-ID: 7651-IBC1

PROBLEM SUMMARY:

The system intermittently panics with code 2000075. Usually occurs when the OFM (optical disk) software is running.

ANSWER SUMMARY:

An isolation patch was provided to help pinpoint the cause of this panic. Since it was installed, this panic has not occurred. It is likely that one of the numerous other changes on this system have resolved this problem. Should the problem recur, however, please resubmit this STR along with another system dump.

- KERNEL STR: NASC000010544
REV: 4.34 ORIG-ID: BW-910920

PROBLEM SUMMARY:

When the user count is high and system begins to swap the system hangs up.

ANSWER SUMMARY:

We can not find any problem with DG/UX. We understand that adjusting Oracle spin count and cpu parameters has helped performance, but that a dead-lock problem between two Oracle batch update processes is the real cause of your system slow downs. This is not a DG/UX problem, but a problem that Oracle will have to address.

- KERNEL STR: NASC000010855
REV: 4.34 ORIG-ID: IBC-911025

PROBLEM SUMMARY:

A process hung in the ffm subsystem while appending to a file.

ANSWER SUMMARY:

This problem is fixed in revision 5.4 of DG/UX. Additionally, patch 4.34.01.13 is available to resolve this problem on a 4.34 system.

- KERNEL STR: NASC000010957
REV: 4.34 ORIG-ID: Q367312

PROBLEM SUMMARY:

We are using diskman. If at the prompt "Enter the disk name in DGUX Common Format" and you enter sd(hada(),n) instead of the correct da(hada(),n) it will cause the machine to panic. Patch 4.32.01.30 is also installed.

ANSWER SUMMARY:

This problem is fixed in revision 5.4 of DG/UX.

DG/UX OPERATING SYSTEM

- KERNEL STR: UKSC000051936
REV: 4.34 ORIG-ID: SEALED LDU

PROBLEM SUMMARY:

AV8000 with HADA failed with Unknown LDU sealed, Status 13005030; Run fsck to restore. This was followed by a HADA panic message.

ANSWER SUMMARY:

This particular LDU seal was due to a HADA hardware problem. Your second LDU seal problem has been resolved in revision 5.4 of DG/UX. Patches 4.33.01.02 and 4.34.01.07 are also available to correct this problem on DG/UX revision 4.34 systems. These patches are available from your Data General Support Representative.

- KERNEL STR: UKSC000052656
REV: 4.34 ORIG-ID: 1000036 PANIC

PROBLEM SUMMARY:

AV/6240 running 4.34 returned Panic 1000036 whilst being shutdown.

ANSWER SUMMARY:

The panic reported was due to faulty hardware. Since that hardware (first CPU board and memory board) was replaced the problem has not occurred. If the problem should recur, please submit a new STR along with a system dump for analysis.

- KERNEL STR: JAPN000000628
REV: 5.40 ORIG-ID: NDG 2491

PROBLEM SUMMARY:

Panic 57000136

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. FSCK was not checking to see if the fragment bit on a file was set with the file size set to 0. This caused the file system trouble when the file was referenced.

- KERNEL STR: JAPN000000635
REV: 5.40 ORIG-ID: NDG 2498

PROBLEM SUMMARY:

Panic 2000075 occurred on DG/UX 5.4

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p28 is available to apply to revision 5.4 to correct this problem. Please contact your Data General Support Representative to obtain this patch.

- KERNEL STR: NASC000010644
REV: 5.40 ORIG-ID: Q351447

PROBLEM SUMMARY:

The system gets a System Panic 3000032 at the master console when establishing an ftp session after revving up DGUX to 5.40.

ANSWER SUMMARY:

This problem has been isolated to a failure on the system board. With a newer revision of the AV/4000 CPU, DG/UX 5.4 does not panic after establishing an FTP session.

- KERNEL STR: NASC000010649
REV: 5.40 ORIG-ID: Q353876

PROBLEM SUMMARY:

AV4600 running dgux 5.4 does not recognize exabyte tape drive from a cold boot.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000010781
REV: 5.40 ORIG-ID: Q364064

PROBLEM SUMMARY:

A total system hang occurred.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000010799
REV: 5.40 ORIG-ID: Q364525

PROBLEM SUMMARY:

Scripts that do cursor handling do not work correctly after revving up to revision 5.4 of DG/UX.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000010821
REV: 5.40 ORIG-ID: Q366179

PROBLEM SUMMARY:

Panic 2000075 occurred on AV6200.

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ANSWER SUMMARY:

This problem will be eliminated in DG/UX 5.4.1. The problem is caused by a read from an applicaion running on this machine. There is a program named 'ar100n' which is making a read system call to a terminal device with the size of the read exceeding 4 billion bytes in decimal. We suspect that this is a bug in the 'ar100n' program, and we suggest that it be fixed to avoid this problem.

- KERNEL STR: NASC000010831
REV: 5.40 ORIG-ID: 10570-A

PROBLEM SUMMARY:

Panic 2000075 occurred.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p17 has been supplied to you to correct the problem.

- KERNEL STR: NASC000010918
REV: 5.40 ORIG-ID: Q372273

PROBLEM SUMMARY:

System panic 2000075 under DG/UX revision 5.40.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1. of DG/UX.

- KERNEL STR: NASC000011106
REV: 5.40 ORIG-ID: Q382935

PROBLEM SUMMARY:

We have received panic 2000075 since rev'ing up to 5.4. We are doing development work on the system when this happens.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011142
REV: 5.40 ORIG-ID: E61468

PROBLEM SUMMARY:

Mirror broken after system panic'd with 3000032.

ANSWER SUMMARY:

The problem with sync-ing of mirrors will be fixed in revision 5.4.1 of DG/UX. Since no dump was submitted with this STR, we cannot pursue any investigation of the system panic you experienced. If this panic

recurs, please submit an STR along with a system dump for analysis.

- KERNEL STR: NASC000011183
REV: 5.40 ORIG-ID: TM-1127

PROBLEM SUMMARY:

System hang after getting LDterm:(LDterm serv) out of blocks message on master console.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011383
REV: 5.40 ORIG-ID: E61682

PROBLEM SUMMARY:

We are experiencing a problem with double logon's being displayed. Errors 5,6, and 11 are recorded in the ttymon log.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011432
REV: 5.40 ORIG-ID: VM-TM-911224

PROBLEM SUMMARY:

Panic 2000075 after powering down the modem which was attached to the Duart port.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX by a modification to ldterm.

- KERNEL STR: NASC000011441
REV: 5.40 ORIG-ID: 3M-Q394298

PROBLEM SUMMARY:

Panic 2000075 occurred.

ANSWER SUMMARY:

This panic is the result of excessive SCSI timeouts due to hardware failures or configuration/cabling problems. SCSI timeouts send DG/UX into reset recovery which, if the hardware never responds, will eventually cause a panic. This problem will be fixed in revision 5.4.1 of DG/UX. However, we also recommend that you run hardware diagnostics to isolate the cause of the timeouts.

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- KERNEL STR: NASC000011445
REV: 5.40 ORIG-ID: Q400006

PROBLEM SUMMARY:

The command SYSTEMID returns error "not available" on av5225.

ANSWER SUMMARY:

After investigating this problem, we have determined that DG/UX is functioning as it should. This problem is in the PROM, which can be corrected by upreving the PROM to revision 9.12.0.

- KERNEL STR: NASC000011451
REV: 5.40 ORIG-ID: CB-JC-911230

PROBLEM SUMMARY:

Panic 57000073 occurred.

ANSWER SUMMARY:

This problem was caused by incorrect SCSI cabling. This panic occurs when an I/O operation fails, which is common in the case of incorrect cabling. If the problem does occur after your cabling is corrected, please resubmit this STR along with a new system dump for further investigation.

- KERNEL STR: SWE 000000432
REV: 5.40 ORIG-ID: ERICSSON 54M

PROBLEM SUMMARY:

Panic 54000003 occurred.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p27 is available to fix this problem. Please contact your Data General Support Representative to request this patch.

- KERNEL STR: SWE 000000433
REV: 5.40 ORIG-ID: ERICSSON 2M P

PROBLEM SUMMARY:

Panic 2000007 taken during full production in the middle of the work day.

ANSWER SUMMARY:

This problem is fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p24 is available to fix this problem. Please contact your Data General Support Representative to request this patch.

- KERNEL STR: SWE 000000439
REV: 5.40 ORIG-ID: ERICSSON 1M P

PROBLEM SUMMARY:

1000037 panic occurred during normal operation.

ANSWER SUMMARY:

After analyzing the dump, we requested that the hken board be swapped out and a new board installed. Once this was done, the panic did not occur again.

- KERNEL STR: UKSC000052849
REV: 5.40 ORIG-ID: DG/UX PANIC 5

PROBLEM SUMMARY:

On an AV/5225 running DG/UX 5.4 a panic 57000116 occurred.

ANSWER SUMMARY:

After researching this problem, we have determined that the software is functioning as it should. This problem appears to be caused by faulty hardware.

- KERNEL STR: UKSC000054039
REV: 5.40 ORIG-ID: NFS XFER HANG

PROBLEM SUMMARY:

System Panic 57000014 while loading a 64mb system dump from a remote 5.4 system.

ANSWER SUMMARY:

After researching this problem, we have determined that the software is functioning as it should. The system which panicked was an NFS server with a remote swap area. This is an unsupported configuration; all NFS servers should have local swap areas.

- KERNEL STR: UKSC000054084
REV: 5.40 ORIG-ID: PANIC 2000075

PROBLEM SUMMARY:

Panic code 2000075 occurred while loading a 128 Mb. database under DG/UX 5.4.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p28 is available from your Data General Support Representative to correct this problem under revision 5.4.

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- KERNEL STR: WEBO000036816
REV: 5.40 ORIG-ID: MN.01

PROBLEM SUMMARY:
All user terminals hang.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p20 is available from your Data General Support Representative to correct this problem.

- KERNEL STR: WEBO000036841
REV: 5.40 ORIG-ID: PICARD-91-11

PROBLEM SUMMARY:

With DG/UX 5.4, shell generates a large number of DEFUNCT processes.

ANSWER SUMMARY:

The information provided with this STR was insufficient for us to proceed with the investigation of this problem. If the problem continues to occur, please resubmit this STR along with instructions for reproducing the problem as well as a system dump displaying the defunct processes.

- LINT STR: NASC000005905
REV: 4.21 ORIG-ID: E058791

PROBLEM SUMMARY:

Error - "Syntax error: Redeclaration of memccpy", returned from the lint code checking utility when memccpy is declared as shown in the on-line man pages.

ANSWER SUMMARY:

Inclusion of memory.h produces a declaration of memccpy, which is the product of conditional macro expansions. The lint invocation must explicitly present the proper predefines so that the declaration in memory.h matches the man page description. The proper predefines are obtained by invoking gcc -v, and placing the -D options produced by gcc into the lint invocation line.

- LP STR: NASC000010693
REV: 5.40 ORIG-ID: JH-911007

PROBLEM SUMMARY:

Printing to laser printer via termprinter does not work. Need new termprinter model and lp .cat.

ANSWER SUMMARY:

Supporting postscript and laser printers on a termserver is supported in DG/UX revision 5.4.1. Sup-

port in revision 5.4 is provided in patch level dgux_5.4.0.13 or greater.

- LP STR: NASC000010885
REV: 5.40 ORIG-ID: Q362722

PROBLEM SUMMARY:

Problem with DG/UX 5.4 LP messages being sent more than once.

ANSWER SUMMARY:

When you are going to disable a printer by turning it off for the weekend, you should use the disable command first. In this case current jobs in the queue will still be there on Monday, and you won't have any messages in your mailbox.

- LP STR: NASC000011068
REV: 5.40 ORIG-ID: SAG-001

PROBLEM SUMMARY:

When installing printers for WordPerfect 5.0, WordPerfect modifies the printer files in the "interfaces" directory. The path to the "interfaces" directory did not resolve correctly.

ANSWER SUMMARY:

This link has been corrected in DG/UX revision 5.4.1.

- LP STR: NASC000011077
REV: 5.40 ORIG-ID: Q381435

PROBLEM SUMMARY:

We can NOT continue a print job at the current page after a printer fault. Sysadm says if we select the continue option, that is what should happen. We believe that this is a bug and should be fixed.

ANSWER SUMMARY:

For your given printer, Fujitsu model 304XR, modify setup menu #31 to 'cnton' to force DTR high at all times. If DTR drops, lpsched, interrupts this as a hard fault and restarts the job from the beginning. By forcing DTR high, software flow control is used for off-line and out of paper states, and the job continues printing when the soft fault occurs.

- LPD STR: NASC000008855
REV: 4.31 ORIG-ID: Q226526

PROBLEM SUMMARY:

Problem printing file if filter is specified in printcap. The job goes into the queue, but the job never prints. The job is removed from the queue.

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- SH STR: UKSC000052993
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

The customer is running DGUX 5.40, under 4.32 "trap < command > 1 2 3" worked when used within a script, under 5.40 it doesn't. Instead of a HUB INT or QUIT being trapped they result in the termination of the script.

ANSWER SUMMARY:

This problem with trap is fixed in DG/UX Revision 5.4.1.

- SH STR: WEBO000000001
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

Under DG/UX 5.4, the sh (ie., bourne shell) sets the signal SIGQUIT to SIGIGN. This breaks VTP for AViiON Systems (C096A). Please restore to previous handler.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. SIGQUIT and SIGIGN are supported from the bourne shell as they were previously under revision 4.3x.

- STTY STR: NASC000009750
REV: 4.31 ORIG-ID: MIT-910624-A

PROBLEM SUMMARY:

"stty nl" tabs are not displayed properly when "cat" or "more" is used to display files with tabs in them.

ANSWER SUMMARY:

The following procedure should be used to setup older DG terminals. Configure terminals for ANSI mode, 8 bits/character and no parity. Run the command: stty n1 -tabs; Set TERM=d210. If function/arrow keys do not work, run one of the following: A) For Bourne Shell: stty -istrip B) For C shell: stty pass8.

- STTY STR: NASC000010541
REV: 4.32 ORIG-ID: Q341537

PROBLEM SUMMARY:

The command "stty quit "" from the shell prompt will set quit to be <undef>. However, if you have a script that does 'stty quit "" and then stty -a, the quit is changed to "^" instead of "<undef>" as desired.

ANSWER SUMMARY:

This problem is fixed in revision 5.4 of DG/UX.

- SYSADM STR: NASC000010747
REV: 5.40 ORIG-ID: Q354674

PROBLEM SUMMARY:

When we create a korn shell user under DG/UX revision 5.40 several files are created for the user, that we do not believe should be created.

ANSWER SUMMARY:

The files created in a user's home directory are not dependent on the shell chosen for the user. Rather, they are copied into the user's home directory from the /etc/skel directory. If you wish to change the default start up files for a user, then you should edit the contents of /etc/skel. Chapter 4 of Customizing the DG/UX System provides information on modifying defaults.

- SYSADM STR: UKSC000054087
REV: 5.40 ORIG-ID: SYSADM

PROBLEM SUMMARY:

When using SYSADM -> device-> port-> Port Service-> modify, an error: "received Signal 11 " is returned after entering ttymon1 to the first question "Controlling port monitor for service"

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- TAR STR: JAPN000000629
REV: 4.32 ORIG-ID: NDG 2493

PROBLEM SUMMARY:

tar program does not generate error message on End of Tape

ANSWER SUMMARY:

Per your request, we are closing this STR. Please note that the tar command has been enhanced under DG/UX 5.4. You may now use the -k flag to specify the length of tape being used.

- TAR STR: NASC000010784
REV: 5.40 ORIG-ID: NSASUNNOLOAD

PROBLEM SUMMARY:

Cannot set up SUN client under 5.4 DGUX.

ANSWER SUMMARY:

This problem was caused by SunOS using a group id not defined in the default /etc/group file in DG/UX. The gid used by Sun is 10. As a workaround, add group 10 to the /etc/group file, and tar will be fixed to handle this case in DG/UX 5.4.1.

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- UUCP STR: NASC000010932
REV: 5.40 ORIG-ID: Q372881

PROBLEM SUMMARY:
uudemon.cleanup no longer runs properly under dgux 5.4 because of the modification to pwd under dg/ux revision 5.4.

ANSWER SUMMARY:
This problem is fixed in DG/UX Revision 5.4.1.

- VI STR: NASC000008837
REV: 4.31 ORIG-ID: E60146

PROBLEM SUMMARY:
"vi" will not map function key 10 (F10), function keys F1 to F9 map properly.

ANSWER SUMMARY:
To map function key 10 (F10), you must specify the key's ASCII value. To do this, while in vi command mode, type :map < Ctrl-V > < F10 > command (command is a set of vi commands). This will also work for function keys 11-15. When using vi in an xterm window, set the TERM variable to xterm-fk. Refer to Appendix D of "Managing the DG/UX System" for proper setup of various DG terminals.

- VI STR: NASC000010106
REV: 4.31 ORIG-ID: Q318365

PROBLEM SUMMARY:
Problem with d211 and the vi editor. When scrolling through the text of a file, the text will not indent properly.

ANSWER SUMMARY:
To correct the problem you report you need to change terminal line characteristics using the stty command. In particular you will need to do the following, if you are a Bourne shell user:
\$ stty -icrnl -onlcr tab3. The screen display under vi will be correct after the characteristics are set.

- XSYSADM STR: WEBO000036783
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:
xsysadm sometimes hides "Interactions" screen from the user. This causes confusion.

ANSWER SUMMARY:
This problem is fixed in DG/UX 5.4.1.

- XTERM STR: NASC000011125
REV: 5.40 ORIG-ID: PQX1

PROBLEM SUMMARY:
One of the adobe-courier fonts is not displayed correctly on the screen and thus is not erased correctly within X Windows.

ANSWER SUMMARY:
The problem you reported is documented in the DG/UX 5.4 X11 Release Notice. The workaround for this problem, which occurs for monospaced fonts that contain character definitions with "ink" outside the bounding box, is to set the '*VT100*adjust-CharacterCellSize:' to 'on' in your XTerm resource file. This is documented in the xterm(1) man page.

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ANSWER SUMMARY:

This problem has been fixed in revision 5.4 of DG/UX. Patch 4.34.01.20 has been made available to you that will correct the problem on a DG/UX Revision 4.34 system.

- REV: 4.34 STR: NASC000011724
 ORIG-ID: BARNEYHANG

PROBLEM SUMMARY:

Complete system hang after following command was issued:

```
dd if = /dev/rmt/0 of = /300/cpf/fd/tapebarn
ibs = 23430. Unable to hotkey system. Reset cpu and
took dump with st 1000.
```

ANSWER SUMMARY:

As we discussed, this STR is being closed at your requested since it has been determined that the problem reported was caused by a defective tape drive.

- REV: 4.34 STR: NASC000011730
 ORIG-ID: E61953

PROBLEM SUMMARY:

Experiencing 20000005 panics upon backing up filesystems to cartridge tape.

ANSWER SUMMARY:

Thank you for reporting this problem; however, as we have mentioned to you, we will be unable to investigate this problem without a system dump taken immediately after the panic occurs. Please submit another STR with the appropriate materials should the problem continue to occur.

- REV: 5.40 STR: GER 000014860
 ORIG-ID: ZD292

PROBLEM SUMMARY:

Diskless Workstation does not boot anymore without keyboard.

ANSWER SUMMARY:

After investigating your problem, we have determined that the software is functioning as expected. It was not intended to boot without a keyboard or console with 4.3x; this was a problem with that release. We fixed that problem in 5.4, and the console port now obeys RS-232 conventions.

- REV: 5.40 STR: GER 000014861
 ORIG-ID: ZD293

PROBLEM SUMMARY:

Default DG/UX 5.4 installation provides write access for "other" on files in the /srv tree.

ANSWER SUMMARY:

The code in admclient, admpackage, and admrelease that creates the /srv directory created the files in question with default protection. Usually, the root would have unmask set to 022, so it would be ok. However, if the you had umask set to 0 and ran one of these commands, the files were created writeable by the world.

- REV: 5.40 STR: GER 000014862
 ORIG-ID: ZD295

PROBLEM SUMMARY:

Changing the timezone sets the clock only temporary.

ANSWER SUMMARY:

This problem is not reproducible under dg/ux 5.4.

- REV: 5.40 STR: INTL000000355
 ORIG-ID: AL04715

PROBLEM SUMMARY:

The system took a 1000001 panic.

ANSWER SUMMARY:

This panic was caused by having the loop0 interface configured incorrectly in TCP/IP. The system panicked because a ping packet was bouncing between the hken and loop interfaces which both had the same IP addresses. Please correct the system to use the 127.0.0.1 IP address for the loop0 TCP/IP interface.

- REV: 5.40 STR: JAPN000000639
 ORIG-ID: NDG 2502

PROBLEM SUMMARY:

Temporary files in the /tmp directory will not be deleted at boot time.

ANSWER SUMMARY:

The documentation about filesystem(7) in the manual "System Manager's Reference for the DG/UX System" regarding /tmp is incorrect. Temporary files in the /tmp directory are not deleted at reboot time. System administrators who want to clean out /tmp periodically should do so via cron jobs similar to the ones in /var/spool/cron/crontabs.

DG/UX OPERATING SYSTEM

- STR: NASC000010905
REV: 5.40 ORIG-ID: DGUX103191-1

PROBLEM SUMMARY:

The access() system call will return 0 (access permitted), if the requested path is on a read-only filesystem, and the access type checking includes W_OK.

ANSWER SUMMARY:

This problem with access() is corrected in DG/UX revision 5.4.1.

- STR: NASC000011050
REV: 5.40 ORIG-ID: Q380165

PROBLEM SUMMARY:

Problem with the way 5.4 DGUX handles floating point comparisons.

ANSWER SUMMARY:

When using unions, the usage of the variable must be consistent: the type retrieved must be the type most recently stored. In the STR example, the variables x and y are stored as integers but then incorrectly accessed in the IF statement as floats and doubles. The results are undefined when a union component is referenced by a type other than the type of the last assignment.

- STR: NASC000011101
REV: 5.40 ORIG-ID: Q377592

PROBLEM SUMMARY:

Customer is getting 0x60 iocb timeout message when he issues a shutdown command. There are still several processes running after the shutdown command completes.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- STR: NASC000011345
REV: 5.40 ORIG-ID: Q395249

PROBLEM SUMMARY:

The semctl proto is NOT properly proto typed in /usr/include/sys, semun is NOT defined.

ANSWER SUMMARY:

In DG/UX 5.4, the definition of "union semun" was removed from sem.h because it is not defined by any of the standards that DG conforms to. Also, having it defined caused problems with user applications that

had already defined it. The user should define "union semun" in a local header file.

- STR: NASC000011772
REV: 5.40 ORIG-ID: GG-1

PROBLEM SUMMARY:

Creating a user through sysadm does not update the /etc/group file.

ANSWER SUMMARY:

Creating a user through sysadm should not update the /etc/group file. The userlist in /etc/group is a list of users which may change into a given group via the newgrp command. To update the /etc/group file you must modify the group through sysadm and add a user to that group.

- STR: SPA 000000867
REV: 5.40 ORIG-ID: FIB-PANIC 121

PROBLEM SUMMARY:

PANIC CODE 121000034 when executing a customer program

ANSWER SUMMARY:

This problem is resolved with DG/UX TCP/IP Patch 2 to revision 5.4.

- STR: UKSC000052918
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

The SIGQUIT signal under 4.32 is ignored at the login shell, but under 5.4 the user is logged out of the system if a SIGQUIT signal is input. Also the isgnal can no longer be trapped. Which is correct, 4.32 or 5.40? Can the signal

ANSWER SUMMARY:

This problem is addressed with DG/UX patch dgux_5.4.0.p31 to revision 5.4. This is source fixed in DG/UX revision 5.4.1.

- STR: UKSC000053732
REV: 5.40 ORIG-ID: LD SWAP SPACE

PROBLEM SUMMARY:

Swap space required when running ld is much greater than was under 4.3X

ANSWER SUMMARY:

This problem is fixed with patch dgux_5.4.0.p26 to DG/UX revision 5.4. This will be source fixed in DG/UX 5.4.1.

DG/UX OPERATING SYSTEM

- ACCT STR: INTL000000155
REV: 4.31 ORIG-ID: SW00006

PROBLEM SUMMARY:

Connect times in the daily accounting report indicate zero minutes.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.

- AT STR: UKSC000054414
REV: 5.40 ORIG-ID: ATJOBS EXTRA

PROBLEM SUMMARY:

Script file supplied by program via standard input to the at command is scheduled by placing entry in /var/spool/cron/atjobs but this file is found to have an extra NL added after each entry line, in dg/ux 5.40. OK in 4.32.

ANSWER SUMMARY:

This problem has been fixed in DG/UX 5.4.1.

- AT STR: UKSC000054930
REV: 5.40 ORIG-ID: AT INSERTING

PROBLEM SUMMARY:

After uprevving to DG/UX 5.4 that an 'at' command that uses redirected input inserts a NL after every line. This affects performance of their Powerhouse application. This is the same as problem reported in UKSC-54414.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- CPIO STR: NASC000011515
REV: 5.40 ORIG-ID: Q409555

PROBLEM SUMMARY:

Cpio is NOT restoring the major number on files made with mknod.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2.

- CRON STR: NASC000011583
REV: 5.40 ORIG-ID: Q404049

PROBLEM SUMMARY:

Occasionally, the system will run at jobs early. We set up 5 at jobs on Monday to do the nightly backups for the week at 6PM. Sometimes the jobs will run as much as 36 hours before schedule.

ANSWER SUMMARY:

This behavior, and its cause are documented in the cron(1M) man page. See the BUGS section for complete details.

- CT STR: NASC000010789
REV: 4.32 ORIG-ID: Q362208

PROBLEM SUMMARY:

Ct aborts with a memory fault.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.

- CT STR: UKSC000053649
REV: 4.32 ORIG-ID: CT MEMORY FAU

PROBLEM SUMMARY:

DG/UX 4.32 ct causes memory fault - core dump.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.

- CU STR: NASC000010976
REV: 5.40 ORIG-ID: E061313

PROBLEM SUMMARY:

Cu does NOT default to the current bits per character as stated in man pages.

ANSWER SUMMARY:

We are unable to reproduce the problem you report with cu(1). If you continue to experience the problem when you have set up the bidirectional line as we describe below, please open a new Software Trouble Report.

- DBX STR: NASC000009892
REV: 4.32 ORIG-ID: Q294699

PROBLEM SUMMARY:

Error - "Memory fault - core dumped when reading symbol data from user supplied program" is returned from dbx when trying to load a large ghf77 program for debugging.

ANSWER SUMMARY:

This problem has been fixed in DG/UX revision 5.4. For DG/UX revisions 4.31 - 4.34, patch dgux_4.32.01.53 will resolve this problem until 5.4 is available. This patch may be applied to DG/UX revisions 4.31 - 4.34. As we discussed in our conversation, you have applied this patch, and you are no longer experiencing this problem.

DG/UX OPERATING SYSTEM

- DBX STR: NASC000011192
REV: 5.40 ORIG-ID: E061551

PROBLEM SUMMARY:

Error - "Note: No debugging information at current position, this region will be treated as one line", is returned when trying to use the step command to debug a C program in the default elf development environment.

ANSWER SUMMARY:

The warning message being reported by dbx is correct in this case. The warning occurs because the routine being stepped into is an ELF shared object. No debugging information exists for shared external library routines such as printf. Please refer to section 5.2.4 "dbx and sdb" in the DG/UX revision 5.4 Release Notice for more details.

- DF STR: NASC000010960
REV: 5.40 ORIG-ID: E61287

PROBLEM SUMMARY:

Apparent discrepancies in the space being reported by the df command and the cpd command.

ANSWER SUMMARY:

The apparent discrepancies arise because df(1M) operates on a file system and cpd(1) operates on a file. The tools available to each command differ somewhat. However, with some work, one can reconcile the output of one command with the other.

- EDITREAD STR: NASC000011673
REV: 5.40 ORIG-ID: Q407693

PROBLEM SUMMARY:

We have a problem using editread with WYSE 50 terminal emulation. When editread is enabled the carriage return or newline keys don't respond. When we disable editread, it works fine.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- EDITREAD STR: UKSC000052104
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

Wy60 screens in native mode, TERM = wyse60, editread enabled. When logging into the shell screen just hangs, with editread disabled everything is ok. Running under 5.4 through term servers, reproduced on two machines

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- EDITREAD STR: UKSC000054270
REV: 5.40 ORIG-ID: EDITREAD AND

PROBLEM SUMMARY:

When editread facility is enabled with wyse60 terminals, using the wyse60 terminfo, users hang at the shell prompt. An 'stty -a < /dev/ttynn shows device settings have disappeared. OK without editread on. DG/UX 5.40.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

- INSTALLATION STR: NASC000011463
REV: 5.40 ORIG-ID: E61746

PROBLEM SUMMARY:

Follow-up to STR NASC-10037 to document procedure to restore a damaged root file system similar to the procedure used in 4.3x of DG/UX.

ANSWER SUMMARY:

The procedure described in the 4.3x manuals for repairing damaged root file systems is not applicable to DG/UX 5.4 and later revisions.

- KERNEL STR: UKSC000051829
REV: 4.31 ORIG-ID: PANIC 2000075

PROBLEM SUMMARY:

AV/4000 experienced panic 2000075 during normal operation.

ANSWER SUMMARY:

The dump tape submitted with this STR was not readable. In addition, the revision of DG/UX under which this problem occurred is no longer supported. Please upgrade your system to revision 4.32 or greater and resubmit this STR if the panic recurs after the system is upgraded.

- KERNEL STR: FRA 000000705
REV: 4.32 ORIG-ID: BERGES C:63RA

PROBLEM SUMMARY:

On AViiON 5xxx, UNIBOL programm (/sbin/rpgrun) loops, and terminal is hang. Programs work fine on AV410 and Av300.

ANSWER SUMMARY:

After researching this problem, we have determined that DG/UX is functioning as it should. The

DG/UX OPERATING SYSTEM

dump show a process clearly looping in user space. There is no indication of any "hung" terminals. The terminals appear to be hung because the user process is off stuck in a user space loop and is not responding to characters typed.

-
- KERNEL STR: FRA 00000706
REV: 4.32 ORIG-ID: BERGES C:63RA

PROBLEM SUMMARY:

On AV200, using BCP command of Sybase SW, or DELETE on an SQL table from Sybase SW will hang the system. Cannot telnet to system, master console hang. System is running DGUX4.32. BCP over Netw works, only fails locally.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 4.34.01.19 is available from your Data General Support Representative to correct this problem. You will need to upgrade your system to revision 4.34 before installing this patch.

-
- KERNEL STR: NASC000010597
REV: 4.32 ORIG-ID: Q349847

PROBLEM SUMMARY:

We received a 1000036 panic.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR with your approval since you have not been able to provide the additional dumps requested. Should the panic recur, please submit a new STR, referencing this STR and include a dump tape with the panic dump and a copy of your dgux kernel.

-
- KERNEL STR: NASC000010926
REV: 4.32 ORIG-ID: JESTER-001

PROBLEM SUMMARY:

System received 1000026 panic.

ANSWER SUMMARY:

The dump analysis indicated that the system is not running released software. Please verify that you are not running a pre-release revision or a corrupt system image.

- KERNEL STR: UKSC000053687
REV: 4.32 ORIG-ID: ALARM CALL 12

PROBLEM SUMMARY:

System hung during a shutdown due to a DBMS. They encountered an Alarm Call 12626 and then the shutdown hung.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4 of DG/UX. It can also be fixed by applying patches 4.32.01.51 and 4.32.01.54. If the problem recurs, please run syacdump when the syac hangs, and submit a new STR with a system dump and the syac dump.

-
- KERNEL STR: UKSC000053719
REV: 4.32 ORIG-ID: PANIC 2000075

PROBLEM SUMMARY:

System panic 2000075.

ANSWER SUMMARY:

This panic was due to a bug in the message queue code and has been resolved in revision 5.4 of DG/UX. Patch 4.31.00.49 is also available and has been provided to fix this problem.

-
- KERNEL STR: UKSC000054697
REV: 4.32 ORIG-ID: SYSTEM HANG

PROBLEM SUMMARY:

System hang after poor performance on sysc lines.

ANSWER SUMMARY:

We can not determine the cause of your system hang with a syacdump. Please install patches 4.32.01.38 and 4.32.01.55. If you system hangs again, please take a dual ported RAM dump, syacdump, and system dump. You may sync your disks and unmount filesystems, but please do not kill any processes that have ports open on a hung syac.

-
- KERNEL STR: UKSC000055307
REV: 4.32 ORIG-ID:

PROBLEM SUMMARY:

AV6240 running DG/UX 4.32: panic 6000004.

ANSWER SUMMARY:

This problem was fixed in revision 5.4 of DG/UX. Additionally, patch 4.34.01.10 is available from your Data General Support Representative to correct this problem on DG/UX revision 4.3x systems.

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- KERNEL STR: NASC000011039
REV: 5.40 ORIG-ID: Q369652

PROBLEM SUMMARY:

When the sticky bit is set for a directory using the chmod command, users other than those owning the directory are able to rename and delete files within the directory.

ANSWER SUMMARY:

The rename problem you are seeing will be corrected in revision 5.4.2 of DG/UX. This was truly a problem since users without write permission or ownership of a directory with the sticky bit set were allowed to rename files within it. The deletion of files is not a problem since it only works when a user has write access to the directory in question, as documented in the rm(1) man page.

- KERNEL STR: NASC000011094
REV: 5.40 ORIG-ID: Q382647

PROBLEM SUMMARY:

System received 3 57000073 panics. (IO operation failed while trying to swap a kernel page).

ANSWER SUMMARY:

After researching this problem, we have determined that the software is functioning as it should. Apparently, the HADA IOP controller had panicked with panic code 900,000, and the info field is 0. This is indicative of a hardware problem with the IOP controller. A hardware service call was placed on your behalf and the Field Engineer has installed a FCO for the Aurora IOP.

- KERNEL STR: NASC000011265
REV: 5.40 ORIG-ID: Q394391

PROBLEM SUMMARY:

Reading from our 1600/6250 reel to reel tape drive causes our system to hang. TCP/IP, syac cluster lines and the master console all hang. We can NOT even do a hot key sequence to take a dump.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR with your approval. We understand that this problem was a result of a hardware problem. You have not experience any hangs of this type since your local DG FE upgraded many of your system components to the current revisions.

- KERNEL STR: NASC000011346
REV: 5.40 ORIG-ID: Q395695

PROBLEM SUMMARY:

When we log off we can NOT log back on.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011455
REV: 5.40 ORIG-ID: Q403751

PROBLEM SUMMARY:

System panic 2000107.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011474
REV: 5.40 ORIG-ID: 920102

PROBLEM SUMMARY:

Physical memory error panic occurred following a bus error on a DSP board.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p36 is available from your Data General Support Representative to correct this problem.

- KERNEL STR: NASC000011592
REV: 5.40 ORIG-ID: Q410409

PROBLEM SUMMARY:

We are experiencing panic codes 7000001 and 1000036.

ANSWER SUMMARY:

This problem was also reported by you as STR number NASC-11597. Please track the status of this problem investigation by referring to that number.

- KERNEL STR: NASC000011597
REV: 5.40 ORIG-ID: 7651-DRB-NYPO

PROBLEM SUMMARY:

1000036 Panics.

ANSWER SUMMARY:

This problem is fixed in revision 5.4 of DG/UX. You can also set your PERCENTBUF parameter based on the amount of memory in your system in order to work around this problem.

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- KERNEL STR: NASC000011609
REV: 5.40 ORIG-ID: SDP0116

PROBLEM SUMMARY:
Panic 6000015.

ANSWER SUMMARY:

This problem occurred when the system took a soft memory error, then tried to correct the error from interrupt level. This is a design flaw which will be corrected in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011620
REV: 5.40 ORIG-ID: Q413384

PROBLEM SUMMARY:
Man page for "fcntl" system call is incorrect in regards to F_SETFL and F_GETFL O_ASYNC flag.

ANSWER SUMMARY:

The FASYNC flag rather than the O_ASYNC flag should be used with F_SETFL and F_GETFL commands of the "fcntl" system call. The on-line man page has been corrected in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011649
REV: 5.40 ORIG-ID: Q416689

PROBLEM SUMMARY:
Complete system hang (panic 30000013).

ANSWER SUMMARY:

The problem will be fixed in revision 5.4.1 of DG/UX. Meanwhile, patch 5.4.0.p42 is available to fix this problem on a 5.4 system.

- KERNEL STR: SPA 000000858
REV: 5.40 ORIG-ID: FIB_WRITE_ERR

PROBLEM SUMMARY:
DGUX 5.40 write(file_descriptor,buffer,number_of_characters) system call when number_of_characters = -1 hangs the system. "No buffer space available" error is reported by inetd(), an some time later system hangs with no panic.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4.1. Patches dgux_5.4.0.p39 and dgux_5.4.0.p44 are available to resolve this problem on dg/ux 5.4.

- KERNEL STR: UKSC000052854
REV: 5.40 ORIG-ID: SYSTEM HANG

PROBLEM SUMMARY:
AV/4600, 5.40, complete system hang. Hot key sequence use to interrupt and memory dump taken. This occurred twice in one hour.

ANSWER SUMMARY:

The dump you submitted reveals two separate but related problems. Both of these problems will be corrected in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p32 is available from your Data General Support Representative to correct one problem and thereby eliminate the second.

- KERNEL STR: UKSC000053336
REV: 5.40 ORIG-ID: PANIC 2000075

PROBLEM SUMMARY:
DG/UX 5.4 system returned panic 2000075 during normal operation.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX.

- KERNEL STR: UKSC000053620
REV: 5.40 ORIG-ID: PANIC 3000032

PROBLEM SUMMARY:
System Panic 3000032. No users on the system at the time of the panic, system panicked overnight. Running DG/UX 5.4 on an AV/4600.

ANSWER SUMMARY:

Two problems are exhibited in the dump submitted with this STR. One problem is actually causing the second to occur. Both will be fixed in revision 5.4.1 of DG/UX. Both can be avoided in the meantime by installing patch 5.4.0.p32. This patch is available from your Data General Support Representative.

- KERNEL STR: UKSC000053726
REV: 5.40 ORIG-ID: SYSTEM PANIC

PROBLEM SUMMARY:
System hang. Master console and ALL user terminals HUNG. Hotkey sequence used to generate the system dump. A standard application was running.

ANSWER SUMMARY:

The problems displayed in the dump submitted with this STR will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p32 is available from

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your Data General Support Representative to correct this problem.

- KERNEL STR: UKSC000053953
REV: 5.40 ORIG-ID: NO LOGIN TTY1

PROBLEM SUMMARY:

SYSTEM DUMP taken when user unable to login ty tty 16. "who -u" showed that a ttymon1 user was running and a "ps -ef" showed that a login proc had been there for better than 24hrs.

ANSWER SUMMARY:

In order to investigate your problem, we need a syacdump of the board that has the hung terminal. Although we requested this dump, we have not received one at this time. If this problem reoccurs, please resubmit this STR with a syacdump and a system dump.

- KERNEL STR: UKSC000054040
REV: 5.40 ORIG-ID: SYSTEM HANG

PROBLEM SUMMARY:

System hang occurred under revision 5.4 of DG/UX. All terminals hung. Master console echoed a newline.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.1 of DG/UX.

- KERNEL STR: UKSC000054124
REV: 5.40 ORIG-ID: BJ FSTAT 5.4

PROBLEM SUMMARY:

An fstat(2) call to get the size of a FIFO pipe always returns 0 in the st_size field, even if another process has just written data into the FIFO. Worked correctly under rev 4.3X of DG/UX.

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.1 of DG/UX. In the meantime, patch dgux_5.4.0.p39 is available to correct this problem.

- KERNEL STR: UKSC000054590
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

Panic 2000075 occurred.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p28 is available from your Data General Support Representative. This

patch will correct the problem on systems running revision 5.4 of DG/UX.

- KERNEL STR: UKSC000055439
REV: 5.40 ORIG-ID: DGUX LOGICAL

PROBLEM SUMMARY:

Mounting portions of broken disk mirrors does not work.

ANSWER SUMMARY:

Prior to revision 5.4.2 of DG/UX, breaking of a mirror while its pieces are still mounted will not guarantee file system consistency. This support will be added in revision 5.4.2 of DG/UX.

- LD STR: UKSC000053177
REV: 5.40 ORIG-ID: LD SWAP SPACE

PROBLEM SUMMARY:

Customer has upgraded from 4.3X to 5.4 of dg/ux. When linking a large executable (10Mb) from library files which total 25 Mb, ld uses much more swap space than it used to under 4.3X. An extra 100 Mb of swap space was required.

ANSWER SUMMARY:

In DG/UX 5.4.1, /usr/sde/m88kdguxelf/usr/bin/ld has been modified so that large amounts of additional swap are no longer required.

- LIBMISALIGN.A STR: NASC000011482
REV: 5.40 ORIG-ID: Q406563

PROBLEM SUMMARY:

The misalign feature of GNU C fails when used with a program using argc. The program gets a segmentation fault and dumps to core.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. In DG/UX 5.4, this problem is fixed by patch dgux_5.4.0.p35 which has already been delivered to you. As we discussed in our phone conversation, this patch has resolved your problem.

- LP STR: FIN 000000056
REV: 5.40 ORIG-ID: KALA-1042

PROBLEM SUMMARY:

DG/UX with several remote printers. If one job is stuck on one printer and several jobs are submitted quickly to another, only the first one prints. Restart scheduler or lp resume print one job. Pre 5.40 lp's.

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- MALLOC STR: NASC000011569
REV: 5.40 ORIG-ID: SI-9201

PROBLEM SUMMARY:

The "autorouter" program fails with a segmentation violation and dumps core. The dbx "where" command reveals that the failure occurred while the program was in malloc.

ANSWER SUMMARY:

As you have told us, you have corrected your code, and there appears to be no problem with malloc, as it is used in your program.

- MMSG STR: NASC000010952
REV: 5.40 ORIG-ID: Q375196

PROBLEM SUMMARY:

The MMSG Y command does not return the tty port back to its original permissions. The Write permission is only returned to User and Group.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4.2.

- SETUID STR: NASC000010881
REV: 5.40 ORIG-ID: Q367355

PROBLEM SUMMARY:

The "Set User ID" bit functionality seems to have changed under 5.40, scripts that depend on this fail to work under 5.40 of DG/UX, these same scripts worked fine under 4.3x of DG/UX.

ANSWER SUMMARY:

The behavior described in this str is actually the intended behavior of the DG/UX 5.4 bourne shell. It is documented in the DG/UX 5.4.1 release notice. The shell was modified to close a security hole. In pre-5.4 releases, it was possible for a user to gain super user privilege by running a setuid script that invoked an interactive shell.

- SETUID STR: NASC000011352
REV: 5.40 ORIG-ID: Q398333

PROBLEM SUMMARY:

The "Set User ID" bit functionality seems to have changed under DG/UX revision 5.40, scripts and programs that depend on this fail to work under 5.40. These same programs and scripts worked fine under 4.3x of DG/UX.

ANSWER SUMMARY:

The behavior described in this STR is actually the intended behavior of the DG/UX 5.4 bourne shell. It is

documented in the DG/UX 5.4.1 release notice. The shell was modified to close a security hole. In pre-5.4 releases, it was possible for a user to gain super user privilege by running a setuid script that invoked an interactive shell.

- SH STR: NASC000011421
REV: 5.40 ORIG-ID: Q402603

PROBLEM SUMMARY:

Sometimes the CONTROL C interrupt is sending a hang up signal that causes the processes to die and logs the user off the machine.

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.1.

- STTY STR: NASC000011621
REV: 5.40 ORIG-ID: E61883

PROBLEM SUMMARY:

There are no man pages for the "stty" and "gtty" system calls. Please include these in the next revision of DG/UX.

ANSWER SUMMARY:

The stty(3c) man page will be added in 5.4.2. Thank you for calling this to our attention. Please note that "stty" and "gtty" are macros rather than system calls. Also, please note that these calls ARE obsolete, and ioctl() calls should probably be used directly.

- SYSADM STR: JAPN000000638
REV: 5.40 ORIG-ID: NDG 2501

PROBLEM SUMMARY:

sysadm can't create group.

ANSWER SUMMARY:

This problem is resolved in Release 5.4.2 of DG/UX. The sysadm menu prompts for group names have been modified for the add and modify operations to allow the following non-alpha-numeric characters: * (plus sign) - (dash) - (underscore). (period)

- SYSADM STR: NASC000011366
REV: 5.40 ORIG-ID: Q399321

PROBLEM SUMMARY:

Trying to Modify, Add, or Delete a port service to a tty on the second or third vda255 will dump core after the 28th port is added.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

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- SYSADM STR: NASC000011549
REV: 5.40 ORIG-ID: Q407179

PROBLEM SUMMARY:

Cannot add new user using 5.4 sysadm admuser script.

ANSWER SUMMARY:

The problems seen with adding a user under sysadm were due to the fact that the global database was being accessed instead of the local database (passwd file) when the system was not the NIS master.

- SYSADM STR: SWIT000000501
REV: 5.40 ORIG-ID: DATA GENERAL

PROBLEM SUMMARY:

THE SYSADM MODIFY USER DO NOT WORK CORRECTLY. THE GROUP AND THE HOME DIRECTORY ARE NOT MODIFIED.

ANSWER SUMMARY:

This problem is resolved in Release 5.4.2 of DG/UX. The admuser(1M) command has been modified to correctly rename the directory and assign proper ownership when a new directory is specified.

- TERMINFO STR: NASC000011409
REV: 5.40 ORIG-ID: Q400470

PROBLEM SUMMARY:

Terminfo database for D211 terminals seems to be incorrect under DG/UX revision 5.40.

ANSWER SUMMARY:

The terminfo entries for d211 have not changed from DG/UX 4.30 to DG/UX 5.4. What has changed, however, is the line discipline. In 5.4, the sh now has job control (^z) which is not compatible with the down arrow key on the d211. To fix this problem, you need to turn off job control by typing: stty susp "". As we discussed, turning off job control resolved this problem.

- TTY STR: NASC000009351
REV: 4.31 ORIG-ID: Q253015

PROBLEM SUMMARY:

Our D412+ does a hard reset occasionally when we log off.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR at your request since you are upgrad-

ing to revision 5.4 and since we have not been able to reproduce your problem with the latest patches to ts.a installed on a DG/UX 4.31 systems. If you decided to stay at revision 4.31, you will need to bring your system up to the latest patch level.

- TTYMON STR: NASC000010725
REV: 5.40 ORIG-ID: Q354106

PROBLEM SUMMARY:

Sacadm -x -p ttymon2 does not enable failed TTY's after system is brought to run level 3. These lines did work for up to 2 days after the system was booted. After a time they became disabled.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. For DG/UX 5.4, patch dgux_5.4.0.p23 has been supplied to you. As we discussed in our phone conversation, you have applied this patch and are no longer experiencing any problems.

- TTYMON STR: UKSC000053651
REV: 5.40 ORIG-ID: TERMINAL ENAB

PROBLEM SUMMARY:

When using the sysadm terminal enable/disable facility, if a terminal is disabled and then enabled before a logoff occurs the USERS terminal will have TWO process running against it. USER shell/application and a login process.

ANSWER SUMMARY:

Ttymon has been modified in DG/UX 5.4.1 to behave correctly when a terminal with an active login session is disabled and then enabled. The active session is not interrupted and the login prompt appears only after the login session is terminated.

- TTYMON STR: UKSC000054721
REV: 5.40 ORIG-ID: DGUX - TTYMON

PROBLEM SUMMARY:

Users unable to log on to system. After supplying user name at login prompt the user is repeatedly given the login prompt again and not the password prompt.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

DG/UX OPERATING SYSTEM

- UUCP STR: NASC000010870
REV: 4.31 ORIG-ID: Q336707

PROBLEM SUMMARY:

An error message was encountered when attempting to dial out using cu. The message is "filelock: F_SETLK returns -1, failed to lock device /dev/tty05." What does this error indicate?

ANSWER SUMMARY:

This error indicates that a lock for /dev/tty05 already exists in /var/spool/locks. Normally the lock is cleared when the uucp connection is closed down. It is probable that a previous connection terminated abnormally and the lock was not cleared. Deleting the entry for tty05 in /var/spool/locks will free up the line and cu will be able to establish a connection.

-
- UUDAEMON STR: NASC000011043
REV: 5.40 ORIG-ID: E61359

PROBLEM SUMMARY:

The uudemmon.cleanup script does not function in 5.4.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

-
- UUSTAT STR: NASC000010807
REV: 5.40 ORIG-ID: Q365430

PROBLEM SUMMARY:

The command "uustat -p", does not function under rev 5.40 of DG/UX. When using this command, a message is returned "LK.65408.013.0: ?????".

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1.

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dgux_5.4.0.p41 is available for DG/UX revision 5.4 users.

- REV: 5.40 STR: NASC000011589
 ORIG-ID: BE-910115

PROBLEM SUMMARY:

Can no longer login into syac lines. Terminals freeze during login process.

ANSWER SUMMARY:

As we discussed in our phone conversation, this problem will be fixed in DG/UX Revision 5.4.1. Until you load 5.4.1, please continue to use the workaround we discussed of adding a 60 second wait to the inittab file in order to give the clusters time to come up.

- REV: 5.40 STR: NASC000011653
 ORIG-ID: E61918

PROBLEM SUMMARY:

ksh not working with foreground/background job control.

ANSWER SUMMARY:

In the korn shell, pressing the suspend key will stop the job that is running in the foreground. The suspend key can be set to CONRTOL Z using the command "stty susp \ ^z".

- REV: 5.40 STR: NASC000011729
 ORIG-ID: Q418968

PROBLEM SUMMARY:

Cannot add groups to /etc/group under 5.4 DG/UX.

ANSWER SUMMARY:

The routines for adding groups use the rename system call which does not work across Idus. This has been corrected in DG/UX revision 5.4.1.

- REV: 5.40 STR: NASC000011773
 ORIG-ID: GG-2

PROBLEM SUMMARY:

Unable to append a user to a group through sysadm.

ANSWER SUMMARY:

In DG/UX 5.4, the low-level routines used for adding, deleting or modifying entries in the group(4) database do not work correctly if the /etc and /tmp directories reside in different file systems. As a workaround, make sure /tmp is not a separate filesystem.

tem. This problem is fixed in the next release of DG/UX, revision 5.4.1.

- REV: 5.40 STR: NASC000011788
 ORIG-ID: Q424862

PROBLEM SUMMARY:

Problem with the symbolic link /bin to /usr/bin disappearing.

ANSWER SUMMARY:

As we agreed in our phone conversation, we are closing this STR as we are unable to investigate the problem further without a reproducible example. Should the problem occur again, please submit another STR with the additional information.

- REV: 5.40 STR: NASC000011975
 ORIG-ID: Q428758

PROBLEM SUMMARY:

Problem with modem signals not always dropping when user exits.

ANSWER SUMMARY:

We understand that your problem has been resolved by creating a new ttymon and adding -local into ttydefs.

- REV: 5.41 STR: NASC000012067
 ORIG-ID: APEX92-21UX

PROBLEM SUMMARY:

"man xtab" returns the error message: pcat: pcat: /usr/catman/p_man/man5/xtab.5.z: cannot open

ANSWER SUMMARY:

The entries for xtab(5) and exports(5) moved to section 4 in DG/UX 5.4.1. However, the xtab(5) symbolic link to exports(5) was not removed. There is no loss of information, however. The xtab and exports files are intact in section 4. This problem will be fixed in DG/UX 5.4.2.

- CPIO STR: NASC000011933
REV: 5.40 ORIG-ID: Q430182

PROBLEM SUMMARY:

Need replacement version of cpio so that backups can span more than one diskette.

ANSWER SUMMARY:

A corrected version of cpio(1) ships with DG/UX 5.4.1.

DG/UX OPERATING SYSTEM

troller. Note that provedev will still report the graphics device as present. That problem with provedev(1) is fixed in DG/UX 5.4.2.

- GRFX STR: NASC000011128
REV: 5.40 ORIG-ID: I431123000

PROBLEM SUMMARY:

The autoconfig utility used in the SW install section of Standalone diskman and in sysadm->system->kernel incorrectly includes the grfx() device on our AV4120 server.

ANSWER SUMMARY:

The problem you reported is fixed in DG/UX 5.4.1. Autoconfig will no longer report the grfx() device as present on systems without a graphics controller. Note that provedev still reports the graphics device as present. That problem with provedev(1) is fixed in DG/UX 5.4.2.

- KERNEL STR: NASC000011417
REV: 4.32 ORIG-ID: Q401665

PROBLEM SUMMARY:

Parallel printer port hangs. We must reboot the machine to free the port.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR with your approval since you will not be able to provide the additional dump requested. Should the problem recur, please submit a new STR, referencing this STR, and include a system dump taken after the printer hangs and a copy of the dgux kernel.

- KERNEL STR: NASC000011483
REV: 4.32 ORIG-ID: MEM-HOSP.1

PROBLEM SUMMARY:

All users on VDA/255 hang. Occurs every 1 to 3 days. Master console and modem port continue to operate normally.

ANSWER SUMMARY:

We are closing this STR with your approval since you have experienced no terminal or syac hangs since installing DG/UX 5.4.

- KERNEL STR: NASC000011787
REV: 4.32 ORIG-ID: Q423235

PROBLEM SUMMARY:

We encountered a 2000110 panic on an AV6220 running revision 4.32 of DG/UX.

ANSWER SUMMARY:

This problem is fixed in revision 5.4 of DG/UX.

- KERNEL STR: SWIT000000521
REV: 4.32 ORIG-ID: ASYNC 7411-KA

PROBLEM SUMMARY:

Sending the hex value FF (octal 377) to a port of the async controller. This value will be received twice. All other values will be received correct. The same works well on the standard RS-232 port (tty00).

ANSWER SUMMARY:

We can not reproduce your problem on either a 4.32 system running patch 4.32.01.51 or on a 5.4 system. Please make sure your sysetm has either patch 4.32.01.51 or 4.32.01.55. If the problem continues, please provide an example program that will show us that multiple 0377 characters are read when only one is entered.

- KERNEL STR: UKSC000053558
REV: 4.32 ORIG-ID: DG/UX 4.32 HA

PROBLEM SUMMARY:

Terminal line hangs on AV6200 running DG/UX 4.32.

ANSWER SUMMARY:

It appears that all data output from the syac has been pended by flow control from a multiplexor. In order to investigate what is happening on the VDC where flow control is handled, we need your system to be upgraded to DG/UX 5.4. DG/UX 5.4 provides support for the syacdb utility which can be used to query both VDA host adaptors and VDCs.

- KERNEL STR: UKSC000054554
REV: 4.32 ORIG-ID: SYSTEM HANG

PROBLEM SUMMARY:

All terminals connected to the VDA/255 hung. The system console was still usable and ps -ef printouts were obtained. Patches dgux_4.32.01.51/54 were not installed so NO syacdump was obtained. Patches NOW installed.

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ANSWER SUMMARY:

Unfortunately, your system dump contain hard errors, and we were not able to recover enough of the system databases to solve your problem. Please install patch 4.32.01.55 and take a dual duart dump, syac dump, and system dump if this problem occurs again. It is important that the processes running on the hung ports not be killed before the dumps are taken.

-
- KERNEL STR: UKSC000054707
REV: 4.32 ORIG-ID: DG/UX - HANG

PROBLEM SUMMARY:

DG/UX 4.32 System Hang on AV5200.

ANSWER SUMMARY:

This problem was fixed in revision 5.4 of DG/UX. In the meantime, patch 4.32.01.51 is available to correct this problem. This patch can be obtained from your Data General support representative.

-
- KERNEL STR: UKSC000055371
REV: 4.32 ORIG-ID: AV/4000,UPGRA

PROBLEM SUMMARY:

AV/4000 System hang, no response on any line. Problem was apparent after upgrading from single to a dual processor and adding extra memory and a 1Gb disk. On rebooting, system ran intermittantly slowly.

ANSWER SUMMARY:

This problem has been fixed in revision 4.32 of DG/UX with patch 4.32.01.19. This patch fixes a problem on AV/400 and AV/4000 systems (Mav Plus) that have Systech async boards (Syac devices). This patch fixes a Syac timeout problem that results in the system reporting a Syac panic/error. Patch 4.32.01.19 supersedes patch 4.31.00.21 which fixes timeout problems of the VDA/128 board.

-
- KERNEL STR: UKSC000055462
REV: 4.32 ORIG-ID: AVIION HANG,

PROBLEM SUMMARY:

AV/6220 returned error message 'out of paging area swap space' and then hung. System was restarted using the hot key interrupt sequence and rebooted. Dump taken from the interrupt supplied for analysis.

ANSWER SUMMARY:

The DG/UX product is functioning as expected. The error you are seeing is due to a high-level problem with either your application or your usage of the system.

-
- KERNEL STR: NASC000011847
REV: 4.34 ORIG-ID: Q425669

PROBLEM SUMMARY:

System got hung up in a loop during backup using dump2. The system repeated the question: Is tape mounted and ready? The admin console locked up while the master console was in this loop.

ANSWER SUMMARY:

This behavior is the result of known memory hardware problems on this system. The problem has not recurred since those problems were corrected.

-
- KERNEL STR: FRA 000000711
REV: 5.40 ORIG-ID: T.SZABRONSKI:

PROBLEM SUMMARY:

DG/UX 5.4 , AV5225: TERMINALS HANG: WHEN USERS LOG OFF, SOME TERMINALS HANG, VDA CONTROLLER WAS DUMPED USING SYACDUMP1 UTILITY.AFTER SHUTING DOWN THE SYSTEM AND BOOTING UP AGAIN, THE TERMINALS HANG ALSO:SEE THE VDA DUMP USING SYACDUMP2.

ANSWER SUMMARY:

The problem with terminals being hung right after a reboot occurs because the Service Access Controller (sac) process (which invokes ttymon) gets started before the loading of the syac board has complete. As a result, the initial attempts by ttymon to open the ttys fail and ttymon marks them as disabled. The attached change to /etc/inittab will solve the problem.

-
- KERNEL STR: INTL000000374
REV: 5.40 ORIG-ID: CL00754

PROBLEM SUMMARY:

The system panicked with code 2000075.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4.1 of DG/UX. Patch 5.4.0.p39 is also available to correct this problem on DG/UX revision 5.4 systems. This patch can be obtained from your Data General support representative.

-
- KERNEL STR: INTL000000378
REV: 5.40 ORIG-ID: SA1369

PROBLEM SUMMARY:

System hang during backup using DUMP2 from Sysadm.

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ANSWER SUMMARY:

There is not sufficient information in the system dump submitted with the STR for us to be able to determine the cause of the hang. If this problem should recur please make sure to use the hotkey sequence documented in the release notice to generate a system dump and reopen this STR.

-
- KERNEL STR: NASC000011213
REV: 5.40 ORIG-ID: Q390332

PROBLEM SUMMARY:

The select() system call is always returning a true condition (even when no data is pending) for file descriptors that are created by opening /dev/tty.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.2 of DG/UX.

-
- KERNEL STR: NASC000011270
REV: 5.40 ORIG-ID: TM-911209

PROBLEM SUMMARY:

System intermittently loses communication with various TTY lines. IOCB timeouts also occur.

ANSWER SUMMARY:

We have provided you with patches that fixed similar problems at other sites. In addition, we have provided isolation patches that will provide additional information should you experience a failure in the future. If you encounter the problem again, please resubmit this STR, and provide a syac dump and a system dump. Please note any messages logged by syslogd.

-
- KERNEL STR: NASC000011304
REV: 5.40 ORIG-ID: Q395898

PROBLEM SUMMARY:

The master console as well as all user terminals hung.

ANSWER SUMMARY:

A careful analysis of the dump provided has indicated that this dump alone is insufficient in isolating this problem. Additional dumps were requested, but since you are not able to submit any, we are closing this STR with your approval. As we discussed, this problem has not recurred since you originally reported the problem to us. Should the problem recur, please submit a new STR.

- KERNEL STR: NASC000011460
REV: 5.40 ORIG-ID: Q405036

PROBLEM SUMMARY:

We deleted a 300 meg file, and a message was sent to the master console stating: "The LDU has been downgraded to Read Only. Please run fsck to correct this problem."

ANSWER SUMMARY:

This error message indicates that the file system has become corrupted. Without a copy of the corrupted file system it is impossible to identify the cause of the corruption. If this problem should recur without obvious cause, please use dd to copy the corrupt file system to tape (before running fsck), and submit it with a request to reopen this STR.

-
- KERNEL STR: NASC000011562
REV: 5.40 ORIG-ID: 00260-920113-

PROBLEM SUMMARY:

The system crashed while a database application was running, and data was lost. This data was being buffered in memory instead of being written immediately to disk.

ANSWER SUMMARY:

In order to prevent data loss in a crash, the database should insure that buffers are flushed to disk. There are several ways to flush data to disk immediately on a write. One of these is to use the O_SYNC flag on an open. If your data is not being written to disk immediately on each write, please discuss this with your database vendor to work out a resolution.

-
- KERNEL STR: NASC000011695
REV: 5.40 ORIG-ID: Q416918

PROBLEM SUMMARY:

Using the open option of O_NDELAY in conjunction with termio options cc.c[4] and cc.c[5] does not return an error as stated in the answer to STR UKSC-44713.

ANSWER SUMMARY:

The O_NDELAY flag should not be used on a port open if termio options cc.c[4] and cc.c[5] are being used for a timeout on a read. The O_NDELAY will override the timeout. With DG/UX 4.32, the Berkeley line discipline is used, and a -1 is returned with error EWOULDBLOCK when these are used together. With DG/UX 5.4, since the AT&T line discipline is used, a 0 is returned instead of a -1.

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- KERNEL STR: NASC000011706
REV: 5.40 ORIG-ID: Q412846

PROBLEM SUMMARY:

We had a 3000032 panic. We increased the value of NQUEUE to 1000000, rebuilt the kernel, and rebooted the system. We then received another 3000032 panic.

ANSWER SUMMARY:

As we discussed in our phone conversation, this problem is a result of a hardware problem. Since HTR #526 has been submitted for this hardware problem, we are closing this STR. Please track the progress of HTR #526 with your hardware support organization.

- KERNEL STR: NASC000011881
REV: 5.40 ORIG-ID: Q428946

PROBLEM SUMMARY:

Panic 2000075 under DG/UX revision 5.40.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4.1 of DG/UX. Patch 5.4.0.p39, which you have already received, is also available to correct this problem on DG/UX revision 5.4 systems.

- KERNEL STR: NASC000011931
REV: 5.40 ORIG-ID: Q428052

PROBLEM SUMMARY:

DG/UX revision 5.40 fsck does not seem to allow user input to questions when bringing up the system after an abnormal shutdown.

ANSWER SUMMARY:

This problem has been corrected in revision 5.4.1 of DG/UX by changing the default flags for /usr from -xlp to -xlp.

- KERNEL STR: NASC000012003
REV: 5.40 ORIG-ID: TM-920219

PROBLEM SUMMARY:

System console and all terminals on syac boards hang.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p39 is available to correct this problem on revision 5.4 systems. This patch has already been supplied to you.

- KERNEL STR: NASC000012027
REV: 5.40 ORIG-ID: 457232

PROBLEM SUMMARY:

The modem port occasionally locks up for an unknown reason. The message returned is DEVICE LOCKED. If the modem is turned off, the system panics with code 2000075.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4.1 of DG/UX by a modification to ldterm.

- KERNEL STR: SPA 000000878
REV: 5.40 ORIG-ID: FIB_2000075

PROBLEM SUMMARY:

PANIC 2000075 in av5225.

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.1 of DG/UX. To work around the problem in revision 5.4, the program "gest" should be modified to not induce socket error handling when performing a send(2) system call.

- KERNEL STR: UKSC000054093
REV: 5.40 ORIG-ID: VDA/255 TERM

PROBLEM SUMMARY:

VDA/255 terminal hang. All terminals but the system console hung. System currently had patch dgux_4.32.01.46 installed but had hung previously with patch dgux_4.32.01.51 installed.(STR: UKSC-53558)

ANSWER SUMMARY:

It appears that all data output from the syac has been pended by flow control from a multiplexor. In order to investigate what is happening on the VDC where flow control is handled, we need your system to be upgraded to DG/UX 5.4. DG/UX 5.4 provides support for the syacdb utility which can be used to query both VDA host adaptors and VDCs.

- KERNEL STR: UKSC000054988
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

System panic 2000107 occurred on an AV/5220 an hour after issuing chmod 660. A similar panic occurred about 2 weeks ago after issuing a chmod command.

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ANSWER SUMMARY:

Dump analysis of the many dumps submitted with this STR indicated that hardware faults were the cause of the panics seen on this system. This was confirmed when the panics ceased after the last replacement of the system board.

- KERNEL STR: UKSC000055349
REV: 5.40 ORIG-ID: PANIC 3000003

PROBLEM SUMMARY:
Panic 3000032

ANSWER SUMMARY:

This problem is believed to have been caused by the same hardware problem as that reported in UKSC-54988. Dump analysis indicated that a hardware fault was the cause of the panics seen on this system. This was confirmed when the panics ceased after the last replacement of the system board.

- KERNEL STR: UKSC000055514
REV: 5.40 ORIG-ID: DG/UX - HANG

PROBLEM SUMMARY:

Customers AV4100 experiences terminal hangs when running a backup script under DG/UX 5.40.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p42 to DG/UX revision 5.4 is available to correct this problem. This patch can be obtained from your Data General Support Representative.

- LOGIN STR: NASC000011806
REV: 5.40 ORIG-ID: Q424194

PROBLEM SUMMARY:

Xterminal logins are not being logged in wtmp under 5.4.

ANSWER SUMMARY:

There is no correct way to add a wtmp entry for an Xterminal because there is no controlling tty associated with the process. A wtmp entry for an Xterminal will cause problems for other commands that access wtmp.

- LP STR: NASC000011567
REV: 5.40 ORIG-ID: DG/UX 002

PROBLEM SUMMARY:

DG/UX 4.3 would allow printing via TCP/IP to printers in the 40000. With DG/UX 5.4 only ROOT (sysadm) can print on the MV computers.

ANSWER SUMMARY:

The problem that is being experienced is because of a change in the printer services in DG/UX 5.4. The interface program that initializes the printer, calls filters, prints banners and sends the files to the printer runs as the uid of the user printing the files, as opposed to releases prior to DGUX 5.4 where the printer interfaces were run with uid of lp.

- LP STR: NASC000011896
REV: 5.40 ORIG-ID: Q429320

PROBLEM SUMMARY:

We get a divide by zero error when issuing an lp command to print on a Versitech plotter which is connected to an AV5220. The same plotters work fine on an AV412 workstation.

ANSWER SUMMARY:

This problem was resolved by adding -opost to the printer options in the printer setup menu. This prevents any output processing on the file prior to sending the data directly to the plotter.

- LP STR: UKSC000054062
REV: 5.40 ORIG-ID: LP SUBSYSTEM

PROBLEM SUMMARY:

Problems with lp subsystem under DG/UX 5.4 when enqueueing large numbers of requests.

ANSWER SUMMARY:

The problem is fixed in DG/UX Revision 5.4.1.

- LPSCHED STR: NASC000010818
REV: 4.31 ORIG-ID: Q346599

PROBLEM SUMMARY:

Unable to define printers on high tty line numbers without lpsched disabling them immediately after an enable.

ANSWER SUMMARY:

This problem does not exist in DG/UX 5.4, as all of the asynchronous subsystems have been modified. We suggest an upgrade to DG/UX Revision 5.4.

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- **MACROS.H** STR: NASC000011412
REV: 5.40 ORIG-ID: Q401615

PROBLEM SUMMARY:

In /usr/include/macros.h, SCCSID is defined at line 86 or 89, depending on the value of `__STDC__`, and at line 94. This causes: "warning SCCSID redefined" messages whenever macros.h is included in a program.

ANSWER SUMMARY:

This problem is fixed in revision 5.4.1 of DG/UX.

- **MAKE** STR: NASC000011799
REV: 5.40 ORIG-ID: Q425202

PROBLEM SUMMARY:

When the "make" command is used to create an object which has had one of its dependent files updated, the object is recreated; however, if the full pathname of the object is specified, make reports that the object is "up to date."

ANSWER SUMMARY:

The behavior being experienced is correct in this case. The pathname that you specify is not a target name in the makefile being used. Therefore, make cannot find the target name in the makefile and thus uses the default rules for compiling a file ending with a ".o" suffix. Since the default rules are being used by make, it doesn't know that main.c depends upon bug.h.

- **PS** STR: JAPN000000649
REV: 5.40 ORIG-ID: NDG 2513

PROBLEM SUMMARY:

ps(1) displays time information in an illegal format.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2.

- **RESTORE** STR: NASC000010706
REV: 4.32 ORIG-ID: Q353655

PROBLEM SUMMARY:

Tape created with DUMP command will not reload multiple files with restore. We have patch 4.32.01.45 with the new restore program.

ANSWER SUMMARY:

This problem with dump(1) has been corrected in revision 5.4 of DG/UX. The dump tape you are trying to restore was created using the dump(1) command from revision 4.31 or 4.32. Section 5.5 of the 4.31 update notice and section 5.4 of the 4.32 update notice

state that dump2(1) should be used for archiving files because dump tapes created using dump(1) may not be restorable.

- **RESTORE** STR: INTL000000364
REV: 5.40 ORIG-ID: SF00033

PROBLEM SUMMARY:

When using "restore -yt" to verify a backup using dump2 it loops endlessly appending "./" to a valid filename.

ANSWER SUMMARY:

The filesystem dump sent with this str was corrupt. Corruption could have occurred if the filesystem was dumped while still in use. The directory file contained filenames before the "." and ".." entries. Restore has been modified in the revision after DG/UX 5.4.1 to handle this particular corrupted directory error.

- **SH** STR: UKSC000052746
REV: 5.40 ORIG-ID: CHROOT ERROR

PROBLEM SUMMARY:

User listed in /etc/passwd file with an '*' in initial program field should be logged on and placed in specified directory which is a 'new' root. Actually error is returned: "No utmp entry. You must exec login from the lowest level."

ANSWER SUMMARY:

This features is not very easy to set up, but it is possible to do this on a DG/UX 5.4 system.

- **STTY** STR: JAPN000000622
REV: 5.40 ORIG-ID: NDG 2485

PROBLEM SUMMARY:

A problem about setting tty attributes.

ANSWER SUMMARY:

This problem is resolved in Release 5.4.1 of DG/UX. The stty(1) command was changed so the character size (cs7/cs8) and the parity (parenb) are not affected by -raw/raw/cooked parameter. This will better support international customers and is compatible behavior with DG/UX 4.3x.

- **SYSADM** STR: NASC000011774
REV: 5.40 ORIG-ID: GG-3

PROBLEM SUMMARY:

If an apostrophe is entered in the user comment section while adding a new user, the operation fails.

DG/UX OPERATING SYSTEM**ANSWER SUMMARY:**

sysadm(1M) has been modified in Release 5.4.2 of DG/UX such that apostrophes can be specified in the comment field.

-
- TAR STR: NASC000011456
REV: 5.40 ORIG-ID: Q399069

PROBLEM SUMMARY:

We are unable to load a tape that was created using tar under 4.32 on our 5.40 system. We receive an error: Blocksize 32; segmentation fault; core dumped. We have included the tape in question.

ANSWER SUMMARY:

As we discussed in our phone conversation, we were unable to reproduce the problem you reported under DG/UX revision 5.4 on AV5000, AV300 and AV400. After verifying that you are running the "released" tar executable, we suggested that your SCSI controller/tape be checked for possible hardware/firmware problems. Hardware call Q433454 was opened with your local Field Engineering office.

-
- TERMINFO STR: UKSC000054543
REV: 4.32 ORIG-ID: D215,ANSI ARR

PROBLEM SUMMARY:

D215 terminals operating in ANSI mode and using the d215 term variable does not allow the arrow keys to function in vi.

ANSWER SUMMARY:

In general, older DG terminals such as the d215 are not fully supported under DG/UX. What this means is that some of the features on the terminal (such as cursor keys) may not be available. There are no plans to make any changes in this area.

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- REV: 5.40 STR: SPA 000000894
 ORIG-ID: MARINA-VTC &

PROBLEM SUMMARY:

We cannot attach a printer in a TermServer with a PVC to a VTC in an AViiON 8000

ANSWER SUMMARY:

Problem was related to the VTC not DG/UX. A number was entered in a file that was getting converted to octal. Once the number was entered correctly, everything was fine.

- REV: 5.41 STR: NASC000012450
 ORIG-ID: Q462942

PROBLEM SUMMARY:

Under revision 5.4.1 of DG/UX "/usr/src/uts/aviion/ii/i deb.h" references "i_cp.h" which does not exist. Under revision 5.4.0 no such reference is made.

ANSWER SUMMARY:

This will be fixed in DG/UX revision 5.4.2. In the meantime, you have been provided with a copy of i_cp.h file.

- ADMIN STR: NASC000012261
REV: 5.40 ORIG-ID: Q450127

PROBLEM SUMMARY:

When we ran fsck, thru sysadm on a 2.5gb filesystem, it ran for over 5 hours and did not complete.

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.2 of DG/UX.

- CSH STR: INTL000000434
REV: 5.40 ORIG-ID: TEAM 367

PROBLEM SUMMARY:

Problem with CSH filename completion and EOF function.

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.1.

- CU STR: NASC000010235
REV: 4.32 ORIG-ID: Q312466

PROBLEM SUMMARY:

Problem with Dialers file and Hayes chat script when logging into SCO XENIX system forcing login in uppercase.

ANSWER SUMMARY:

Based on your problem description it is probable that the modem on the Xenix side of the connection is set up to return result codes. The effect of this is that the CONNECT message causes the Xenix side to expect an uppercase username and password pair. To fix this, consult your modem documentation for the command(s) to turn result codes off.

- EDITREAD STR: NASC000012173
REV: 5.40 ORIG-ID: E62346

PROBLEM SUMMARY:

When we use our D216+ terminal in vt100 mode, and editread is turned on, we cannot control the Numeric Keypad mode. It changes from Numeric to Application whenever a newline key is hit. This works correctly if editread is off.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.1. Note that editread uses terminfo (TERM = vt100) to determine what types of keys are being typed. The default DG/UX terminfo entry maps the keypad to function keys. To correct this, set your TERM variable to vt100-fk. This will allow you to use the numeric keypad to enter numbers.

- FSCK STR: GER 000014901
REV: 5.40 ORIG-ID: ZF00445

PROBLEM SUMMARY:

fsck error message "< i-node > is marked as fragmented, but is not fragmented" The file is then deleted

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.2 of DG/UX. In the meantime, patch 5.4.0.p47 to revision 5.4 and patch 5.4.1.p2 to revision 5.4.1 are available to correct this problem.

- HELP STR: NASC000009999
REV: 4.32 ORIG-ID: Q300081

PROBLEM SUMMARY:

When using help or usage on a C2 security system, interact gets a buss error and does a core dump.

ANSWER SUMMARY:

As per our phone conversation on 3/18/92, we are closing this STR since your customer sites are no longer experiencing this problem, and we cannot reproduce the problem in house. We have modified help under 5.4 to trap and report errors instead of dumping core. Should you experience this problem

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- KERNEL STR: JAPN00000640
REV: 5.40 ORIG-ID: NDG 2503

PROBLEM SUMMARY:

Please avoid panic 5300023 on MT device

ANSWER SUMMARY:

Efforts to cause this panic to occur on a DG/UX revision 5.4.1 system were not successful. Therefore, we believe this problem to be corrected in that revision. If you still see this panic in revision 5.4.1 please resubmit this STR along with additional information which will allow us to reproduce it.

- KERNEL STR: NASC00001107
REV: 5.40 ORIG-ID: Q383474

PROBLEM SUMMARY:

With nothing but a tar running the complete system hung. We feel there is a problem in the kernel and would like it fixed.

ANSWER SUMMARY:

We were unable to determine the cause of the problem from the information supplied. Since you have not been able to provide the requested information, we are closing this STR. We understand that you are reving up to DG/UX revision 5.4.1. Should the problem resurface under this revision, please submit a new STR, referencing this STR, and include the necessary materials.

- KERNEL STR: NASC000011581
REV: 5.40 ORIG-ID: 00265-920114-

PROBLEM SUMMARY:

When I remake the kernel after installing the Layered Software Prerequisite for DG/UX 5.4, the keyboard locks up, and I have to reboot.

ANSWER SUMMARY:

As we agreed in our recent phone conversation, we are closing this STR since you are no longer having a problem after upgrading to revision 5.4.1 of DG/UX which doesn't require the Layered Software Prerequisite.

- KERNEL STR: NASC000011694
REV: 5.40 ORIG-ID: Q416321

PROBLEM SUMMARY:

DG/UX revision 5.40 reported "Out of paging area space" and then panicked. This message seems to be

in error since only 2 users were on the system at this time.

ANSWER SUMMARY:

This message was not generated in error. One of your B32.PR processes had allocated an address space of about 65 mb out of 71 mb available after the kernel requirements were met. It is likely that your application has a memory leak. The panic was merely due to the hotkey sequence used by the operator to force a dump of the system not a result of the swap space depletion.

- KERNEL STR: NASC000011822
REV: 5.40 ORIG-ID: Q422675

PROBLEM SUMMARY:

Network and local users slow down and eventually system comes to a halt.

ANSWER SUMMARY:

This problem is the result of "chattering" on a duart port. A correction to eliminate the resultant hang will be included in revision 5.4.1 of DG/UX. In the meantime, patch 5.4.0.p38 has already been supplied to you to resolve this problem.

- KERNEL STR: NASC000011864
REV: 5.40 ORIG-ID: Q425508

PROBLEM SUMMARY:

We can NOT shut our system down gracefully because four ttymons are NOT dying.

ANSWER SUMMARY:

This problem has been corrected in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000011959
REV: 5.40 ORIG-ID: Q432225

PROBLEM SUMMARY:

We are receiving 0300013 panics when we use the "halt" command to bring the system down.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR at your request since you will not be able to provide the additional dump requested. It is our understanding that you are no longer experiencing these panics. If the problem should recur, please submit a new STR, referencing, this STR, and include the system memory dump with a copy of the dgux kernel.

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- KERNEL STR: NASC000012143
REV: 5.40 ORIG-ID: RECLAIM1

PROBLEM SUMMARY:

The reclaims/second reported by "sar" and dg_susinfo may be in error. If a user file page is purged (vs. cleaned), the page purge will be counted as 2 reclaims.

ANSWER SUMMARY:

After reviewing the sources we have determined that only 1 reclaim is counted for each page purge.

- KERNEL STR: NASC000012186
REV: 5.40 ORIG-ID: D-1-952-7663

PROBLEM SUMMARY:

Hardware flow control problem from VDC/16 to TI 810 printer.

ANSWER SUMMARY:

To control output from the system, CTSXON should be set. Please reference /usr/include/sys/termiox.h. Your printer should have its flow control signal line connected to pin 4 of the VDC port.

- KERNEL STR: NASC000012192
REV: 5.40 ORIG-ID: JH-920306

PROBLEM SUMMARY:

Kernel will not allow more than 2048 file descriptors (with the SDESLIM configuration variable). You can set this configuration variable to any number above 2048 but you can open only 2045 files.

ANSWER SUMMARY:

The SDESLIM configuration variable has as its upper limit the value to which the HDESLIM configuration variable is set. The default value for HDESLIM is 2048, which is probably why you are seeing this behavior. Increasing HDESLIM should resolve your problem.

- KERNEL STR: NASC000012202
REV: 5.40 ORIG-ID: Q446830

PROBLEM SUMMARY:

We are getting 1000001 system panics.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4.2. However, in the meantime, the panic may be avoided by changing the dgux system file in /usr/etc/master.d to place the vitr device and the llc pseudo-device in the same Streams lockset. They may be placed in the same

lockset by changing the word "module" to "llc_vitr" on the line entries for llc and vitr.

- KERNEL STR: NASC000012345
REV: 5.40 ORIG-ID: Q455716

PROBLEM SUMMARY:

We have an AV4000 running rev 5.4 of DG/UX. We are using non-DG disk drives, and get 5 or 6 57000116 panics a day. Our field engineer has checked out the disk drives, and said there was not a hardware problem.

ANSWER SUMMARY:

As we've discussed in our phone conversation, these panics were a result of non-DG disk drives. You've told us that you were running non-supported DG disks. We've recommended that you contact your local Sales Office for the information on supported disk drives.

- KERNEL STR: NASC000012382
REV: 5.40 ORIG-ID: Q452779

PROBLEM SUMMARY:

Our MUMPS application freezes up completely while the mirrored logical disks are performing slow synchronization. After the mirrors are synchronized, the application resumes processing as normal.

ANSWER SUMMARY:

This problem occurs when your application accesses the same data that the resync process is copying from the master to slave image. This problem will be fixed in DG/UX 5.4.2. Until then, patch 5.4.0.p53 has been provided for your 5.4 systems, and Patch 5.4.1.p11 has been provided for your 5.4.1 systems.

- KERNEL STR: NASC000012406
REV: 5.40 ORIG-ID: Q460195

PROBLEM SUMMARY:

Problem with system call dg_unbuffered_write roaching file systems.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. In the meantime, please upgrade to revision 5.4.1 and install patch 5.4.1.p12, which is included, to correct this problem.

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- KERNEL STR: NASC000012424
REV: 5.40 ORIG-ID: Q458303

PROBLEM SUMMARY:

While doing an `rm *` in a directory, we received the following error: "The LDU has been downgraded to Read Only. Please run `fsck` to correct this problem."

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. In the meantime, patch 5.4.1.p12 is available, and is included, to correct this problem on revision 5.4.1 systems. Please upgrade to revision 5.4.1 and install this patch at your earliest convenience.

- KERNEL STR: NASC000012425
REV: 5.40 ORIG-ID: Q459081

PROBLEM SUMMARY:

Panic 2000075 on a AV4620 running 5.4 of dgux.

ANSWER SUMMARY:

This problem has been fixed in revision 5.4.1 of DG/UX by a modification to `ldterm`.

- KERNEL STR: SWE 000000450
REV: 5.40 ORIG-ID: 2000075

PROBLEM SUMMARY:

System panic with panic code 2000075. Panic was caused by process running `dump2`.

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.2 of DG/UX. A network packet contained an error which caused the system to panic. This error will no longer cause a panic as of revision 5.4.2.

- KERNEL STR: UKSC000052738
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

In a C program which handles the `sigint` value `ctrl-C` the signal can be trapped OK under 4.32 but under 5.4 the signal also causes a `SIGHUB` signal to be sent to the process therefore terminating that process.

ANSWER SUMMARY:

Discussions with the Data General UK Support Center have indicated that the installation of patches to revision 5.4 of DG/UX corrected your problem. If the problem should recur, please resubmit this STR along with a small program which reproduces the problem and detailed information about the process which is exhibiting the problem.

- KERNEL STR: UKSC000056985
REV: 5.40 ORIG-ID: DGUX/SYAC FLO

PROBLEM SUMMARY:

Customer has aviion system running DG/UX 5.4 with syac board. Terminals are set to seven bit mark parity system to `cs8` and `istrip`. Flow control does not work.

ANSWER SUMMARY:

This is correct system behavior. The flow control must be checked at the lowest level to ensure immediate response. By setting up the line correctly, you should not have a problem. For a 7 bit, mark parity terminal, the following need to be set: `cs7`, `parodd`, `parenb`, `parext`.

- KERNEL STR: NASC000012146
REV: 5.41 ORIG-ID: JPG.I_CP.H

PROBLEM SUMMARY:

The include file `/usr/src/uts/aviion/ii/i_deb.h` includes the file `/usr/src/uts/aviion/ii/i_cp.h` which does not exist. `i_deb.h` is included from `i_vp.h`, which is included from `i_io.h`, which is included from `i_su.h`.

ANSWER SUMMARY:

This file will be included in the DG/UX 5.4.2 release. In the meantime, please use the `i_cp.h` file we have supplied to you.

- KERNEL STR: NASC000012184
REV: 5.41 ORIG-ID: Q445890

PROBLEM SUMMARY:

The parallel printer port, `/dev/lp`, is being reset on AV/46xx and AV/53x AViiONs on each device open after installing DG/UX Revision 5.4.1.

ANSWER SUMMARY:

Patch `dgux_5.4.1.p05`, which you have already received and tested, corrects this problem. The printer device, `/dev/lp`, with this patch, will not issue a printer reset on each device open. Only during the AViiON boot sequence will a printer reset be issued.

- KERNEL STR: NASC000012373
REV: 5.41 ORIG-ID: Q454294

PROBLEM SUMMARY:

Getting a 3000032 panic after DGUX_5.4.1 has been loaded.

ANSWER SUMMARY:

Analysis of the dump submitted indicated that this panic was a result of a hardware failure. It is our un-

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derstanding that your local DG Field Engineering Office has replaced the CPU board, and you have not experienced any more panics of this type. Should the panic recur, please submit a new memory dump and dgux kernel for analysis.

- KERNEL STR: UKSC000056810
REV: 5.41 ORIG-ID: LDU DOWNGRADE

PROBLEM SUMMARY:

After running a benchmark the customer finds that when he attempts to delete files created by the benchmark the filesystem containing these files gets downgraded to read only.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. In the meantime, patch 5.4.1.p09 is available to correct this problem. This patch can be obtained from your Data General support representative.

- KERNEL STR: UKSC000056886
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:

System hang on AV6220 running dgux rev 5.4.1

ANSWER SUMMARY:

Insufficient information is available to allow us to fully understand this problem. If this problem recurs please re-open this STR and submit additional system dumps for analysis.

- KSH STR: NASC000011195
REV: 5.40 ORIG-ID: Q389231

PROBLEM SUMMARY:

ksh appears not to handle hangup signal.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX.

- KSH STR: NASC000012182
REV: 5.40 ORIG-ID: Q445969

PROBLEM SUMMARY:

The assignment of the ~ in the ksh does not function correctly when used in a 'cd' command. The message 'not found' is returned for the directory.

ANSWER SUMMARY:

Alias substitution occurs only with an unquoted ~ Do not use quotes.

- LD STR: NASC000012035
REV: 5.40 ORIG-ID: Q434886

PROBLEM SUMMARY:

Error - "Segmentation Fault - Core dumped", is returned at execution time by c objects that are compiled with the -K PIC switch and linked dynamically on DG/UX Revision 5.4 using FCS version of the linker, ld.

ANSWER SUMMARY:

We were able to reproduce this problem against the 5.4 fcs version of ld; however, after installing the latest patch level which contains dgux_5.4.0.p26, the ld patch, the problem could not be reproduced. Please install the latest patchkit to revision 5.4, op_sys_x_5.4.0.920124, which is included.

- LD STR: NASC000012037
REV: 5.40 ORIG-ID: E062149

PROBLEM SUMMARY:

Error - "Abnormal termination in /bin/ld signal number 013 core dumped", returned by ld when a c object that was compiled with the -K PIC switch is linked statically on DG/UX 5.4 with SDE of m88kdguxelf.

ANSWER SUMMARY:

This problem is fixed with the ld patch, dgux_5.4.0.p26, which is found in the latest patchlevel (op_sys_x_5.4.0.920124); you have already been provided with this patchlevel. As we discussed in our phone conversation, you are no longer experiencing any problems.

- LIBC STR: NASC000012007
REV: 5.40 ORIG-ID: PL0033

PROBLEM SUMMARY:

The function atof returns the wrong binary format.

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.2.

- LP STR: UKSC000052753
REV: 4.32 ORIG-ID:

PROBLEM SUMMARY:

When an lp command is issued by any other user apart from superuser, the error "can't lock acceptance status" is returned. Root is at 44% /usr is at 96% but the problem also occurred when at 85%. The model file was Async_9600.

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cause the file is processed by a series of programs. In revision 4.32 this worked fine.

ANSWER SUMMARY:

The date format produced by the use of the %G% and %H% identification keywords has been changed to match that produced in DG/UX 4.32. This problem is fixed in DG/UX Revision 5.4.2. For DG/UX Revision 5.4, patch dgux_5.4.0.p51 is available from your local Customer Support Center.

-
- SETUID STR: NASC000012199
REV: 5.40 ORIG-ID: Q441944

PROBLEM SUMMARY:

Are the changes made to setuid(2) AT&T System 5 Version 4 and/or POSIX compliant?

ANSWER SUMMARY:

The change made to the DG/UX 5.4 Bourne shell forces compatibility with the function released in Unix System Laboratory Release V.4. However, this function is not documented in the System V Interface Definition (SVID) Third Edition or in the IEEE 1003.2 (POSIX) draft.

-
- SH STR: NASC000011742
REV: 5.40 ORIG-ID: NASC10881

PROBLEM SUMMARY:

Allowing controlled access to protected information (set-user-id).

ANSWER SUMMARY:

As per our phone conversation, we have agreed to close this STR as discussed based on the security value the original change to the bourne shell provided.

-
- SYSADM STR: NASC000012312
REV: 5.40 ORIG-ID: D-DDS92031801

PROBLEM SUMMARY:

sysadm will not run if any of the shared libraries it needs are missing from the system.

ANSWER SUMMARY:

The sysadm(1M) script has been fixed in DG/UX 5.4.2 to be smarter about which version of idi(1) is invoked. In 5.4.2, if sysadm's ASCII interface is selected, /usr/bin/idi.ascii is always used. If the motif interface is selected, and the motif version of idi is available, the motif version of idi is used.

- SYSADM STR: NASC000012315
REV: 5.40 ORIG-ID: Q455463

PROBLEM SUMMARY:

The get date function in xsysadm returns the correct date and time, but it also return the error "Operation failed" in a window. We do not believe it should return an error since the operation worked.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2. The idi(1) command has been modified, so that the "Operation failed" message will not be displayed when using sysadm(1M)'s System -> Date -> Get operation.

-
- SYSADM STR: SWE 000000457
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

When the logical disk used for holding diskless clients swap files is very large, "admclient"/sysadm picks a text string instead of a number from the output of "df" and aborts.

ANSWER SUMMARY:

This problem is resolved in DG/UX 5.4.2. The admclient(1M) program is fixed to correctly calculate the free space for large /srv/swap disks. The change involves (1) extracting the free blocks field from df(1)'s output correctly even when the number is very large, and (2) comparing the block size needed to the available block size (rather than bytes) to avoid overflow.

-
- TAR STR: NASC000011244
REV: 5.40 ORIG-ID: F368504-DRB

PROBLEM SUMMARY:

"tar" runs much slower on 5.4 than it did on 4.3X. With the same amount of data, what used to take 2.5 hours to write to a 2GB tape now takes 4.0 hours. System performance is noticeably degraded when a "tar" is running concurrently.

ANSWER SUMMARY:

Patch dgux_5.4.0.p43 has been provided to address this problem with DG/UX 5.4 systems.

-
- UUCP STR: NASC000012475
REV: 5.40 ORIG-ID: Q458423

PROBLEM SUMMARY:

Under DG/UX revision 5.40, rmail fails to work across a uucp connection.

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- REV: 5.41 STR: NASC000012734
 ORIG-ID: U6869

PROBLEM SUMMARY:

After entering an interrupt while in a user application, the Basic process running the terminal will toggle between the shell and Basic. Cross reference STRs NASC-11832, 11833 and 12163.

ANSWER SUMMARY:

The problem with the Bourne shell, sh, is resolved in Release 5.4.2 of DG/UX. Patch dgux_5.4.0.p52 is available for DG/UX 5.4.0 systems, and patch dgux_5.4.1.p07 is available for DGUX 5.4.1 systems. Patch dgux_5.4.1.p07 is included.

- REV: 5.41 STR: NASC000012784
 ORIG-ID: Q465096

PROBLEM SUMMARY:

The new functionality to the tape device drive does NOT work. When using the MTIOC_MODFM command with the MTIOC_MODFM_NOFM to the ioctl call documented in /usr/include/sys/_int_tape_ioctl.h, the call returns 'bad address error 14'.

ANSWER SUMMARY:

We understand that this error was the result of a user coding error; therefore, we are closing this STR.

- REV: 5.41 STR: NASC000012816
 ORIG-ID: Q467778

PROBLEM SUMMARY:

Problems setting '\ ^ -' to undefine the 'susp' key in editread for 5.4.1 of DG/UX.

ANSWER SUMMARY:

As described in the man page for editread(5) under "Assigning Values to Functions", you can disable any function by setting its value to OFF. On the configuration display a blank setting implies a disabled condition.

- CPIO STR: AUSC000008265
 REV: 4.32 ORIG-ID:

PROBLEM SUMMARY:

Errors are being generated by CPIO Revision 4.32 and DG/UX 5.4 that were not being produced under DG/UX 4.30.

ANSWER SUMMARY:

The errors you report encountering under DG/UX 4.32 and DG/UX 5.4 cpio are either not reproducible

under DG/UX 5.4 or behavior that has been corrected in DG/UX 5.4.

- CPIO STR: NASC000012417
 REV: 5.40 ORIG-ID: Q458697

PROBLEM SUMMARY:

Cpio will NOT restore symbolic links in /etc.

ANSWER SUMMARY:

This problem was caused when cpio attempted to create a temporary file when overwriting symbolic links. This problem has been fixed in DG/UX 5.4.1. This has also been fixed in patch dgux_5.4.0.p59 which has already been delivered to you.

- CRON STR: NASC000012524
 REV: 5.40 ORIG-ID: Q467856

PROBLEM SUMMARY:

The first time a cron job is run after a time change to daylight savings time, the cron job will run one hour late.

ANSWER SUMMARY:

Text has been added to the NOTES section of the cron(1M) man page in DG/UX 5.4.2. This note tells the user that cron must be stopped and restarted if the value of TZ is changed, as it is when standard time changes to daylight savings time.

- CU STR: NASC000011643
 REV: 5.40 ORIG-ID: Q414978

PROBLEM SUMMARY:

CU does NOT default to current bits per character as stated in man pages under 5.4. Reference NASC-10976.

ANSWER SUMMARY:

CU follows the settings of the terminals CS7/CS8 and ISTRIP. This is fixed in DG/UX Revision 5.4.2.

- CU STR: NASC000011741
 REV: 5.40 ORIG-ID: NASC10976

PROBLEM SUMMARY:

Incorrect setting on CU to CS7.

ANSWER SUMMARY:

CU follows the settings of the terminals CS7/CS8 and ISTRIP. This is fixed in DG/UX Revision 5.4.2.

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ANSWER SUMMARY:

This problem is a duplicate of that reported by you in another STR, number INTL-463. Please follow the progress of this problem investigation by referring to that number.

-
- **KERNEL** **STR: NASC000010312**
REV: 4.32 **ORIG-ID: Q332713**

PROBLEM SUMMARY:

Standamong diskman option to 'copy a physical disk' loops and continues to copy the disk over and over again.

ANSWER SUMMARY:

This problem is resolved in Release 5.4.2 of DG/UX.

-
- **KERNEL** **STR: NASC000011308**
REV: 4.32 **ORIG-ID: 911212SPMD**

PROBLEM SUMMARY:

All terminals hung except master console. Would like dump analyzed to determine the problem.

ANSWER SUMMARY:

As we agreed in our phone conversation, we are closing this STR, with your approval, since the problem has not occurred in two months after applying patch dgux_4.32.01.19.

-
- **KERNEL** **STR: NASC000012174**
REV: 4.32 **ORIG-ID: Q444684**

PROBLEM SUMMARY:

DG/UX revision 4.32 gives "Unknown LDU sealed, status 4026027".

ANSWER SUMMARY:

This problem is a result of a hardware problem. Since we have dispatched call Q444684 on your behalf, we are closing this STR. Please track the progress of Q444684 with your Hardware Support organization.

-
- **KERNEL** **STR: NASC000012190**
REV: 4.32 **ORIG-ID: Q442062**

PROBLEM SUMMARY:

We have an AV4020 running rev 4.32 of DG/UX. We have installed patch 51 and are continuing to have syac hangs. The FE has tested the system, and no problems were found. We installed patch 55 to get a syac dump.

ANSWER SUMMARY:

As we discussed in our conversation, we are closing this STR with your approval since the problem was a result of a hardware problem with your VDA128. You have installed patch dgux_4.32.01.19 which fixes a number of hangs and the syac dump patch dgux_4.32.01.55. Should you experience syac hangs in the future, please submit a new STR with a dpram dump, syac dump, system dump and dgux kernel.

-
- **KERNEL** **STR: NASC000012378**
REV: 4.32 **ORIG-ID: Q457369**

PROBLEM SUMMARY:

5 workstations to AV6220 server hung. Master console was still available and able to run vi and ps etc. Tried to execute Ingres from master console and received error 'Unable to create socket'.

ANSWER SUMMARY:

Unfortunately, we were unable to determine the cause of your problem because we could not read the dump tapes submitted. Should the problem recur, please submit a new STR, referencing this STR, and include the system memory dump and dgux kernel.

-
- **KERNEL** **STR: UKSC000054990**
REV: 4.32 **ORIG-ID: LP HANG - DUM**

PROBLEM SUMMARY:

System printers were recreated and enabled under sysadm. An lp request was then found to be using 80% of cpu time and appeared to hang.

ANSWER SUMMARY:

The system dump submitted with this STR does not contain sufficient information for us to understand this problem. If this problem recurs, please note which process (name and PID number) was using the stated amount of CPU time, and also note the command line used to obtain that information. Please also submit the output from sar -A along with another system dump.

-
- **KERNEL** **STR: NASC000011676**
REV: 4.34 **ORIG-ID: 7651-DRB-NYPO**

PROBLEM SUMMARY:

All accesses to the HADA disks were not allowed after an undetermined failure occurred on the HADA subsystem. Failure occurred while moving files from filesystem on extended SCSI to filesystem on standalone spindle on HADA.

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ANSWER SUMMARY:

Analysis of the dump submitted indicated that this problem was caused by a hardware problem. The problem reported in this STR was turned over to the Hardware Support Group (NSS). Please track the progress of this problem with the NSS group.

-
- KERNEL STR: NASC000012167
REV: 4.34 ORIG-ID: Q445056

PROBLEM SUMMARY:

We are getting "No space left on device" error when trying to open a directory on the "/usr/data/xpm/jaf218" file system.

ANSWER SUMMARY:

We are closing this STR, with your approval, as the problem has not occurred in two months since scripts were written to delete the unused files.

-
- KERNEL STR: NASC000012429
REV: 4.34 ORIG-ID: TM-920330

PROBLEM SUMMARY:

System hang when reading in a tape on 6586 (Galaxy) tape drive.

ANSWER SUMMARY:

As we agreed, we are closing this STR since the problem is being investigated from a hardware standpoint.

-
- KERNEL STR: NASC000012832
REV: 4.34 ORIG-ID: TM-920506-2

PROBLEM SUMMARY:

System panics with 2000075's.

ANSWER SUMMARY:

This problem is the same as one previously submitted by you (NASC-11597). The problem has been corrected in revision 5.4 of DG/UX. In the meantime, you can work around the problem by setting your PERCENTBUF tunable parameter based on the amount of memory in the system and your file and directory data element sizes.

-
- KERNEL STR: UKSC000056950
REV: 4.34 ORIG-ID: AV8000 HANG

PROBLEM SUMMARY:

DG/UX system hang on an AV/8000 has occurred a number of times (see UKSC-56837)

ANSWER SUMMARY:

This problem has been corrected in revision 5.4 of DG/UX. Patch 4.34.01.22 is also available to correct the problem on DG/UX revision 4.34 systems.

-
- KERNEL STR: FIN 000053026
REV: 5.40 ORIG-ID: KALA-1047

PROBLEM SUMMARY:

System panic 3000014 has occurred twice on AV/5240 running DG/UX 5.40.

ANSWER SUMMARY:

This problem has been corrected by replacing four out-of-rev 32MB memory boards with one rev 20 192MB memory board. The problem may have been caused by the two rev 21 32MB boards, because soft errors on these boards may result in loss of a full dataword. It is recommended that 16MB, 32MB, and 64MB boards be rev 24 or above, and 64MB, 128MB, and 192MB boards be rev 20 or above.

-
- KERNEL STR: GER 000014924
REV: 5.40 ORIG-ID: YS00569

PROBLEM SUMMARY:

AV6240 hangs while loading tar-format gigatape to magnetic disk.

ANSWER SUMMARY:

We are closing this STR because these hangs were believed to be caused by a firmware problem in the SCSI-2 controller. This problem appears to have been resolved by removing the Exact Burst jumper on the SCSI-2 controller. If this problem should recur, submit an STR with appropriate dump materials and reference this STR.

-
- KERNEL STR: INTL000000440
REV: 5.40 ORIG-ID: SW01300

PROBLEM SUMMARY:

The VDA hung, sacadm -1 indicated that the ttymon process for the second VDC had failed.

ANSWER SUMMARY:

A number of processes were killed after the VDA stopped responding and before the hotkey sequence was issued. The streams lock that is holding up VDA response was held by a process that is no longer in the system, and we have no way of locating your problem. If this problem recurs, please issue the hotkey sequence as soon as possible in order to preserve as much state as possible.

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- KERNEL STR: NASC000011529
REV: 5.40 ORIG-ID: PL0027

PROBLEM SUMMARY:

The declaration of `ldmio_pd_info` in `sys/_int_dg_ldm_ioctl.h` does not match the description given after the structure definition.

ANSWER SUMMARY:

The comments in this file are incorrect. This will be corrected in revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000011756
REV: 5.40 ORIG-ID: D-DGUX-012892

PROBLEM SUMMARY:

`ioctl` to change timeout value does not take effect until previous time has expired. Therefore, the next timed read will wait until both times have expired, even if the first read was satisfied immediately.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.2 of DG/UX. A change was made to clear the outstanding `VTIME` timeout when a new `M_READ` request is received.

- KERNEL STR: NASC000012197
REV: 5.40 ORIG-ID: Q445942

PROBLEM SUMMARY:

Errors on hard disk are not reported to master console properly, but they are recorded in the `/usr/adm/messages` file.

ANSWER SUMMARY:

This problem will be fixed in Revision 5.4.2 of DG/UX. The problem occurred because the `cird` driver error messages begin with a newline character, and the kernel function that writes messages to the console terminates when it hits a newline. The function that writes to the messages file does not terminate when it finds a newline. The entire message will now be written to the console.

- KERNEL STR: NASC000012233
REV: 5.40 ORIG-ID: E407702

PROBLEM SUMMARY:

Disk errors are not reported to the master console correctly since revving up to 5.4, but they are logged to the `/usr/adm/messages` file.

ANSWER SUMMARY:

This problem will be fixed in Revision 5.4.2 of DG/UX. The problem occurred because the `cird`

driver error messages begin with a newline character, and the kernel function that writes messages to the console terminates when it hits a newline character. The function that writes to the messages file does not. The entire message will now be written to the console as well as the log file.

- KERNEL STR: NASC000012332
REV: 5.40 ORIG-ID: X000047

PROBLEM SUMMARY:

Frequent 2000107 panics.

ANSWER SUMMARY:

Per our telephone conversation, we are closing this STR since after loading Revision 5.4.1 of DG/UX the problem has not recurred. We requested that you load Revision 5.4.1 of DG/UX or patch `dgux_5.4.0.p34` for diagnostic information since dump analysis could not identify the cause of the panics. If this panic should recur, please reopen this STR and submit with a dump and kernel image.

- KERNEL STR: NASC000012370
REV: 5.40 ORIG-ID: Q458367

PROBLEM SUMMARY:

Under DG/UX revision 5.40 stand-alone `fsck` returns errors "Inode xxx, truncated: Incorrect block count in inode xxx" on Filesystem/LDU that was unmounted normally.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.2 of DG/UX. In the meantime, patches `5.4.0.p54` and `5.4.1.p12` are available to correct this problem on DG/UX revision 5.4 and 5.4.1 systems, respectively. These patches have already been provided to you.

- KERNEL STR: NASC000012511
REV: 5.40 ORIG-ID: M000978

PROBLEM SUMMARY:

Under DG/UX revision 5.4.0 a "umount" of a filesystem caused the entire system to hang.

ANSWER SUMMARY:

The underlying cause of this condition was that the controller used to access this file system did not respond when issued an I/O operation. This caused one buffer to remain allocated awaiting the completion of the I/O. When the `umount` was issued, it hung waiting for this buffer to be freed. This tied up a key lock.

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- KERNEL STR: NASC000012552
REV: 5.40 ORIG-ID: E408567

PROBLEM SUMMARY:
Panic 57000143 under DG/UX revision 5.40.

ANSWER SUMMARY:
This problem is corrected in revision 5.4.1 of DG/UX.

- KERNEL STR: NASC000012626
REV: 5.40 ORIG-ID: Q468725

PROBLEM SUMMARY:
When one image of a mirrored pair crashed we were NOT able to continue. The pair were on separate controllers, software mirrored and were raw disks. No filesystem on them.

ANSWER SUMMARY:
This problem will be corrected with the redesign of the logical disk manager in revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000012628
REV: 5.40 ORIG-ID: Q470317

PROBLEM SUMMARY:
The system hung while we were doing a hot backup of ORACLE file via tar.

ANSWER SUMMARY:
As we discussed in our conversation, this problem is a result of a hardware design flaw with the SCSI II controller firmware. Until the new firmware is available, your DG Account Engineer has performed a hardware work around; which enables the SCSI II to perform correctly.

- KERNEL STR: SWIT000000538
REV: 5.40 ORIG-ID: LB00260

PROBLEM SUMMARY:
INTERUPT FROM INTEGRATED DEVICE 0x5.
TOO MANY SPURIOUS INTERUPTS. PANIC 4000110.

ANSWER SUMMARY:
Analysis of the dump provided shows spurious interrupts coming from the line printer (device code 05) port prior to the device being configured into the system. This indicates a hardware problem with the device; therefore, this STR is being closed.

- KERNEL STR: UKSC000055436
REV: 5.40 ORIG-ID: PANIC 2000075

PROBLEM SUMMARY:
AV/4600 running DG/UX 5.4 gave panic 2000075.

ANSWER SUMMARY:
The materials submitted with this STR did not contain a copy of the system dump. If this problem recurs, please re-open this STR and submit a copy of the new system dump along with a current kernel image.

- KERNEL STR: WEBO000036842
REV: 5.40 ORIG-ID: WEBO HGD

PROBLEM SUMMARY:
When running AVO, occasionally if a user gets mail, AVO will display a notification message on both that user's display and on another user's display. If you do a who at this time both users are assigned the same tty.

ANSWER SUMMARY:
This problem of multiple users appearing with the same tty will be fixed in Revision 5.4.2 of DG/UX. This resulted from telnetd mixing System V Release 3 and System V Release 4 pty allocation and cleanup policies. In Revision 5.4.2 telnetd uses all System V Release 4 policies, so this problem will no longer occur.

- KERNEL STR: NASC000012413
REV: 5.41 ORIG-ID: Q458892

PROBLEM SUMMARY:
The "ioctl" system call no longer works properly under DG/UX revisions 5.40 and 5.41. Programs that worked fine under DG/UX revision 4.32 no longer work.

ANSWER SUMMARY:
The problem with the icrnl flag being set by an ioctl call after it has been explicitly cleared is fixed in revision 5.4.2 of DG/UX. In the meantime, patches dgux_5.4.1.p15 and dgux_5.4.0.p56 have been provided to correct the problem. The problem resulted from an incompatibility between AT&T and Berkeley line disciplines.

- KERNEL STR: NASC000012426
REV: 5.41 ORIG-ID: AA032392

PROBLEM SUMMARY:
System Panic 57000137.

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ANSWER SUMMARY:

This problem will be resolved in revision 5.4.2 of DG/UX. In the meantime, patch 5.4.1.p13 has been provided to you to correct this problem.

-
- KERNEL STR: NASC000012441
REV: 5.41 ORIG-ID: AA033192

PROBLEM SUMMARY:

When writing to tape and an EOT is encountered, only one record may be written successfully after the BSR iocctl before an ENOSPC error is received. Unable to span volumes with labeled tapes.

ANSWER SUMMARY:

A workaround, specific to your site, was developed to allow two volume labels to be written on the end of a tape after EOT is encountered. This workaround was provided to the developers and enabled them to write the volume labels as required. If this workaround does not work as intended or presents additional problems, please submit another STR and reference this one.

-
- KERNEL STR: NASC000012491
REV: 5.41 ORIG-ID: Q462042

PROBLEM SUMMARY:

'dd' returns 'write error:invalid argument', after mt is used to position the 8mm tape past the first logical file.

ANSWER SUMMARY:

On the Model 6590 8mm tape drive, writes are allowed only at BOT or at End-of-Recorded-Media; therefore, the commands you are issuing will not work correctly. This is a restriction of the device. In Revision 5.4.2 of DG/UX, the error being returned will be changed from "Invalid argument" to "No such device or address."

-
- KERNEL STR: NASC000012546
REV: 5.41 ORIG-ID: JKT-010

PROBLEM SUMMARY:

Panic 2000075 after upgrading to 5.4.1.

ANSWER SUMMARY:

The dump submitted with this STR does not provide us with enough information to determine the cause of this panic. We understand that this problem has only occurred once. If the problem does recur, please take system dumps and submit them with a new STR, making certain to mention this STR. We may be able to use the dumps together to determine the cause of the problem.

-
- KERNEL STR: NASC000012603
REV: 5.41 ORIG-ID: Q473052

PROBLEM SUMMARY:

We have an AV4600 running 5.4.1. We had a 2000075 panic. We sent in the memory dump and the system image on file 1, as requested. This is greatly impacting us because we can not truly rely on the system.

ANSWER SUMMARY:

As we discussed in our conversation, we are closing this STR with your approval since you have not been able to provide a valid matching dgux kernel for the system dump we have. Should you experience this panic in the future, please submit a new STR and include the system dump in file 0 and the dgux kernel in cpio format in file 1.

-
- KERNEL STR: NASC000012659
REV: 5.41 ORIG-ID: Q472556

PROBLEM SUMMARY:

We received a panic 3000031 on AV5220.

ANSWER SUMMARY:

Dump analysis indicated that the panic was a result of a hardware failure. A software dispatch was done to ensure that the memory boards and system board are up to the latest ECO levels. The CPU board was replaced as a result of the dispatch. Please track the progress of call #U11042 with your Hardware Support organization.

-
- KERNEL STR: NASC000012683
REV: 5.41 ORIG-ID: E408711

PROBLEM SUMMARY:

Experiencing 'out of paging memory space' error on an AV4600.

ANSWER SUMMARY:

After analysis of the dump submitted with this STR, we have determined that the "out of paging memory space" errors are correct. The system currently has 78 of 80 MB of memory allocated. This may be due to an application allocating memory and then not freeing it after it has been used. If this is not the case, then we recommend adding more memory/swap space to your system.

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- KERNEL STR: NASC000012732
REV: 5.41 ORIG-ID: U6915

PROBLEM SUMMARY:
Getting 41000025 system panic.

ANSWER SUMMARY:
This problem will be fixed in revision 5.4.2 of DG/UX. In the meantime, patch 5.4.1.p17, which you have received, is available to correct this problem. The panic was due to a timing problem in the streams multiplexor dismantling code.

- KERNEL STR: SWE 000000473
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:
The CHOWN_REST kernel parameter doesn't function according to the IEEE P1003-1988 standard

ANSWER SUMMARY:
This problem cannot be reproduced by the instructions provided. If this problem is still occurring, please provide complete details about the environment in use when this problem occurs, and complete instructions necessary to duplicate the problem.

- KERNEL STR: UKSC000057028
REV: 5.41 ORIG-ID: DG/UX 5.4 SYS

PROBLEM SUMMARY:
Three AV8000 machines running dgux 5.4.1 hang when doing backups to two 2Gb tape drives. The hot key sequence does not allow a dump to be taken. Therefore we have had to use start 1000 to get a system dump.

ANSWER SUMMARY:
The cause of this hang problem was traced to a firmware problem on the SCSI II controller board. A hardware workaround has been applied and is reported to have eliminated these hangs. A hardware fix is forthcoming.

- KERNEL STR: UKSC000057247
REV: 5.41 ORIG-ID: DGUX_5.4.1 PA

PROBLEM SUMMARY:
AV8000 with HADA running DG/UX 5.4.1 and MSE (Mumps based application s/w) panicked with panic code 41000025. This has happened a number of times over the last few days.

ANSWER SUMMARY:
This problem will be corrected in revision 5.4.2 of DG/UX. In the meantime, patch 5.4.1.p17 has been provided to correct this problem.

- KERNEL STR: UKSC000057693
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:
System Panic 2000075 on AV8000 (yudon) running dgux 5.4.1.

ANSWER SUMMARY:
The problem which led to this panic will be corrected in revision 5.4.2 of DG/UX. In the meantime, to work around this problem, do not enter invalid device names when prompted for devices by diskman.

- LOGIN STR: NASC000011023
REV: 5.40 ORIG-ID: Q377207

PROBLEM SUMMARY:
We have a program that uses "getlogin()" to determine the user login name. We noticed that this program was failing and it appears that /etc/utmp is corrupt. We would like to know if this is the case and have its cause corrected.

ANSWER SUMMARY:
This problem with init(1M) is resolved in Release 5.4.2 of DG/UX.

- LOGIN STR: SWIT000000529
REV: 5.40 ORIG-ID: LS00025

PROBLEM SUMMARY:
The hostname displayed on the login screen is truncated after 9 chars. This happens on a async terminal.

ANSWER SUMMARY:
This problem is resolved in Release 5.4.1 of DG/UX.

- LP STR: INTL000000454
REV: 5.40 ORIG-ID: BEL 920203

PROBLEM SUMMARY:
Cannot print any French accent characters using the DG/UX lp mechanism on a PostScript printer.

ANSWER SUMMARY:
This function is supported using the -S < character set > switch on the lp command line for the -S <code_set_name> switch for the postprint filter. Also needed are patches:

DG/UX OPERATING SYSTEM

DG/UX Revision 5.4.1 - dgux_5.4.1.p19
 DG/UX Revision 5.4 - dgux_5.4.0.p61

- LP STR: NASC000012567
 REV: 5.41 ORIG-ID: E408382

PROBLEM SUMMARY:

Unable to print ascii text files to parallel postscript printer under DGUX 5.4.1.

ANSWER SUMMARY:

This problem has been fixed in DG/UX revision 5.4.2. For DG/UX revision 5.4.1, the patch dgux_5.4.1.p19 has been supplied to you. Also, for DG/UX revision 5.4, the patch dgux_5.4.0.p61 is available.

- LP STR: NASC000012656
 REV: 5.41 ORIG-ID: D-1-301-2422

PROBLEM SUMMARY:

After booting the system "lpsched" and "lpNet" are running as seen by "ps". lpstat -t returns "unexpected message 19" from LP print services. lpshut returns "unexpected message 5" from LP print services.

ANSWER SUMMARY:

Based on the information provided, please proceed as follows: From sysadm, shut down lp. Kill any lp processes, lpsched, or lpNet that remain. Delete the file SCHEDLOCK in /var/spool/lp. Remove the pipe files, FIFO listenBSD listenS5 in /var/spool/lp/fifos. Remove any outstanding print requests by deleting the contents of /var/spool/lp/requests. Using Sysadm restart lp.

- LP STR: NASC000012780
 REV: 5.41 ORIG-ID: D-JPG.LP.PS

PROBLEM SUMMARY:

When defining a printer type PS with input type SIMPLE, the resulting interface file does not check for simple text input resulting in only a banner page being printed. No text is printed.

ANSWER SUMMARY:

This problem has been fixed in DG/UX revision 5.4.2. For DG/UX revision 5.4.1, the patch dgux_5.4.1.p19 is available. Also, for DG/UX revision 5.4, the patch dgux_5.4.0.p61 is available.

- REELEXCHANGE STR: NASC000012394
 REV: 5.41 ORIG-ID: Q460090

PROBLEM SUMMARY:

Reelexchange returns an unknown label error in 5.4.1 that did NOT appear in 4.32. However, this error does not prevent the tape from being written or read.

ANSWER SUMMARY:

We are unable to reproduce this problem on a DG/UX 5.4.1 system with a reel-to-reel (model numbers G6588 and G6589) tape drive. As you are using a quad-density tape drive, not supplied by Data General, and as you are able to both write and subsequently read your tape, despite the spurious error message, we are closing out this STR.

- SH STR: NASC000011877
 REV: 4.32 ORIG-ID: Q422071

PROBLEM SUMMARY:

Problem with ctrl-c causing "Progress menu program" to exit out to a shell instead of to the login prompt.

ANSWER SUMMARY:

This problem is resolved in Release 5.4 of DG/UX.

- SH STR: NASC000011184
 REV: 5.40 ORIG-ID: E61502

PROBLEM SUMMARY:

The trap command does not work under DG/UX revision 5.40 if it is invoked under the user's initial shell. This did work correctly under revision 4.3x.

ANSWER SUMMARY:

This problem is fixed in the Bourne shell, sh, which is released with DG/UX revision 5.4.2. Patch dgux_5.4.0.p52 is available for this problem on DG/UX 5.4 systems, and patch dgux_5.4.1.p07 is available for this problem on DG/UX 5.4.1 systems. You have been provided with these patches.

- SH STR: NASC000011832
 REV: 5.40 ORIG-ID: Q424859

PROBLEM SUMMARY:

Interrupt signal handling appears to be incorrect in DG/UX revision 5.40.

ANSWER SUMMARY:

This problem with the Bourne shell, sh, is resolved in Release 5.4.2 of DG/UX. Patch dgux_5.4.0.p52 is available for DG/UX 5.4 systems, and patch

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dgux_5.4.1.p07 is available for DG/UX 5.4.1 systems. You have been provided with these patches.

- SH STR: NASC000011833
REV: 5.40 ORIG-ID: E62022

PROBLEM SUMMARY:

Interrupt signal handling appears to be incorrect in DG/UX revision 5.40.

ANSWER SUMMARY:

This problem with the Bourne shell, sh, is resolved in Release 5.4.2 of DG/UX. Patch dgux_5.4.0.p52 is available for DG/UX 5.4 systems, and patch dgux_5.4.1.p07 is available for DG/UX 5.4.1 systems. You have been provided with these patches.

- SH STR: NASC000012022
REV: 5.40 ORIG-ID: Q428533

PROBLEM SUMMARY:

We are getting core dumps from the shell and our executable and would like to have them analyzed.

ANSWER SUMMARY:

The shell is dumping core in response to receiving SIGQUIT. This is incorrect behavior of the sh and has been resolved in Release 5.4.2 of DG/UX. Patches dgux_5.4.0.p52 and dgux_5.4.1.p07 are available for DG/UX 5.4 and 5.4.1 systems respectively. You have been provided with both patches.

- SH STR: NASC000012545
REV: 5.40 ORIG-ID: Q422323

PROBLEM SUMMARY:

Problem with interrupts causing keyboard input to alternate between two processes.

ANSWER SUMMARY:

This problem with the Bourne shell, sh, is resolved in Release 5.4.2 of DG/UX. Patch dgux_5.4.0.p52 is available for systems running DG/UX 5.4, and patch dgux_5.4.1.p07 is available for systems running DG/UX 5.4.1. You have been provided with these patches.

- SH STR: NASC000012163
REV: 5.41 ORIG-ID: Q439704

PROBLEM SUMMARY:

The parent process is connecting to init 1 after a ^c interrupt is done in a child process. This is the same problem reported in STRs NASC-11832 and NASC-11833. Please cross reference those STRs.

ANSWER SUMMARY:

This problem with the Bourne shell, sh, is fixed in Release 5.4.2 of DG/UX. Patch dgux_5.4.1.p07 is available for DG/UX 5.4.1 systems. You have been provided with this patch.

- SH STR: NASC000012565
REV: 5.41 ORIG-ID: Q471346

PROBLEM SUMMARY:

We have an AV300 running rev 5.41 of DG/UX. We run a Basic Interpreter and when we try to exit, we do not get the correct results. When we were running 5.40 we were told that this was fixed in 5.41, but it is not fixed.

ANSWER SUMMARY:

This problem with the Bourne Shell, sh, is fixed in Release 5.4.2 of DG/UX. Until 5.4.2 is available, patch dgux_5.4.1.p07 has been supplied to you for use on your 5.4.1 system.

- SH STR: NASC000012745
REV: 5.41 ORIG-ID: U3743

PROBLEM SUMMARY:

Problem with trap command not working as it did under DG/UX 4.32.

ANSWER SUMMARY:

This problem with the Bourne shell, sh, is resolved in Release 5.4.2 of DG/UX. Patch dgux_5.4.1.p07 is available for DG/UX 5.4.1 systems. You have been provided with this patch.

- SYSADM STR: NASC000012295
REV: 5.41 ORIG-ID: PL0034

PROBLEM SUMMARY:

When changing time and timezone, sysadm seems to use the old timezone to set the time, resulting in a wrong time.

ANSWER SUMMARY:

A note will be added to the admdate(1M) man page indicating that if both the time and the timezone are changed simultaneously, odd results can occur. Sysadm will also be modified in DG/UX 5.4.2 to warn the user to logout and login again after changing the timezone.

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- TAR STR: NASC000012516
REV: 5.41 ORIG-ID: D-FLL040492-1

PROBLEM SUMMARY:

A multitape tar backup created on a DG/UX 5.4 workstation does not restore properly on a DG/UX 5.4.1 workstation. It stops at the end of the first tape, even if it's in the middle of a file. The -k flag was used on tar.

ANSWER SUMMARY:

The problem is identical to the one you reported in NASC-12514. Since you also are the originator of NASC-12514, you should watch the progress of that STR for resolution information.

- TERMINFO STR: NASC000012735
REV: 5.41 ORIG-ID: Q472778

PROBLEM SUMMARY:

With a D1400i terminal in vt220 and the background set to light, the vi visual bell reverses the video but does NOT set it back to the original setting. This problem can also be seen with the tput flash command.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2. Two new terminfo entries, vt220-rv and vt220-w-rv, have been added to support reverse video for the D1400i in VT200 mode.

- TTYMON STR: NASC000012588
REV: 5.41 ORIG-ID: Q469830

PROBLEM SUMMARY:

Request that patch dgux_5.4.0.p38 be provided for DG/UX revision 5.4.1.

ANSWER SUMMARY:

The facilities provided by patch 5.4.0.p38 are included in DG/UX 5.4.1.

- UTMP STR: INTL000000433
REV: 5.40 ORIG-ID: TEAM 366

PROBLEM SUMMARY:

"Who am I" gives the wrong user name when logged on via Telnet.

ANSWER SUMMARY:

We cannot determine the cause of the problem from the information supplied. Should the problem recur, please submit a new STR, referencing this STR and include the necessary support materials.

- UUCP STR: NASC000011044
REV: 5.40 ORIG-ID: E61360

PROBLEM SUMMARY:

man page for uusched contains incorrect example for root crontab entry.

ANSWER SUMMARY:

The example in the uusched(1M) man page has been fixed in DG/UX 5.4.2.

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STR ANSWER REPORT for DG/UX BASE SYSTEM FOR AVIION

- STR: NASC000012137
REV: 5.40 ORIG-ID: 457232
- PROBLEM SUMMARY:**
Modem port occasionally becomes locked up and can't be cleared.

ANSWER SUMMARY:

As we agreed in our recent phone conversation, we are closing this STR since the problem has not occurred again. If the problem does reoccur, please send in the syacdump, a system dump, and a kernel image.

- STR: NASC000012939
REV: 5.40 ORIG-ID: U11868
- PROBLEM SUMMARY:**
We are getting core dumps intermittently when using the "PMTD" command.

ANSWER SUMMARY:

This problem cannot be reproduced in DG/UX revision 5.4.1. If the problem reoccurs, please submit another STR with the following information: the DG/UX revision of the client and server, the command used when the problem occurred, the /etc/pmttapetab file, and the core file.

- STR: NASC000013091
REV: 5.40 ORIG-ID: TM-920604
- PROBLEM SUMMARY:**
VTC Image code supplied with DGUX has a keep alive timer of 2 hours. The value should be set to a more reasonable time or be user selectable.

ANSWER SUMMARY:

Patch dgux_5.4.1.e08 contains a modified VTC256 file which reduces the Keep Alive timer from 2 hours to about 2 minutes. This code will run on DG/UX 5.4.2, but it will not be included in that release. A separate RFE has been submitted to allow the Keep Alive timer to be a separate configurable parameter.

- STR: NASC000012500
REV: 5.41 ORIG-ID: X000061
- PROBLEM SUMMARY:**
Under DG/UX revision 5.4.1 we are unable to format and label a "generic" SCSI disk drive.

ANSWER SUMMARY:

This problem is related to your use of non-DG disk drives. This problem was dispatched to the field for further investigation and trouble-shooting. The problem is being addressed under call # E409282, and responsibility has shifted to the Account Engineer. The problem may be caused by incorrect jumpering of the disk drive, or the manufacturer may need to make firmware changes.

- STR: NASC000012900
REV: 5.41 ORIG-ID: TM-920514

PROBLEM SUMMARY:

Terminal connect/disconnect problem.

ANSWER SUMMARY:

This problem is resolved with DG/UX patch dgux_5.4.1.e07. The ttymon process will attempt to ensure modem disconnect when opening a tty by forcing DTR low and looking for CD to drop. If the tty is a VTC tty, it will not respond to those ioctls. This will cause the tty to appear to be hung if the user connects to that tty while ttymon is executing the tty modem hangup code.

- STR: NASC000013108
REV: 5.41 ORIG-ID: U29889

PROBLEM SUMMARY:

Since installing update 5.4.1 we can no longer compile our device drivers. Problem is critical for us.

ANSWER SUMMARY:

This will be fixed in DG/UX revision 5.4.2. In the meantime, you have been provided with a copy of i_cp.h file.

- STR: UKSC000056647
REV: 5.41 ORIG-ID: VTC ADDRESS R

PROBLEM SUMMARY:

If the /dev/ttyxx entry is changed when using VTC's so that the NEW /dev/ttyxx entry is within the range of the 2nd VTC and IP addresses have been specified in the vtc.addr file. On init 3 error messages are reported.

ANSWER SUMMARY:

This problem will be fixed in DG/UX revision 5.4.2.

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- KERNEL STR: SWIT000000543
REV: 4.32 ORIG-ID: ZS00061

PROBLEM SUMMARY:

All lines on the VDA/255 (two VDC/16 box) hang erratic. System console still works fine. After stoping and restarting the system it works fine for the next few days. This problem is very hot, more than 6 system with the same prob.

ANSWER SUMMARY:

The dump included with this STR was taken after a system reset. This has limited the amount of information we can get from the dump. Please install patch dgux_4.32.01.55 and follow the patch notice instructions for taking a dual ported ram dump, syac dump, and then a system hotkey dump.

- KERNEL STR: UKSC000052858
REV: 4.32 ORIG-ID: LDU SEALED ER

PROBLEM SUMMARY:

AV/5200, 4.32, system hung, user attempted to drop system to single user level and got 'LDU Sealed status 4005030', then took panic dump, (2000075).

ANSWER SUMMARY:

This problem is corrected in DG/UX Revision 5.4.

- KERNEL STR: SWE 000000528
REV: 4.34 ORIG-ID:

PROBLEM SUMMARY:

Aviion 8000 with HADA running dgux 4.34 have had several panics during the last months. Dump submitted with this STR with paniccode 32000001.

ANSWER SUMMARY:

This problem was corrected in revision 5.4 of DG/UX by a redesign of the directory manager code.

- KERNEL STR: HOLL000000434
REV: 5.40 ORIG-ID: VIEWGROUP CAL

PROBLEM SUMMARY:

There were 2 lines on an syac255 hanging, the processes running on these 2 terminals were killed, than the system took a panic 0xc000B. We would like to know why the 2 lines sees to be hanging and why the system took the panic.

ANSWER SUMMARY:

This problem appears to be caused by a hardware failure. We understand that this problem has not occurred since the VDA was replaced. If you encounter

this problem again, please provide additional syac-dumps and system dumps.

- KERNEL STR: INTL000000484
REV: 5.40 ORIG-ID: SW01430

PROBLEM SUMMARY:

System hung. Newlines were echoed when entered on Master console but no response from other terminals.

ANSWER SUMMARY:

This problem occurred because of a hardware failure on the disk containing the system swap area, SCSI device unit 2.

- KERNEL STR: JAPN000000669
REV: 5.40 ORIG-ID: NDG 2532

PROBLEM SUMMARY:

Panic 2000075 occurred on DG/UX 5.4

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.1 of DG/UX. Patch 5.4.0.p39 has also been provided to correct this problem.

- KERNEL STR: NASC000010903
REV: 5.40 ORIG-ID: ADS01AV

PROBLEM SUMMARY:

Panic 2000075 (VM_PANIC_INVALID_KERNEL_ADDRESS).

ANSWER SUMMARY:

This problem will be corrected with the redesign of the logical disk manager in revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000011280
REV: 5.40 ORIG-ID: Q394277

PROBLEM SUMMARY:

When we use an ioctl system call to set a tty line to use 2 stop bits, it does not work on a tty line that runs on a syac. The same program works correctly when run on a duart port.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2.

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- KERNEL STR: NASC000011939
REV: 5.40 ORIG-ID: E62065

PROBLEM SUMMARY:

Problem with dd not reading the last block from tape when the last block is a partial block.

ANSWER SUMMARY:

This problem will be fixed in Revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000012244
REV: 5.40 ORIG-ID: Q448275

PROBLEM SUMMARY:

Under DG/UX revision 5.40 we are unable to run "tunefs" on the /usr filesystem even though the man page for "tunefs" states this should be possible. We need to know the exact steps to do this.

ANSWER SUMMARY:

The tunefs command has been changed to permit tuning of the /usr file system. This problem is fixed in DG/UX revision 5.4.2.

- KERNEL STR: NASC000012346
REV: 5.40 ORIG-ID: D-92032301

PROBLEM SUMMARY:

System panics with code 3000032.

ANSWER SUMMARY:

DG/UX patch dgux_5.4.1.p32 prevents the kernel from panicking when this problem occurs. With this patch installed, an error will be returned to the NFS client that transmitted a bad File Handle to the AViiON server. This patch is included in the release of DG/UX 5.4.2.

- KERNEL STR: NASC000012431
REV: 5.40 ORIG-ID: Q461870

PROBLEM SUMMARY:

Received a panic 3000032 on an AV7000 running 5.4 of DG/UX.

ANSWER SUMMARY:

As we agreed in our recent phone conversation, we are closing this STR. The problem has not reoccurred since installing the latest patchkit for DG/UX 5.4.1, op_sys_x_5.4.0.920327, and upgrading the memory boards on your system to rev level 21.

- KERNEL STR: NASC000012719
REV: 5.40 ORIG-ID: X000084

PROBLEM SUMMARY:

Potential problem between DG/UX "header" files and various "C" compilers when using options that give warnings for embedded '/'*'s in programs.

ANSWER SUMMARY:

This problem will be resolved in Revision 5.4.2 of DG/UX. The header files will be passed through a filter program that removes the embedded '/'*'s, thus preventing the warning messages.

- KERNEL STR: NASC000012663
REV: 5.41 ORIG-ID: Q467858

PROBLEM SUMMARY:

We cannot amount a write protected floppy disk, after mounting and trying to write to it, we have to reboot the system.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. In that revision, a check will be added at mount time to determine if a diskette mounted read/write is really writable; if not, an error will be returned at that time.

- KERNEL STR: NASC000012868
REV: 5.41 ORIG-ID: TM-920511-1

PROBLEM SUMMARY:

Panic 2000075.

ANSWER SUMMARY:

This problem will be resolved in revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000012903
REV: 5.41 ORIG-ID: E409591

PROBLEM SUMMARY:

Panic 20000002 when accessing DOS floppy under DG/UX revision 5.4.1.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX.

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- CPIO STR: NASC000013198
REV: 5.41 ORIG-ID: U35291

PROBLEM SUMMARY:

Getting 'loctl command is not supported for this device', when trying to 'cpio' to tape after a 'mt' repositioning command.

ANSWER SUMMARY:

The problem you are experiencing is a limitation of the QIC-150 tape drive. For the QIC-150 a tape record can only be written at Beginning-of-Tape (BOT) or after the End-Of-Recorded-Media (EORM). Attempting to write a record at any other location on the tape will result in the error you report. See the rmt(7) man page for further information.

- DBX STR: NASC000012121
REV: 5.40 ORIG-ID: E062305

PROBLEM SUMMARY:

At DG/UX 5.4 in the elf environment dbx no longer executes the previous command when a carriage return is entered at the command prompt. Cross Reference with UKSC-56975.

ANSWER SUMMARY:

In DG/UX 5.4.2, dbx supports the editread(5) function as documented in its manual page. Editread(5) does not directly provide your requested capability; however, it can be accomplished via the up-arrow/newline sequence. An enhancement request to editread(5) has been filed for consideration for DG/UX 5.4.3.

- HELP STR: NASC000008576
REV: 4.31 ORIG-ID: Q213616

PROBLEM SUMMARY:

Under DG/UX 4.31, help on a command gives a core dump. Help on command works under 4.30.

ANSWER SUMMARY:

We have not been able to reproduce your specific problem; however, in DG/UX 5.4 we modified help to trap and report errors instead of dumping core. Should you experience this problem again, please open a new STR with the Customer Support Center.

- INIT STR: NASC000012965
REV: 5.40 ORIG-ID: U14815

PROBLEM SUMMARY:

Problem with system dropping into Installman.

ANSWER SUMMARY:

Your system dropped into installman(1M) because init(1M) received a signal 15 from a shell script you run to backup a file system. As your shell script kills both a user process accessing the file system and its parent, care must be taken to ensure that the parent process is not init(1M). Note that init(1M) becomes the parent of an orphan child process.

- KERNEL STR: SWIT000000546
REV: 4.32 ORIG-ID: ZB00115

PROBLEM SUMMARY:

The hex code FF sent through the async controller will be received twice. This is the same problem as described in the STR SWIT-521. An example program will show the problem. For more details see below.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4. In DG/UX 4.32, the problem can be worked around by turning off parity checking (-parenb).

- KERNEL STR: NASC000012971
REV: 4.34 ORIG-ID: U9407

PROBLEM SUMMARY:

Panic 1000036 on AV6220.

ANSWER SUMMARY:

As we agreed in our recent conversation, we are closing this STR since you have only seen one other occurrence of the problem, and you are planning to upgrade to the latest revision of DG/UX in the near future. If you are still experiencing the problem after upgrading, please submit another STR, and cross-reference this one.

- KERNEL STR: INTL000000489
REV: 5.40 ORIG-ID: TEAM 371

PROBLEM SUMMARY:

pathconf returns incorrect file name length limit.

ANSWER SUMMARY:

The value you are seeing is not incorrect - it indicates that NFS will support a maximum name length of at least this size. Since the NFS protocol does not supply DG/UX (or any other system) with the actual _SC_NAME_MAX value, DG/UX attempts to determine the type of the remote system and returns a guess as to the correct value for this variable.

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- KERNEL STR: INTL000000493
REV: 5.40 ORIG-ID: SW01490

PROBLEM SUMMARY:

System hung. Newlines were echoed when entered on Master console but no response from other terminals. SCSI tape is continually being reset. Light on 1.6GB disk was locked on.

ANSWER SUMMARY:

As we agreed, we are closing this STR since you are unable to provide a kernel image with the memory dump. Should the problem continue, please submit another STR and include a memory dump and a kernel image.

- KERNEL STR: NASC000011372
REV: 5.40 ORIG-ID: E61702

PROBLEM SUMMARY:

We have an AV4620 running rev 5.40 of DG/UX. When the system is heavily loaded, the system clock will lose 5 to 6 minutes a day.

ANSWER SUMMARY:

This problem will be fixed in Revision 5.4.2 of DG/UX. There was a problem with the management of the timeout chain that resulted in the system seeming to sleep and the clock losing about 4 to 5 minutes at a time.

- KERNEL STR: NASC000011956
REV: 5.40 ORIG-ID: Q431798

PROBLEM SUMMARY:

A "sleep 999,999,999" will timeout after about 30 hours under DG/UX revision 5.40. This did not occur under revision 4.3x of DG/UX.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. In the meantime, patches 5.4.0.p55 and 5.4.1.p23 are available to correct this problem under revision 5.4.0 and 5.4.1, respectively.

- KERNEL STR: NASC000012527
REV: 5.40 ORIG-ID: Q462790

PROBLEM SUMMARY:

Terminal hangs on VDA-128 running 5.4 of DG/UX.

ANSWER SUMMARY:

With your permission, we are closing this STR. We understand that this problem has not occurred since DG/UX revision 5.4.1 was installed. If you see this problem again, please let us know.

- KERNEL STR: NASC000012602
REV: 5.40 ORIG-ID: Q473007

PROBLEM SUMMARY:

The "ioctl" system call no longer works properly under DG/UX revisions 5.40 and 5.41. Programs that read and set the "stty" line settings via the "ioctl" system call that worked properly under revision 4.3x of DG/UX no longer work.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR at your request since you have not had an opportunity to provide the support materials necessary for the continued investigation. We will be glad to investigate this problem for you if materials are submitted with a new STR. Please reference this STR number when submitting a new STR.

- KERNEL STR: NASC000012967
REV: 5.40 ORIG-ID: Q450871

PROBLEM SUMMARY:

Problem with not being able to remove empty directories; subsequent fsck runs report invalid blocks.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. The directories were not truly empty; the directory blocks had been destroyed when a page was zero-filled. This occurred due to a bug which occurred when a fragment (a file smaller than one data element in size) was extended by truncate(2) or ftruncate(2), and the fragment status of the inode didn't get properly updated.

- KERNEL STR: NASC000013027
REV: 5.40 ORIG-ID: U25237

PROBLEM SUMMARY:

We have a modem hooked to a tty line, and the process hung, and now we are not able to get the device open.

ANSWER SUMMARY:

We understand that this problem has not occurred since your VDA has been replaced. With your permission, we are closing this STR.

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- KERNEL STR: UKSC000058739
REV: 5.40 ORIG-ID: PANIC 2000075

PROBLEM SUMMARY:
AV/6220 returned panic 2000075

ANSWER SUMMARY:
This problem will be corrected in revision 5.4.2 of DG/UX.

- KERNEL STR: INTL000000473
REV: 5.41 ORIG-ID: DENMARK-92043

PROBLEM SUMMARY:
A GHF77 revision 1.8.4 program compiled under 4.31 produces segmentation fault under 5.4.1 (but not 5.4, 4.34 and 4.31) when running.

ANSWER SUMMARY:
This problem will be fixed in Revision 5.4.2 of DG/UX. The destination register of a misaligned load will no longer be corrupted during the handling of a misaligned access.

- KERNEL STR: JAPN000000699
REV: 5.41 ORIG-ID: NDG 2564

PROBLEM SUMMARY:
System don't check "Text file busy".

ANSWER SUMMARY:
AT&T removed this error return from a number of system calls, including open(2) and close(2) in SVR4. Therefore, this return value was removed beginning with revision 5.4 of DG/UX in order to remain compliant with the SVID (System V Interface Definition).

- KERNEL STR: NASC000012659
REV: 5.41 ORIG-ID: Q472556

PROBLEM SUMMARY:
We received a panic 3000031 on AV5220.

ANSWER SUMMARY:
This problem will be corrected in revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000012835
REV: 5.41 ORIG-ID: M1071

PROBLEM SUMMARY:
DG/UX panic 3000031.

ANSWER SUMMARY:
This problem will be fixed in revision 5.4.2 of DG/UX.

- KERNEL STR: NASC000013100
REV: 5.41 ORIG-ID: U28311

PROBLEM SUMMARY:
We are getting a 3000032 system panic.

ANSWER SUMMARY:
As we agreed in our recent phone conversation, we are closing this STR since you have not had a chance to do further testing and submit additional memory dumps. Should the problem reoccur, please send us a memory dump and the accompanying kernel image.

- KERNEL STR: NASC000013110
REV: 5.41 ORIG-ID: U25079

PROBLEM SUMMARY:
Panic 3000017, AV8000 DG/UX 5.4.1.12, while users had been using system for couple hours after the system had been brought down and back up.

ANSWER SUMMARY:
The dump analysis of the 3000017 panic indicated that the VTC had panicked. Since this is a hardware problem, we are closing this STR. Hardware call #U34516 was opened for a similar panic. Please track the progress of #U34516 with your local hardware support organization.

- KERNEL STR: NASC000013329
REV: 5.41 ORIG-ID: U41913

PROBLEM SUMMARY:
Under DG/UX revision 5.4.1 if the NPIPE tunable kernel parameter is set very high, the system takes an excessive amount of time to come up.

ANSWER SUMMARY:
With DG/UX 5.4, all common pipe system calls are supported by streams. Stream pipes do not require that this parameter be adjusted. Our tests only show an expected, nominal increase in boot time when the value is increased.

- KERNEL STR: UKSC000058704
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:
Panic 2000075.

ANSWER SUMMARY:
This problem will be resolved in revision 5.4.2 of DG/UX. As part of the IOP panic recovery logic included in revision 5.4.1 of DG/UX, insufficient request

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blocks were set aside for issuing an IOP reset. This situation will be rectified in revision 5.4.2.

- **KERNEL** STR: UKSC000058805
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:

System Hang. Customer was running Icobol and BBasic when the system "hung". Users could not log onto the system but root could.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. The system went into an infinite loop when someone moved a CPD to a point below itself. One of the pathnames contained a symbolic link, which made this an easy mistake to make. The system will not go into an infinite loop under these circumstances starting with revision 5.4.2.

- **LIBMISALIGN.A** STR: NASC000012701
REV: 5.40 ORIG-ID: U2051

PROBLEM SUMMARY:

Problem with the data misalignment handler in patch level op-sys-x.5.4.0.920124 causing segmentation faults.

ANSWER SUMMARY:

This problem will be fixed in Revision 5.4.2 of DG/UX. The misalignment handler will be corrected so that it no longer corrupts the destination register of a misaligned load.

- **LINT** STR: NASC000012617
REV: 5.40 ORIG-ID: Q468924

PROBLEM SUMMARY:

The utility "lint" returns errors when "varargs" is used to pass a variable number of arguments to a function.

ANSWER SUMMARY:

Lint does not automatically define the macros `va_alist` and `va_dcl`, which are expanded according to compiler-specific macros by the include file `varargs.h`. To force the proper expansion of these macros, add `-D_GNUC_` to the lint command line. You must invoke lint in an ELF Software Development Environment when you are using ANSI extensions to the C language.

- **LP** STR: NASC000012550
REV: 5.40 ORIG-ID: Q468049

PROBLEM SUMMARY:

Setting printer fault recovery to "continue" in `sysadm` under DG/UX revision 5.40 does not seem to work. The print job will restart at the first page rather than the page where the fault occurred as it should.

ANSWER SUMMARY:

When DTR or CD drops a SIGHUP is passed to `Ipsched` which interprets this as a lost connection to the printer (a hard fault). We then invoke the fault handler as set by the user. At your election, use the `stty "clocal"` to prevent a SIGHUP from being passed back to `Ipsched`. In DG/UX 5.4.2 we are providing a page print filter, which will allow you to reprint starting at the page fault.

- **LP** STR: NASC000012959
REV: 5.40 ORIG-ID: U12635

PROBLEM SUMMARY:

Problem with `lp -w` not retruning notification to the user that the job has printed.

ANSWER SUMMARY:

This problem is fixed in DG/UX revision 5.4.2.

- **LP** STR: NASC000013031
REV: 5.40 ORIG-ID: U23784

PROBLEM SUMMARY:

`SYSADM` will not allow you to add a form alignment pattern greater than 80 characters regardless of the page width of the form.

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.3, and relates only to the `sysadm` interface using `lpforms`. The following is the suggested workaround until the fix appears in DG/UX Revision 5.4.3.

- **LP** STR: NASC000013283
REV: 5.40 ORIG-ID: U37427

PROBLEM SUMMARY:

Problem with `Ipsched` hanging when permissions of file being printed are 770. Cross Reference with INTL-414.

ANSWER SUMMARY:

This problem is fixed in DG/UX Revision 5.4.2.

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- LPADMIN STR: NASC000013279
REV: 5.41 ORIG-ID: U41223

PROBLEM SUMMARY:

Lp Forms Menu, Mount a form to a printer, does not allow you to Press return to print an alignment pattern [q to quit]. It skips this prompt and asks for another Lp Forms Menu option while in sysadm.

ANSWER SUMMARY:

This problem with the lpadmin command is fixed in DG/UX Revision 5.4.2.

- LPR STR: JAPN000000691
REV: 5.41 ORIG-ID: NDG 2556

PROBLEM SUMMARY:

/usr/bin/lpr -r switch don't work correct.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.2 of DG/UX. The -r option will function properly with the lpr command. Specifically, a complete pathname will be able to be specified on the lpr command line when the -r option is used and the file will be successfully printed and then removed.

- MAN STR: NASC000013136
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:

In the man pages for syac_ttyaddrs and syac_routes commands, the single quotes surrounding the device entries are missing. Example :
syac_ttyaddrs '/dev/async/syac@60(60000000)'/dev/tty34 128.222.3.112

ANSWER SUMMARY:

In DG/UX 5.4.2, the syac_ttyaddrs(1M) and syac_routes(1M) man pages have been fixed so that the missing single quotes surrounding device entries are present.

- RESTORE STR: NASC000011710
REV: 5.40 ORIG-ID: Q420336

PROBLEM SUMMARY:

Under DG/UX revision 5.40 a SYSADM restore of /usr from a level 0 dump will fail with /usr/sbin/restore reporting a "Segmentation Fault".

ANSWER SUMMARY:

The error you encountered was due to a change in the underlying file system in DG/UX 5.4. This change, and its implications with respect to restore, will be

documented in the Release Notice and in the restore(1M) man page for DG/UX 5.4.2.

- RESTORE STR: NASC000012107
REV: 5.40 ORIG-ID: Q440597

PROBLEM SUMMARY:

Problem trying to restore a dump2 tape across the network. The tape is an 8mm. Everything works fine with 9 track tape or QIC150 tapes. Restore keeps asking for next volume even though entire backup is on 1 volume.

ANSWER SUMMARY:

We believe your problem is due to your use of /dev/pmt with caching turned on. Please turn caching off by editing /etc/pmttapetab appropriately.

- SAR STR: NASC000013037
REV: 5.41 ORIG-ID: U24146

PROBLEM SUMMARY:

We are unable to read one of our sar files. The filename is /usr/adm/sa/sa27. When we use sar -A -f /usr/adm/sa/sa27, we get the headings displayed, but nothing is displayed under the columns.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2. The problem was that the first record in sa27 was corrupt, and the sar command was improperly keeping this record around. This prohibited the processing of the remainder of the file.

- STDIO STR: JAPN000000688
REV: 5.41 ORIG-ID: NDG 2553

PROBLEM SUMMARY:

<stdio.h> FOPEN_MAX has no effect

ANSWER SUMMARY:

Please see the man page for stdio(). The integer constant FOPEN_MAX specifies the MINIMUM number of files that the implementation guarantees can be open simultaneously. Additional files that can be opened depend upon available memory and the kernel configuration, specifically the kernel parameter SDES LIM.

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- SU STR: NASC000013216
REV: 5.40 ORIG-ID: U36105

PROBLEM SUMMARY:

When we change the variable "SUPATH" in the file /etc/default/login, and do a su, the path is not changed to what SUPATH is set.

ANSWER SUMMARY:

The functionality described is correct behavior. The login(1) man page qualifies that /etc/default/login affects the behavior of the login program. Modifying SUPATH in /etc/default/login will affect the superuser's PATH only when accessing the system thru the login program. To affect the superuser's PATH upon su(1) access, you can modify the SUPATH variable in /etc/default/su.

- TERMINFO STR: NASC000013117
REV: 5.41 ORIG-ID: U29338

PROBLEM SUMMARY:

We have discovered a problem with the way that terminfo calculates the cursor position coordinates. We have written a terminfo program for a Prism4 terminal, and terminfo does not calculate the cursor positioning correctly.

ANSWER SUMMARY:

The problem you are having with 00 and %c is a limitation in the terminfo tparm() code. A similar problem could occur with 04, which is ^D (EOF). You should avoid using %c in your terminfo entry when %c is 00 or 04.

- TTYMON STR: NASC000011576
REV: 5.40 ORIG-ID: Q413240

PROBLEM SUMMARY:

Problem with using baud rate hunt group under 5.4 DG/UX.

ANSWER SUMMARY:

We suggest that you use the autobaud feature of ttymon to determine the baud rate. Please see the ttymon(1M) man page for details. The baud rate hunt group does not function correctly under DG/UX 5.4, and will not be supported in DG/UX 5.4.2.

- TTYMON STR: NASC000012200
REV: 5.40 ORIG-ID: X000030

PROBLEM SUMMARY:

We are finding core files in /etc/saf/ttymon1. We feel there is a problem in dgux and would like it fixed.

ANSWER SUMMARY:

The first core file you submitted indicated a problem with ttymon(1M), which was fixed with a patch provided to you. Later you submitted another core file. This core file was produced as a result of a user generating a SIGQUIT during login. No problem with ttymon(1) is indicated by this core file.

- VI STR: NASC000010975
REV: 5.40 ORIG-ID: E61311

PROBLEM SUMMARY:

We would like for "vi" to refresh the screen like it did under rev 4.32 of DGUX. We are using TERM=d412-dg.

ANSWER SUMMARY:

In order for vi(1) to function correctly on the D412 terminal, the terminal must be in VT220 mode, and the TERM variable must be set to D412. Data General terminals in DG-mode, e.g. TERM=d412-dg, are not fully supported under DG/UX. For further information on terminal support see Appendix D of "Managing the DG/UX System" (093-701088).

- VI STR: UKSC000054234
REV: 5.40 ORIG-ID: D412 DOWN ARR

PROBLEM SUMMARY:

In DG/UX 5.4 vi with a D412 terminals and TERM=d412-dg, Ctrl-I (^I) does not refresh the screen. The terminal merely "beeps" at the user. This worked in DG/UX 4.3x.

ANSWER SUMMARY:

In order for vi(1) to function correctly on the D412 terminal, the terminal must be in VT220 mode, and the TERM variable set to D412. Data General terminals in DG-mode, e.g. TERM=d412-dg, are not fully supported under DG/UX. For further information on terminal support see Appendix D of "Managing the DG/UX System" (093-701088).

- WHO STR: NASC000013156
REV: 5.41 ORIG-ID: U24944

PROBLEM SUMMARY:

When we use "who -u", it is suppose to return the comments that we used when we added a user. We used the comments to determine where the terminal was located. Since reving up to 5.41 these comments are no longer displayed.

ANSWER SUMMARY:

As comments associated with terminal lines are no longer stored in inittab(4), they are no longer dis-

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played by the -u option to who(1). To retrieve comments about terminal lines, use one of the administrative commands for managing terminal lines. Both admterminal(1M) and pmadm(1M) can provide the desired information.

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STR ANSWER REPORT for DG/UX BASE SYSTEM FOR AVIION

- STR: NASC000012722
REV: 5.40 ORIG-ID: Q418420

PROBLEM SUMMARY:
The utmp file is being corrupted which causes the user that is logged in to be mistaken with another user that has logged off.

ANSWER SUMMARY:
This problem is fixed in DG/UX TCP/IP 5.4.2.
- STR: NASC000014025
REV: 5.40 ORIG-ID: APCOM-1

PROBLEM SUMMARY:
probedev included devices grfx() and duart(1) when auto0configuring a new DG/UX 5.4 kernel causing syac() device not to function.

ANSWER SUMMARY:
The problem you reported is fixed in DG/UX 5.4.1. Autoconfig will no longer report a grfx() device as present on systems that do not have a graphics controller. Note that probedev will still report the graphics device as present, and the problem with probedev(1) is fixed in DG/UX 5.4.2.
- STR: FRA 000000848
REV: 5.41 ORIG-ID: FRENCH MARINE

PROBLEM SUMMARY:
Using curses library in a 'C' program, this program can not print ISO 88591 accentuated characters

ANSWER SUMMARY:
Because your application is to work in an international environment, you should include the appropriate setlocale() statement as the first action in the application code. See the setlocale(3C) man page for more information.
- STR: NASC000012902
REV: 5.41 ORIG-ID: JPG.AUTOMOUNT

PROBLEM SUMMARY:
When specifying multiple maps in the automount master map (/etc/auto.master), any command that tries to reference directories that should be automounted will hang.

ANSWER SUMMARY:
As per our conversation, we are closing this STR. If you have future problems using the automounter,

please submit a new STR with the automount configuration files and, if possible, a trace from the automounter program. See the automount man page for details on the Trace and verbose options.

- STR: NASC000013359
REV: 5.41 ORIG-ID: DOD-920702

PROBLEM SUMMARY:
System crash with a panic code 2000075. System is used roughly 50% as an NFS file server, and 30% a mail and DNS server.

ANSWER SUMMARY:
As we agreed, we are closing this STR since you were unable to provide us with any additional information or materials regarding this panic.
- STR: NASC000013494
REV: 5.41 ORIG-ID: U57408

PROBLEM SUMMARY:
A program using the syslog function aborts with SEGMENTATION VIOLATION if the message supplied to syslog is greater than 1074 bytes.

ANSWER SUMMARY:
There is currently an undocumented limit to the size of the message which syslog() can print. In DG/UX 5.4 Release 2.01, which is an update to DG/UX 5.4.2, the syslog(3C) man page will document this limit as 800. If this limit is exceeded, the behavior is undefined. In DG/UX 5.4 Release 3.00, this limit will be enforced by the syslog() routine.
- STR: NASC000013818
REV: 5.41 ORIG-ID: U69197

PROBLEM SUMMARY:
Getting error 'literal constant 65535 overflows field (range [-32768 32767]) when assembling (as) programs under 5.4.1 that did not give the error in 5.4.

ANSWER SUMMARY:
This problem is fixed in Revision 5.4.2 of DG/UX.
- STR: NASC000013908
REV: 5.41 ORIG-ID: DASH-MSS-8279

PROBLEM SUMMARY:
Restoring from my dump2 tape backup, I keep getting 'Tape read error: error 0' on the read. Is there anyway to skip over the start of the tape and to restore files beyond that?

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ANSWER SUMMARY:

This problem with dodisk is resolved in DG/UX 5.4 Release 2.01, which is an update to DG/UX 5.4.2.

- DOCUMENTATION STR: NASC000013778
REV: 5.41 ORIG-ID: U75585

PROBLEM SUMMARY:

Default values for SEMMNI and SHMMNI kernel variables noted in Managing manual for 5.40 & 5.41 (pg 4-43, 4-44 & pg 4-37, 4-38; respectively) differ from the /usr/etc/master.d/dgux system file.

ANSWER SUMMARY:

The copy of 'Managing the DG/UX System' (093-701088-02), which accompanies the DG/UX 5.4.2, release contains the correct information for SEMMNI and SHMMNI.

- IDI STR: NASC000013184
REV: 5.41 ORIG-ID: U31550

PROBLEM SUMMARY:

Unix 5.4.1 AV532 64mb memory fails to execute idi motif version when there are too many main menu options. Ascii version does not fail.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4 Release 2.01, which is an update to DG/UX 5.4.2. The idi(1) motif interface is fixed to handle large menus. In the idi(1) to be shipped with DG/UX 5.4 Release 2.01, the maximum number of sub-items per menu has been increased from 16 to 32. Further, if the maximum is exceeded, idi(1) returns an error message, rather than dumping core.

- INIT STR: NASC000013288
REV: 5.41 ORIG-ID: U41157

PROBLEM SUMMARY:

"who" command shows same user on same tty line for two different days.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2. In DG/UX 5.4 and in DG/UX 5.4.1, init(1M) did not always properly maintain /etc/utmp after the death of an orphan child.

- INIT STR: NASC000013371
REV: 5.41 ORIG-ID: U42332

PROBLEM SUMMARY:

Issuing a 'kill -15 9999' against a process, seems to have initiated a process that starts 'installman' at the master console.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2.

- INIT STR: NASC000013426
REV: 5.41 ORIG-ID: U51296

PROBLEM SUMMARY:

When rlogin to a system and issue 'init 6', the system comes back up to the present level when issued, not the default value in /etc/inittab.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4 Release 2.01, which is an update to DG/UX 5.4.2.

- INIT STR: NASC000013435
REV: 5.41 ORIG-ID: U53728

PROBLEM SUMMARY:

Need patch for problem of regular users entering "kill 1" and causing system to drop into installman.

ANSWER SUMMARY:

This problem is fixed in DG/UX 5.4.2.

- KERNEL STR: NASC000010241
REV: 4.34 ORIG-ID: Q326278

PROBLEM SUMMARY:

Second syac board hangs. System dump taken at the time of hang.

ANSWER SUMMARY:

After investigating this problem, we were unable to determine the exact cause of the failure; however, since you are no longer experiencing this problem, we are closing the STR with your agreement.

- KERNEL STR: INTL000000429
REV: 5.40 ORIG-ID: SW01207

PROBLEM SUMMARY:

The system took a 22000010 panic.

ANSWER SUMMARY:

As we agreed, we are closing this STR. We were unable to determine the cause of the problem with the dumps provided, and you were unable to provide ad-

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ditional information and steps to reproduce the problem.

- KERNEL STR: NASC000011012
REV: 5.40 ORIG-ID: Q374633

PROBLEM SUMMARY:

When making backup tapes using cpio to a QIC-525 tape, cpio aborts with a "IO Error # 5" after dumping about 150 MB to the tape.

ANSWER SUMMARY:

As we agreed in our recent phone conversation, we are closing this STR since we have not been able to reproduce the problem, and you have been unable to pursue the problem. Should the problem recur, please contact us, and provide the requested information, and we will continue the investigation.

- KERNEL STR: NASC000012137
REV: 5.40 ORIG-ID: 457232

PROBLEM SUMMARY:

Modem port occasionally becomes locked up and can't be cleared.

ANSWER SUMMARY:

The problem you experienced is the result of interference with dgsvcd. The dgsvcd provided with 5.4.2 will allow you configure dgsvcd so that this isn't a problem. Until then, you will need to move your modem to a different port.

- KERNEL STR: NASC000012306
REV: 5.40 ORIG-ID: Q444699

PROBLEM SUMMARY:

Experiencing timeout errors during large file transfers from a Pioneer CD_ROM drive to a Avilion 6225 hard disk.

ANSWER SUMMARY:

Per our phone conversation, we are closing this STR since the problem appears to be with the firmware in the Pioneer CDROM drives. The engineers at Pioneer are looking into this problem. Please contact Pioneer for further updates regarding this problem. If it is determined that there is a DG/UX problem related to the CDROM drives, please submit another STR and reference this one.

- KERNEL STR: NASC000012518
REV: 5.40 ORIG-ID: TM-920408

PROBLEM SUMMARY:

Printer on parallel port slows and pauses as system idle time decreases.

ANSWER SUMMARY:

As we agreed, we are closing this STR since you have converted your printer to serial; you are no longer having this problem; and you do not wish to pursue the problem with the parallel port.

- KERNEL STR: NASC000012591
REV: 5.40 ORIG-ID: Q457345

PROBLEM SUMMARY:

Unable to read tape on 8mm or QIC150 using dd if = /dev/rmt/0 of = filename ibs = 26820 obs = 8940.

ANSWER SUMMARY:

As we discussed in our recent phone conversation, the QIC-150 drive is restricted to reading and writing in 512-byte blocks. The 8mm drive is able to read and write variable length records.

- KERNEL STR: NASC000012708
REV: 5.40 ORIG-ID: Q450857

PROBLEM SUMMARY:

When using the statfs system call, it will return the same value for fs_bfree and fs_bavail when the fstype is set to a non zero number.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4 Release 2.01, which is an update to DG/UX 5.4.2.

- KERNEL STR: NASC000013206
REV: 5.40 ORIG-ID: U9069

PROBLEM SUMMARY:

Problem with growing root with the amount of space reserved for superuser is set incorrectly.

ANSWER SUMMARY:

We are not able to reproduce this problem under revisions 5.4 or 5.4.1 of DG/UX. We used a root file system that matched yours in size and free space and grew it by the same amount. Until we are provided with information which allows us to reproduce this problem or fully understand its cause, we can make no further progress toward resolving it.

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- KERNEL STR: NASC000013366
REV: 5.40 ORIG-ID: U47551

PROBLEM SUMMARY:

AV6240 running 5.40 with patch 39 randomly hangs. There is no system response at all from the system. Hitting new line on master console only moves cursor. I have to do a hot-key panic to shut-down the system. System restarts ok.

ANSWER SUMMARY:

We were unable to determine the cause of this problem because we were not able to successfully read the tapes; and although we have tried to reach you regarding the format, we have not received any information on how the tapes were created. We will keep the tapes on file for a short amount of time, so if you will contact us regarding the format, we will reopen the STR.

- KERNEL STR: NASC000013450
REV: 5.40 ORIG-ID: U39883

PROBLEM SUMMARY:

Problems using type-ahead buffers in conjunction with ioctl system call in 5.4 of dgux.

ANSWER SUMMARY:

As we discussed in our phone conversation, we are closing this STR with your permission since you have not had an opportunity to provide the support materials necessary for the investigation. We will be glad to investigate this problem for you if materials are submitted.

- KERNEL STR: INTL000000527
REV: 5.41 ORIG-ID: SW01638

PROBLEM SUMMARY:

System appeared to hang. The console scrolled up when carriage returns were entered.

ANSWER SUMMARY:

This problem will be fixed in revision 5.4.2 of DG/UX. A timeout on the SCSI bus was not getting cancelled after being serviced, which caused timeouts to back up and the system to hang. Redesign of this area of code will eliminate this problem in revision 5.4.2.

- KERNEL STR: NASC000013215
REV: 5.41 ORIG-ID: CJ54MILL3

PROBLEM SUMMARY:

Panic 54000003.

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX. The panic occurred when a file system was being converted from fast recovery mode to regular recovery mode at the same time that a process was actively using the file system. The problem will be corrected by checking the process count before performing the conversion.

- KERNEL STR: NASC000013267
REV: 5.41 ORIG-ID: E410147

PROBLEM SUMMARY:

Problem with LPD terminating after installing 5.4.1 on top of 5.4.0. We want to know what changed between 5.4.0 and 5.4.1, such that modifying our printer cables prevents the problem.

ANSWER SUMMARY:

We have not found any changes to DG/UX or the printing subsystem that would cause this problem. Because EIA signals are affected by noise and may "float" high, an incorrect cable may work for a while and then fail later. Any environmental change may contribute to this change in behavior.

- KERNEL STR: NASC000013725
REV: 5.41 ORIG-ID: AA080792

PROBLEM SUMMARY:

System is at SCM prompt in the mornings. There is no panic code. This dump tape is generated by issuing a ST 1000 command from SCM. The system is basically running idle.

ANSWER SUMMARY:

From analysis of the dump submitted, it seems most likely that execution of the "halt" command caused the reported symptoms. In order to eliminate the system downtime caused by this as well as help track the issuer of the command, we suggest moving /sbin/halt to another location and creating a shell script called /sbin/halt which logs each issuance of this command.

- KERNEL STR: NASC000013826
REV: 5.41 ORIG-ID: U77311

PROBLEM SUMMARY:

We are running DG/UX rev 5.41 with patchkit 12 installed and received a 2000075 panic.

ANSWER SUMMARY:

This problem will be fixed in DG/UX 5.4 Release 2.01, which is an update to DG/UX 5.4.2.

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- **UTMP** STR: NASC000012800
REV: 5.40 ORIG-ID: Q461843

PROBLEM SUMMARY:
Discrepancy between the 'who' command and 'ps' command in 5.4 of DG/UX.

ANSWER SUMMARY:
This problem is resolved in DG/UX 5.4.2. In DG/UX 5.4, init(1M) could miss the death of an orphan child and not clean up /etc/utmp appropriately.

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DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4 [mkfs,file systems]**

Sealed LDUs

A problem has been discovered with using large directory element sizes. If a value of 5 or larger is specified for "-S" on mkfs, then users may encounter one or more of the following errors:

- * LDU sealed
- * File system degrading to readonly mode
- * fsck reporting empty directory blocks

In addition, for an LDU with a strip size of 32, mkfs will, by default, use 5 for the directory element size. The default value can be overridden by explicitly providing a value. Large element sizes for regular files will not cause a problem and should be specified (-s) or allowed to default to values that match the size of the strip (for best performance).

These problems will only be seen on the file systems that have large directory element sizes. File systems created with normal parameters will not be affected.

OS (AX/UNIX) REV 5.4 [disk,raw,unblocked]

Using Raw Disk

Database and system software like Pick often allow system administrators to specify that data is to be stored onto a raw disk. These packages generally provide their own buffering and concurrency control. When configuring these packages, the administrators should specify an LDU in the /dev/rdisk directory. The LDU nodes in /dev/dsk are blocked device nodes that provide buffering by DG/UX. If the package is already buffering the data, then specifying an LDU node in /dev/dsk may reduce performance by:

- * requiring an extra data copy from the application's buffers into DG/UX's buffers.
- * causing memory contention between the application buffer pool and DG/UX buffering (resulting in additional paging).

OS (AX/UNIX) REV 5.4 [stty,termio,terminals]

Binary Cursor Addressing

Because DG terminals in native DG mode generate binary cursor addresses that may be interpreted in many ways by Unix line disciplines, this mode is not officially supported by DG/UX. For example, a cursor address may be console interrupt, suspend, eof, tab, or any of a number of other special characters. The processing of these special characters is dependent on the line discipline setup. The termio(7) man page describes this processing.

Many users have been able to use their DG terminals in native mode by carefully setting up the line characteristics. In DG/UX 5.4, there is a problem that may result in unexpected processing of form feed and vertical tab characters. These characters may be followed by a number of null characters. Hence cursor addresses that include either a form feed or vertical tab may not be sent to the terminal correctly.

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This problem can be avoided by entering the "stty ofill ff1 vt1" command. The system administrator may wish to add this to the /etc/profile file. This problem will only be seen on VDC ports (the VDC may be connected to either a VDA/128 or VDA/255), and will only be seen on terminals in the DG native mode. This character processing may be a problem even when the "Unix" option of the DG native mode is selected.

OS (AX/UNIX) REV 4.32 [hang,ffm.a,bm.a]

Process Hangs

On DG/UX 4.3x systems that have a group of processes that are doing a lot of concurrent reads and writes to the same file, it is possible for two or more of these process to deadlock. Patch dgux_4.34.01.17 will solve this problem. This patch includes all previous changes made to ffm.a and bm.a. The patch may be applied to any 4.32, 4.33, or 4.34 system.

OS (AX/UNIX) REV 5.4 [remshlp_BSD, printing]

Remote Printing to BSD Systems

Patch dgux5.4.0.p07 fixes a problem with the following remote printer script, remshlpBSD. The script removed an unneeded form feed after the last file of each print job. This will eliminate most blank pages appended to remote print jobs. This combined with the now working -o nofilebreak will allow for proper printing on all bsd systems. This patch is required for remote printing to BSD schedules with the layered product Interleaf Release 5.2.

OS (AX/UNIX) REV 5.4 [remshlp_BSD, printing]

Termserver Postscript Printer Support

Patch dgux_5.4.0.p13 corrects a problem which prevented laser and postscript printers to function properly when connected to a termserver (i.e., Model 4819 TERMSERVER 2100 RS-232).

In addition to the replacement files, lp.cat and termprinter, you must follow the steps outlined below when setting up this printer.

1. Place the printer name and its internet address in /etc/hosts or in the YP database if running Yellow Pages.
2. Using sysadm, create a local printer, and define the printer types required. Below are required responses to specific questions in the local printer definition.

Printer name: <this name must match exactly with the name in the /etc/hosts file >

Local printer? yes

Device: /dev/null

Model: termprinter

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The port on the termserver must be set to host mode instead of the default, terminal. Use the following command on the termserver console:

```
setd (! < port id >) dev = (host,glass,default)
```

The setup for standard (lpr, lpr-80) printers on termserver is the same as stated above, however this patch is not needed. The patch applies to laser and postscript printers.

OS (AX/UNIX) REV 5.4 [setvbuf, libc.a]

Function all setvbuf in ELF libc.a, libc.so, libc.so.1

Patch dgux5.4.0.p16 fixes a problem with function call to the setvbuf routine found in ELF based libc. The form of the call:

```
setvbuf(FILE stream, char buf, int type, size t size;
```

where size is a size greater the BUFSIZ (from stdio.h. Previously only BUFSIZ was allocated instead of the size value passed to the function, thus each call using FILE stream with the standard stdio routines would trash memory. Setvbuf has been modified to allocate size bytes instead of BUFSIZ.

If your application was linked static, then you must relink with this updated libc.a. If your application was linked shared, then it will automatically pick up the update once the patch is installed.

OS (AX/UNIX) REV 4.30

Overriding Default Values for Filesystem Data Element Sizes

Data General has become aware of a problem in the DG/UX file system code when users override the default parameters for data element sizes. Since most users do not override these default values, most systems are not likely to be affected. However, it is important that all DG/UX users are aware of this problem.

This problem may exhibit itself in one or more of these ways:

- * LDU seals
- * File system degrading to readonly mode
- * fsck reporting invalid directory blocks (see /etc/log/fsck.log)

Please keep in mind, though, that each of these symptoms can result from other system problems. They only bear relation to the problem described in this article if the answer to any of the following three questions is yes.

* Has the system ever been set to override the default data element size for files (by specifying a value greater than four to the -s option to mkfs under any revision of DG/UX prior to Release 5.4)?

* Has the system ever been set to override the default data element size for directories (by specifying a value greater than four to the -S option to mkfs under any revision of DG/UX)?

* If the system is running revision 5.4 or greater, are there any LDUs with stripe sizes of 32 or greater? [This causes mkfs to set the directory element size larger than the default unless overridden by the System Administrator.]

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If the answer to all of these questions is no, then the system will not experience this problem. If the answer to any of the above three questions is yes, then the Data General Support Center should be contacted for further information.

Users who are uncertain whether or not these values were set differently from the default can use the `/usr/sbin/dumpfs(1m)` command to check the directory data element size and [file] data element size. (Note that the argument to `mkfs` is expressed as a base 2 logarithm; so 16 is the default data element size as reported by `dumpfs(1m)`.)

If you are running a revision of DG/UX prior to 5.4, do not modify your data element sizes to be larger than the defaults. If you are running DG/UX revision 5.4 then you may set the data element size for files to be larger than the default. However, under revision 5.4 you may not set the data element size for directories to be larger than the default unless you have installed patch 5.4.0.p24.

DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4 [Patch Level Kit]**

DG/UX 5.4 Patch Level Kit Release

A DG/UX Revision Patch Level kit is available from the Customer Support Center. This patch level kit is named, `op_sys_x.5.4.0.911209`. It contains four packages which correspond to four product patch levels. They are: `dgux_5.4.0.24`, `tcpip_5.4.0.01`, `nfs_5.4.0.01`, and `X11_5.4.0.01`. Each product patch level contains patches up through the patch level number; hence patch level `dgux_5.4.0.24` contains dg/ux patches 1 - 24.

OS (AX/UNIX) REV 5.4 [sfm.a Patch]

DG/UX 5.4 Patch to the kernel module `sfm.a`

Patch `dgux_5.4.0.p28` corrects a problem in the `sfm.a` kernel library which causes panic code 2000075. The problem was caused when a `select(2)` of a pipe was satisfied at the same time that the other end of the pipe was closed. This problem was corrected by the addition of a lock. This patch includes patches `dgux_5.4.0.p17` and `dgux_5.4.0.20`.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [restore Patch]

DG/UX 5.4 Patch to the command: `restore`

Patch `dgux_5.4.0.p30` fixes a problem where `restore(1M)` reported there was "no memory for file removal list." This problem occurs when restoring a very large file systems -- those with more than approximately 4,000,000 inodes.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [restore Patch]

DG/UX 5.4 Patch to the command: `restore`

Patch `dgux_5.4.0.p30` fixes a problem where `restore(1M)` reported there was "no memory for file removal list." This problem occurs when restoring very large file systems -- those with more than approximately 4,000,000 inodes.

This patch is available from the Customer Support Center in Atlanta.

DG/UX OPERATING SYSTEM**OS (AX/UNIX) REV 5.4 [ld Patch]**

DG/UX 5.4 Patch to the ld Command

Patch dgux_5.4.0.p26 corrects a 5.4 linker problem where the alignment rules were incorrectly applied when common variable alignment requests were values other than a power of 2.

The original release of the 5.4 linker required some users to increase their swap space for linking a large number of objects to accommodate its need for additional memory. This patch eliminates the need for additional swap space to be added for the linker by reducing its memory requirement.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [sh Patch]

DG/UX 5.4 Patch to the bourne shell, sh

Patch dgux_5.4.0.p31 releases the DG/UX Revision 5.4.1 version of the Bourne shell, sh, as a patch to DG/UX Revision 5.4. It provides support for trapping the signals, SIGQUIT and SIGINT. Additionally the shell corrects the problem which results in the parent process dumping core and terminating when the key sequence for the stty setting, quit, is entered from the keyboard.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [ts.a VTC Patch]

DG/UX 5.4 Patch to the kernel module ts.a and (VTC) VME Terminal Controller

Patch dgux_5.4.0.p32 includes the software changes necessary for DG/UX to support the VME Terminal Controller, model 7425. It provides utilities to initialize the VTC and to configure it for operation. Please refer to /usr/release/vtcsupport.pn included in the patch for more information.

Patch dgux_5.4.0.p32 also includes software fixes which allow DG/UX to behave in a more fault-tolerant manner when chattering occurs on a serial port due to multiple streams of input and output on that port.

This patch also corrects a problem which causes cursor addresses that include either a form feed or a vertical tab to not be sent to a terminal correctly. The normal padding of these characters may cause them to be followed by a number of null characters. Improper processing of these null characters may cause unexpected results when the character is displayed on a terminal. This problem only occurs on VDC ports (running off either VDA/128 or VDA/255 controllers). The problem also occurs only when the terminal is configured to run in DG-UNIX mode or the unsupported native DG mode.

In addition, this patch fixes a problem with syac lines intermittently failing to open on an idle system. This problem is reported to the user via an entry in the ttymon log file of the occurrence of an errno 11.

This patch is available from the Customer Support Center in Atlanta.

DG/UX OPERATING SYSTEM**OS (AX/UNIX) REV 5.4 [sh Patch]**

/sbin/sh, sh, Bourne shell, Patch dgux_5.4.0.p31 recalled

This patch, dgux_5.4.0.p31, was found to have serious problems and is being recalled. A new patch is currently being tested and will be released as soon as testing is completed.

If you have installed dgux_5.4.0.p31 on your system, you are advised to return to the Bourne shell which shipped with DG/UX 5.4.

OS (AX/UNIX) REV 5.4 [libmisalign.a Patch]

libmisalign.a, core dump, -u option, patch

Patch dgux_5.4.0.p35 corrects a problem with libmisalign.a dumping core when the -u misalign.auto_install option is used. User applications must be relinked with libmisalign for this problem to be corrected.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [crt0.o Patch]

DG/UX 5.4 Patch, dgux_5.4.0.p37 available

Patch dgux_5.4.0.p37 corrects a problem with module crt0.o. The signal, SIGSEGV was received when calls to getenv(3C) were issued. The problem was in the _start code, related to using the .init section. Linking with libmisalign.a also would demonstrate the problem.

The module crt0.o is being updated for the three programming environments under DG/UX Revision 5.4: m88kdguxelf, m88kdguxcoff, m88kbcbs.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [sysadm]

Notes on DG/UX 5.4 sysadm

There are several gotchas with DG/UX 5.4 sysadm(1M) that have to do with adding/ modifying users and groups. The following is a list of these gotchas and the commands that can be used as workarounds.

1) DG/UX 5.4 sysadm(1M) does not allow adding user names that contain a hyphen character. This can be seen through the sysadm(1M) User -> Login Account-> Add menu. Use the admuser command directly from the command line as a workaround. For example, to add the user "newuser-1", use the command:

```
admuser -o add newuser-1
```

See the admuser(1M) man page for further information about this command.

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2) DG/UX 5.4 sysadm(1M) does not allow adding group names that contain a hyphen character. This can be seen through the sysadm(1M) User -> Group -> Add menu. Use the admgroup command directly from the command line as a workaround. For example, to add the group "newgroup-1", use the command:

```
admgroup -o add newgroup-1
```

See the admgroup(1M) man page for further information about this command.

3) admuser(1M) does not properly update the home directory name and group if you modify a user by changing his group, username and home directory. This can also be seen from the sysadm(1M) User -> Login Account -> Modify menu. Use the usermod command directly from the command line as a workaround. For example, to change username "toto" to "bebe" and change the home directory to /home/bebe, use the command:

```
usermod -g general -d /home/bebe -m -l bebe toto
```

See the usermod(1M) man page for further information about this command.

4) admuser(1M) does not work correctly if you use an apostrophe in the User Comment field when adding a user. This can also be seen from the sysadm(1M) User -> Login Account -> Add menu. Use the useradd command directly from the command line as a workaround. For example, to add the username "newuser" with a comment field of "newuser's login", use the command:

```
useradd -c "newuser's login" newuser
```

See the useradd(1M) man page for more information about this command.

5) DG/UX 5.4 sysadm(1M) does not update /etc/group when adding a user. This is correct behavior. The userlist in /etc/group is a list of users which may change into a given group via the newgrp command. To update the /etc/group file, you must modify the group and add a user to that group.

6) In DG/UX 5.4, the low-level routines used for adding, deleting, or modifying entries in the group(4) database do not work correctly if the /etc and /tmp directories reside in different file systems. This limitation affects the Add, Delete, and Modify operations in sysadm(1M)'s User -> Group menu. As a workaround make sure /tmp is not a separate filesystem. This problem is fixed in the next release of DG/UX, revision 5.4.1.

OS (AX/UNIX) REV 5.4 [fsls.a Patch]

DG/UX 5.4 Patch to the fsls.a kernel library

Patch dgux_5.4.0.p27 is now available to correct a synchronization problem which causes conversion of file systems from fast recovery mode to normal recovery mode to not work in parallel.

This problem is exhibited to the user as a panic of code 54000003. However, if you wish to be certain that this patch will correct an occurrence of this panic which you have experienced, you should take a system dump following the panic and submit it with an STR for analysis.

This patch is available from the North American Support Center.

DG/UX OPERATING SYSTEM**OS (AX/UNIX) REV 5.4 [fsls.a Patch]**

DG/UX 5.4 Patch to the vmc.a kernel library

Patch dgux_5.4.0.p29 is now available to correct a race condition which is caused by concurrent access of a given page table entry by two processes. This problem exhibits itself as a panic of code 2000075.

Please note, however, that this panic code can have a wide variety of causes. If you wish to be certain that this patch will correct an occurrence of this panic which you have experienced, you should take a system dump following the panic and submit it with an STR for analysis.

This patch is available from the North American Support Center.

OS (AX/UNIX) REV 5.4 [vmc.a Patch]

DG/UX 5.4 Diagnostic Patch to Help Isolate Memory Trashing Problems

Patch dgux_5.4.0.p34 is now available to help isolate memory trashing problems (those usually exhibited as panic codes 2000075, 1000036 and 2000107). It does not prevent any known system panics, but does allow more information to be retrieved from the system dump taken when a memory trashing panic does occur. Sites experiencing any of these panic codes should install this patch.

This patch is designed to isolate a common variety of memory trashing problem: modification of free kernel memory by a kernel resident subsystem which previously owned it. When this particular type of memory trashing problem occurs, the user will see panic codes 2000112, 2000113, or 2000114 in place of the original panic code. Dumps taken following these panics should be submitted along with STRs for analysis.

This patch is available from the North American Support Center.

OS (AX/UNIX) REV 5.4 [terminal services]

DG/UX 5.4 Patch to terminal services.

Patch dgux_5.4.0.p38 provides all the enhancements and fixes provided by patch dgux_5.4.0.p32. In addition, it provides enhanced error reporting and logging of syac problems. Below is a complete list of enhancements and fixes found in this patch.

Patch dgux_5.4.0.p38 includes the software changes necessary for DG/UX to support the VME Terminal Controller, model 7425. It provides utilities to initialize the VTC and to configure it for operation. Please refer to /usr/release/vtc_support.pn for more information.

This patch includes software fixes which allow DG/UX to behave in a more fault-tolerant manner when chattering occurs on a serial port due to multiple streams of input and output on that port.

Patch dgux_5.4.0.p38 also corrects a problem which causes cursor addresses that include either a form feed or a vertical tab to not be sent to a terminal correctly. The normal padding of these characters may cause them to be followed by a number of null characters. Improper processing of these null characters may cause unexpected results when the character is displayed on a terminal. This problem only occurs on VDC ports (running off either VDA/128 or VDA/255 controllers). The problem also occurs only when the terminal is configured to run in DG-UNIX mode or the unsupported native DG mode.

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In addition, this patch fixes a problem with syac lines intermittently failing to open on an idle system. This problem is reported to the user via an entry in the ttymon log file of the occurrence of an errno 11.

This patch is available from the North American Support Center.

OS (AX/UNIX) REV 5.4 [sfm.a patch]

DG/UX 5.4 Patch to the sfm.a library.

Patch dgux_5.4.0.p39 corrects a number of problems in the sfm.a subsystem as described below:

Incorrect Size Returned by stat(2)/fstat(2)

This patch fixes the problem where a call to stat(2)/fstat(2) to get the size of a FIFO pipe always returns 0 in the st_size field, even if data has just been written into the pipe.

Memory Leak Caused by write(2)

This patch fixes a memory leak caused by a write(2) system call using an invalid buffer address or incorrect buffer length.

Invalid Memory Reference

This patch incorporates patch dgux_5.4.0.p17. It corrects a problem which results in a 200075 panic from an invalid memory reference when processing messages at the stream head.

Streams Deadlock

This patch incorporates patch dgux_5.4.0.p20. It fixes a problem with a streams deadlock which occurs when sfm_internal_ioctl and sfm_aid_exit each try to obtain two locks but in the opposite order. sfm_internal_ioctl has been changed so that it releases one of the locks and then re-obtains the two locks in the same order that sfm_aid_exit does. The symptom is that the system runs fine until this deadlock occurs, then as each process that needs one of these locks tries to lock that resource, it hangs.

select(2) on Closed Pipe

This patch incorporates patch dgux_5.4.0.p28. It corrects a problem which causes panic code 2000075. The problem occurs when a select(2) of a pipe is satisfied at the same time that the other end of the pipe is closed. This problem was corrected by the addition of a lock.

This patch is available from the North American Support Center.

OS (AX/UNIX) REV 5.4 [sysadm]

DG/UX 5.4 sysadm portservices dumps core with large tty counts

A problem in DG/UX 5.4 sysadm(1M) and idi(1M) may occasionally cause the Add, Delete, and Modify operations of the Device -> Port -> Port Service menu to dump core with signal 11. This problem usually only occurs when dealing with a large number of ttys (greater than 200) that are monitored by the same ttymon(1M) port monitor. sysadm and idi have been modified in DG/UX Release 5.4.1 to not display this behavior.

Under DG/UX Release 5.4, this problem can be worked around by using the admterminal(1M) or admportservice(1M) command directly from the command line.

DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4.1 [/etc/fstab]**

dump2(1M), backup, /etc/fstab, sysadm

If the dump frequency field of an /etc/fstab entry contains something other than "d", "w" or "m", then the file system will not be backed up by dump2(1M) or sysadm's File System -> Backup -> Create. For example, if the entry for the /usr file system on your AViiON is:

```
/dev/dsk/usr /usr dg/ux rw 1 0
```

this should be changed to:

```
/dev/dsk/usr /usr dg/ux rw d 0
```

After this change, the /usr file system will be backed up on a daily basis. This problem will most likely occur on newly shipped pre-loaded systems, and on systems where DG/UX 5.4 or DG/UX 5.4.1 has been installed on a clean disk. If you have saved your /etc/fstab file when upgrading from DG/UX 4.32, and are now using it under DG/UX 5.4 or DG/UX 5.4.1, you should not have this problem. You are, however, encouraged to check your /etc/fstab file to be certain you will not experience this problem. Note that if you do not wish to have a file system backed up, then you should insert an "x" into the fourth field. OS (AX/UNIX) REV 5.4 [Patch Level Kit]

DG/UX 5.4 Patch Level Kit Release

A new DG/UX Revision Patch Level kit is available from the Customer Support Center. This patch level kit is named, op-sys-x.5.4.0.920124, and it replaces patch level kit op-sys-x.5.4.0.911209. It contains four packages which correspond to four product patch levels. They are: dgux_5.4.0.39, tcpip_5.4.0.03, nfs_5.4.0.01, and X11_5.4.0.01. Each product patch level contains patches up through the patch level number; hence patch level dgux_5.4.0.39 contains DG/UX patches 1 - 39.

This patch level kit is applicable to 5.4 ONLY. All of the patches in this patch level are available in the 5.4.1 release.

OS (AX/UNIX) REV 5.4 [ttymon Patch]

DG/UX 5.4 Patch, dgux_5.4.0.p45 available

Patch dgux_5.4.0.p45 fixes a "memory leak" problem in ttymon(1M) which, in some instances, caused the ttymon process to gradually increase in size. The result was that, eventually, login attempts would start to fail.

Patch dgux_5.4.0.p45 supersedes previously released DG/UX patches dgux_5.4.0.p40 and dgux_5.4.0.p23 as described below.

Patch dgux_5.4.0.p40 includes a sac that logs ttymon exit codes, and a ttymon that logs extended error messages. In addition, it ensures that the death of a ttymon process will not result in the automatic death of child processes.

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Patch dgux_5.4.0.p23 corrects a problem which kept modem lines from acting on the hang up signal in some instances.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [i/o Patch]

DG/UX 5.4 Patch, dgux_5.4.0.p42 available

Patch dgux_5.4.0.p42 corrects a number of problems as noted:

AV/46xx and AV/53x Parallel Printer Support

Each time the parallel printer port is opened on the AV/46xx and AV/53x series of machines, a printer reset is issued. Various types of printers need to be reset via their parallel port before they will operate properly. The reset does not adversely effect the operation of a printer that does not require it.

Opstar Support

Two problems found in DG/UX 5.4 when using OpStar hardware on certain AViiON systems have been corrected. In particular, it is required when using AV 53x and AV 46xx systems with OpStar. It also fixes a SCSI problem which occurs when mounting WORM filesystems with servers that use model 7421 VME SCSI host adapter. (Please note that the firmware of this host adapter must be rev 20 or later.)

Floating Point Exception Handling

The manner in which double precision floating point exceptions are handled has been modified in patch dgux_5.4.0.p42. Certain floating point exceptions are now reported in the system log as messages of priority LOG_ERR. The message will appear as follows:

"A process was killed when its state was corrupted."

Memory Errors

This patch also causes a SIGBUS violation to be generated rather than a system panic when memory errors occur as a result of user references to addresses outside the range of physical memory.

Tape Firmware Problem

This patch addresses a tape firmware problem on the AV/46XX and AV/53X (33 MZ servers/workstations). The tape drives affected are model numbers 6588-XX and 6589-XX (Galaxy II). This patch may be applied to other systems including those not running these tape drives.

SCSI Device Timeouts with Large Data Blocks

This patch includes a workaround for a hardware problem that may occasionally result in SCSI device timeouts when reading large (i.e., larger than 32Kb) data blocks on the AV530, AV4600 and AV/4620 systems. The problem is also likely to be seen during such operations as "Physical Disk Copy" in diskman(1m). This patch prevents the timeout from occurring on these systems. The problem does not occur on other AViiON systems.

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New ioctl Command, MTIOC_MODFM

This patch implements a new ioctl command, MTIOC_MODFM. It permits the modification of tape filemarking behavior. By default when a tape device opened with write intent is closed, filemarks are written whether or not data was actually written to the device.

This new MTIOC_MODFM ioctl command is used to alter that behavior. If this ioctl is invoked with the MTIOC_MODFM_NOFM argument, filemarks will be written upon close only if the tape device is opened with write intent AND data was actually written to the device.

MTIOC_MODFM_NOFM is currently the only valid argument for the MTIOC_MODFM ioctl. All other arguments will result in EINVAL.

Note that the modification of filemark behavior does not persist across multiple opens. After the device is closed, subsequent opens will use the default filemark behavior described above.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [technical briefs]

Summary of Current DG/UX 5.4 Technical Briefs

There are four DG/UX 5.4 technical briefs currently available. These papers provide in-depth information about various aspects of the product. Each can be ordered via its part number, as listed below. Note that as modifications are made to these briefs their suffixes (eg. the -00 at the end of the part number) will be incremented.

012-003886-03: A Second Look at Multiprocessor SMPs

This technical brief begins by discussing common misconceptions about Symmetric Multiprocessor Systems (SMPs). It then outlines the design of the AViiON SMP architecture, and describes how the DG/UX operating system maps processes onto Virtual Processors (VPs) and VPs onto Job Processors (JPs). The next section outlines how the DG/UX operating system's kernel uses different kinds of locks to ensure the integrity of kernel databases. A comparison is made between SMPs and parallel processing systems. In the "Performance" section, a series of tests demonstrate how the AViiON SMPs scale as more processors are added to a system.

012-004035-00: A Look at High Availability Disk Systems

This technical brief introduces the DG High Availability Disk Array (HADA). Included is a terminology section, a list of high availability design goals, a RAID (Redundant Array of Inexpensive Disks) implementation section, the history of RAID, and a description of striping. Tips for choosing a disk subsystem are presented along with HADA and CSS2 disk configurations. Also provided are examples of how a HADA system responds to different failure scenarios. Features such as mirroring and dual porting are described. The gridman utility is introduced, and the "hot replacement" of disk modules is discussed. A performance comparison of different HADA configurations is included, as well as the answers to common high-availability disk system questions. Finally, the use of stripe parity to re-generate data from a failed disk module is described.

012-004054-00: The DG/UX 5.4 File System

This technical brief provides conceptual and performance-related information about the DG/UX 5.4 File System design and implementation. Included are sections on files and file systems, storage and access of files, logical disks, the relationship between the File System and the Virtual Memory Manager, access modes for files, and block I/O and character I/O. Attention is paid to the internals of the File System, with discussions of the Flat File Manager (FFM), Disk Allocation Regions (DARs), inodes, data elements, logical disks, striping, and mirroring. The "Tips for Tuning a File System" section discusses ways of improving File System perfor-

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mance, and provides results of performance tests. Also provided are examples of how open, read, and memory mapped system calls are handled within the Demand-Paged I/O model.

012-004093-01: Open Systems Terminology

This technical brief contains definitions for more than 200 terms. The focus is on terminology pertaining to the alphabet soup of open systems standards, performance benchmarks, and the organizations that support the standards and benchmarks. Other terms, specific to the DG/UX 5.4 operating system, are also included. A "Quick Reference" at the beginning of the technical brief lists the names of organizations and the standards or products that they support/promulgate.

DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4.1 [ffm.a]**

Using `ftruncate()` may cause `fsck` to fail and files to be deleted.

Patch `dgux_5.4.1.p02` fixes a problem with the `ftruncate(2)` system call. If a file was created, opened, and written to and the file size is less than 8KB, then if `ftruncate` is used to extend the file past 8KB, the inode was not being updated to reflect that the file was not fragmented. If the filesystem is then unmounted and `fsck`'ed, `fsck` would report that the file is marked fragmented but it is not a fragmented file -- clear?, then `fsck` would report that that inode for the file is partially truncated -- fix?, then there are several more fixes for the filesystem that `fsck` prompts you to answer. The result is that the file is deleted. Patch 47 updates the inode correctly when the `ftruncate(2)` system call is used to extend the file in this case.

OS (AX/UNIX) REV 5.4.1 [hken.a]

`hken` would report incorrect results when reading the ethernet address.

Patch `dgux_5.4.1.p04` fixes a problem with the `hken.a` library when the ethernet board is accessed via a DLPI application to read the hardware address of the board. The `hken.a` library did not use a lock mechanism to ensure exclusive access to the board and as a result, the data returned to the user could be incorrect with no error indication. The patched `hken.a` uses locking in the routine that reads the hardware address thus preventing incorrect data being returned to the user.

OS (AX/UNIX) REV 5.4 [get Patch]

DG/UX 5.4 Patch to the `get (scs)` Command

Patch `dgux5.4.0.p51` updates the command, `get`, from `SCCS`. The date format for the commands `G` and `H` have been modified to return date formats as documented in the man page `get(1)`. With this correction the date formats are compatible with those returned under DG/UX revision 4.32.

OS (AX/UNIX) REV 5.4 [ffm.a]

Using `ftruncate(2)` may cause `fsck` to fail and files to be deleted.

Patch `dgux_5.4.0.p47` fixes a problem with the `ftruncate(2)` system call. If a file was created, opened, and written to and the file size is less than 8KB, then if `ftruncate` is used to extend the file past 8KB, the inode was not being updated to reflect that the file was not fragmented. If the filesystem is then unmounted and `fsck`'ed, `fsck` would report that the file is marked fragmented but it is not a fragmented file -- clear?, then `fsck` would report that that inode for the file is partially truncated -- fix?, then there are several more fixes for the filesystem that `fsck` prompts you to answer. The result is that the file is deleted. Patch 47 updates the inode correctly when the `ftruncate(2)` system call is used to extend the file in this case.

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Patch dgux_5.4.0.p47 includes patch dgux_5.4.0.p24 described below.

This patch also corrects a problem that causes corruption of directories in a file system if the directory element size if the -S option to mkfs for that file system is given an argument of 5 or greater.

This patch also corrects a problem with a seal occurring during the mount procedure, which leaves the file system unmounted, but with a buffer in the buffer manager that is not forgotten. When the file system is then remounted, the system will may hang since the buffer is still in existence at the time of the mount.

The layered software product AV/Office Revision 1.0 which experienced the following symptoms is corrected as a result of this patch to DG/UX. Implementing Control Point Directories within the AV Office 1.0 Electronic Mail application can corrupt users' Mail data. The condition is characterized by additional user mailboxes (mboxN) being created in UAP/umail/text/ <username > other than those defined by the user. The corrupt mbox's usually contain only one AV Office Mail message file (under UAP/umail/text/<username >/mboxN/1) and a DETAILS file of length 0. Users will become aware of the problem when AV Office Mail erroneously reports "No letters in the mailbox." There is no data loss as a result of this condition however, the data is no longer accessible from within the Mail application. Applying this patch will prevent this condition from occurring but will not repair any AV Office mailboxes corrupted prior to applying the patch.

OS (AX/UNIX) REV 5.4 [hken.a]

hken would report incorrect results when reading the ethernet address.

Patch dgux_5.4.0.p49 fixes a problem with the hken.a library when the ethernet board is accessed via a DLPI application to read the hardware address of the board. The hken.a library did not use a lock mechanism to ensure exclusive access to the board and as a result, the data returned to the user could be incorrect with no error indication. The patched hken.a uses locking in the routine that reads the hardware address thus preventing incorrect data being returned to the user.

This patch also addresses a problem in the hken driver flow control algorithm in the driver would exhibit a problem when there were multiple streams opened and the board was recovering from an overrun while transmitting. The write side of the stream would stop, and we would run out of streams memory after a short while.

This patch is dependent upon patch level 24 or greater.

OS (AX/UNIX) REV 5.4.1

Missing /usr/src/uts/aviion/ii/i_cp.h file.

This include file was left off of the DG/UX 5.4.1 release media. It is included by the i_deb.h file and is primarily needed by customers that develop their own device drivers.

It will be included in the 5.4.2 release of DG/UX.

OS (AX/UNIX) REV 5.4 [restore Patch]

DG/UX 5.4 Patch, dgux_5.4.0.p46 available

Patch dgux5.4.0.p46 provides improved performance for the restore(1M command (also sysadm File System -> Backup -> Restore. In addition, patch dgux5.4.0.p46 supersedes patch dgux5.4.0.p30 which fixes a problem where restore(1M reported there was no memory for file removal list. This problem occurs when restoring a very large file systems -- those with more than approximately 4,000,000 inodes.

This patch is available from the Customer Support Center in Atlanta.

DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4.1 [Installation]**

As with all previous updates and releases of DG/UX, Update 1 to DG/UX 5.4 loads via diskman. The installation procedures for this update are described in the manual Installing the DG/UX System (093-701087-01).

Users attempting to upgrade their systems to DG/UX 5.4.1 simply by running sysadm loadpackage will discover that their system is not upgraded. In particular, the dgux package will not load and users will be unable to build a kernel.

Users are advised to follow the installation instructions in the manual mentioned above. First and foremost, remember to boot the update tape and use diskman to load your update. OS (AX/UNIX) REV 5.4 [Patch Level Kit]

DG/UX 5.4 Patch Level Kit Release

A new DG/UX Revision Patch Level kit is available from the Customer Support Center. This patch level kit is named, op-sys-x_5.4.0.920327, and it replaces patch level kit op-sys-x.5.4.0.920124. It contains four packages which correspond to four product patch levels. They are: dgux_5.4.0.51, tcpip_5.4.0.05, nfs_5.4.0.01, and X11_5.4.0.01. Each product patch level contains patches up through the patch level number; hence patch level dgux_5.4.0.51 contains DG/UX patches 1 - 51.

This patch level kit is applicable to 5.4 ONLY.

OS (AX/UNIX) REV 5.4.1 [ffm.a Patch]

DG/UX 5.4.1 Patch dgux_5.4.1.p12 Available

DG/UX patch 5.4.1.p12 corrects several file system problems:

This patch corrects a problem with overallocation of disk space which occurs when a fragment (a file smaller than one data element in size) is extended. This problem can be identified by the fsck error messages it produces:

Inode xxx, truncated: Incorrect block count in inode xxx

Also corrected in this patch is a problem with the ftruncate(2) system call not properly updating the fragment status of an inode. This condition occurs when a fragment (a file smaller than one file data element in length - 8 Kb by default) is extended by ftruncate and then written to so that its length is greater than one file data element but less than or equal to its extended size. At this point the file is no longer a fragment. If the file system is then unmounted and fsck is used to check the file system, and you respond "y" to all of fsck's queries, you will delete the file. If you do not run fsck, loss of the file will not occur. This patch updates the inode correctly in these circumstances, thereby eliminating this chance for unintentional file deletion. This problem can be identified by the fsck error messages it produces:

Inode xxx is marked as fragmented, but is not fragmented

In addition, this patch corrects a problem in the file system which causes an LDU to be downgraded to readonly mode when a file whose is_fragmented inode bit is not set properly.

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This patch is available from the Customer Support Center in Atlanta.

DG/UX 5.4.1 Patch dgux_5.4.1.p13 Available

DG/UX patch 5.4.1.p13 corrects a file system problem which causes panics 57000143, 57000136 and 57000137 to occur. These panics occurred when the value -1 was specified as the buffer size for a write(2) system call. When DG/UX compared the size of the write request and the current file offset to the process's soft and hard file size limits it was done incorrectly, causing an overflow in a calculation. The panic occurred later, when a write to the file was attempted at the invalid offset location. This patch corrects the problem by causing the write(2) system call to return the proper error to the user when an invalid buffer size is specified.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [cpio Patch]

cpio, dgux_5.4.0.p59 available

Patch dgux_5.4.0.p59 is now available. This patch fixes a problem where cpio(1) returned the error "cpio: Cannot create temporary file, errno 18, Cross device link" when restoring a cpio archive.

This patch is available from the Customer Support Center in Atlanta.

OS (AX/UNIX) REV 5.4 [contrib tape]

ATTENTION DATA GENERAL AViiON CUSTOMERS

REQUEST FOR SOFTWARE CONTRIBUTIONS

On the occasion of each major release of DG/UX, DG makes available a tape containing (almost) free software for the comfort and convenience of its customers. The Contributed Software tape is provided at nominal cost and without support.

We are now accepting contributions for the next release of the tape. We are interested in software that you have written or in public domain software that you have ported. If you have software to offer and/or questions about the contributed software tape, send e-mail to:

contrib@dg.com

or send an inquiry to:

Contributed Software Tape
c/o ISA, M.S. 5
Data General Corporation
62 TW Alexander Drive
Research Triangle Park, NC 27709

Mr. Contrib will reply with instructions on how to submit your software. Please contact Mr. Contrib before July 1, 1992.

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OS (AX/UNIX) REV 5.4 [sh]

DG/UX 5.4 and 5.4.1 sh patch available

Patch dgux_5.4.0.p52 and dgux_5.4.1.p07 release several bug fixes for the Bourne shell, sh(1). In addition, patch dgux_5.4.0.p52 replaces patches dgux_5.4.0.p31 and dgux_5.4.0.p41.

Patch dgux_5.4.0.p52 to DG/UX 5.4 provides the following fixes (these fixes are released in the 5.4.1 sh):

- Provides support for trapping the signals, SIGQUIT and SIGINT in an interactive sh.
- Prevents the initial shell from dumping core and terminating when the key sequence for the stty setting, quit, is entered from the keyboard. Note that this is different behavior from the shell released in DG/UX 4.3x. The correct behavior for the DG/UX 5.4 shell is to ignore these signals when entered from the initial shell.

Patch dgux_5.4.0.p52 to DG/UX 5.4 and patch dgux_5.4.1.p07 to DG/UX 5.4.1 provide these fixes:

- Prevents editread(5) from affecting the trapping of SIGINT and SIGQUIT when entered in an interactive shell other than the initial shell. If editread was in use (i.e. enable = on), the current shell would terminate upon receiving SIGINT and SIGQUIT.
- Allows trapping of signals more than once between /etc/profile and \$HOME/profile.
- Prevents a parent shell from terminating if it has an interactive shell child. The result of this error was two active shell processes sharing the same tty.

Both of these patches are diskman loadable images. This means that a system must be brought to the SCM and standalone diskman booted to load this patch. This is required since it is not recommended that the sh be loaded while it is executing. This patch will NOT be rolled into the next DG/UX patch level for either 5.4 or 5.4.1 but will remain a standalone patch.

OS (AX/UNIX) REV 5.4/5.4.1 [lp PostScript Patch]

DG/UX 5.4/5.4.1 Patch for PostScript Printing & Termserver

Two patches are being released, one each for DG/UX 5.4 and 5.4.1, that correct numerous problems reported against PostScript printers, termserver printers, and international character support for PostScript printers. The patch names are:

DG/UX Revision 5.4 - dgux_5.4.0.p61
DG/UX Revision 5.4.1 - dgux_5.4.1.p19

The description below is directly from the dgux_5.4.1.p19 patch notice and also applies to DG/UX 5.4.

In the first customer ship of DG/UX Revision 5.4 Update 1 (5.4.1), printing with the lp command to PostScript printers connect via the parallel printer port or via a termserver would fail to print the job if your printer has been setup as follows:

5.4.1 Parallel Postscript Settings

```
-----
input type:   PostScript
printer type: PS
interface:    standard
```

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5.4.1 Termserver Postscript Settings

```
-----
input type:   PostScript
printer type: PS
interface:    termprinter
```

Also Wordperfect(R) graphics files would not print correctly across a termserver to the HP Laserjet family of printers.

This patch notice also documents how to access international character sets for PostScript printers.

Postscript Printing

Patch dgux_5.4.1.p19 delivers new terminfo files, updated filters, and updates your printer filter table. These modifications are upwardly compatible with DG/UX Revision 5.4.2.

Many PostScript printers have two modes of printing, Interactive and batch. Interactive PostScript printers generally use serial communications and will require a printer type of PS or PSR. This mode allows for a dialogue of two way communication between the PostScript printer and the fast filter, postio. The fast filter postio requires a serial device, /dev/ttyxx, and should NOT be used with a serial printer connected to a termserver.

Batch PostScript printers are generally used when the connection type that does not provide for two way communication other than flow control and will require a printer type of PS-b or PS-br. This mode is used for parallel printers connected to /dev/lp, printers connected to termserver using the device /dev/null, and printers connected to the parallel port on the VME terminal controller.

After installing this patch you must modify your PostScript printer entries based on the tables below. This will ensure that your printer will pickup the new model file being delivered with this patch.

The settings will be documented in the manual, Customizing the DG/UX System, chapter 6, for DG/UX Release 5.4.2.

New Parallel Postscript Settings with Patch dgux_5.4.1.p19

```
-----
input type:   PS
printer type: PS-b
interface:    standard
```

or for reverse paper stacking

```
input type:   PS
printer type: PS-br
interface:    standard
```

For serial PostScript printers, you should continue to use the 5.4.1 recommended settings.

5.4.1 Serial Postscript Settings with Patch dgux_5.4.1.p19

```
-----
input type:   PS
printer type: PS
interface:    standard
```

or for reverse paper stacking

```
input type:   PS
printer type: PS-r or PSR
interface:    standard
```

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For termserver PostScript printers, you should use these settings:

5.4.1 Termserver Postscript Settings with Patch dgux_5.4.1.p19

```
-----
input type:    PS
printer type:  PS-b
interface:     termprinter
local printer: yes
device:        /dev/null
```

or for reverse paper stacking

```
input type:    PS
printer type:  PS-br
interface:     termprinter
local printer: yes
device:        /dev/null
```

Additionally, for termserver, place the printer name and its internet address in `/etc/hosts` or in the YP database if running Yellow Pages. If your PostScript printer has the option to set it to Batch mode, do so. Otherwise the port on the termserver must be set as to host mode instead of the default, terminal. Use the following command on the termserver console:

```
setd (! < port id >) dv = (host,glass,default)
```

Wordperfect Graphics and Termserver

The Model 4819 TERMSERVER 2100 RS-232 incorrectly strips all 0xFF or 377 characters from the data stream passing through the termserver. This problem was reported by users of Wordperfect printing graphic data across this termserver to one of the HP LaserJet family of printers. The graphic was not printed correctly.

This patch delivers a new termprinter model file and a filter, `termprinter_ff_filter`. The filter is hardcoded in the model file and should not be added to the filter table. This filter simply adds an extra 0xFF for each 0xFF seen in the data stream. To pick up this fix you must modify your termserver printer configuration using `sysadm`. No changes to your prompted entries are necessary, but by executing the modify option, your entry will pick up the new termprinter model file.

International character sets and PostScript Printers

The default code set is 'ascii'. Other code sets are specified with the `-S` option to `lp`. For example:

```
lp -S iso-88591 file1
```

You may obtain the list of codesets available by issuing the command:

```
lpstat -S -l
```

The code sets available for non-PostScript printers are determined by the printer type as defined in the `terminfo(4)` database.

PostScript printers are controlled by the `lp` filter, `postprint`. To change the system default for PostScript printers, use the `sysadm` menu:

```
Device->Printer->Filter
```

Then select Add or Modify. The field "Program" has

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/usr/lib/lp/postscript/postprint

change this to

/usr/lib/lp/postscript/postprint -S code_set_name

where code_set_name follows from postprint(1), not from lpstat -S -l and is defined as follows:

code_set_name	ISO Codeset	description
-----	-----	-----
ascii	US English	(default)
ps88591	ISO 8859-1	(Latin 1)
ps88592	ISO 8859-2	(Latin 2) ps
88597	ISO 8859-7	(Latin/Greek)

OS (AX/UNIX) REV 5.4.1 [Patch Level Kit]

DG/UX 5.4.1 Patch Level Kit Release

A DG/UX Revision Patch Level kit is available. This patch level kit is named, op-sys-x_5.4.1.920410. It contains two packages which correspond to two product patch levels. They are: dgux_5.4.1.12 and tcpip_5.4.1.02. Each product patch level contains patches up through the patch level number; hence patch level dgux_5.4.1.12 contains DG/UX patches 1 - 12.

This patch level kit is applicable to 5.4.1 ONLY.

OS (AX/UNIX) REV 5.4 [libc]

Patch dgux_5.4.0.p58 - Corrections for libc

Patch dgux_5.4.0.p58 brings forward all libc corrections for revision 5.4. and 5.4.1 including correcting the following problems:

1. A problem reported against read(2). It is the nature of streams that the read(2) system call may return less than the full number of bytes requested. We have altered fread(3S) to issue enough read(2) requests to assure that the full number of bytes requested is returned except in case of EOF or error.

2. A problem with function call to the setvbuf routine found in ELF based libc. The form of the call:

```
setvbuf(FILE *stream, char *buf, int type, size_t size);
```

where size is a size greater than BUFSIZ (from stdio.h). Previously only BUFSIZ was allocated instead of the size value passed to the function, thus each call using FILE *stream with the standard stdio routines would trash memory. Setvbuf has been modified to allocate size bytes instead of BUFSIZ.

3. Also in the m88kocs, m88kbcs, and m88kdguxcoff environments the symbols __countbase, __countlimit, and __countothers were undefined in the profiling libc.a. This problem is corrected with this patch, dgux_5.4.0.p58.

If your application was linked static, then you must relink with this updated libc.a. If your application was linked shared, then it will automatically pick up the update once the patch is installed.

DG/UX OPERATING SYSTEM**OS (AX/UNIX) REV 5.4.1 [libc]**

Patch dgux_5.4.1.p18 - Corrections for libc

Patch dgux_5.4.1.p18 brings forward all libc corrections for revision 5.4. and 5.4.1 including correcting a problem reported against read(2). It is the nature of streams that the read(2) system call may return less than the full number of bytes requested. We have altered fread(3S) to issue enough read(2) requests to assure that the full number of bytes requested is returned except in case of EOF or error.

Also in the m88kocs, m88kbc, and m88kdguxcoff environments the symbols `__countbase`, `__countlimit`, and `__countothers` were undefined in the profiling libc.a. This problem is corrected with this patch, dgux_5.4.1.p18.

If your application was linked static, then you must relink with this updated libc.a. If your application was linked shared, then it will automatically pick up the update once the patch is installed.

OS (AX/UNIX) REV 5.4.1 [/dev/lp Discussion]

DG/UX 5.41 /dev/lp Streams Information

The Goal:

In DG/UX 5.41, the parallel printer device /dev/lp was redesigned as a streams based device so that greater flexibility and control of the output could be achieved by applications. This redesign gives an application the ability to push and pop modules onto /dev/lp and to perform unique ioctl's for custom behavior.

With this redesign, the default characteristics of /dev/lp changed so that it provides the same interface as a tty device. This gives reasonable default behavior and allows for the complete set of stty output options to be used on /dev/lp printers configured with the lp sub-system.

For example:

A printer named "raw_lp" mapped to the device /dev/lp can be setup so that no output processing is done on the data with the following command:

```
lpadmin -praw_lp -v/dev/lp -ostty = raw
```

You could then issue the lp command to print a bit-mapped graphics file to /dev/lp.

```
lp -draw_lp arrow.pcl
```

Note: Multiple printer configurations may be defined for the same device. This allows printing of multiple types files on the same printer.

The Problem:

With this FCS DG/UX 5.4.1 implementation, /dev/lp is no longer a raw device by default. By default newline expansion occurs (`nl = = > crnl`) and tabs are expanded to spaces. Thus a bit-mapped graphics file printed to /dev/lp using lp or cat probably will not print correctly.

Additionally, there are a couple of problems with our implementation which prevents the use of stty options with the lp sub-system.

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First, FCS DG/UX 5.4.1 does not autopush the correct modules on /dev/lp. The autopush modules for the parallel printer device /dev/lp are set in the file /etc/dgux.params. The argument, lp_ARG, is defined as:

```
lp_ARG = "ldterm ttcompat"
```

Second, the lp scheduler by default always pops all modules off /dev/lp and pushes the single module "ldterm".

The Recommended 5.4.1 and Future 5.4.2 Solution:

To correct these problems follow this procedure:

1) Change the dgux parameter assignment of lp_ARG in file /etc/dgux.params to:
lp_ARG = "ptem ldterm ttcompat"

This instructs the kernel to autopush the correct modules onto /dev/lp when it is opened.

2) Run the undocumented lpadmin command with the following option:

```
lpadmin -p < printer name > -v /dev/lp -Hkeep
```

This instructs the lp scheduler to leave the /dev/lp device as is. The lp scheduler will not push or pop streams modules.

3) Take your system down to init level 1 and then back up to init 3 to configure the new /dev/lp defaults.

A Second Workaround:

If you require /dev/lp to be a RAW device by default (provide the exact behavior as in DG/UX 5.4), then you should follow this procedure instead:

1) Change the dgux parameter assignment of lp_ARG in file /etc/dgux.params to:

```
lp_ARG = ""
```

This instructs the kernel not to push any modules onto /dev/lp when it is opened.

2) Run the undocumented lpadmin command with the following option:

```
lpadmin -p < printer name > -v /dev/lp -H"ptem ldterm ttcompat"
```

This instructs the lp scheduler to push the above modules onto /dev/lp for each print request.

3) Take your system down to init level 1 and then back up to init 3 to configure the new /dev/lp defaults.

DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4 [libc]**

Patch dgux_5.4.0.p58 - Corrections for libc

Patch dgux_5.4.0.p58 brings forward all libc corrections for revision 5.4. and 5.4.1 including correcting the following problems:

1. A problem reported against read(2). It is the nature of streams that the read(2) system call may return less than the full number of bytes requested. We have altered fread(3S) to issue enough read(2) requests to assure that the full number of bytes requested is returned except in case of EOF or error.

2. A problem with function call to the setvbuf routine found in ELF based libc. The form of the call:

```
setvbuf(FILE *stream, char *buf, int type, size_t size);
```

where size is a size greater than BUFSIZ (from stdio.h). Previously only BUFSIZ was allocated instead of the size value passed to the function, thus each call using FILE *stream with the standard stdio routines would trash memory. Setvbuf has been modified to allocate size bytes instead of BUFSIZ.

3. Also in the m88kocs, m88kbc, and m88kdguxcoff environments the symbols __countbase, __countlimit, and __countothers were undefined in the profiling libc.a. This problem is corrected with this patch, dgux_5.4.0.p58.

If your application was linked static, then you must relink with this updated libc.a. If your application was linked shared, then it will automatically pick up the update once the patch is installed.

OS (AX/UNIX) REV 5.4.1 [libc]

Patch dgux_5.4.1.p18 - Corrections for libc

Patch dgux_5.4.1.p18 brings forward all libc corrections for revision 5.4. and 5.4.1 including correcting a problem reported against read(2). It is the nature of streams that the read(2) system call may return less than the full number of bytes requested. We have altered fread(3S) to issue enough read(2) requests to assure that the full number of bytes requested is returned except in case of EOF or error.

Also in the m88kocs, m88kbc, and m88kdguxcoff environments the symbols __countbase, __countlimit, and __countothers were undefined in the profiling libc.a. This problem is corrected with this patch, dgux_5.4.1.p18.

If your application was linked static, then you must relink with this updated libc.a. If your application was linked shared, then it will automatically pick up the update once the patch is installed.

DG/UX OPERATING SYSTEM

OS (AX/UNIX) REV 5.4.1 [/dev/lp Discussion]

DG/UX 5.41 /dev/lp Streams Information

The Goal:

In DG/UX 5.41, the parallel printer device /dev/lp was redesigned as a streams based device so that greater flexibility and control of the output could be achieved by applications. This redesign gives an application the ability to push and pop modules onto /dev/lp and to perform unique ioctl's for custom behavior.

With this redesign, the default characteristics of /dev/lp changed so that it provides the same interface as a tty device. This gives reasonable default behavior and allows for the complete set of stty output options to be used on /dev/lp printers configured with the lp sub-system.

For example:

A printer named "raw_lp" mapped to the device /dev/lp can be setup so that no output processing is done on the data with the following command:

```
lpadmin -praw_lp -v/dev/lp -ostty = raw
```

You could then issue the lp command to print a bit-mapped graphics file to /dev/lp.

```
lp -draw_lp arrow.pcl
```

Note: Multiple printer configurations may be defined for the same device. This allows printing of multiple types files on the same printer.

The Problem:

With this FCS DG/UX 5.4.1 implementation, /dev/lp is no longer a raw device by default. By default newline expansion occurs (nl = => crnl) and tabs are expanded to spaces. Thus a bit-mapped graphics file printed to /dev/lp using lp or cat probably will not print correctly.

Additionally, there are a couple of problems with our implementation which prevents the use of stty options with the lp sub-system.

First, FCS DG/UX 5.4.1 does not autopush the correct modules on /dev/lp. The autopush modules for the parallel printer device /dev/lp are set in the file /etc/dgux.params. The argument, lp_ARG, is defined as:

```
lp_ARG = "ldterm ttcompat"
```

Second, the lp scheduler by default always pops all modules off /dev/lp and pushes the single module "ldterm".

The Recommended 5.4.1 and Future 5.4.2 Solution:

To correct these problems follow this procedure:

1) Change the dgux parameter assignment of lp_ARG in file /etc/dgux.params to:

```
lp_ARG = "ptem ldterm ttcompat"
```

This instructs the kernel to autopush the correct modules onto /dev/lp when it is opened.

2) Run the undocumented lpadmin command with the following option:

```
lpadmin -p < printer name > -v /dev/lp -Hkeep
```


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This instructs the lp scheduler to leave the /dev/lp device as is. The lp scheduler will not push or pop streams modules.

3) Take your system down to init level 1 and then back up to init 3 to configure the new /dev/lp defaults.

A Second Workaround:

If you require /dev/lp to be a RAW device by default (provide the exact behavior as in DG/UX 5.4), then you should follow this procedure instead:

1) Change the dgux parameter assignment of lp_ARG in file /etc/dgux.params to:

```
lp_ARG = ""
```

This instructs the kernel not to push any modules onto /dev/lp when it is opened.

2) Run the undocumented lpadmin command with the following option:

```
lpadmin -p <printer name> -v /dev/lp -H"ptem ldterm ttcompat"
```

This instructs the lp scheduler to push the above modules onto /dev/lp for each print request.

3) Take your system down to init level 1 and then back up to init 3 to configure the new /dev/lp defaults.

OS (AX/UNIX) REV 5.4 [sh]

DG/UX 5.4 and 5.4.1 sh patch available

Patch dgux_5.4.0.p52 and dgux_5.4.1.p07 release several bug fixes for the Bourne shell, sh(1). In addition, patch dgux_5.4.0.p52 replaces patches dgux_5.4.0.p31 and dgux_5.4.0.p41.

Patch dgux_5.4.0.p52 to DG/UX 5.4 provides the following fixes (these fixes are released in the 5.4.1 sh):

- Provides support for trapping the signals, SIGQUIT and SIGINT in an interactive sh.
- Prevents the initial shell from dumping core and terminating when the key sequence for the stty setting, quit, is entered from the keyboard. Note that this is different behavior from the shell released in DG/UX 4.3x. The correct behavior for the DG/UX 5.4 shell is to ignore these signals when entered from the initial shell.

Patch dgux_5.4.0.p52 to DG/UX 5.4 and patch dgux_5.4.1.p07 to DG/UX 5.4.1 provide these fixes:

- Prevents editread(5) from affecting the trapping of SIGINT and SIGQUIT when entered in an interactive shell other than the initial shell. If editread was in use (i.e. enable = on), the current shell would terminate upon receiving SIGINT and SIGQUIT.
- Allows trapping of signals more than once between /etc/profile and \$HOME/profile.
- Prevents a parent shell from terminating if it has an interactive shell child. The result of this error was two active shell processes sharing the same tty.

Both of these patches are diskman loadable images. This means that a system must be brought to the SCM and standalone diskman booted to load this patch. This is required since it is not recommended that the sh be loaded while it is executing. This patch will NOT be rolled into the next DG/UX patch level for either 5.4 or 5.4.1 but will remain a standalone patch.

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OS (AX/UNIX) REV 5.4.1 [ld as

DG/UX 5.41 ld/as-v3 Patch dgux_5.4.1.p22

Patch dgux_5.4.1.p22 is prerequisite patch for the AT&T C++ Model L018A.

This patch must be applied on DG/UX Revision 5.4.1 systems. However do not apply this if a DG/UX patch level has been applied which is of later revision. Display the file /etc/issue. If the revision number is 5.4.1.22 or greater do not apply this patch. The fixes provided with this patch will be included in all future patches to DG/UX Revision 5.4.1 and future patch levels.

Patch dgux5.4.1.p22 delivers two modified modules for the m88kdguxelf program development environment, the version 3.00 assembler, as-v3 and the linker, ld.

This patch corrects a problem that manifests itself in various forms when using position independent code (PIC, with the compilers, gcc, C++, and ghf77. The version 3.00 assembler no longer optimizes local symbols by relocating against the section symbol for PIC relocations. When combining objects with ld -r, the linker, with this patch, correctly adjusts the addends in the relocation entries.

This patch is available from the local customer support center.

OS (AX/UNIX) REV 5.4/5.4.1 [lp PostScript Patch]

DG/UX 5.4/5.4.1 Patch for PostScript Printing & Termserver

Two patches are being released, one each for DG/UX 5.4 and 5.4.1, that correct numerous problems reported against PostScript printers, termserver printers, and international character support for PostScript printers. The patch names are:

DG/UX Revision 5.4 - dgux_5.4.0.p64
 DG/UX Revision 5.4.1 - dgux_5.4.1.p26

The correct patch numbers are dgux_5.4.0.p64 and dgux_5.4.1.p26. We are repeating the description of the patches below. The description references dgux_5.4.1.p26, but also applies to dgux_5.4.0.p64.

In the first customer ship of DG/UX Revision 5.4 Update 1 (5.4.1), printing with the lp command to PostScript printers connect via the parallel printer port or via a termserver would fail to print the job if your printer has been setup as follows:

5.4.1 Parallel Postscript Settings

 input type: PostScript
 printer type: PS
 interface: standard

5.4.1 Termserver Postscript Settings

 input type: PostScript
 printer type: PS
 interface: termprinter

Also Wordperfect(R) graphics files would not print correctly across a termserver to the HP Laserjet family of printers.

This patch notice also documents how to access international character sets for PostScript printers.

DG/UX OPERATING SYSTEM

Postscript Printing

Patch dgux_5.4.1.p26 delivers new terminfo files, updated filters, and updates your printer filter table. These modifications are upwardly compatible with DG/UX Revision 5.4.2.

Many PostScript printers have two modes of printing, Interactive and batch. Interactive PostScript printers generally use serial communications and will require a printer type of PS or PSR. This mode allows for a dialogue of two way communication between the PostScript printer and the fast filter, postio. The fast filter postio requires a serial device, /dev/ttyxx, and should NOT be used with a serial printer connected to a termserver.

Batch PostScript printers are generally used when the connection type that does not provide for two way communication other than flow control and will require a printer type of PS-b or PS-br. This mode is used for parallel printers connected to /dev/lp, printers connected to termserver using the device /dev/null, and printers connected to the parallel port on the VME terminal controller.

After installing this patch you must modify your PostScript printer entries based on the tables below. This will ensure that your printer will pickup the new model file being delivered with this patch.

The settings will be documented in the manual, Customizing the DG/UX System, chapter 6, for DG/UX Release 5.4.2.

New Parallel Postscript Settings with Patch dgux_5.4.1.p26

input type: PS
printer type: PS-b
interface: standard

or for reverse paper stacking

input type: PS
printer type: PS-br
interface: standard

For serial PostScript printers, you should continue to use the 5.4.1 recommended settings.

5.4.1 Serial Postscript Settings with Patch dgux_5.4.1.p26

input type: PS
printer type: PS
interface: standard

or for reverse paper stacking

input type: PS
printer type: PS-r or PSR
interface: standard

For termserver PostScript printers, you should use these settings:

5.4.1 Termserver Postscript Settings with Patch dgux_5.4.1.p26

input type: PS
printer type: PS-b
interface: termprinter local printer: yes device: /dev/null

or for reverse paper stacking

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```
input type: PS
printer type: PS-br
interface: termprinter local printer: yes
device: /dev/null
```

Additionally, for termserver, place the printer name and its internet address in /etc/hosts or in the YP database if running Yellow Pages. If your PostScript printer has the option to set it to Batch mode, do so. Otherwise the port on the termserver must be set as to host mode instead of the default, terminal. Use the following command on the termserver console:

```
setd (! < port id > ) dv = (host,glass,default)
```

Wordperfect Graphics and Termserver

The Model 4819 TERMSERVER 2100 RS-232 incorrectly strips all 0xFF or 377 characters from the data stream passing through the termserver. This problem was reported by users of Wordperfect printing graphic data across this termserver to one of the HP LaserJet family of printers. The graphic was not printed correctly.

This patch delivers a new termprinter model file and a filter, termprinter_ff_filter. The filter is hardcoded in the model file and should not be added to the filter table. This filter simply adds an extra 0xFF for each 0xFF seen in the data stream. To pick up this fix you must modify your termserver printer configuration using sysadm. No changes to your prompted entries are necessary, but by executing the modify option, your entry will pick up the new termprinter model file.

International character sets and PostScript Printers

The default code set is 'ascii'. Other code sets are specified with the -S option to lp. For example:

```
lp -S iso-88591 file1
```

You may obtain the list of codesets available by issuing the command:

```
lpstat -S -l
```

The code sets available for non-PostScript printers are determined by the printer type as defined in the terminfo(4) database.

PostScript printers are controlled by the lp filter, postprint. To change the system default for PostScript printers, use the sysadm menu:

```
Device->Printer->Filter
```

Then select Add or Modify. The field "Program" has

```
/usr/lib/lp/postscript/postprint
```

change this to

```
/usr/lib/lp/postscript/postprint -S code_set_name
```

where code_set_name follows from postprint(1), not from lpstat -S -l and is defined as follows:

code_set_name	ISO Codeset	description
ascii	US English	(default)
ps88591	ISO 8859-1	(Latin 1)
ps88592	ISO 8859-2	(Latin 2)
ps88597	ISO 8859-7	(Latin/Greek)

DG/UX OPERATING SYSTEM**PROGRAMMING NOTES/DOCUMENTATION****OS (AX/UNIX) REV 5.4.1 [libc]**

Patch dgux_5.4.1.p18 - Corrections for libc

Patch dgux_5.4.1.p18 brings forward all libc corrections for revision 5.4. and 5.4.1 including correcting a problem reported against read(2). It is the nature of streams that the read(2) system call may return less than the full number of bytes requested. We have altered fread(3S) to issue enough read(2) requests to assure that the full number of bytes requested is returned except in case of EOF or error.

Also in the m88kocs, m88kbc, and m88kdguxcoff environments the symbols `__countbase`, `__countlimit`, and `__countothers` were undefined in the profiling libc.a. This problem is corrected with this patch, dgux_5.4.1.p18.

If your application was linked static, then you must relink with this updated libc.a. If your application was linked shared, then it will automatically pick up the update once the patch is installed.

OS (AX/UNIX) REV 5.4.1 [/dev/lp Discussion]

DG/UX 5.41 /dev/lp Streams Information

The Goal:

In DG/UX 5.41, the parallel printer device /dev/lp was redesigned as a streams based device so that greater flexibility and control of the output could be achieved by applications. This redesign gives an application the ability to push and pop modules onto /dev/lp and to perform unique ioctl's for custom behavior.

With this redesign, the default characteristics of /dev/lp changed so that it provides the same interface as a tty device. This gives reasonable default behavior and allows for the complete set of stty output options to be used on /dev/lp printers configured with the lp sub-system.

For example:

A printer named "raw_lp" mapped to the device /dev/lp can be setup so that no output processing is done on the data with the following command:

```
lpadmin -praw_lp -v/dev/lp -ostty = raw
```

You could then issue the lp command to print a bit-mapped graphics file to /dev/lp.

```
lp -draw_lp arrow.pcl
```

Note: Multiple printer configurations may be defined for the same device. This allows printing of multiple types files on the same printer.

The Problem:

With this FCS DG/UX 5.4.1 implementation, /dev/lp is no longer a raw device by default. By default newline expansion occurs (`nl = = > crnl`) and tabs are expanded to spaces. Thus a bit-mapped graphics file printed to /dev/lp using lp or cat probably will not print correctly.

Additionally, there are a couple of problems with our implementation which prevents the use of stty options with the lp sub-system.

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First, FCS DG/UX 5.4.1 does not autopush the correct modules on /dev/lp. The autopush modules for the parallel printer device /dev/lp are set in the file /etc/dgux.params. The argument, lp_ARG, is defined as:

```
lp_ARG = "ldterm ttcompat"
```

Second, the lp scheduler by default always pops all modules off /dev/lp and pushes the single module "ldterm".

The Recommended 5.4.1 and Future 5.4.2 Solution:

To correct these problems follow this procedure:

1) Change the dgux parameter assignment of lp_ARG in file /etc/dgux.params to:

```
lp_ARG = "ptem ldterm ttcompat"
```

This instructs the kernel to autopush the correct modules onto /dev/lp when it is opened.

2) Run the undocumented lpadmin command with the following option:

```
lpadmin -p <printer name> -v /dev/lp -Hkeep
```

This instructs the lp scheduler to leave the /dev/lp device as is. The lp scheduler will not push or pop streams modules.

3) Take your system down to init level 1 and then back up to init 3 to configure the new /dev/lp defaults.

A Second Workaround:

If you require /dev/lp to be a RAW device by default (provide the exact behavior as in DG/UX 5.4), then you should follow this procedure instead:

1) Change the dgux parameter assignment of lp_ARG in file /etc/dgux.params to:

```
lp_ARG = ""
```

This instructs the kernel not to push any modules onto /dev/lp when it is opened.

2) Run the undocumented lpadmin command with the following option:

```
lpadmin -p <printer name> -v /dev/lp -H"ptem ldterm ttcompat"
```

This instructs the lp scheduler to push the above modules onto /dev/lp for each print request.

3) Take your system down to init level 1 and then back up to init 3 to configure the new /dev/lp defaults.

DG/UX OPERATING SYSTEM**OS (AX/UNIX) REV 5.4 [sh]**

DG/UX 5.4 and 5.4.1 sh patch available

Patch dgux_5.4.0.p52 and dgux_5.4.1.p07 release several bug fixes for the Bourne shell, sh(1). In addition, patch dgux_5.4.0.p52 replaces patches dgux_5.4.0.p31 and dgux_5.4.0.p41.

Patch dgux_5.4.0.p52 to DG/UX 5.4 provides the following fixes (these fixes are released in the 5.4.1 sh):

- Provides support for trapping the signals, SIGQUIT and SIGINT in an interactive sh.
- Prevents the initial shell from dumping core and terminating when the key sequence for the stty setting, quit, is entered from the keyboard. Note that this is different behavior from the shell released in DG/UX 4.3x. The correct behavior for the DG/UX 5.4 shell is to ignore these signals when entered from the initial shell.

Patch dgux_5.4.0.p52 to DG/UX 5.4 and patch dgux_5.4.1.p07 to DG/UX 5.4.1 provide these fixes:

- Prevents editread(5) from affecting the trapping of SIGINT and SIGQUIT when entered in an interactive shell other than the initial shell. If editread was in use (i.e. enable = on), the current shell would terminate upon receiving SIGINT and SIGQUIT.
- Allows trapping of signals more than once between /etc/profile and \$HOME/profile.
- Prevents a parent shell from terminating if it has an interactive shell child. The result of this error was two active shell processes sharing the same tty.

Both of these patches are diskman loadable images. This means that a system must be brought to the SCM and standalone diskman booted to load this patch. This is required since it is not recommended that the sh be loaded while it is executing. This patch will NOT be rolled into the next DG/UX patch level for either 5.4 or 5.4.1 but will remain a standalone patch.

OS (AX/UNIX) REV 5.4.1 [ld as]

DG/UX 5.41 ld/as-v3 Patch dgux_5.4.1.p22

Patch dgux_5.4.1.p22 is prerequisite patch for the AT&T C++ Model L018A.

This patch must be applied on DG/UX Revision 5.4.1 systems. However do not apply this if a DG/UX patch level has been applied which is of later revision. Display the file /etc/issue. If the revision number is 5.4.1.22 or greater do not apply this patch. The fixes provided with this patch will be included in all future patches to DG/UX Revision 5.4.1 and future patch levels.

Patch dgux5.4.1.p22 delivers two modified modules for the m88kdguxelf program development environment, the version 3.00 assembler, as-v3 and the linker, ld.

This patch corrects a problem that manifests itself in various forms when using position independent code (PIC, with the compilers, gcc, C++, and ghf77. The version 3.00 assembler no longer optimizes local symbols by relocating against the section symbol for PIC relocations. When combining objects with ld -r, the linker, with this patch, correctly adjusts the addends in the relocation entries.

This patch is available from the local customer support center.

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OS (AX/UNIX) REV 5.4/5.4.1 [lp PostScript Patch]

DG/UX 5.4/5.4.1 Patch for PostScript Printing & Termserver

Two patches are being released, one each for DG/UX 5.4 and 5.4.1, that correct numerous problems reported against PostScript printers, termserver printers, and international character support for PostScript printers. The patch names are:

DG/UX Revision 5.4 - dgux_5.4.0.p64
 DG/UX Revision 5.4.1 - dgux_5.4.1.p26

We have determined there was an error with these patches and have stop shipment on the incorrect versions, dgux_5.4.0.p61 and dgux_5.4.1.p19. The correct patch numbers are dgux_5.4.0.p64 and dgux_5.4.1.p26. We are repeating the description of the patches below. The description references dgux_5.4.1.p26, but also applies to dgux_5.4.0.p64.

In the first customer ship of DG/UX Revision 5.4 Update 1 (5.4.1), printing with the lp command to PostScript printers connect via the parallel printer port or via a termserver would fail to print the job if your printer has been setup as follows:

5.4.1 Parallel Postscript Settings

```
-----
input type:   PostScript
printer type: PS
interface:    standard
```

5.4.1 Termserver Postscript Settings

```
-----
input type:   PostScript
printer type: PS
interface:    termprinter
```

Also Wordperfect® graphics files would not print correctly across a termserver to the HP Laserjet family of printers.

This patch notice also documents how to access international character sets for PostScript printers.

Postscript Printing

Patch dgux_5.4.1.p26 delivers new terminfo files, updated filters, and updates your printer filter table. These modifications are upwardly compatible with DG/UX Revision 5.4.2.

Many PostScript printers have two modes of printing, Interactive and batch. Interactive PostScript printers generally use serial communications and will require a printer type of PS or PSR. This mode allows for a dialogue of two way communication between the PostScript printer and the fast filter, postio. The fast filter position requires a serial device, /dev/ttyxx, and should NOT be used with a serial printer connected to a termserver.

Batch PostScript printers are generally used when the connection type that does not provide for two way communication other than flow control and will require a printer type of PS-b or PS-br. This mode is used for parallel printers connected to /dev/lp, printers connected to termserver using the device /dev/null, and printers connected to the parallel port on the VME terminal controller.

After installing this patch you must modify your PostScript printer entries based on the tables below. This will ensure that your printer will pickup the new model file being delivered with this patch.

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The settings will be documented in the manual, Customizing the DG/UX System, chapter 6, for DG/UX Release 5.4.2.

New Parallel Postscript Settings with Patch dgux_5.4.1.p26

```
-----
input type:          PS
printer type:       PS-b
interface:          standard
```

or for reverse paper stacking

```
input type:          PS
printer type:       PS-br
interface:          standard
```

For serial PostScript printers, you should continue to use the 5.4.1 recommended settings.

5.4.1 Serial Postscript Settings with Patch dgux_5.4.1.p26

```
-----
input type:          PS
printer type:       PS
interface:          standard
```

or for reverse paper stacking

```
input type:          PS
printer type:       PS-r or PSR
interface:          standard
```

For termserver PostScript printers, you should use these settings:

5.4.1 Termserver Postscript Settings with Patch dgux_5.4.1.p26

```
-----
input type:          PS
printer type:       PS-b
interface:          termprinter
local printer:      yes
device:             /dev/null
```

or for reverse paper stacking

```
input type:          PS
printer type:       PS-br
interface:          termprinter
local printer:      yes
device:             /dev/null
```

Additionally, for termserver, place the printer name and its internet address in /etc/hosts or in the YP database if running Yellow Pages. If your PostScript printer has the option to set it to Batch mode, do so. Otherwise the port on the termserver must be set as to host mode instead of the default, terminal. Use the following command on the termserver console:

```
setd (! < port id > ) dv = (host,glass,default)
```

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Wordperfect Graphics and Termserver

The Model 4819 TERMSERVER 2100 RS-232 incorrectly strips all 0xFF or 377 characters from the data stream passing through the termserver. This problem was reported by users of Wordperfect printing graphic data across this termserver to one of the HP LaserJet family of printers. The graphic was not printed correctly.

This patch delivers a new termprinter model file and a filter, `termprinter_ff` filter. The filter is hardcoded in the model file and should not be added to the filter table. This filter simply adds an extra 0xFF for each 0xFF seen in the data stream. To pick up this fix you must modify your termserver printer configuration using `sysadm`. No changes to your prompted entries are necessary, but by executing the modify option, your entry will pick up the new termprinter model file.

International character sets and PostScript Printers

The default code set is 'ascii'. Other code sets are specified with the `-S` option to `lp`. For example:

```
lp -S iso-88591 file1
```

You may obtain the list of codesets available by issuing the command:

```
lpstat -S -l
```

The code sets available for non-PostScript printers are determined by the printer type as defined in the `terminfo(4)` database.

PostScript printers are controlled by the `lp` filter, `postprint`. To change the system default for PostScript printers, use the `sysadm` menu:

```
Device->Printer->Filter
```

Then select Add or Modify. The field "Program" has

```
/usr/lib/lp/postscript/postprint
```

change this to

```
/usr/lib/lp/postscript/postprint -S code_set_name
```

where `code_set_name` follows from `postprint(1)`, not from `lpstat -S -l` and is defined as follows:

code_set_name	ISO Codeset	description
ascii	US English	(default)
ps88591	ISO 8859-1	(Latin 1)
ps88592	ISO 8859-2	(Latin 2)
ps88597	ISO 8859-7	(Latin/Greek)

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OS (AX/UNIX) REV 5.4 [technical briefs]

New DG/UX 5.4x Technical Brief

A new DG/UX Technical Brief, "Taking Advantage of Symmetric Multiprocessing Systems", is now available. It can be ordered by its part number, 012-004177-00. Note that as modifications are made to this and other technical briefs their suffixes (eg. the -00 at the end of the part number) will be incremented.

012-004177-00: Taking Advantage of Symmetric Multiprocessing Systems

This technical brief is a companion to Technical Brief 012-003886 ("A Second Look at Multiprocessor SMPs"). One does not need to change applications when moving them from a single-processor AViiON system to a multiprocessing system. However, an application that is designed to run on a single-processor system may not take complete advantage of an SMP system's multiprocessors. This technical brief talks about the kinds of design and implementation techniques that enable you to take advantage of multiprocessor systems. Specifically, it discusses ways to improve application performance by designing applications that provide opportunities for process parallelism. These techniques can be used when you design new applications or when you make changes to existing applications.

REMINDER: The following previously-announced DG/UX technical briefs are also available:

012-003886-03: A Second Look at Multiprocessor SMPs

012-004035-00: A Look at High Availability Disk Systems

012-004054-00: The DG/UX 5.4 File System 012-004093-00: Open Systems Terminology

OS (AX/UNIX) REV 5.4.1

Hardware Supplement Tape Shipping with AV46xx and AV53x Systems

Hardware supplement dgux_5.4.0.e04 was erroneously shipped with a number of AV/46xx and AV/53x systems running Revision 5.4.1 of DG/UX. Note that this supplement was generated for Revision 5.4 of DG/UX and should not be loaded on any system running Revision 5.4.1 of DG/UX.

Hardware supplement dgux_5.4.0.e04 provides software fixes and workarounds for several hardware-related issues on AV/46xx and AV/53x systems running Revision 5.4 of DG/UX. It consists of a tape and notice as listed below:

Part Description	Part Number
AViiON Hardware Supplement Notice for AV/46xx and AV/53x	017-600003
AViiON Hardware Supplement for AV/46xx and AV/53x Media	079-600211

This supplement shipped between February 24, 1992, and June 18, 1992 with many AV/46xx and AV/53x systems, model numbers G70338, G70339, G70390, G70394, G70460, and G70465. If you received an AV/46xx or AV/53x system with Revision 5.4.1 of DG/UX installed on it and received a tape with part number 079-600211 containing supplement dgux_5.4.0.e04, do not load this tape on your system.

DG/UX OPERATING SYSTEM**OS (AX/UNIX) REV 5.4 [Patch Level Kit]****DG/UX 5.4 Patch Level Kit Release**

A new DG/UX Revision Patch Level kit is available from your local Support Center. This patch level kit is named, `op-sys-x_5.4.0.920522`, and it replaces patch level kit `op-sys-x.5.4.0.920327`. It contains four packages which correspond to four product patch levels. They are: `dgux_5.4.0.64`, `tcpip_5.4.0.05`, `nfs_5.4.0.01`, and `X11_5.4.0.01`. Each product patch level contains patches up through the patch level number; hence patch level `dgux_5.4.0.64` contains DG/UX patches 1 - 64.

This patch level kit contains a do script, `dgux_7.r.540p64.do` and requires that you use `sysadm setuppackage` for the DG/UX product patch level in addition to `sysadm loadpackage`.

This patch level kit is applicable to 5.4 ONLY.

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PROGRAMMING NOTES/DOCUMENTATION

OS (AX/UNIX) REV 5.4.1 [lp]

DG/UX 5.4x lp Code Set Conversions

DG/UX 5.4x Character Set Translations for Printing with lp 7/27/92 Rev 1.01

There have been several requests in the lp area to support a printer which has a different code set than that of the source file. Thus, code set conversions are necessary.

Conversions between code sets are supported with the command `iconv(1)`. Please review the `iconv(1)` man page before proceeding.

If using DG/UX 5.4 and you wish to convert to and from the DGI code set, you must add the following entries into the conversion database file: `/usr/lib/kbd/iconv_data`. These entries are missing from the DG/UX 5.4 release.

88591	dgi	88591.dgi.d	88591.dgi.d	d
88591	dgi	88591.dgi.b	88591.dgi.b	b
88591	dgi	88591.dgi.e	88591.dgi.e	e
88591	dgi	88591.dgi.p	88591.dgi.p	p
dgi	88591	dgi.88591.d	dgi.88591.d	d
dgi	88591	dgi.88591.b	dgi.88591.b	b
dgi	88591	dgi.88591.e	dgi.88591.e	e
dgi	88591	dgi.88591.p	dgi.88591.p	p

These entries exist in the DG/UX 5.4.1/5.4.2 version of `iconv_data`. The actual source map files are included for the dgi maps, should you wish to choose an alternate map of specific characters.

The two most common questions are:

1) My source file was created on AOS/VS using the 8 bit DGI characters. Now that I've moved my application to DG/UX how do I print the files correctly on a printer that supports the IBM code sets 437 or 850?

2) How do I print a file which has characters in the ISO 8859.1 character set on an IBM printer which supports code pages 437 and 850?

We will use standard System V.4 printer-filter-support to solve these problems, using `iconv(1)` as the filter.

First create a filter with the input defined as "dgi" and output type of "88591". The only conversion tables for dgi are to and from 88591. Thus we must map all dgi characters to ISO 8859.1 first and then map again for the required device character set. The command `iconv(1)` is specified as the program and it defines the from (-f) value as dgi and the to (-t) value as 88591. These values, are taken from the file `/usr/lib/kbd/iconv_data`. The from value is column 1. The to value is column 2.

(The entries for input, output, and content types are not specific indicators for the filter `iconv(1)`, however the values must match between the filters and the printers. The specific conversion is specified on the filter command line. Thus, the entry, "dgi", is the descriptive reference for the input type to the filter.)

Below is the specific example for a filter called: `dgi_to_88591`

```

Input types: dgi
Output types: 88591
Printer types: any
Printers: any
Filter type: slow
Command: /usr/bin/iconv -f dgi -t 88591 -m b

```

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Next we must define a second filter to convert from the ISO 8859.1 character set to the IBM code page 850. Note that all the DGI characters map to the ISO 8859.1 character set, but not all are supported in the IBM 850 character set.

Define the input type for the filter as 88591, the output type as PC850. The command iconv(1) is specified as the program and it specifies the from (-f) value as 88591 and the to (-t) value as PC850. These values are taken from the file, /usr/lib/kbd/iconv_data. The from value is column 1. The to value is column 2.

Below is the specific example for a filter called 88591_to_PC850.

```
Input types: 88591
Output types: PC850
Printer types: any
Printers: any
Filter type: slow
Command: /usr/bin/iconv -f 88591 -t PC850 -m b
```

Next we define a printer of type ibmgraphics. The Content type is PC850, which matches the output type of the filter, 88591_to_PC850. Below is the specific example for the printer called ibm_850. On the ibmgraphics printer, character_set_1 is code page 437, and character_set_2 is code page 850.

printer ibm_850 is idle. enabled since Mon Jul 13 16:56:13 EDT 1992. available.

```
Form mounted:
Content types: PC850
Printer types: ibmgraphics
Description: direct connect ibm proprinter
Connection: direct
Interface: /usr/lib/lp/model/standard
On fault: mail to transou once
After fault: continue
Users allowed: (all)
Forms allowed: (none)
Banner not required
Character sets: character_set_1
character_set_2
Default pitch: 10 CPI 6 LPI
Default page size: 80 wide 66 long
Default port settings:
```

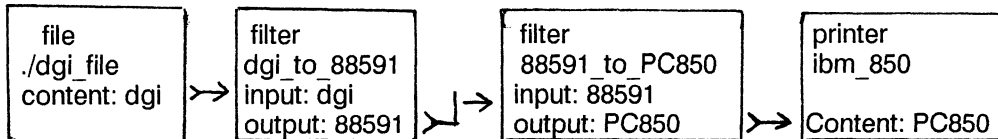
Now, to print a file that contains dgi characters on an ibm proprinter which supports the code page 850, you would enter the following lp command.

```
lp -d ibm_850 -T dgi -S character_set_2 ./dgi_file
```

```
-d - selects the printer ibm_850
-T - specifies the content type of the file is dgi
-S - selects the character set 2 (code page 850) for the ibm printer
```

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The conversion of file follows this path:



Now, to print a file that contains characters from the ISO 8859.1 character set on an ibm printer proprinter which supports the code page 850, you would enter the following lp command.

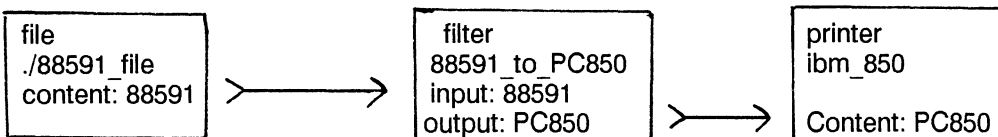
```
lp -d ibm_850 -T 88591 -S character_set_2 ./88591_file
```

-d - selects the printer ibm_850

-T - specifies the content type of the file is 88591

-S - selects the character set 2 (code page 850) for the ibm printer

The conversion of the file follows this path:



Using the man pages for iconv(1), lp(1), lpadmin(1), and this example, you should be able to define the necessary conversion filters for any of the characters sets supported in /usr/lib/kbd and the map file /usr/lib/kbd/iconv_data.

OS (AX/UNIX) REV 5.4 & 5.4.1 [file data loss]

DG/UX File System Data Loss Problem:

There are several problems with the DG/UX revision 5.4 and revision 5.4.1 fast recovery file system implementation which, though uncommon, can corrupt the contents of a file. This only occurs on systems with file systems running in fast recovery mode (i.e., the fsck_log_size option is specified in the /etc/fstab file).

The potential for corruption exists if the DG/UX system crashes immediately after a file is created. Recently created files may end up containing null data, but may sometimes contain other incorrect data after recovery with "fsck -l".

Corruption may also occur if the DG/UX system crashes while a transaction is being written to the fast recovery log. Incomplete transactions may be improperly recovered by "fsck -l".

Corruption is only noticed by the system when a corrupted file is accessed, so there may be corrupted files in your fast recovery file systems of which you are not aware. Accessing corrupted files will cause an LDU seal which is reported both on the console and in the /usr/adm/messages log file.

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Patches to correct these problems under revisions 5.4 and 5.4.1 of DG/UX have been created and are currently being tested. Until these patches are available, you can avoid the corruption problems by not running in fast recovery mode. To switch a file system from fast recovery to regular recovery mode you should do the following:

- * Unmount the file system

- * Run `fsck -y` on the file system (this will not, unfortunately, restore the contents of a file damaged by the problems described above but it will make the remainder of the file accessible). Note that running `fsck` without the `-l` option will always report bitmap errors since the fast recovery storage area of the file system is not recognized and is therefore cleared out. These errors do not indicate file corruption.

- * Remove the `fsck_log_size` specification from `/etc/fstab`

- * Remount the file system

OS (AX/UNIX) REV 5.4.1 [technical briefs]

Summary of Current DG/UX 5.4 Technical Briefs

There are four DG/UX 5.4 technical briefs currently available. These papers provide in-depth information about various aspects of the product. Each can be ordered via its part number, as listed below. Note that as modifications are made to these briefs their suffixes (eg. the `-00` at the end of the part number) will be incremented.

012-003886-03: A Second Look at Multiprocessor SMPs

This technical brief begins by discussing common misconceptions about Symmetric Multiprocessor Systems (SMPs). It then outlines the design of the AViiON SMP architecture, and describes how the DG/UX operating system maps processes onto Virtual Processors (VPs) and VPs onto Job Processors (JPs). The next section outlines how the DG/UX operating system's kernel uses different kinds of locks to ensure the integrity of kernel databases. A comparison is made between SMPs and parallel processing systems. In the "Performance" section, a series of tests demonstrate how the AViiON SMPs scale as more processors are added to a system.

012-004035-00: A Look at High Availability Disk Systems

This technical brief introduces the DG High Availability Disk Array (HADA). Included is a terminology section, a list of high availability design goals, a RAID (Redundant Array of Inexpensive Disks) implementation section, the history of RAID, and a description of striping. Tips for choosing a disk subsystem are presented along with HADA and CSS2 disk configurations. Also provided are examples of how a HADA system responds to different failure scenarios. Features such as mirroring and dual porting are described. The gridman utility is introduced, and the "hot replacement" of disk modules is discussed. A performance comparison of different HADA configurations is included, as well as the answers to common high-availability disk system questions. Finally, the use of stripe parity to re-generate data from a failed disk module is described.

012-004054-00: The DG/UX 5.4 File System

This technical brief provides conceptual and performance-related information about the DG/UX 5.4 File System design and implementation. Included are sections on files and file systems, storage and access of files, logical disks, the relationship between the File System and the Virtual Memory Manager, access modes for files, and block I/O and character I/O. Attention is paid to the internals of the File System, with discussions of the Flat File Manager (FFM), Disk Allocation Regions (DARs), inodes, data elements, logical disks, striping, and mirroring. The "Tips for Tuning a File System" section discusses ways of improving File System performance, and provides results of performance tests. Also provided are examples of how open, read, and memory mapped system calls are handled within the Demand-Paged I/O model.

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012-004035-00: Open Systems Terminology

This technical brief contains definitions for more than 200 terms. The focus is on terminology pertaining to the alphabet soup of open systems standards, performance benchmarks, and the organizations that support the standards and benchmarks. Other terms, specific to the DG/UX 5.4 operating system, are also included. A "Quick Reference" at the beginning of the technical brief lists the names of organizations and the standards or products that they support/promulgate.

OS (AX/UNIX) REV 5.4.1 [Permissions]

DG/UX 5.4.1 Incorrect Patch Level Kit Directory Permissions

Loading the op-sys-x_5.4.1.920612 patch level kit will change permissions on the /etc and /sbin directories. To correct the permissions of the /sbin and /etc directories after install any of the 5.4.1 patch levels, perform the following as root:

```
chown bin /sbin
chgrp bin /sbin
cd /sbin
chown bin setup.d
chgrp bin setup.d
chmod 775 /etc
chown root /etc
chgrp sys /etc
cd /etc
chmod 775 lp
chown lp lp
chgrp lp lp
cd lp
chown lp fd
chgrp lp fd
```

If the permissions of /etc are not correct, then sometimes users that are not superuser may not be able to run the ps command. The ps command examines the contents of the /etc/ps_data file and, based on a change in init levels or current time of day, may decide that the file must be deleted and recreated. Since a non-root user does not have access to /etc for writing, ps utilizes the set group id bit to accomplish this. However, if ps does not belong to the same group that /etc belongs to, then even if ps is executed with the set group id bit, the ps command will not be able to delete and recreate the ps_data file. If a user has this problem, ps will report:

```
ps_data: Cannot unlink /etc/ps_data or
ps_data: Cannot create ps_data
ps_data: Permission denied
```

```
ps_data: Cannot unlink /etc/ps_data
```

OS (AX/UNIX) REV 5.4.1 [technical briefs]

New DG/UX 5.4.1 Technical Brief

A new DG/UX Technical Brief, "Physical Disk Failover", is now available. It can be ordered by its part number, 012-004186-00. Note that as modifications are made to this and other technical briefs their suffixes (eg. the -00 at the end of the part number) will be incremented.

DG/UX OPERATING SYSTEM

012-004186-00: Physical Disk Failover

To help customers better use the dual initiator configuration disk subsystem features, Data General has developed "Operator Initiated Failover" software (OIF). OIF is included in DG/UX Release 5.4.2. This technical brief describes how the OIF software helps users get the most from their dual-initiator configuration investment. In addition to failover terminology, the following topics are discussed:

- * An overview of the dual-initiator configuration and its advantages
- * The software designed to help customers manage these complex systems
- * The hardware and software requirements necessary to ensure a consistent and reliable physical disk failover
- * Examples of Operator Initiated Failovers
- * How to write your own "watch-dog" processes to automate the failover process. Sample programs are provided.

REMINDER: The following previously-announced DG/UX technical briefs are also available:

012-003886-03: A Second Look at Multiprocessor SMPs
 012-004035-00: A Look at High Availability Disk Systems
 012-004054-00: The DG/UX 5.4 File System
 012-004093-00: Open Systems Terminology
 012-004177-00: Taking Advantage of Symmetric Multiprocessor Systems

OS (AX/UNIX) REV 5.4 & 5.4.1 [file data loss]

DG/UX Fast Recovery Patches Available:

Patches 5.4.0.p73 and 5.4.1.p56 are now available to correct problems with the DG/UX revision 5.4 and revision 5.4.1 fast recovery file system feature. These problems, though uncommon, corrupted the contents of a file. The problems only affected file systems running in fast recovery mode (i.e., with the `fsck_log_size` option specified in the `/etc/fstab` file).

The potential for corruption existed if the DG/UX system crashed immediately after a file was created. Recently created files sometimes ended up containing null data, but sometimes contained other incorrect data after recovery with "fsck -l".

Corruption also occurred if the DG/UX system crashed while a transaction was being written to the fast recovery log. Incomplete transactions were improperly recovered by "fsck -l".

Corruption is only noticed by the system when a corrupted file is accessed, so there may be corrupted files in your fast recovery file systems of which you are not aware. Accessing corrupted files will cause an LDU seal which is reported both on the console and in the `/usr/adm/messages` log file.

OS (AX/UNIX) REV 5.4.1 [Patch Level Kit]

DG/UX 5.4.1 Patch Level Kit Release `op-sys-x_5.4.1.920724`

A new DG/UX Revision Patch Level kit is available. This patch level kit is named, `op-sys-x_5.4.1.920724`. It contains three packages which correspond to three product patch levels. They are: `dgux_5.4.1.41`, `tcpip_5.4.1.04`, and `nfs_5.4.1.02`. Each product patch level contains patches up through the patch level number; hence patch level `dgux_5.4.1.41` contains DG/UX patches 1 - 41.

This patch level kit is applicable to 5.4.1 ONLY.

DG/UX OPERATING SYSTEM

OS (AX/UNIX) REV 5.41 [performance,kernel]

DG/UX 5.4 and 5.4.1 Terminal Performance

The drivers for ttys and pttys in DG/UX 5.4 (and later systems) are streams based. The performance of these drivers may decrease if they run out of queue pairs or multiplexor links. The number of queue pairs is limited by the NQUEUE kernel parameter, and the number of multiplexor links is limited by the NMUXLINK parameter. The data structures for the queue pairs and multiplexor links are dynamically allocated, hence setting higher limits for NQUEUE and NMUXLINK will only result in additional memory usage when the additional multiplexor links or queue pairs are actually used. Although these structures are small, these parameters are important. They serve as a "safety net" by limiting the amount of memory that is used when an incorrectly configured port picks up noise as data or a port gets into a "chat" mode with an incorrectly configured modem. Here are some guidelines for choosing a value for these parameters:

NQUEUE:

- Allow 5 for each tty used
- Allow 8 for each pty used
- Allow 10 for each concurrent rlogin session
- Allow 15 for each concurrent telnet session (includes pttys)
- Allow 2 for each socket used

MUXLINK:

- Allow 2 per pty used
- Allow 2 per communication stack (TCP/IP, UDP, etc.)
- Allow 2 per network interface (LOOP, ICL, etc.)

For good measure, round the total up to a power of 2. If the value is greater than the default value listed in `/user/etc/master.d/dgux`, then add the parameter to your system file and rebuild your kernel. OS (AX/UNIX) REV 5.41 [performance,kernel]

DG/UX 5.4 and 5.4.1 Performance

The performance of the `ttynam()` function is effected by the number of entries in the `/dev` directory. A few of commands that call this function are `login`, `telnetd`, `su`, `uucp`, `ex`, `halt`, and `ps`. To provided optimum system performance, the DG/UX kernel should be carefully built to not create unnecessary entries. The most common error is to specify a large value for `NPIPE`.

DG/UX 5.4 provides System V.4 stream pipes that do not rely on the `NPIPE` configuration parameter. Prior to System V.4, creation of a pipe required a character special node in the `/dev` directory. With V.4, pipes became streams based and no longer require `/dev` entries. The number of pipes allowed is only limited by the amount of streams memory and the number of file descriptors allowed per process. The system call `pipe(2)` uses streams pipes and will not be effected by the `NPIPE` parameter.

The system supports another type of pipe similar to the old style character special based pipe. It is these entities that are controlled by the `NPIPE` parameter and reference character special entries of the form `/dev/sp`. Use of these pipes require opening of two `/dev/sp` entries and the use of a special `ioctl` to connect the two. In normal use, these pipes are almost never used and the default value of 64 for `NPIPE` should be sufficient.

Data General will continue to investigate ways to improve the performance of the `ttynam()` function and the commands that use this function.

DG/UX OPERATING SYSTEM

BUSINESS BASIC for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Data General's Business BASIC is a powerful interactive programming language designed for use in producing business applications. Business BASIC lets multiple users program, test, debug and execute programs independently. It provides many of the standard BASIC commands, statements, and functions. It also contains specialized statements and functions that handle file access, format control, and system functions.</p> <p>Business BASIC operates under Data General's AOS/VS, AOS/VS II, DG/UX, and DG/RDOS operating systems on Data General machines ranging from the DESKTOP GENERATION Model 10 to the MV/40000 to the AViiON line. It also operates under INTERACTIVE SYSTEMS Corporation's Interactive UNIX on the Dasher series of machines. Interactive UNIX is an enhanced, high performance UNIX operating system).</p> <p>Business BASIC supports numerous file structures, including ISAM files, logical files, subfiles within a master file, and linked-available-record files. Under the AOS/VS operating system, it includes an interface to Data General's INFOS II system, which allows Business BASIC statements to manipulate INFOS II files. An interface is also furnished for user-written assembly-language routines under the AOS/VS and DG/RDOS operating systems. Under DG/UX and I/UNIX, Business BASIC provides an interface for user-written C language routines.</p>	<p>Product: BUSINESS BASIC FOR AViiON SYSTEMS (Unlimited Users)</p> <p>Model #: L005A</p> <p>Current Rev. 1.20 SSS Shipped: 12/91</p> <p>Previous Rev: 1.10 Support Effective Until: No longer supported</p> <p>Release Notice: 085-600140-04</p>

DOCUMENTATION

Title	Part Number
Commands, Statements, and Functions in Business Basic Learning Business BASIC	093-000351-02
Subroutines, Utilities, and the Business BASIC CLI	093-000684-00
Using Business BASIC on DG/UX and 386/ix System	093-000389-02
	093-000685-02

BUSINESS BASIC for AVION SYSTEMS

BUSINESS BASIC for AViiON SYSTEMS

STR ANSWER REPORT
for BUSINESS BASIC FOR AViiON SYSTEMS

- PU.A STR: NASC000011570
 REV: 1.20 ORIG-ID: Q412674

PROBLEM SUMMARY:
Print file using causes a "SEGMENTATION VIOLA-
TION" and creates a core dump.

ANSWER SUMMARY:
This problem with PRINT USING is corrected for
the next revision or update after revision 1.20 of Busi-
ness BASIC for AViiON systems. A replacement
library, pu.a, is available to correct this problem on
revision 1.20, which is enclosed.

BUSINESS BASIC for AViON SYSTEMS



BUSINESS BASIC for AViiON SYSTEMS**STR ANSWER REPORT**
for BUSINESS BASIC FOR AViiON SYSTEMS

- UX.A STR: ITAL000000145
REV: 1.10 ORIG-ID: PD-92-01 (SIA)

PROBLEM SUMMARY:

The statement STME 19 doesn't execute correctly the command in the variable PROGRAM_NAME\$ if the variable BUFFER\$ has more than one argument spaced by blank.

ANSWER SUMMARY:

This problem with STME 19 is corrected for the next revision or update after revision 1.20 of Business BASIC for AViiON Systems. A replacement library, ux.a, is available to correct this problem in revision 1.20.

BUSINESS BASIC for AVIION SYSTEMS



BUSINESS BASIC for AViiON SYSTEMS**STR ANSWER REPORT**
for BUSINESS BASIC FOR AViiON SYSTEMS

- STR: NASC000012350
REV: 1.20 ORIG-ID: Q455750

PROBLEM SUMMARY:

Bbasic aborts with a core dump when you first open a file from the DEVICE_MAP and then do a LOPEN statement.

ANSWER SUMMARY:

This problem with LOPEN and opening a file in the DEVICE_MAP file is corrected in the next revision after 1.20 of Business BASIC for AViiON Systems. Replacement libraries are available in a cpio file, BB12003_CPIO, to correct this problem in revision 1.20, which is enclosed.

- STR: NASC000012595
REV: 1.20 ORIG-ID: Q456324

PROBLEM SUMMARY:

Customer is having BBASIC applications to abort with an "core dump- segmentation violation" every few days.

ANSWER SUMMARY:

This problem is corrected for the next revision or update after revision 1.20 of Business BASIC for AViiON systems. A cpio file, BB12003_CPIO, is available to correct this problem in revision 1.20, which you have received.

- STR: NASC000012783
REV: 1.20 ORIG-ID: U8709

PROBLEM SUMMARY:

Receiving error "Error 4 at line ###, SYSTEM (program is lost)" from a BBASIC program which is used throughout the application system.

ANSWER SUMMARY:

The SAVE file that you sent has been saved with a "File unopened" error 44 at line 700. Line 969 is the first line number in the SAVE file that we have so lines of code were deleted prior to SAVEing this program. It may be this error that is causing the problem. We also understand that you are no longer experiencing this problem and have requested that we close this STR.

BUSINESS BASIC for AViON SYSTEMS

BUSINESS BASIC for AVIIION SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****BASIC_B (AX) REV 1.10**

Business BASIC Revision 1.10 on DG/UX 5.4

1. When using DG/UX 5.4, you will need to set the TARGET_BINARY_INTERFACE environment variable to m88kdguxcoff before generating a new Business BASIC interpreter. For the bourne shell use:

```
eval 'sde-target -sh m88kdguxcoff'
```

For the cshell use:

```
eval 'sde-target -csh m88kdguxcoff'
```

2. The device type prt_queue in the DEVICE_MAP file cannot be used in Business BASIC revision 1.10 on DG/UX 5.4. If a prt_queue is used then I/O error 10, "File does not exist", is returned when CLOSE or CLOSE FILE is used. Using STME 10 on the channel where the prt_queue is opened or using UCHANS will result in a core file and Business BASIC will terminate. This problem is corrected in next revision of Business BASIC. This is only a problem with prt_queue; prt_device works correctly. This is not a problem in Business BASIC 1.10 on DG/UX 4.3x.

BUSINESS BASIC for AVION SYSTEMS

BUSINESS BASIC for AViiON SYSTEMS

PROGRAMMING NOTES/DOCUMENTATION

BASIC_B (AX) REV 1.20

DG/UX Business BASIC revision 1.20 Is Now Available.

Business BASIC revision 1.20 for AViiON systems has been shipping since December, 1991. Among the new features of this release are:

1) The program execution speed of Business BASIC has been substantially improved. These performance improvements were accomplished by changing the internal format of Business BASIC SAVE files. The savefile changes improve performance in a variety of areas, such as SWAP and CHAIN, math and string handling.

The bb_port utility furnished with Business BASIC for AViiON Systems can be used to help in the conversion process of the save files.

Listed below are some benchmark results for Business BASIC revisions 1.10 and 1.20. The benchmarks were run on an AV 5220 dual processor running at 25 megahertz with 112 megabytes of memory. Business BASIC revision 1.10 was run on DG/UX revision 4.32, while Business BASIC revision 1.20 was run on DG/UX 5.4.

	BBASIC Rev 1.10 DG/UX 4.32		BBASIC Rev 1.20 DG/UX 5.4	
SBTEST	ELA	CPU	ELA	CPU
512 exclusive	40	35.3	29	25.1
512 shared	19	14.1	13	9.9
2048 shared	16	12.6	12	8.4
GMTEST	ELA	CPU	ELA	CPU
String: 100K	50	49.6	17	17.5
MATH: 100K	25	24.7	9	9.6
LOCKS: 100K	11	10.1	6	6.5
OETEST	ELA	CPU	ELA	CPU
48 users	139	7.1	33	1.7
K5TEST	Maximum Ela		Maximum Ela	
# users				
1	26		18	
16	51		43	
32	53		45	
64	54		46	
96	58		48	
128	65		51	

2) A new execution switch, -L, is available to enable logging for application analysis. When this switch is specified, Business BASIC logs activity about which Business BASIC statements and expressions have been used. The activity is recorded in a report when Business BASIC is brought down. The report is written to a file in the working directory with the name "bb_log. <pid number >". The report contains two columns of information. The first column is the token field, which is a Business BASIC statement, command, function, or expression. The second column is the count field, which represents the number of times that a token is executed. This switch can be useful in analyzing an application. The use of this switch imposes a slight performance penalty.

BUSINESS BASIC for AVIION SYSTEMS

3) A new conversion tool is supplied in the CONVERT directory to aid in changing Business BASIC variable names in source files. The script change_id works with the executable chng_id to convert the variable names. For more information, see the on-line file CHANGE_ID.DOC in the DOC directory; you can view this file by typing bb_help CHANGE_ID.DOC at your shell prompt.

4) This revision of Business BASIC includes the new ENLARGEDB utility. It allows you to enlarge a logical database by going through a simple interactive session, instead of remembering a multi-step procedure that involves several utilities.

5) This revision of Business BASIC includes the new DATAVRFY utility. It allows verification of the integrity of a linked-available-record file. It is very similar in operation to the INDEXVRFY utility.

BASIC_B (AX) REV 1.20**Business BASIC Revision 1.10 prt_queue Problem**

A problem exists in revision 1.10 when opening a prt_queue listed in the DEVICE_MAP file. When using revision 1.10 on a DG/UX 4.3+ system, you may not see a problem unless you have opened multiple prt_queues. When using Business BASIC revision 1.10 on DG/UX 5.4, you may see a "File does not exist" error when trying to close the prt_queue or a core dump when using STME 10. These problems are corrected in Business BASIC revision 1.20 which runs only on DG/UX 5.4.

BASIC_B (AX) REV 1.20**DG/UX Business BASIC revision 1.20 Replacement Library - pu.a**

A replacement library, pu.a, is now available to correct a problem which causes Business BASIC to produce a "Segmentation fault" and core dump when using PRINT USING. The format for PRINT USING is PRINT USING "format",expression. The problem occurs when the expression does not have a matching format. Some examples of this are PRINT USING "", "" or PRINT USING "73X", "".

Once this library is loaded in the BASICGEN/lb directory, you need to generate a new Business BASIC interpreter.

BUSINESS BASIC for AViiON SYSTEMS

PROGRAMMING NOTES/DOCUMENTATION

BASIC_B (AX) REV 1.20

DG/UX Business BASIC revision 1.20 Kernel Parameters.

Option 8 of the "Business BASIC Daemon Management" menu is used to calculate the DG/UX kernel parameters based on the obit limits selected. The output is displayed in 4 columns. The DEFAULT column and the CHANGE column should be ignored for DG/UX Business BASIC revision 1.20. The values in the DEFAULT column are for DG/UX 4.3x nstead of for DG/UX 5.4; therefore, the CHANGE column is also incorrect.

The OBIT column contains the minimum value required by obit for each parameter listed based on the values in the obit limits file and the number of entries in the ttymap file. This value does not take into consideration anything that you may have running on your system with Business BASIC or the minimum requirements for the operating system.

To determine the current operating system value of each parameter, use the /etc/sysdef command. If the parameter is not listed, then the default value is being used.

The default value can be found in the /usr/etc/master.d directory in the file dgux. In the dgux file, find the parameter name and the alias value. For example, the alias value for the parameter SEMAPM is cf_ps_max_sem_adj_processes. Now search for the alias value and you will find a detailed description of the parameter as well as a table containing the default value. For SEMAPM, the default value is 16384.

Once you have the default values for all the kernel parameters, use the information in the CONFIG.DOC file which is in /usr/opt/bbox/DOC to determine your DG/UX kernel parameters.

BASIC_B (AX) REV 1.20

DG/UX Business BASIC revision 1.20 Replacement Libraries

Replacement libraries are available to correct the following problems in Revision 1.20 of Business BASIC for AViiON systems:

1. A problem which causes Business BASIC to produce a "Segmentation fault" and core dump when using PRINT USING. The format for PRINT USING is:

PRINT USING "format",expression

The problem occurs when the expression does not have a matching format. Some examples of this are PRINT USING "", "" or PRINT USING "73X", "". [STR NASC-11570]

2. A problem with STME 19 where various errors or erroneous behavior may occur. The format for STME 19 is:

STME 19,error,program_name\$,buffer\$

The problem occurs when the buffer\$ contains more than one argument to be passed to the executable specified in program_name\$. [STR ITAL-145]

3. A problem where STMA 9,0 and STMA 9,6 were returning the login uid name, rather than the effective uid name. [NO STR]

4. A problem with the SHELL statement/command where output from the shell execution could be lost. The format for SHELL is:

SHELL [error_variable,command\$ [,buffer\$]]

The problem occurs when the buffer\$ argument is specified to capture the standard out and error output from the shell execution. This output could be lost in some circumstances. [NO STR]

BUSINESS BASIC for AVIION SYSTEMS

5. A problem which causes Business BASIC to core dump when you open a file in the DEVICE_MAP file and then execute a LOPEN statement. [STR NASC-12350]

BUSINESS BASIC for AViiON SYSTEMS**BASIC_B (AX) REV 1.20**

DG/UX Business BASIC revision 1.20 Replacement Libraries

Replacement libraries are available to correct the following problems in Revision 1.20 of Business BASIC for AViiON systems:

1. A problem which causes Business BASIC to produce a "Segmentation fault" and core dump when using PRINT USING. The format for PRINT USING is: PRINT USING "format",expression The problem occurs when the expression does not have a matching format. Some examples of this are PRINT USING "", "" or PRINT USING "73X", "". [STR NASC-11570]

2. A problem with STME 19 where various errors or erroneous behavior may occur. The format for STME 19 is: STME 19,error,program_name\$,buffer\$ The problem occurs when the buffer\$ contains more than one argument to be passed to the executable specified in program_name\$. [STR ITAL-145]

3. A problem where STMA 9,0 and STMA 9,6 were returning the login uid name, rather than the effective uid name. [NO STR]

4. A problem with the SHELL statement/command where output from the shell execution could be lost. The format for SHELL is: SHELL [error_variable,command\$ [,buffer\$]] The problem occurs when the buffer\$ argument is specified to capture the standard out and error output from the shell execution. This output could be lost in some circumstances. [NO STR]

5. A problem which causes Business BASIC to core dump when you open a file in the DEVICE_MAP file and then execute a LOPEN statement. [STR NASC-12350]

6. A problem where the POS function is not checking to see whether the substring matched exceeds the length of the string being searched and returns an incorrect position. [NASC-13084, NASC-13367]

7. A problem with listing of nested IF statements which results in part of the statement not being displayed. The SAVE file is correct; however, LISTing to a file causes part of the code to be dropped. [NASC-12746, NASC-13368]

8. A problem with STME 10. STME 10 is used to return the complete pathname of a file by supplying the channel number as an argument. Channel 16 is reserved for the console and when used as an argument to STME 10 causes a segmentation fault core dump. [NASC-12785]

9. A problem where the incorrect values of the C1, C2, C3, and the C4 keys are returned. [FRA-723]

10. A problem which causes a segmentation fault core dump when trying to enter an 8-bit character from the keyboard. [INTL-517]

You must re-generate a Business BACIC interpreter after the update files have been replaced in /usr/opt/bbox/BASICGEN/lb.

BUSINESS BASIC for AVION SYSTEMS



DG SORT/MERGE UTILITY for AVIIION SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The DG Sort/Merge Utility for AViiON Systems is a general-purpose utility that manipulates data record order and content. It allows you to sort and copy records, merge multiple files into a single file, edit record fields, delete duplicate output records from a sort or merge operation, delete records according to conditions that you specify, and translate EBCDIC files into ASCII files.</p> <p>The DG Sort/Merge Utility accepts any UNIX-generated fixed-length, variable-length or data-sensitive (text) file for input or output. It also accepts sequential files and MINISAM files created by Interactive COBOL for input or output.</p> <p>The utility can be invoked in either interactive or non-interactive modes. Commands entered interactively may be stored into a command file on disk for repeated executions. In summary, DG Sort/Merge offers you an extensive set of tools to transform your data files from one format to another without writing applications.</p>	<p>Product: DG SORT/MERGE UTILITY for AVIIION SYSTEMS</p> <p>Model #: R042A</p> <p>Current Rev. 1.03 SSS Shipped: 08/91</p> <p>Release Notice: 085-600208-03</p>

DOCUMENTATION

Title	Part Numbers
Using the Sort/Merge Utility on DG/UX and Interactive Unix Systems	093-000681-00

DG SORT/MERGE UTILITY for AVIION SYSTEMS

DG SORT/MERGE UTILITY for AVIIION SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****Sort/Merge (AX) REV 1.02**

New Feature: Variable Sort Buffersizes

As released, DG/UX Sort/Merge uses 1 MB buffers while sorting files (sorting a 3 MB file will result in 3 temp files, each of which must be passed in the final sort phase). A bug has also been found in which sort command files that use stdin as input were running with a buffersize of only about 82 KB, hampering performance significantly in some cases.

In response to several requests and to correct the bug mentioned above, a new dgsort executable has been made available which recognizes the environment variable DGSORT_MEM, and uses the value of that variable for its memory buffersize. For COBOL users wishing to take advantage of this feature in their runtime systems, a new libdgsort.a has also been provided. The units used are Kbytes, so if you wish to have 2MB sort buffers, you would set DGSORT_MEM to 2048.

Note that setting this value to be too large can result in either running out of swap space or in excessive swapping on your system, and can actually impede performance. Optimum results depend on available memory, available swap space, record format, key size and file size, and can only be obtained through testing various values of DGSORT_MEM. If this variable is not set, the default 1 MB buffersize will be used.

In the next revision of DG/UX Sort/Merge, the buffersize will be controllable via both this method and a runtime switch, allowing the user to choose whichever method is preferred.

DG SORT/MERGE UTILITY for AViION SYSTEMS

DG SORT/MERGE UTILITY for AVIION SYSTEMS

PROGRAMMING NOTES/DOCUMENTATION

Sort/Merge (AX) REV 1.02

Problem with SKIP files and RECORDLENGTH

A new dgsort executable is available which corrects two different problems that have been reported.

1) Under certain circumstances, the sort would end prematurely as soon as a record was encountered that would have been skipped to a skip file. The skip file was created, but empty, and the sort would abort with no errors and no statistics displayed to the screen if -s was used.

2) When any relational operator (=, >, < or <>) was used in conjunction with RECORDLENGTH, the test could return erroneous results.

DG SORT/MERGE UTILITY for AViION SYSTEMS

GNU C++ COMPILER for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT				
<p>GNU C++ (or G++) is a true native-code compiler implementing the C++ language designed by Bjarne Stroustrup of AT&T and a number of other vendors. As compared with that translator, G++ 1.37.2 offers superior optimization, superior error reporting, faster compilation rate.</p> <p>GNU C++ supports a high level of optimization, subject to user control through various command-line options. The GNU compiler offers a number of extensions to the C++ language, including the 'asm', 'typeof', and 'inline' constructs. GNU C++ adheres to the 88open Object Compatibility Standard [OCS] in terms of assembler code generated, calling sequence, and alignment.</p> <p>This update of GNU C++ is based on Revision 1.37 of the compiler from the Free Software Foundation. The GNU General Public Licence provides you with the opportunity to obtain source code for the GNU software for the AViiON. The source for this update will be distributed with other GNU sources and tools as Data General Model #R028A.</p>	<p>Product: GNU C++ COMPILER for AViiON SYSTEMS</p> <p>Model #: L021A</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Current Rev. 1.37</td> <td style="width: 50%;">SSS Shipped: 07/90</td> </tr> <tr> <td>Update 02</td> <td>SSS Shipped: 09/91</td> </tr> </table> <p>Release Notice: 085-600237-00 Update Notice: 078-600047-01</p>	Current Rev. 1.37	SSS Shipped: 07/90	Update 02	SSS Shipped: 09/91
Current Rev. 1.37	SSS Shipped: 07/90				
Update 02	SSS Shipped: 09/91				

DOCUMENTATION

Title	Part Number
AT&T C++ Language System Library Manual	069-100389-00

GNU C++ COMPILER for AViON SYSTEMS

GNU C++ COMPILER for AVIION SYSTEMS**STR ANSWER REPORT**
for GNU C++ COMPILER FOR AVIION SYSTEMS

- STR: NASC000010879
REV: 1.37 ORIG-ID: Q369842

PROBLEM SUMMARY:

When a static member function is defined in a separate file from its declaration, the linker will return an "undefined symbol" error for a program that attempts to invoke that function.

ANSWER SUMMARY:

The ld error results from g++ not reporting a compile time error. The definition of garbage() is illegal. It is declared as static in the class junk and also static in the badjunk.cc source. g++ will produce a compile time error for this illegal syntax in the next revision. Until then, you can use this code by removing the static keyword in the badjunk.cc source.

GNU C++ COMPILER for AVIION SYSTEMS

GNU C++ COMPILER for AVIION SYSTEMS

GNU C++ COMPILER for AVIIION SYSTEMS**STR ANSWER REPORT**
for GNU C++ COMPILER FOR AVIIION SYSTEMS

- STR: NASC000012384
REV: 1.37 ORIG-ID: D-JDM-5

PROBLEM SUMMARY:

Cannot get g++ to link; says it needs file ctr0.o.

ANSWER SUMMARY:

This problem is not reproducible when running Revision 1.37.2 on a DG/UX 5.4 system. 1.37.2 is required to run on DG/UX 5.4. Please install the latest revision of g++.

- STR: NASC000012385
REV: 1.37 ORIG-ID: D-JDM-6

PROBLEM SUMMARY:

Simple program will not compile cleanly. #include <stream.h>
int main()
{ cout("Hello, World!\n"); }

ANSWER SUMMARY:

This problem is not reproducible when running Revision 1.37.2 of g++ on a DG/UX 5.4 system. 1.37.2 is required for DG/UX 5.4. Please install the latest revision of g++.

GNU C++ COMPILER for AVIION SYSTEMS



GNU C++ COMPILER for AVIIION SYSTEMS**STR ANSWER REPORT**
for GNU C++ COMPILER FOR AVIIION SYSTEMS

- STR: NASC000012517
REV: 1.37 ORIG-ID: D-JDM-8

PROBLEM SUMMARY:

gdb 3.6.9.4c1, released as part of g++ 1.37.2.4, does not properly handle an array of structs. Previous releases of gdb have also had the same problem.

ANSWER SUMMARY:

This problem is fixed in gdb 3.6.10.2, which is released with C++ 2.1.2 for AVIIION.

- STR: NASC000012369
REV: 137.20 ORIG-ID: Q454971

PROBLEM SUMMARY:

The Gnu C++ compiler is returning incorrect values for bit field data members.

ANSWER SUMMARY:

The sample program uses an extension to ANSI C that is supported differently by cc and C++. If you compile with cc -ansi you will get warnings. CC must generate code that can be compiled by a standard C compiler, so it changes the bit-field type to int. To be compatible with CC, g++ does the same thing. This is a legal and reasonable implementation of this extension to ANSI C.

GNU C + + COMPILER for AVIION SYSTEMS



GNU C++ COMPILER for AVIION SYSTEMS



GREEN HILLS FORTRAN-88000

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Green Hills Fortran-88000 is an optimizing compiler developed by Green Hills Software, Inc. Green Hills Fortran-88000 is a gobally optimizing replacement for the standard DG/UX f77 (1) compiler. The Green Hills Fortran-88000 is fully compatible with the Green Hills C-88000 and Pascal-88000 compilers available as separate products.</p>	<p>Product: GREEN HILLS FORTRAN-88000</p> <p>Model #: L002A</p> <p>Current Rev. 1.8.6 SSS Shipped: 03/92</p> <p>Previous Rev: 1.8.5.01 Support Effective Until: 10/01/92</p> <p>Release Notice: 085-600123-02</p>

DOCUMENTATION

Title	Part Number
Green Hills Software User's Manual Fortran-88000	069-100232-02
Green Hills Fortran Reference Manual	069-100369-01

GREEN HILLS FORTRAN-88000

GREEN HILLS FORTRAN-88000

STR ANSWER REPORT for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

- STR: NASC000010822
REV: 1.85 ORIG-ID: E061185

PROBLEM SUMMARY:

Documentation change request to modify the GreenHills F77 Users manual so that it correctly documents the character that is appended to the external subroutines, functions, and common blocks.

ANSWER SUMMARY:

The new version of the manual that will ship with revision 1.8.6 of Green Hills F77 goes into greater detail on the conventions used for naming in executables. Your request has been forwarded to Green Hills for consideration in the production of this and future manuals.

- STR: NASC000011134
REV: 1.85 ORIG-ID: Q378984

PROBLEM SUMMARY:

The GreenHills Fortran Write verb is truncating files when the file attributes are set to Access = Direct and Format = unformatted.

ANSWER SUMMARY:

This problem is fixed in revision 1.8.6 of Green Hills F77.

- STR: HOLL000000389
REV: 185.10 ORIG-ID:

PROBLEM SUMMARY:

Greenhill fortran 77 produces differnt result when compiling with different switches.

ANSWER SUMMARY:

Fixed in revision 1.8.6 of Green Hills FORTRAN 77.

- DBX STR: NASC000010389
REV: 1.85 ORIG-ID: E060862

PROBLEM SUMMARY:

Error - "No symbol <var> in current context", is returned by the Dbx print command when it is used to examine a parameter variable.

ANSWER SUMMARY:

In an effort to keep generated code as compact as possible, PARAMETER names are not stored by Green Hills. Instead, the value of the parameter is simply stored at a given memory location, and that location is referenced through the remainder of code

generation. No debugger can display this information. Green Hills has no plans to change this aspect of their code generation.

GREEN HILLS FORTRAN-88000



GREEN HILLS FORTRAN-88000**STR ANSWER REPORT**
for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

-
- STR: NASC000011568
REV: 1.85 ORIG-ID: Q409456

PROBLEM SUMMARY:
GREEN HILLS FORTRAN 77 fails to successfully input data using a list directed format if the numeric field is in the form number + exponent or number-exponent (e.g., 2 + 5). It works fine when read in using an F edit descriptor.

ANSWER SUMMARY:
The problem is fixed in revision 1.8.6 GREEN HILLS FORTRAN 77.

 - STR: NASC000011578
REV: 1.85 ORIG-ID: Q413427

PROBLEM SUMMARY:
Getting "Multiple defined global" compile errors when a variable which appears in a COMMON statement is initialized using the form INTEGER I/10/. Problem does not exist if variable is initialized in a DATA or assignment statement.

ANSWER SUMMARY:
This is a duplicate STR. Please cross-reference STR NASC11579 when inquiring about this problem.

 - STR: NASC000011720
REV: 1.85 ORIG-ID: Q416314

PROBLEM SUMMARY:
Error - "Warning: symbol: 'com11\$' has different size" is returned by ld when linking objects that were built with GreenHills F77 that have common blocks.

ANSWER SUMMARY:
Fixed in revision 1.8.6. Workarounds provided.

 - STR: NASC000011579
REV: 5.40 ORIG-ID: Q413427

PROBLEM SUMMARY:
Getting "Multiple defined global" compile errors when a variable which appears in a COMMON statement is initialized using the form INTEGER I/10/. Problem does not exist if variable is initialized in a DATA or assignment statement.

ANSWER SUMMARY:
User error. COMMON data items should only be initialized in BLOCK DATA subroutines.
-

GREEN HILLS FORTRAN-88000



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STR ANSWER REPORT
for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

- STR: JAPN000000652
REV: 1.80 ORIG-ID: NDG 2515

PROBLEM SUMMARY:
Fortran runtime error.

ANSWER SUMMARY:
An error number 152 is an ETIMEDOUT (connec-
tion timed out). This is probably caused by trying to
access a file over a network or on an NFS-mounted
file system when the connection times out, for
whatever reason.

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GREEN HILLS FORTRAN-88000

STR ANSWER REPORT for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

- REV: 1.85 STR: NASC000007809
ORIG-ID: Q164835

PROBLEM SUMMARY:

Compile and execution times of programs created with the ghf77 1.8.5 compiler using the -OL switch are significantly slower than the compile and execution times of programs created with the ghf77 1.8.4.9 compiler.

ANSWER SUMMARY:

With each new revision of ghf77, new optimizations have been added to improve final runtime performance. Many of these optimizations significantly impact the performance of the compiler when invoked, but the goal of improving final runtime performance is considered worth the extra compiler overhead to most users.

- REV: 1.85 STR: NASC000008233
ORIG-ID: Q195442

PROBLEM SUMMARY:

Ghf77 programs go into a hang loop when formatted write statements are used with incorrect formats.

ANSWER SUMMARY:

The problem reported is fixed in revision 1.8.6 of Green Hills F77.

- REV: 1.85 STR: NASC000012398
ORIG-ID: ORNL-920327

PROBLEM SUMMARY:

Since rev'ing up to DG/UX 5.4, object modules produced by the Green Hills Fortran compiler cannot be linked.

ANSWER SUMMARY:

This problem is caused by the fact that the default code format for revision 5.4 of DG/UX is ELF, but Green Hills F77 produces COFF code. You should set the environment variable TARGET_BINARY_INTERFACE to m88kdguxcoff before compiling to correct this problem.

- REV: 1.86 STR: GER 000014919
ORIG-ID: ZD365

PROBLEM SUMMARY:

Naming conventions for COMMON reference are not compatible between GHF77 1.8.6 and 1.8.5.x and this is not mentioned in release note or user manual.

ANSWER SUMMARY:

The release notice will be updated to reflect changes in the internal naming conventions for unnamed COMMON blocks. There are no plans to provide backward compatibility with previous revisions of GH F77.

- REV: 1.86 STR: NASC000012319
ORIG-ID: Q454756

PROBLEM SUMMARY:

Using the X611 compiler switch to list out make file information also causes the program to be compiled and linked, contrary to what is listed in the documentation.

ANSWER SUMMARY:

The problem is fixed in revision 1.8.6.1, currently scheduled for release in the summer of 1992.

GREEN HILLS FORTRAN-88000



GREEN HILLS FORTRAN-88000**STR ANSWER REPORT**
for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

- STR: JAPN000000670
REV: 1.86 ORIG-ID: NDG 2533

PROBLEM SUMMARY:
debugger does not recognize initial source file.

ANSWER SUMMARY:
Not reproducible with the information supplied. We have compiled and debugged several GH F77 programs under the ELF environment in revision 5.4 of DG/UX. Please include your compile command lines and your environment settings if you wish to resubmit this STR.

- STR: NASC000012434
REV: 1.86 ORIG-ID: Q460894

PROBLEM SUMMARY:
According to NASC-12017, the requirement for special routines in order to be able to call Green Hills Fortran routines from C was to be eliminated at Release 1.8.6 of GH Fortran. This is not the case. They are still required.

ANSWER SUMMARY:
Data General was provided erroneous information from Green Hills on the necessity for these routines. Under certain conditions, the routines are not necessary, thus this error was not discovered during testing. Green Hills has plans to remove the need for these extra calls. The release notice will be corrected in the next revision of GH F77.

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STR ANSWER REPORT
for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

- STR: NASC000012867
REV: 1.86 ORIG-ID: U013492

PROBLEM SUMMARY:

The GreenHills 1.8.6 compiler is not handling the padding of a list directed formatted reads correctly when the list is longer than the input record and the list ends with a character variable.

ANSWER SUMMARY:

This problem is fixed in the next revision. In the meantime, both COFF and ELF versions of libf.a have been provided which correct this problem for revision 1.8.6 of GreenHills Fortran 77.

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GREEN HILLS FORTRAN-88000**STR ANSWER REPORT**
for GREEN HILLS FORTRAN 77 FOR AVIION UNIX

- STR: INTL000000500
REV: 1.86 ORIG-ID: 66VIE920612
PROBLEM SUMMARY:
The READ statement can't read files with tabs in it.
ANSWER SUMMARY:
User error. GH F77 can read the file properly, but the format is incorrect in the supplied program.

- STR: JAPN000000683
REV: 1.86 ORIG-ID: NDG 2546
PROBLEM SUMMARY:
Open statement don't work correctly with vms mode.
ANSWER SUMMARY:
Opening an existing file with status = 'NEW' in VMS mode is not an error. In VMS mode, if a file already exists when this open occurs, the file is truncated and any output is placed at the beginning, as if the file was "new". This is compatible with VMS F77 operation.

- STR: NASC000013118
REV: 1.86 ORIG-ID: U024819
PROBLEM SUMMARY:
Raising a double precision 2 to a double precision -2 exponent does not produce the correct result.
ANSWER SUMMARY:
As we dicussed, you are no longer experiencing this problem since you have been provided with libf.a (coff and elf) for ghf77 1.8.6. This problem is fixed in the next revision of ghf77.

- STR: NASC000013374
REV: 1.86 ORIG-ID: E411041
PROBLEM SUMMARY:
The GreenHills Fortran compiler is not in compliance with the Ansi X3.9-1978 standard's definition of line length.
ANSWER SUMMARY:
The Green Hills compiler meets the ANSI interpretation for FORTRAN and complies fully with the standard.

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GREEN HILLS FORTRAN-88000



GREEN HILLS FORTRAN-88000**PROGRAMMING NOTES/DOCUMENTATION**

GH F77 (AX) REV 1.8.6

Problems with structure field reference and -X611 switch

A bug in revision 1.8.6 of the Greenhills F77 compiler was causing two different errors:

- 1) The compiler was incorrectly reporting an error on the "." character in a structure field reference.
- 2) When compiling with a -X611 switch (Do not compile, but output a list of included files in a format convenient for use in a makefile), the compiler was incorrectly going ahead with the other phases of the compile instead of stopping after producing the expected files.

Both of these problems are corrected in the next update to revision 1.8.6 of GH F77. Until that time, a new fcom88 module is available from your local DG office that corrects both problems.

GH F77 (AX) REV 1.8.6

Data corruption from list-directed READs

A library problem in GH F77 revision 1.8.6 could cause an error if the specified list on a list-directed READ was longer than the input data and the list ended with a character variable.

Two new versions of libf.a (one for COFF and one for ELF) have been provided which correct this problem.

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GREEN HILLS FORTRAN-88000

PROGRAMMING NOTES/DOCUMENTATION

GH F77 (AX) REV 1.8.6

Data corruption from list-directed READs

A library problem in GH F77 revision 1.8.6 could cause an error if the specified list on a list-directed READ was longer than the input data and the list ended with a character variable.

Two new versions of libf.a (one for COFF and one for ELF) have been provided which correct this problem.

GREEN HILLS FORTRAN-88000

ICOBOL For AViiON (Unlimited Users)

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The Interactive Cobol Compiler, revision 1.70, for AViiON Systems is an update of the 1.60 compiler for AViiON Systems. It is intended for use on AViiON machines running DG/UX, revision 4.20 or greater. The 1.70 revision of the ICOBOL compiler introduces several new language features and contains corrections to many bugs. It produces code revision 9 .pd and .dd files by default and is upwardly compatible with the ICOBOL 1.51 compiler.</p> <p>The updated documentation for "Using Interactive COBOL on DG/UX and Interactive UNIX Systems" and the updated "Interactive COBOL Programmer's Reference" manual contains the most up-to-date information about the Interactive COBOL compiler.</p> <p>The Interactive COBOL compiler for AViiON Systems produces code revisions 6, 7 8 and 9 of Interactive COBOL .pd and .dd files. The ability to debug a COBOL program requires compilation with the -d option.</p>	<p>Product: ICOBOL for AViiON (Unlimited Users)</p> <p>Model #: L007A</p> <p>Current Rev. 1.70 SSS Shipped: 08/91</p> <p>Previous Rev: 1.60</p> <p>Support Effective Until: 03/01/92</p> <p>Release Notice: 085-600205-02</p>

DOCUMENTATION

Title	Part Numbers
Using ICOBOL on DG/UX and I/Unix	069-000359-03

ICOBOL For AViiON (Unlimited Users)

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STR ANSWER REPORT for INTERACTIVE COBOL FOR AVIIION SYSTEMS

- ICX STR: INTL000000342
REV: 1.60 ORIG-ID: SW00927

PROBLEM SUMMARY:

Negative Decimal results that should round to zero give on size errors.

ANSWER SUMMARY:

This will be fixed in revision 1.80 of Interactive COBOL on DG/UX and Interactive Unix Systems. It is also fixed by a replacement module, icx, for revision 1.70. The runtime system will no longer incorrectly raise a size error when trying to store a negative number in a COMPUTATIONAL data item.

- ICX STR: SPA 000000859
REV: 1.60 ORIG-ID: XAVI_ICOBOL

PROBLEM SUMMARY:

When accepting a screen with several numeric fields & this fields are formatted (for example thousand dot) , moving up and down through this fields using the cursor keys, the variable contents and its display changes(adding some numbers)

ANSWER SUMMARY:

This problem is fixed in the current revision of 1.70 of Interactive COBOL on DG/UX Systems. The arrow keys will not modify the data in a SCREEN ACCEPT field.

- ICX STR: NASC000011289
REV: 1.70 ORIG-ID: Q395420

PROBLEM SUMMARY:

If a one character, uppercase program name is specified in the CREV utility, the error "ERROR: Unable to open specified file" is returned.

ANSWER SUMMARY:

This problem will be fixed in the next revision of Interactive COBOL. It is also fixed in revision 1.70 by replacement modules, crev.pd and crev.dd, in which you have already received. The utility crev will be able to open a program whose name consists of a single uppercase character.

- ICX STR: NASC000011443
REV: 1.70 ORIG-ID: Q391783

PROBLEM SUMMARY:

ICOBOL program will not interact with the Unix spooler correctly after reving up to 1.70 of ICOBOL.

ANSWER SUMMARY:

This problem will be fixed in the next revision of Interactive COBOL on dgux and 386/ix systems. It is also fixed in the current revision 1.70 by the replacement module icx revision 83.00.00.00, which you have received. The options file specified by the value of the environment variable ICOPTIONS will be properly closed by the runtime system.

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STR ANSWER REPORT for INTERACTIVE COBOL FOR AVIION SYSTEMS

- STR: NASC000012133
REV: 1.70 ORIG-ID: E62322
- PROBLEM SUMMARY:**
RFE to have DG/SORT add the ability to create an indexed file with alternate keys.

ANSWER SUMMARY:
This requested function is already in DG/SORT. To specify alternate keys repeat the phrase "icobol isam key" as in the following dgsort command file on the attached page.

- ICOBOL STR: INTL000000381
REV: 1.70 ORIG-ID: BEL92010
- PROBLEM SUMMARY:**
Compiler with option j6 returns "uncorrected error" if record length for a file ASSIGN TO PRINTER is longer than 132 characters.

ANSWER SUMMARY:
The behavior being exhibited by the compiler is correct. Record lengths for line sequential files was increased to 254 in code revision 7, not code revision 6. Code revision 7 was introduced in revision 1.50 of AOS/VS Interactive COBOL. Please compile with the -j7 option in order to transport object files to an 1.50 ICOBOL environment.

- ICOBOL STR: NASC000011290
REV: 1.70 ORIG-ID: E61651
- PROBLEM SUMMARY:**
When the compiler switches "-p", requests program offsets, and the "-n" are used at the same time no program offsets are placed in the listing file. The only thing you get is the "Program Counter Offset" heading.

ANSWER SUMMARY:
In the next revision of ICOBOL a corrected error will be displayed indicating that the -n option supercedes options that affect code generation. No program counter section header will appear in the program listing.

- ICOBOL STR: NASC000011291
REV: 1.70 ORIG-ID: Q395958
- PROBLEM SUMMARY:**
Receiving compiler error "If error persist after correcting all other errors please submit a Software

Trouble Report (lst_xrf_ln())" when using the -x switch.

ANSWER SUMMARY:
This problem is fixed by a new compiler available in replacement modules 1.70.03, which is contained in the enclosed magnetic tape. The compiler's cross referencer will no longer abort when it encounters a START statement.

- ICOBOL STR: NASC000011814
REV: 1.70 ORIG-ID: Q416927
- PROBLEM SUMMARY:**
Screen DISPLAY/ACCEPT problems when using 03 group level screen names in the DISPLAY/ACCEPT using 1.70 of DG/UX ICOBOL. If the 03 group levels are changed to 01 levels and then use the 01 level screen names, the DISPLAY/ACCEPT works.

ANSWER SUMMARY:
This problem is fixed by a new compiler in replacement module 1.70.03, which is contained in the enclosed magnetic tape. The compiler will produce correct code for screen positioning for screen items at all levels.

- ICOBOL STR: NASC000012010
REV: 1.70 ORIG-ID: Q431703
- PROBLEM SUMMARY:**
Receiving compiler error "If this error persists after you have corrected all other errors, please submit a Software Trouble Report" when using the "x" compiler switch. Cross reference STR NASC-11291.

ANSWER SUMMARY:
This problem is fixed with a new compiler from the replacement module 1.70.03, which is contained in the enclosed magnetic tape. The compiler's cross referencer will no longer abort when encountering a program's START statement.

- ICX STR: UKSC000050471
REV: 1.60 ORIG-ID:
- PROBLEM SUMMARY:**
The customer has a product which worked as planned under ICOBOL Rev 1.50 and since uprevving to Rev 1.60 has developed a fault ie in screen section even if a field has USING and REQUIRED attributes the user may skip any data input.

ANSWER SUMMARY:
This problem is fixed in a new runtime system in replacement module 1.70.03 available from your local Data General representative. The runtime system will

ICOBOL For AViiON (Unlimited Users)

no longer bypass a USING screen item that has the REQUIRED attribute and has not been initialized.

- ICX STR: ITAL000000147
 REV: 1.70 ORIG-ID: PD-92-02 (INF)

PROBLEM SUMMARY:

Runtime problem of icx that fails when dividing 0 by 0.

ANSWER SUMMARY:

This problem is fixed by a new runtime system in replacement module 1.70.03 available from your local Data Generate representative. A numeric edited destination will no longer prevent a MOVE statement located in an ON SIZE ERROR clause from occurring when dividing 0 by 0.

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sages and the files in the directory /usr/opt/icobol_1.70/run/log when submitting a problem report. This problem may be related to the MGS Exception 582 which has been resolved at your site.

-
- MGS STR: UKSC000055622
REV: 1.70 ORIG-ID:

PROBLEM SUMMARY:

Multiple mgs servers running. Powerhouse Quiz application is also running. User upgraded from 1.60 and Icobol users hanging, and minisam exception error 521, action 1016, function get_block retries exceeded, OS error 0 was reported

ANSWER SUMMARY:

The multiple mgs servers running are caused when a minisam client such as icx or quiz fails to disconnect properly. This can lead to hangs and other problems. A workaround is to use the alternate locking method of using unix semaphores by specifying MGS_ALT_SEM_KEY=0.

-
- MINISAM STR: INTL000000365
REV: 1.60 ORIG-ID: SW00847

PROBLEM SUMMARY:

ICOBOL panicked and corrupted several files. Panic was as follows: Minisam exception (512), Action (1012), Function read-block, OS error (22), Org except (521), Moreinfo (1 2 3) (0).

ANSWER SUMMARY:

This is fixed in revision 1.70 of Interactive COBOL on DG/UX and Interactive UNIX Systems.

ICOBOL For AViiON (Unlimited Users)**STR ANSWER REPORT**
for INTERACTIVE COBOL FOR AVIIION SYSTEMS

- ICOBOL STR: NASC000013055
REV: 1.70 ORIG-ID: U26138

PROBLEM SUMMARY:

No compiler error is being generated when the field name is left out of a variable declaration. The same program compiles with errors under AOS/VS ICOBOL.

ANSWER SUMMARY:

The 1.70 compiler is exhibiting the correct behavior in this case. According to the ANSI 85 COBOL standards, a data name is not required after a level number and omitting this clause is equivalent to entering the word FILLER. This is documented in chapter 7 of the Interactive COBOL Programmer's reference manual.

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STR ANSWER REPORT for INTERACTIVE COBOL FOR AViiON SYSTEMS

- | | |
|-----------------------|--|
| ● ICOBOL
REV: 1.70 | STR: NASC000011269
ORIG-ID: Q394331 |
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PROBLEM SUMMARY:
The 1.70 ICOBOL compiler is returning unusual error messages if a data item is misspelled in the Procedure Division.

ANSWER SUMMARY:
This problem is fixed in the 1.70.07 replacement compiler on the enclosed tape. The compiler will not report unusual error messages for an undefined reference in an arithmetic statement.
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|-----------------------|--------------------------------------|
| ● ICOBOL
REV: 1.70 | STR: NASC000012786
ORIG-ID: U8775 |
|-----------------------|--------------------------------------|

PROBLEM SUMMARY:
Receiving compiler error "'X1' must be unsigned" which is defined as PIC S9(3) and is being referenced in the SCREEN SECTION. No errors are reported if used in the Procedure Division.

ANSWER SUMMARY:
This problem is fixed in the 1.70.07 replacement compiler on the enclosed tape. The compiler will no longer report an error when using a signed subscript in the SCREEN SECTION.
- | | |
|-----------------------|---------------------------------------|
| ● ICOBOL
REV: 1.70 | STR: NASC000012915
ORIG-ID: U12436 |
|-----------------------|---------------------------------------|

PROBLEM SUMMARY:
Icobol 1.70.03 compiles and runs programs clean that use a linkage section. The same programs fail when ran under 1.60 of Icobol/VS.

ANSWER SUMMARY:
This problem is fixed in the 1.70.07 replacement compiler on the enclosed tape. The compiler will no longer create large symbol numbers for Screen and Linkage Section items that the runtime system on AOS/VS does not support.
- | | |
|-----------------------|---------------------------------------|
| ● ICOBOL
REV: 1.70 | STR: NASC000013238
ORIG-ID: U34826 |
|-----------------------|---------------------------------------|

PROBLEM SUMMARY:
The order of the alternate keys are not being created as defined in the SELECT statement under DG/UX ICOBOL and AOS/VS ICOBOL 1.70.

ANSWER SUMMARY:

This problem is fixed in the 1.70.07 replacement compiler on the enclosed tape. The compiler will correctly order alternate keys as they appear in the FD section and when one alternate key is embedded within another and the REDEFINES clause has been specified.

- | | |
|--------------------|--|
| ● ICX
REV: 1.70 | STR: NASC000012438
ORIG-ID: Q454607 |
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PROBLEM SUMMARY:

READ INTO is not moving the record into the destination field under 1.70 of Icobol.

ANSWER SUMMARY:

This problem is fixed in the 1.70.07 replacement runtime system on the enclosed tape. A sequential READ INTO statement will no longer fail to move a record into the specified destination item when preceded by a MINISAM READ statement yielding a file status error code 23.

- | | |
|--------------------|--|
| ● LGC
REV: 1.70 | STR: NASC000012359
ORIG-ID: Q448560 |
|--------------------|--|

PROBLEM SUMMARY:

Receiving compiler error "signal (SIGBUS) detected, unable to make legend" when compiling a large program with the debug switch.

ANSWER SUMMARY:

This problem is fixed in the 1.70.07 replacement lgc on the enclosed tape. The lgc will no longer abort with a SIGBUS error after it encounters more than 98 COPY statements within a program.

- | | |
|----------------------|--|
| ● REORG
REV: 1.70 | STR: NASC000012161
ORIG-ID: Q444472 |
|----------------------|--|

PROBLEM SUMMARY:

Receiving error "FS_23: no record exists with the specified record key value" when attempting to execute REORG against an empty indexed file.

ANSWER SUMMARY:

This problem is fixed in the 1.70.07 replacement reorg file on the enclosed tape. An empty MINISAM file can now be specified as a valid input file for reorg.

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ICOBOL For AViiON (Unlimited Users)**STR ANSWER REPORT**
for INTERACTIVE COBOL FOR AVIION SYSTEMS

- MINISAM STR: NASC000013428
REV: 1.70 ORIG-ID: U45603

PROBLEM SUMMARY:

File corruption is occurring during normal processing. Need corrupted file analyzed to see if the cause of the corruption can be determined. Space on the system appears to be sufficient.

ANSWER SUMMARY:

As we have discussed, this STR is being closed since you are no longer experiencing the problem reported. However, one possible source of the corruption is the sending of SIGKILL signals with kill -9 to icx processes. Please refer to the section "Runtime System Termination" in chapter 2 of "USING COBOL on DG/UX and Interactive UNIX Systems" for supported alternatives.

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ICOBOL For AViiON (Unlimited Users)

PROGRAMMING NOTES/DOCUMENTATION

ICOBOL (AX) REV 1.70 [crev]

Corrected CREV utility for revision 1.70

A corrected CREV utility is being released to correct a problem with opening source files whose names consist of a single uppercase letter or an uppercase letter followed only by digits.

ICOBOL For AViiON (Unlimited Users)

ICOBOL For AViiON (Unlimited Users)**PROGRAMMING NOTES/DOCUMENTATION****ICOBOL (AX) REV 1.70**

AX-COBOL-I Revision 1.70 Replacement Modules

A new compiler, a new optimizer, a new runtime system, a new legend creator and a new minisam global server (mgs) are being released to correct some problems discovered in Interactive COBOL 1.70 and subsequent replacement modules. In addition, two library files are being released in order that the runtime system can be rebuilt which contains these fixes. Also a new optional behavior is being introduced in a new options files. Please see the 1.70.03.fixes file for a complete description of the problems fixed.

The tar dump file, 1.70.03.tar, is in tar format and contains the following files:

config/libmisam.a	bin/icx	bin/icopt
config/libicx.a	bin/icobol	bin/lgc
config/options	bin/mgs	

To load these files into the ICOBOL directory structure, do the following:

- 1) Make backups of the aforementioned files
- 2) Change directories to /usr/opt/icobol_1.70 or \$IC_ROOT
- 3) Bring servers down with ic_down, so no one will be accessing icx
- 4) Become superuser
- 5) tar -xvf 1.70.03.tar

ICOBOL For AViiON (Unlimited Users)

ICOBOL For AViiON (Unlimited Users)**PROGRAMMING NOTES/DOCUMENTATION****ICOBOL (AX) REV 1.70**

Missing Man Pages for Revision 1.70 of Interactive COBOL on DG/UX Systems

The official released tape of revision 1.70 of Interactive COBOL on DG/UX Systems is missing some of the man pages for this product. About 30 man pages are missing from the directory \$IC_ROOT/man. These man pages are the only files missing from the tape. Corrected tapes with a complete set of man pages will be mailed to SSS customers. A complete set of man pages are being made available now. To load, please change directory to \$IC_ROOT/man and extract the files from the file man_pages.tar.

ICOBOL (AX) REV 1.70

ICOBOL/DGUX Update Modules 1.70.06 to Resolve Symbolic Links

In order for MINISAM to completely resolve symbolic links when opening files, a new MINISAM/mgs shared memory segment was developed. For symbolic links to be resolved in the MINISAM virtual memory file (MGS.VM) for page flushing and obituary handling, the process that starts mgs (with ic_up) must have the new environment MGS_RESOLVE_LINKS set to 1. Note that there is some overhead involved in checking and resolving the link path which will impose some performance penalties at OPEN time. Only users that change links while files are OPEN should use this environment variable. Since there is additional overhead involved, the default behavior will be for MINISAM not to resolve symbolic links. Please note that the resolution of links only applies to symbolic links. When users delete hard links that will eventually lead to the deletion of access to an opened MINISAM file, it is still possible for mgs to panic and all opened, modified MINISAM data bases to become corrupt.

The executables containing a MINISAM library are being released in order to incorporate this change. A new minisam library for linking any product that contains MINISAM is also being released. The tar dump file, 1.70.06, contains the following files:

bin/icx	bin/dgsort	bin/ic_status	config/libmisam.a
bin/mgs	bin/dgmerge	bin/ic_shutdown	
bin/reorg			

To load these files into the ICOBOL directory structure, do the following:

- 1) Make backups of the aforementioned files.
- 2) Change directories to /usr/opt/icobol_1.70 or \$IC_ROOT
- 3) Bring the servers down with the script ic_down
- 4) Become superuser
- 5) tar -xvf 1.70.06.tar

Please note that any mixing of the 1.70.06 executables with those of earlier versions of 1.70 should result in the following error:

MGS: shared memory revision is not the same

ICOBOL For AViiON (Unlimited Users)

ICOBOL For AViiON (Unlimited Users)**PROGRAMMING NOTES/DOCUMENTATION****ICOBOL (AX) REV 1.70**

AX-COBOL-I Revision 1.70 Replacement Modules

Many new modules, including a new compiler, runtime system, minisam global server, are being released to correct some problems discovered with Interactive COBOL 1.70 and subsequent replacement modules. These replacement modules are rev. marked as revision 1.70.07. Please see the 1.70.07.fixes file for a complete description of the problems fixed.

To load these replacement files into the the ICOBOL directory structure, do the following:

- 1)Make a complete backup of the ICOBOL directory structure
- 2)Change directories to /usr/opt/icobol_1.70 or \$IC_ROOT
- 3)Bring the servers down with the script ic_down
- 4)Become superuser
- 5)tar -xvf 1.70.07.tar
- 6)Restart the servers with the script ic_up

Please note that any mixing of the 1.70.07 executables with those preceding 1.70.06 will result in the following error:

MGS: shared memory revision is not the same

ICOBOL For AViiON (Unlimited Users)

Mxdb for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Mxdb for AViiON Systems is a debugger developed by Data General to integrate debugging services for a wide variety of compiler and interpreter technologies. It provides source- and machine-level debugging for programmers using LPI Languages, Interactive-COBOL, Green Hills Languages, and GNU C. You may also use Mxdb to debug objects produced by other COFF-generating compilers.</p> <p>Mxdb interprets language expressions for ANSI-C, COBOL85, FORTRAN, PL/I and INTERACTIVE-COBOL (ICOBOL). When using Mxdb to debug other languages (such as Pascal), you must use one of the Mxdb expression interpreters. See the Users Manual, "Using the Multi-extensible Debugger (Mxdb)", for details.</p>	<p>Product: Mxdb for AViiON Systems</p> <p>Model #: R007A</p> <p>Current Rev. 2.10 SSS Shipped: 05/92</p> <p>Previous Rev: 2.00 Support Effective Until: 12/01/92</p> <p>Release Notice: 085-600328-00</p>

DOCUMENTATION

Title	Part Number
Using the Command Processor	093-000706-02
Using the Multi-extensible Debugger (Mxdb)	093-000710-03

Mxdb for AViiON SYSTEMS

Mxdb for AViiON SYSTEMS



Mxdb for AViiON SYSTEMS



Mxdb for AViiON SYSTEMS**STR ANSWER REPORT**

for Multi-extensible Debugger for Aviiion Sys

- STR: NASC000012911
REV: 2.10 ORIG-ID: U013483
PROBLEM SUMMARY:
Error - "ctl error: assertion 'dim > = 0' failed at line 331 of file coff_to_legend.C ctl failed", is returned by the GreenHills F77 compiler rev 1.8.6 when using the -g compiler switch.

ANSWER SUMMARY:

The problem is fixed in the next update after revision 2.10. In the meantime, a new ctl has been supplied that corrects this problem for revision 2.10, which is on the enclosed cartridge tape.

- STR: NASC000012932
REV: 2.10 ORIG-ID: E409684
PROBLEM SUMMARY:
Overall performance of mxdb rev 2.10 is poor as compared to earlier releases.

ANSWER SUMMARY:

We are aware of some performance issues in Mxdb 2.10. These are currently being analyzed and isolated, and will be corrected in the next revision of mxdb.

- STR: NASC000013089
REV: 2.10 ORIG-ID: 19357796
PROBLEM SUMMARY:
Mxdb can't find a particular .lg file.

ANSWER SUMMARY:

We are unable to reproduce this problem with the information supplied. We suspect, however, that your problem is caused by the fact that the directory-list is changed when you enter a "debug" command. We suggest checking your dir-list before beginning your debugging session to ensure that the directory containing the .lg file is included.

Mxdb for AViION SYSTEMS

Mxdb for AVIION SYSTEMS**STR ANSWER REPORT**

for Multi-extensible Debugger for Aviion Sys

-
- STR: INTL000000502
REV: 2.00 ORIG-ID: 66VIE920614
PROBLEM SUMMARY:
The ghf77 compiler version 1.8.6 produces the wrong debugger information for the array index.
ANSWER SUMMARY:
This is caused by a limitation in both COFF and ELF code. This will be corrected with the availability of DWARF code.
-
- STR: NASC000012935
REV: 2.10 ORIG-ID: U018601
PROBLEM SUMMARY:
Intermittently, during a "next" or a "continue", Mxdb will stop at a breakpoint in a system routine or an Xm library routine which was not set by the user.
ANSWER SUMMARY:
The problem is fixed in the next revision or update of Mxdb following revision 2.10 of Mxdb.
-
- STR: NASC000013169
REV: 2.10 ORIG-ID: E410423
PROBLEM SUMMARY:
The 2.01 and 2.10 revs of Mxdb do not use FORTRAN syntax to evaluate integer arrays.
ANSWER SUMMARY:
This is a limitation caused by the information available in both COFF and ELF. This problem will be corrected in DWARF executables, which will be supported in a future revision of Mxdb.
-
- STR: NASC000013251
REV: 2.10 ORIG-ID: 19357796
PROBLEM SUMMARY:
Can not get the output of the selection command.
ANSWER SUMMARY:
This problem is fixed in Mxdb revision 2.11.
-

Mxdb for AViiON SYSTEMS



Mxdb for AViION SYSTEMS

STR ANSWER REPORT
for Multi-extensible Debugger for Aviion Sys

- STR: NASC000013851
REV: 2.10 ORIG-ID: U077420

PROBLEM SUMMARY:
Intermittently getting error message when invoking
MXDB in graphics mode: "MXDB WS: Internal Error:
Assertion, "message_expected_but_non_available"
Failed at line 375 of file "ws_mxdb.C"."

ANSWER SUMMARY:
This problem is fixed in revision 2.11 of Mxdb.

Mxdb for AViON SYSTEMS



Mxdb for AViiON SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION**

MXDB (AX) REV 2.00

Corrupted message queues when using the GUI

Mxdb revision 2.00 has a bug in which a message queue that does not belong to the process can be deleted when using the GUI. The symptoms of this bug include receiving an error when Mxdb is exited THE FIRST TIME ONLY (from that point on, the queue is gone and the error no longer occurs), and then some other process will likely be "hung" awaiting a message on a queue that no longer exists. This problem has been reported at both and ICOBOL site and at a site running NetWare, but it could occur anywhere.

A patched version of the Mxdb 2.00 executable is available which corrects the problem. The executable has been named mxdb.2.00.01. The problem is corrected in source in revision 2.10.

Mxdb for AViON SYSTEMS

Mxdb for AViiON SYSTEMS

PROGRAMMING NOTES/DOCUMENTATION

MXDB (AX) REV 2.10

ctl assertion error at compile time

Under certain circumstances, Mxdb revision 2.10 can cause a compile- time error:

ctl error: assertion failed at line nnn of file coff_to_legend.C. ctl failed.

This problem will be corrected in the next update to Mxdb 2.10. In the meantime, a new ctl is available which corrects this problem for revision 2.10. ctl revision 2.00.16 is available from the local DG office.

Mxdb for AViiON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Netware for AViiON systems is Novell's Portable Netware Product ported to DG/UX-based AViiON Servers. Netware for AViiON systems lets AViiON systems act as a file and print server, UNIX application server, and/or multifunction communication/databse server for PC-Client workstations. With Netware, AViiON servers can interoperate with installed Novell systems, the largest installed base of PC Lan Servers in the world. In addition Netware allows AViiON servers to grant transparent resource access to Netware-supported PC Clients, to integrate with native Netware servers, and to provide connectivity and an application program interface to support generalized client-server applications.</p> <p>Netware services for AViiON systems is licensed by user count and has as its prerequisite and AViiON server with the Netware Transport license. It includes file sharing and print sharing services.</p>	<p>Product: NETWARE SERVICES for AViiON SYSTEMS</p> <p>Model #: C020A</p> <p>Current Rev. 1.40 SSS Shipped: 06/92</p> <p>Previous Rev: 1.31 Support Effective Until: 01/01/93</p> <p>Release Notice: 085-001237-02</p>

NETWARE SERVICES for AViiON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS

STR ANSWER REPORT

for NetWare Services for AViiON Systems

- STR: NASC000010599
REV: 1.20 ORIG-ID: Q339578
- PROBLEM SUMMARY:**
Access right problems with Portable Netware 1.20.

ANSWER SUMMARY:
This problem has been fixed in NFAS 1.30.0.01 which is included.

- STR: UKSC000052044
REV: 1.20 ORIG-ID:
- PROBLEM SUMMARY:**
Netware 1.20: "netware 1.20" daemon erratically "vanishes" crashing Netware. No core dump etc found, nothing in logs. Customer using "cron" to daily stop and restart NETWARE (backup SYS vol). Stopped occurring when "cron" not used.

ANSWER SUMMARY:
The majority of the problems we have found are due to the system being highly underconfigured for the number of users running on it. There appear to be over 50 users running on a low end system, leaving no adequate CPU time for the NetWare processes to do their job correctly

- CLIENT STR: NASC000011275
REV: 1.30 ORIG-ID: AA1209
- PROBLEM SUMMARY:**
We are unable to see the AViiON file server we they start Netware services.

ANSWER SUMMARY:
According to Novell, the driver you are using is no longer supported. NetWare 386 (and NetWare for AViiON) ship with their own set of client software, and Novell recommends that you use that. This newer software is backward- compatible with all NetWare servers. Due to changes in the Token Ring drivers, you should be using rev. 2.50 or later with NetWare for AViiON.

- ENGINE STR: NASC000010225
REV: 1.20 ORIG-ID: Q317661

PROBLEM SUMMARY:
Foxpro II will error with "file not found" when creating 22 DB files on a portable netware server. The same Foxpro program can be run on a Native server and will work fine (Native 3.11).

ANSWER SUMMARY:

According to Fox Software, the 25 file limit may be reached before 25 files have been opened because the help file counts as one but does not show as being open. The MEGA program opens the help file, a setup file, and 24 .DBF files and then it fails on the 25th .DBF file. The problem is a FoxPro limitation.

- UTILS STR: INTL000000298
REV: 1.20 ORIG-ID: SW00733

PROBLEM SUMMARY:
With password aging set to 40 days, Netware forces users to change their passwords at least three times within this period.

ANSWER SUMMARY:
Problem has been fixed in revision 1.30.

NETWARE SERVICES for AViON SYSTEMS



NETWARE SERVICES for AViiON SYSTEMS

STR ANSWER REPORT
for NetWare Services for AViiON Systems

- ENGINE STR: JAPN000000634
REV: 1.30 ORIG-ID: NDG 2497

PROBLEM SUMMARY:

The process 'NWEngine' on NetWare is down with core when showing directories by MS-DOS 'DIR' after creating many directories on DG/UX

ANSWER SUMMARY:

The problem was with an array not be allocated the proper multiple index after many files were created therefore corrupting shared memory. This problem is fixed in 1.31.

NETWARE SERVICES for AVIION SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS

STR ANSWER REPORT
for NetWare Services for AViiON Systems

- ENGINE STR: NASC000011934
REV: 1.30 ORIG-ID: X000020

PROBLEM SUMMARY:
Any file created on or copied to an Aviiion file server has the creation date incremented by one day.

ANSWER SUMMARY:
This problem occurs during the month of February in a leap year. It is due to an architecture problem with the way the 3.01B based NetWare for Unix code handles copies. It will be fixed in the 3.11 based NetWare for Unix which will be out by the end of the year.

NETWARE SERVICES for AViION SYSTEMS



NETWARE SERVICES for AViiON SYSTEMS**STR ANSWER REPORT**
for NetWare Services for AViiON Systems

- REV: 1.20 STR: NASC000012172
ORIG-ID: Q431690

PROBLEM SUMMARY:

Portable Netware will not perform routing unless transport AND services are both running. It is our understanding that just the transport software is needed to perform routing.

ANSWER SUMMARY:

This problem could not be reproduced. In order to do routing, you must define more than one network assignment. The NPSCconfig file you sent us indicates that only one network assignment was defined. If you define more than one, you should be able to route IPX packets without Services being up.

NETWARE SERVICES for AViON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS**STR ANSWER REPORT**

for NetWare Services for AViiON Systems

- ENGINE STR: NASC000012502
REV: 1.30 ORIG-ID: Q459859

PROBLEM SUMMARY:

We are unable to store/use files that we store in the Portable Netware login directory.

ANSWER SUMMARY:

It was necessary for us to change the functionality as you see it due to a Portable NetWare security problem that was in the source code from Novell. We only explicitly allow users access to the SLIST and LOGIN programs, as well as access to the OS2 directory. The security problem has been fixed, and the functionality you desire will be in NetWare for AViiON rev. 3.11.

- ENGINE STR: UKSC000057667
REV: 1.31 ORIG-ID:

PROBLEM SUMMARY:

Netware 1.31.02: (DG/UX 5.41): Netware API Agent looping and reporting error: "NWError: (0xFF, NWApi-Main()) Receiving IPC/RPC message" Restarted Netware and it stopped happening.

ANSWER SUMMARY:

This is a known problem with mxdb. The Api agent loops when you type 'bye' to exit out of mxdb while netware is up. The workaround is to type quit instead. This is an mxdb problem and will be fixed in a future rev of mxdb.

NETWARE SERVICES for AViON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS**STR ANSWER REPORT**

for NetWare Services for AViiON Systems

- STR: NASC000013569
REV: 1.30 ORIG-ID: U51447

PROBLEM SUMMARY:

Running Netware and TCP/IP on a token ring bd (VITR0) users cannot connect to either product after both products have been running for a period of time. Telnet times out and Netware cannot connect to requested address.

ANSWER SUMMARY:

This is a problem with the llc queue filling up and not emptying itself. It is fixed with patch 59 to DG/UX 5.4.1.

- STR: NASC000013854
REV: 1.40 ORIG-ID: U71344

PROBLEM SUMMARY:

Cannot access an AViiON Token Ring Server through a Native Novell Router.

ANSWER SUMMARY:

The problem was that the AViiON was not listening on the NetWare multicast address over token ring, so other servers on the network were not continually seen. Patches for NetWare 1.40 (#6 and #9) are available to correct this situation.

- CLIENT STR: NASC000011275
REV: 1.30 ORIG-ID: AA1209

PROBLEM SUMMARY:

Unable to see the AViiON file server when starting NetWare Services.

ANSWER SUMMARY:

We recently revisited this issue, and because of this, have re-opened this STR so we could supply you with an answer we think will be more satisfactory to you. Patch #6 for revision 1.40 of NetWare for AViiON Systems is available to correct the situation that you described.

NETWARE SERVICES for AViON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****NETWARE FOR AViiON****PATCH LEVEL 8 TO NETWARE FOR AViiON SYSTEMS 1.30 NOW AVAILABLE**

NetWare for AViiON Systems has released its first patch level to revision 1.30. This patch level contains 8 fixes and is for revision 1.30 only. The descriptions are listed below. The fixes are for a mixture of both Transport and Services problems. If you feel you need one of these fixes, please contact your Customer Support Center.

Patch Level 1.30.0.8:

Patch 1: NetWare Engines were not de-allocating and reusing memory correctly causing "Process Memory Exhausted" errors.

Patch 2: NetWare for AViiON Systems now properly handles the deletion of directories that contain a "." as part of their name.

Patch 3: NetWare will no longer give the error "NWInform: Received Unknown NCP. Func. 0x3B (000000)" when using the NETX, EMSNETX and XMSNETX redirectors.

Patch 4: NetWare will no longer consume shared memory causing a shutdown of services.

Patch 5: NetBIOS counts have been greatly increased over previous releases.

Patch 6: Multiple problems with the NetWare Portable C Interface (API Library) have been corrected.

Patch 7: Print job configuration information managed from PCONSOLE no longer gets lost.

Patch 8: Signal handlers within application programs built with the NetWare Portable C Interface no longer become corrupt.

NETWARE SERVICES for AViiON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS

PROGRAMMING NOTES/DOCUMENTATION

NETWARE FOR AViiON

NETWARE FOR AViiON AND THE HYBRID USER FACILITY

NetWare for AViiON Systems supports the ability to associate NetWare user accounts with DG/UX user accounts for security purposes. These users are called Hybrid Users. We have had many questions recently about how this works and what exactly happens. Hopefully this article will clear some points up.

NetWare for AViiON's Hybrid User facility allows the mapping of NetWare and DG/UX users. Doing this allows NetWare users from PCs and Macs to share files with Unix users from the DG/UX environment. The easiest way to understand this is to understand the implications of certain settings in the file `/etc/netware/NWConfig`, normally controlled by the `SCONSOLE` program. The default `NWConfig` file has the following four parameters set:

<code>hu_group_owner = 690</code>	default is 690, DG/UX user name "netware"
<code>hu_user_owner = 690</code>	default is 690, DG/UX group name "netware"
<code>file_mask = 0600</code>	default is 0600, owner has read/write access
<code>dir_mask = 0700</code>	default is 0700, owner has read/write/execute acces

The `hu_group_owner` and `hu_user_owner` are the default DG/UX security settings for all NetWare users that are not explicitly assigned as hybrid users. In fact, you can think of all NetWare users as being hybrid users, its just that unless you specify otherwise, NetWare user accounts are mapped to the Unix owner and group of "netware". When the package `nw_serv` (NetWare Services) is set up, we will create the DG/UX user account and group of "netware" giving a user and group ID of 690 to match the `NWConfig` file. This can be changed if desired, but it is not recommended.

The `file_mask` and `dir_mask` parameters are DG/UX permission masks for ALL files created by ANY NetWare client. If a NetWare client is a hybrid user, the DG/UX permissions are checked when manipulating DG/UX files. If the hybrid DG/UX account doesn't allow the operation, NetWare will do a secondary check with the default account (usually "netware") and may allow access.

By default, non-hybrid users who log into a NetWare for AViiON server have read and/or write access to all DG/UX files that allow access to user or group "netware". For a NetWare client to access them, they must be accessible through a defined NetWare volume. When files are created, they will be created with user and group of "netware", and the DG/UX access rights will, by default, be 0600 (owner read/write) as per the parameter `file_mask` in the `NWConfig` file. This normally allows all NetWare clients to access files in the NetWare filing system, but NetWare trustee and other security rights will also be adhered to.

To define a hybrid user, NetWare and DG/UX user accounts must already exist. There are two ways to bind a NetWare user to a DG/UX user. You can use `SCONSOLE` or the hybrid utility, both found in `/usr/bin/netware`. See chapter 2 of THE NetWare for AViiON Systems Administration manual for details. When this is done, a NetWare Bindery object is created to bind the NetWare user to the DG/UX user.

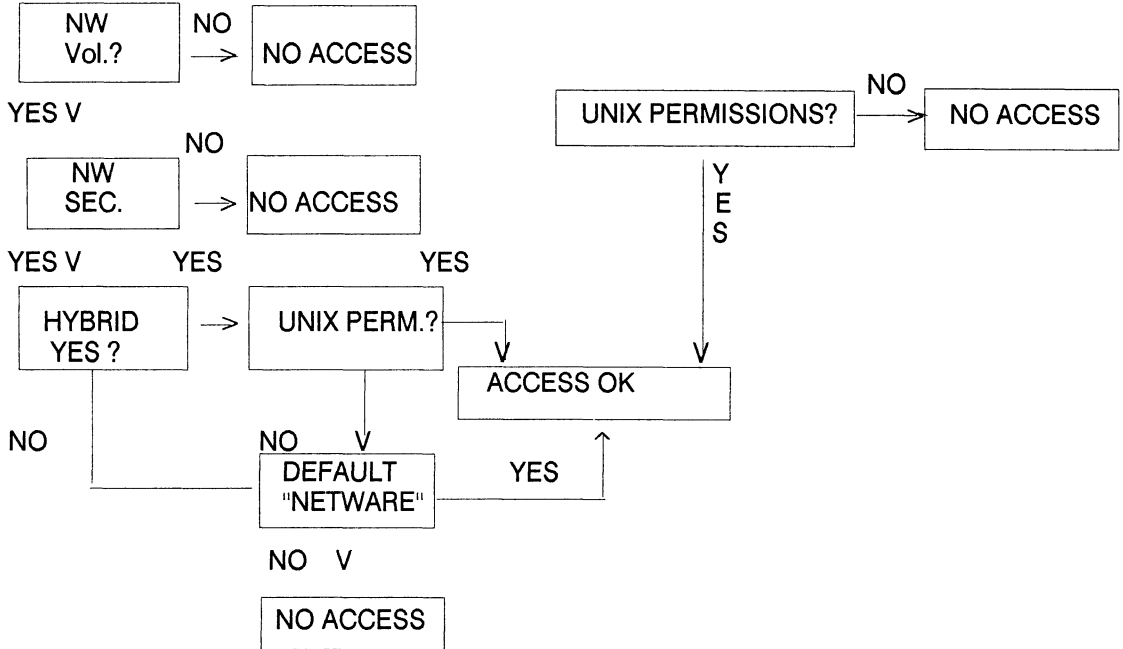
When a NetWare client who is also a hybrid user logs into te system, he has access to all files his bound Unix user would have access to, PLUS all files whose DG/UX owner and group are "netware". Again, these files can only be accessed within defined NetWare volumes, and NetWare security rights take precedent. Any file that is created by a hybrid user will get DG/UX owner and group of the Unix user bound to the NetWare user, NOT owner and group of "netware". This allows files to be shared among NetWare users and DG/UX users.

NETWARE SERVICES for AViiON SYSTEMS

A flow chart of how this works may be helpful:

NETWARE USER:

UNIX USER:



File access is one thing, but file sharing is another. To allow both NetWare users and Unix users to share files, a locking mechanism should be used. By default, NetWare does its own file and record locking. This means that Unix users still have access to files that are locked by PC applications. You can set up NetWare for AViiON to use "native locks", meaning that when NetWare-ready applications lock files, these files will also be locked in DG/UX to prevent DG/UX applications from accessing the file. These locks are DG/UX advisory locks by default, and its up to the Unix application to respect the file lock, and take the proper action. DG/UX mandatory locks can be used, but you must alter the file_mask variable in the NWConfig file. See the man page for "chmod" for more information on this.

NETWARE SERVICES for AViiON SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****NETWARE FOR AViiON****PROGRAMMING INTERFACES AVAILABLE WITH NETWARE FOR AViiON SYSTEMS**

For developers wishing to use NetWare for AViiON Systems as a development platform for communications, there are several programming interfaces and options available:

- * Novell IPX via Unix Transport Layer Interface (TLI)
- * Novell SPX via Unix TLI
- * Novell NetBIOS via TLI
- * Novell NetBIOS via the NetBIOS (NCB) library
- * NetWare file server APIs (Portable C Interface into NCP)

All header and library files necessary to program to these interfaces are included with the NetWare Transport for AViiON Systems product. The following documentation is also included:

069-000482-01 Programming with Transport Layer Interfaces (TLI) for AViiON Systems
069-000566-00 NetWare for AViiON Systems: C Interface Programmer's Guide
069-000567-00 NetWare for AViiON Systems: C Interface Reference Guide

The first manual documents how to use the IPX, SPX, and NetBIOS interfaces. The other 2 manuals document the C interface into a NetWare file server.

The IPX and SPX interfaces are intended for people who wish to program directly to Novell's communications protocols. IPX provides a datagram (connectionless) service for "reliable" networks. SPX provides a connection-oriented service. Both are compatible with Novell's IPX and SPX on other hardware platforms. Since these interfaces are Unix based, programmers will need to modify any existing source code to use AT&T's Transport Layer Interface (TLI) to access them. Our manual documents how to access IPX and SPX through TLI, but does not document the TLI interface itself. See the DG/UX documentation set for manuals on how to program to the kernel and TLI. Typical IPX/SPX applications that have been written by customers include communications gateways and database servers.

The NetBIOS interfaces are provided for those wishing to use the NetBIOS interface, common on PC networks. The NCB library interface is similar, but not identical to other NetBIOS NCB Libraries such as DG/PC*I and PC based NetBIOS (5C) interfaces. Novell's NetBIOS runs over IPX, so it can only communicate with other nodes doing the same. Typical NetBIOS applications written by customers are various client-server applications.

The Portable C Interface is a set of header and library files that allow Unix based applications to perform NetWare file server functions. For example, a Unix application can "log in" to a NetWare server, get directory listings from the NetWare filing system, put NetWare locks on files, etc. This interface is intended to provide a bridge between Unix users and PC users. The MHS for AViiON Systems product is a good example of a NetWare API application. It requires the APIs to access the NetWare filing system as a NetWare user to perform many of its functions, and to communicate with other NetWare servers.

Another option is using the NetWise RPC Tool. This is a separate product available with several network library options. It can be used with NetWare using the NetBIOS or TLI/SPX libraries. The RPC tool can be used to create client-server application where remote procedure call architecture is required.

NETWARE SERVICES for AViiON SYSTEMS

NETWARE SERVICES for AViiON SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****NETWARE (AX)**

POSTSCRIPT PRINTING THROUGH NETWARE

The original hardcopy of NetWare Services for AViiON Systems Release Notice Revision 1.40 part number 085-001237-02 contains a note about setting up the NetWare print script file for post script printing. This note is incorrect. The note reads:

3. If you add a printer through SCONSOLE that is a postscript printer, you should replace the script in `/etc/netware/print_scripts` where the filename is the name of the printer. The script should contain:

"#" on the first line and

`"/usr/bin/lp -c -d$0 $2"` on the second line.

The release notice has since been changed and the note now reads:

3. If you add a printer through SCONSOLE that is a postscript printer, you should replace the script in `/etc/netware/print_scripts` where the filename is the name of the printer. The script should contain:

"#" on the first line and

`"/usr/bin/lp -c -dXXXX $2` on the second line, where XXXX is the name of the UNIX printer.

NETWARE SERVICES for AViiON SYSTEMS

ONC/NFS SYSTEM for AViiON

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>ONC/NFS for AViiON Systems release 4.30 is a port of SunOS version 4.0 ONC/NFS source code to Data General's AViiON family of computers.</p>	<p>Product: ONC/NFS SYSTEM for AViiON</p> <p>Model #: C002A</p> <p>Current Rev. 4.30 SSS Shipped: 07/90 Update 01 SSS Shipped: 10/90</p> <p>Previous Rev: 4.20 Support Effective Until: No longer supported</p> <p>Release Notice: 085-600133-02 Update Notice: 078-600038-00</p>

DOCUMENTATION

Title	Part Number
Installing and Managing the DG/UX System	093-701052-02

ONC/NFS SYSTEM for AViiON

ONC/NFS SYSTEM for AViiON

ONC/NFS SYSTEM for AVIION

STR ANSWER REPORT
for DG/UX NFS FOR AVIION

- STR: NASC000013058
REV: 5.40 ORIG-ID: BP-920602

PROBLEM SUMMARY:
Replacement /usr/sbin/rpc.lockd module that was provided to customer to fix a previously reported locking problem causes another problem.

ANSWER SUMMARY:
This problem is fixed by the patch nfs_5.4.1.p02 which you have already received.

ONC/NFS SYSTEM for AViION

ONC/NFS SYSTEM for AVIION

ONC/NFS SYSTEM for AVIIION**STR ANSWER REPORT**
for DG/UX NFS FOR AVIIION

- STR: NASC000013604
REV: 5.41 ORIG-ID: U48228

PROBLEM SUMMARY:

When executing the `chown()` system call on a mounted (from a Harris cpu) file system the group id is being changed to 65535.

ANSWER SUMMARY:

This problem was caused by DG/UX NFS sending out a 16 bit (short) -1 for a group ID instead of a 32 bit (long) -1. The patchfile that we sent to you, `nfs_5.4.1.p03`, has a corrected `rpc.a` library that uses the correct size for the contents of the group ID.

ONC/NFS SYSTEM for AVIIION

ONC/NFS SYSTEM for AVIIION

PROGRAMMING NOTES/DOCUMENTATION

NFS (AX) REV 4.31 [rpc.lockd]

Replacement rpc.lockd and dg_lock_mgr executables.

Patch 4.31.00.53 is available from your local DG Representative. This patch is applicable to all systems running DG/UX NFS 4.31. Note that NFS revision 4.31 ships with DG/UX revisions 4.32, 4.33 and 4.34.

This patch contains replacement executables for rpc.lockd and dg_lock_mgr. The new modules address a problem with rpc.lockd internal resources not being released properly after a test lock request, and after the rpc.lockd server processed enough of these requests to fill its internal buffers, it appears to hang. This version of lockd correctly releases the internal buffers.

ONC/NFS SYSTEM for AVIION

OPENMAC/SERVICES FOR AVIIION SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>OpenMAC/Services for AViiON Systems is licensed by user count regardless of AViiON server class. It includes OpenMAC/Services for AViiON Systems software for DG/UX, and a complete set of documentation.</p>	<p>Product: OPENMAC/SERVICES FOR AVIIION SYSTEMS</p> <p>Model #: C118A</p> <p>Current Rev. 1.10 SSS Shipped: 06/92</p> <p>Previous Rev. 1.00 Support Effective Until: 01/01/93</p> <p>Release Notice: 085-001203-01</p>

DOCUMENTATION

Title	Part Number
Installing and Configuring OpenMac/Services for AViiON Systems	093-000754-01

OPENMAC/SERVICES FOR AVIION SYSTEMS

OPENMAC/SERVICES FOR AVIION SYSTEMS

OPENMAC/TRANSPORT FOR AVIIION SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The OpenMAC/Transport for AViiON systems software is an AppleTalk protocol stack for the DG/UX operating system. It allows Apple Macintosh clients to communicate with an AViiON host using its native networking protocols.</p> <p>The OpenMAC/Transport for AViiON Systems is licensed to the AViiON server platform.</p> <p>The model numbers for the OpenMAC/Transport are:</p> <ul style="list-style-type: none"> ● C117AZM for 3200 Systems ● C117AZS for 4000 Series Systems ● C117AZU FOR 5000 and 6000 Series Systems, except 5240, 6240. ● C117AZV for 7000 and 8000 Series Systems, and 5240, 6240 Systems. 	<p>Product: OPENMAC/TRANSPORT for AVIIION SYSTEMS</p> <p>Model #: C117A</p> <p>Current Rev. 1.10 SSS Shipped: 06/92</p> <p>Previous Rev. 1.01</p> <p>Support Effective Until: 01/01/93</p> <p>Release Notice: 085-001202-01</p>

DOCUMENTATION

Title	Part Number
Installing and Configuring OpenMac/Transport for AViiON Systems	093-000753-01

OPENMAC/TRANSPORT FOR AVIION SYSTEMS

SDLC for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>SDLC for AViiON Systems provides primary and secondary SDLC support and a link-level trace. The physical links use the SDLC protocol with the required error-checking and retransmission facilities that guarantee delivery. SDLC provides synchronous level support for SNA. SNA can perform either the primary or secondary link-station role. The link-station role can be pre-configured or negotiated with the partner when the link is activated. Autodial functionality is provided for V.25 bis and SADL modems.</p>	<p>Product: SDLC for AViiON SYSTEMS</p> <p>Model #: C010B</p> <p>Current Rev. 3.00 SSS Shipped: 09/91</p> <p>Previous Rev: 2.11 Support Effective Until: 04/01/92</p> <p>Release Notice: 085-001227-00</p>

DOCUMENTATION

Title	Part Number
Using SNA for AViiON Systems	093-000676-01

SDLC for AVIION SYSTEMS

SDLC for AViiON SYSTEMS

STR ANSWER REPORT
for SDLC FOR AViiON SYSTEMS

- STR: UKSC000053646
REV: 2.00 ORIG-ID: UX PANIC 1000

PROBLEM SUMMARY:
AX-SNA: 2.00: Reproducible: "Unrecoverable Memory panic 10000037" (VSC board) May be associated with cable or line driver fault. Panic no longer happens. SNA reports sense code 0822 "Link procedure failed" then panic'd seconds after

ANSWER SUMMARY:
This problem has been fixed in revision 3.00 of SDLC for AViiON Systems.

SDLC for AVIION SYSTEMS



SNA 3270 FOR AViION SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>SNA 3270 is an emulator of an IBM 3278 display terminals and IBM 3286 and 3289 printers. It runs with three other DG/UX communication products. The first is SNA for AViION Systems, which in turn uses either SDLC for AViION Systems or SNA Token-Ring for AViION Systems. Together they emulate the functionality of an IBM remote PU 2.0 node, such as an IBM 3x74 cluster controller.</p>	<p>Product: SNA 3270 for AViION SYSTEMS</p> <p>Model #: C012B</p> <p>Current Rev. 3.00 SSS Shipped: 09/91</p> <p>Previous Rev: 2.01 Support Effective Until: 04/01/92</p> <p>Release Notice: 085-001226-00</p>

DOCUMENTATION

Title	Part Number
SNA 3270 for AViION System Users Manual	093-000677-01

SNA 3270 FOR AVIION SYSTEMS

SNA 3270 FOR AVIION SYSTEMS

SNA 3270 FOR AVIIION SYSTEMS**STR ANSWER REPORT**
for SNA 3270 FOR AVIIION SYSTEMS

- STR: NASC000011355
REV: 3.00 ORIG-ID: FOWLERSNA02
PROBLEM SUMMARY:
pe3270 appends a time stamp to output file even if output files is set to "single" in the printer configuration.
ANSWER SUMMARY:
This problem will be fixed in revision 3.10 of SNA 3270 for AViiON Systems.

- STR: NASC000012068
REV: 3.00 ORIG-ID: Q437528
PROBLEM SUMMARY:
3270 api programs fail with "API not sending" errors. This can be reproduced with the sample demoapi.c provided with 3.0 3270.
ANSWER SUMMARY:
This problem has been corrected in the new de3270 executable that has already been sent to you.

SNA 3270 FOR AVIION SYSTEMS



SNA 3270 FOR AViION SYSTEMS**STR ANSWER REPORT**
for SNA 3270 FOR AViION SYSTEMS

- STR: NASC000012169
REV: 2.00 ORIG-ID: Q445141

PROBLEM SUMMARY:

The user has a problem logging in to the host from SNA 3270 running an AV300 which accesses the host via an AV6200 gateway. When the user keys in de3270, the screen comes up and then the message "session is not bound" is displayed.

ANSWER SUMMARY:

The problem you encountered was caused by an invalid bind response from de3270. This problem has been fixed in SNA 3270 for AViION Systems patch level 2.00.0.1 which you have already received.

SNA 3270 FOR AVIION SYSTEMS



SNA 3270 FOR AViiON SYSTEMS**STR ANSWER REPORT**

for SNA 3270 FOR AViiON SYSTEMS

- STR: NASC000012340
REV: 3.00 ORIG-ID: Q433496

PROBLEM SUMMARY:

de3270 hangs occasionally for no apparent reason.

ANSWER SUMMARY:

The problem of de3270 hanging can be corrected by modifying your terminal characteristics before executing de3270. Using the following command line will prevent de3270 from hanging: stty -ignbrk -brkint -ignpar iexten.

- STR: NASC000012526
REV: 3.00 ORIG-ID: Q450503

PROBLEM SUMMARY:

Demo program that comes with de3270 (DEMOAPI.C) looks for a return value that is not documented.

ANSWER SUMMARY:

A return code of 5 from the a_wait verb indicates that the keyboard is locked. The SNA 3270 for AViiON Systems documentation will be corrected in release 3.10 to describe this return code.

- STR: NASC000012669
REV: 3.00 ORIG-ID: Q460438

PROBLEM SUMMARY:

After exiting 3270 you must start it twice in order to receive logon banner.

ANSWER SUMMARY:

This problem can corrected by installing the new s2_schd executable that was previously sent to you. In addition to installing the new executable, you must change the Terminate Session parameter in the Secondary LU definition to NO.

SNA 3270 FOR AVIION SYSTEMS

SNA 3270 FOR AViION SYSTEMS



SNA 3270 FOR AVIION SYSTEMS



SNA 3270 FOR AVIION SYSTEMS

STR ANSWER REPORT
for SNA 3270 FOR AVIION SYSTEMS

- STR: NASC000013707
REV: 3.00 ORIG-ID: U64131

PROBLEM SUMMARY:
Running rev 3.00 SNA_3270, the pe3270 will not print due to the host rejecting the SNA_3287 bind.

ANSWER SUMMARY:
This problem was corrected with the replacement pe3270 that we provided to you. This fix will be incorporated into revision 3.10 of SNA 3270 for AViION Systems.

SNA 3270 FOR AVIION SYSTEMS



SNA for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>SNA for AViiON Systems is the software product which when used in conjunction with SDLC for AViiON Systems and/or SNA Token Ring for AViiON System, provides the AViiON user with access to an IBM SNA network. SNA for AViiON Systems emulates a physical unit type 2.1 or 2.0 network for AViiON server Systems.</p> <p>Data General offers two terminal emulation products that interface to SNA for AViiON Systems. SNA 3270 for AViiON Systems emulates the functions of IBM 3270 SNA terminals. The SNA RJE for AViiON Systems product emulates the IBM 3770 (model 3) SNA workstations. Refer to SNA 3270 for AViiON Systems and SNA RJE for AViiON Systems product release notices and documentation for more information.</p> <p>SNA for AViiON Systems offers a high level interface for LU0, LU1, LU2 and LU3. Refer to "Using API LU0,1,2,3, for more information.</p>	<p>Product: SNA for AViiON Systems</p> <p>Model #: C011B</p> <p>Current Rev. 3.00 SSS Shipped: 09/91</p> <p>Previous Rev: 2.10 Support Effective Until: 04/01/92</p> <p>Release Notice: 085-001228-01</p>

DOCUMENTATION

Title	Part Number
Installing, Configuring and Operating SNA for AViiON Systems	093-000676-01

SNA for AVIION SYSTEMS

SNA for AViiON SYSTEMS**STR ANSWER REPORT**
for SNA FOR AViiON SYSTEMS

- STR: NASC000010648
REV: 2.00 ORIG-ID: E061104

PROBLEM SUMMARY:

Problem with XID format 3 and format 1 support.

ANSWER SUMMARY:

The problem you encountered was not caused by the XID format 3. It was the Sprint TP3 that you were using that was preventing the ACTPU from working correctly. When the TP3 was replaced with a TP4, the ACTPU was successful; however, at this point there was a problem with role negotiation. This problem has been fixed in release 3.00 of SNA for AViiON systems.

- STR: NASC000011030
REV: 2.00 ORIG-ID: Q371001

PROBLEM SUMMARY:

The s2_sna process intermittently reports "major code 1, minor code 830" and goes down, creating a core file.

ANSWER SUMMARY:

This problem has been fixed in release 3.00 of SNA for AViiON Systems which you have already received and tested.

- STR: NASC000010584
REV: 2.10 ORIG-ID: E61070

PROBLEM SUMMARY:

AV6220 panics with "2000075" when 2nd SNA server is started.

ANSWER SUMMARY:

This problem has been fixed in release 3.00 of SDLC for AViiON Systems.

- STR: INTL000000226
REV: 4.32 ORIG-ID: 367

PROBLEM SUMMARY:

System panic 1000037 "Unrecoverable memory error at physical locations 55B0FDDC."

ANSWER SUMMARY:

The cause of this panic can not be determined with the information provided. If this problem persists, please provide an SDLC trace along with the system dump.

SNA for AVIION SYSTEMS

SNA for AViiON SYSTEMS**STR ANSWER REPORT**
for SNA FOR AViiON SYSTEMS

- STR: NASC000011433
REV: 4.32 ORIG-ID: GMAC-TM-91122

PROBLEM SUMMARY:

Panic 1000037 with Address "55B00088" when bringing down SNA. This panic can be eliminated by modifying the hardware configuration, but is believed to be due to improper line signal handling by DG/UX.

ANSWER SUMMARY:

Although this problem has already been corrected by modifying the hardware configuration, the possibility of the panic reoccurring should be eliminated by upgrading to release 3.00 of SDLC for AViiON Systems. The board level code in release 3.00 SDLC has been improved so that it properly handles problems on the line.

SNA for AViON SYSTEMS

SNA for AViION SYSTEMS

SNA for AViION SYSTEMS**STR ANSWER REPORT**
for SNA FOR AViION SYSTEMS

- REV: 3.00 STR: NASC000012026
ORIG-ID: Q431884

PROBLEM SUMMARY:

We are getting panic 3000032's when we have a SNA cable connected to the AViion that uses internal clocking, even when SNA is shutdown.

ANSWER SUMMARY:

This problem is caused by a combination of the strength of the clocking signal from the VSC and the length of the sync cable. There are three possible ways to prevent this panic. The first is to use internal clocking on the PC instead of the AViION. The second is to use a cable with a length of approximately 6 feet or less. The third alternative is to use modem eliminators for clocking.

SNA for AVIION SYSTEMS

SNA for AViiON SYSTEMS

STR ANSWER REPORT
for SNA FOR AViiON SYSTEMS

- STR: SWE 000000530
REV: 3.00 ORIG-ID: SNA PRINTING

PROBLEM SUMMARY:
Customer have one LU defined as a printer LU. Print jobs sent from SNA host (Tandem) end up as a file on AviiON but will never be printed. lp command on th file works ok. Configurations sent to Bill Carnes 05/25/92.

ANSWER SUMMARY:
This problem will be fixed in revision 3.10 of SNA 3270 for AViiON Systems. pe3270 was not printing the file because no End Bracket was being sent by the host application and pe3270 was designed to check for an End Bracket before printing. In revision 3.10, if no End Bracket is received, then pe3270 will print the file when an Unbind is received.

SNA for AVIION SYSTEMS



SNA TOKEN RING FOR AVIIION SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>SNA Token Ring for AViiON Systems provides a Link-Level interface for the SNA for AViiON Systems communications product that is 100% compatible with the IBM token ring network transport. This product is also compatible with IEEE 802.5 and 802.2 standards to allow the sharing of a token ring LAN with non-SNA network traffic.</p> <p>The product utilizes the token ring driver and LLC (Logical Link Control) driver provided with DG/UX, Revision 5.4.</p> <p>The features provided are:</p> <ul style="list-style-type: none"> ● Support of both 16 Mbit/sec and 4Mbit/sec LANs ● Support of shielded and unshielded media ● Support of IBM defined routing with up to 7 bridges 	<p>Product: SNA TOKEN RING FOR AViiON</p> <p>Model #: C121A</p> <p>Current Rev. 1.00 SSS Shipped: 10/91</p> <p>Release Notice: 085-001220-00</p>

DOCUMENTATION

Title	Part Number
Installing, Configuring and Operating SNA for AViiON Systems	093-000676-01

SNA TOKEN RING FOR AVIION SYSTEMS

SNA TOKEN RING FOR AVIION SYSTEMS

SoftPC

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>SoftPC is software that emulates a PC/AT on any Data General AViiON series system with an X Window System™ display station. It can also run on VT100- and VT220-compatible serial terminals connected to an AViiON. SoftPC runs under the DG/UX™ operating system and provides all the features of a well-equipped PC/AT. It allows you to run MS-DOS® and MS-DOS-based applications on your AViiON system.</p> <p>The PC/AT hardware emulated by SoftPC includes an Intel 80286 CPU and an Intel 80287 math co-processor; the CGA, EGA and VGA display adapters; two hard disks of up to 32 Mb each; a PC/AT - style keyboard; and the Microsoft® Bus mouse. SoftPC also supports Network Drives, providing both additional disk space and convenient file sharing, and the Lotus, Intel, Microsoft Expanded Memory System, Revision 4.0 (LIM).</p> <p>SoftPC allows you to access DG/UX files, devices or commands from inside MS-DOS and to freeze SoftPC windows to eliminate resource usage while other applications are running. You can also copy and paste between SoftPC windows and other windows.</p>	<p>Product: SoftPC</p> <p>Model #: A001B</p> <p>Current Rev. 2.0.1 SSS Shipped: 04/92</p> <p>Previous Rev: 2.00 Suport Effective Until: 11/01/92</p> <p>Release Notice: 085-600327-00</p>

DOCUMENTATION

Title	Part Number
Installing and Using the SoftPC	069-100439-00

SoftPC

SoftPC**PROGRAMMING NOTES/DOCUMENTATION**

SOFTPC (AX) REV. 2.00**NEW VT100 KEYMAP FILE; TERMINAL CONFIG INFORMATION**

Please note the following:

1. The vt100 keymap file in /usr/opt/SoftPC/term is incorrect. The current vt100 keymap file does not echo a capital Q when you are using SoftPC on a serial terminal. The correct vt100 keymap file is now available. Please contact your Data General representative.
2. On some serial terminals in vt100 emulation mode, you may need to leave "data bits" in the terminal configuration menu set to 8 until you log in and type stty cs7.

If you change "data bits" to 7 in the configuration menu before typing stty cs7, you will not be able to type at the command line.
3. The MAPS article for SoftPC 2.0 is incorrect. Lotus 1-2-3 version 3.0 does NOT work with SoftPC. Lotus 1-2-3 version 3.0 uses protected mode, and SoftPC 2.0 does not support protected mode.
4. SoftPC 2.0 uses 100% of CPU time while idling at the DOS prompt. You should use the SoftPC Autofreeze option to avoid the use of CPU time.
5. A list of supported serial terminals and their configurations that are known to work with SoftPC 2.0 is available from your Data General representative.

SoftPC

TCP/IP for AViiON

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT												
<p>TCP and IP are communications protocols used on a large number of networks. This package consists of the additional software necessary to allow Data General's DG/UX™ operating system to communicate over those networks. Currently supported are connection to Ethernet® networks via the Interphase V/Ethernet 3207 Hawk (hken) and Integrated Ethernet (inen) Controller. Kernel support for these devices is part of the DG/UX package. Wide-area networking using the DG/UX X.25 release 2.0 package with IXE is also supported with TCP/IP 4.30 using the Systech VSC/3 or VSC/4 controllers.</p> <p>The DG TCP/IP (DG/UX) package includes kernel support for these devices and the TCP, UDP, IP, ICMP, ARP and RARP protocols. It also includes user commands and server daemon processes that support the FTP, TFTP, Telnet, and SMTP protocols and the Berkeley R commands from outside the kernel. TCP, IP, FTP, SMTP, and Telnet comply with the military specifications for those protocols.</p>	<p>Product: TCP/IP for AViiON</p> <p>Model #: C001A</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Current Rev. 4.30</td> <td style="width: 50%;">SSS Shipped: 07/90</td> </tr> <tr> <td>Update 01</td> <td>SSS Shipped: 10/90</td> </tr> <tr> <td>Previous Rev:</td> <td>4.20</td> </tr> <tr> <td>Support Effective Until:</td> <td>No longer supported</td> </tr> </table> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Release Notice:</td> <td style="width: 50%;">085-600132-02</td> </tr> <tr> <td>Update Notice:</td> <td>078-600039-00</td> </tr> </table>	Current Rev. 4.30	SSS Shipped: 07/90	Update 01	SSS Shipped: 10/90	Previous Rev:	4.20	Support Effective Until:	No longer supported	Release Notice:	085-600132-02	Update Notice:	078-600039-00
Current Rev. 4.30	SSS Shipped: 07/90												
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Previous Rev:	4.20												
Support Effective Until:	No longer supported												
Release Notice:	085-600132-02												
Update Notice:	078-600039-00												

DOCUMENTATION

Title	Part Number
DG TCP/IP (DG/UX™) User's Manual	093-701023-02
Programming with DG TCP/IP (DG/UX™)	093-701024-01

TCP/IP for AViON

TCP/IP for AViiON

STR ANSWER REPORT
for DG/UX TCP/IP FOR AViiON

- REV: 4.30 STR: UKSC000051830
ORIG-ID:

PROBLEM SUMMARY:
Performance of TCP/IP from a SEEL X.25-to-TCP/IP bridge using "PINNACLE" s/w seems erratic. Screen is painted in 2 halves with a considerable pause. SNIFFER shows the screen arrives TWICE and various msgs between AV and SEEL fly around!

ANSWER SUMMARY:
The sniffer trace submitted with the STR indicates that the SEEL box is not acknowledging the AViiON's TCP/telnet packets and they are being retransmitted.

- REV: 4.32 STR: INTL000000259
ORIG-ID: SW00517

PROBLEM SUMMARY:
Problem with multiple file opens under REMSH from AV to MV.

ANSWER SUMMARY:
This problem is fixed with DG/UX TCP/IP patch #52 for revisions 4.31, 4.32 4.33 and 4.34.

- REV: 4.32 STR: NASC000010940
ORIG-ID: Q366517

PROBLEM SUMMARY:
We have problems with the Synoptics term servers booting from the AViiON computers using TFTP.

ANSWER SUMMARY:
This problem is fixed in DG/UX TCP/IP 5.4.1.

- REV: 4.32 STR: NASC000011298
ORIG-ID: Q380171

PROBLEM SUMMARY:
Under 4.32 DG/UX and TCP/IP, if type is set to binary, filenames retrieved with "mget" from an MS-DOS machine will have a \015 appended to the end of the filenames.

ANSWER SUMMARY:
This problem is fixed in DG/UX TCP/IP 5.4.

- REV: 4.32 STR: UKSC000051871
ORIG-ID: DG/UX - SMTP

PROBLEM SUMMARY:
smtp dies and dumps core if it receives a message from a null address. This occurs when smtp on another system on the net is brought down.

ANSWER SUMMARY:
This will be fixed in a future revision of DG/UX TCP/IP. In the meantime, you can make the following modifications to the arpapproto.cf file.

- REV: 5.40 STR: NASC000010757
ORIG-ID: TELNET-10-15-

PROBLEM SUMMARY:
Telnet is incorrectly mapping a backspace character (\010 ^H) to a cursor-left (\031 ^Y), when sent from a program to a terminal display.

ANSWER SUMMARY:
The correct behavior is observed if the user executes the CHAR/CRT4 command in the CLI before telnetting to the AViiON and running the application.

- REV: 5.40 STR: NASC000011356
ORIG-ID: Q387361

PROBLEM SUMMARY:
When running inetd with the -d option to display various diagnostic messages, problems such as intermittent ftp hangs after successfully connecting, but before giving a username prompt, and access problems to files, resulted.

ANSWER SUMMARY:
This problem is fixed in DG/UX TCP/IP 5.4.1.

TCP/IP for AViON

TCP/IP for AVIIION

STR ANSWER REPORT for DG/UX TCP/IP FOR AVIIION

- STR: NASC000011114
REV: 4.32 ORIG-ID: E61319
- PROBLEM SUMMARY:**
DG/UX panics with 3000011 if rc.tcpiport is stopped/restarted several times in succession.

ANSWER SUMMARY:

As we agreed, since there have been no further occurrences of this problem, we are closing this STR. If you experience the problem in the future, please submit a new STR that includes the core dump and kernel image as well as a detailed description of the steps necessary to reproduce the problem.

- STR: NASC000011423
REV: 4.32 ORIG-ID: SI-9101
- PROBLEM SUMMARY:**
If the hostname is specified in uppercase during TCP/IP package setup, netinit fails to initialize the ethernet controller board.

ANSWER SUMMARY:

This problem is fixed in DG/UX TCP/IP revision 5.4.

- STR: NASC000011688
REV: 4.32 ORIG-ID: E061930
- PROBLEM SUMMARY:**
FTP changes permissions on files either retrieved or stored.

ANSWER SUMMARY:

The problem you described is the result of a restriction. FTP has to be very general in order to maintain interoperability between hosts that have different conventions. In some UNIX-to-UNIX situations rcp can be used but the bottom line for FTP is that it is necessary to use chmod, chown, or chgrp.

- STR: NASC000011003
REV: 5.40 ORIG-ID: 200153
- PROBLEM SUMMARY:**
When doing a 'cat' on a file and a ^C is hit, several pages (4-5) will scroll by before the output stops.

ANSWER SUMMARY:

This is due to the way telnet and telnetd handle character interrupt processing of the CTRL-C. There could be a substantial amount of data in the telnet and telnetd buffers (including TCP and IP) that must be

flushed to the screen before the CTRL-C actually interrupts the data output. This is a restriction.

- STR: NASC000011279
REV: 5.40 ORIG-ID: Q392962
- PROBLEM SUMMARY:**
Problem with 5.4 remsh reporting checksum errors.

ANSWER SUMMARY:

This problem is really a problem with tar(1). This problem is source fixed in DG/UX 5.4.1. However, in the meantime, instead of using the command "remsh remote-host dd if=/dev/rmt/0 | tar xvpf -" use "remsh remote-host dd if=/dev/rmt/0 | dd | tar xvpf -". This will prevent the tar command from terminating unexpectedly.

TCP/IP for AViiON



TCP/IP for AViiON**STR ANSWER REPORT**
for DG/UX TCP/IP FOR AVIIION

- STR: NASC000011226
REV: 5.40 ORIG-ID: Q388107
PROBLEM SUMMARY:
The user does stty erase ctrl/h and telnets to prime node and the erase does not work. The erase to SCO unix pc works ok.
ANSWER SUMMARY:
The problem has been fixed for revision 5.4.1 TEL-NET, which you have received.

- STR: NASC000011860
REV: 5.40 ORIG-ID: D-STAR-920206
PROBLEM SUMMARY:
Using telnet from a DOS PC, the following message appears when logging into the AViiON: "Unable to initialize with term value of dec-vt100".
ANSWER SUMMARY:
The PC is most likely sending the terminal type dec-vt100 to the AViiON's telnetd. If the PC is unable to send the string vt100 instead of the dec-vt100, there are 2 possible options: you could modify the /etc/profile script or you could use tic and infocmp to create a dec-vt100 terminfo entry.

TCP/IP for AViiON



TCP/IP for AViiON

STR ANSWER REPORT for DG/UX TCP/IP FOR AVIIION

- STR: NASC000010427
REV: 4.32 ORIG-ID: Q291983
- PROBLEM SUMMARY:**
Ruptime fails to report system as "up" after 27 xterminal logins.

ANSWER SUMMARY:
This problem will be addressed in DG/UX TCP/IP 5.4.2.

- STR: NASC000010872
REV: 4.32 ORIG-ID: Q334342
- PROBLEM SUMMARY:**
Problems setting up mail and mailx so that we can send to both uucp and network format addresses.

ANSWER SUMMARY:
This STR has been closed as discussed from our phone conversation. If the problem should recur, please submit an STR along with the following support materials from the attached page.

- STR: NASC000010188
REV: 4.33 ORIG-ID: Q314549
- PROBLEM SUMMARY:**
The rwhod reports "main1 rwhod [24883]:recv:message too long".

ANSWER SUMMARY:
This problem will be resolved in DG/UX TCP/IP 5.4.2.

- STR: NASC000011545
REV: 5.40 ORIG-ID: Q410246
- PROBLEM SUMMARY:**
If a user has a UID greater than 32767, the .forward file in that user's home directory is ignored.

ANSWER SUMMARY:
This problem is fixed with patch #5 for 5.4 DG/UX TCP/IP and with patch #1 for 5.4.1 DG/UX TCP/IP. The problem will be source-fixed in 5.4.2. We understand that you have received and successfully tested the patch for 5.4.

- STR: NASC000011909
REV: 5.40 ORIG-ID: DG/UX 03
- PROBLEM SUMMARY:**
With DG/UX 5.4 Domain Name Service logging on from a PC can take as long as five minutes. DG/UX 4.3 the logon time was a few seconds.

ANSWER SUMMARY:
Additional materials are required with this STR to resolve this problem. Please see the attached summary for the materials required.

- STR: SPA 000000881
REV: 5.40 ORIG-ID: FIB_121000034
- PROBLEM SUMMARY:**
Panic 121000034. We already have tcpip 5.4 patch 02b applied.

ANSWER SUMMARY:
This problem will be corrected in revision 5.4.2 of DG/UX TCP/IP. EINVAL is now returned if a user application attempts to reconnect a socket that has already executed a connect(2) call. In the meantime, please install DG/UX TCP/IP 5.4.1 patch 02 that will also return EINVAL to the user application.

- STR: SPA 000000884
REV: 5.40 ORIG-ID: FIB_PANIC_TCP
- PROBLEM SUMMARY:**
New panic 121000034 .

ANSWER SUMMARY:
This problem will be fixed in DG/UX TCP/IP 5.4.2. In the meantime, please install DG/UX TCP/IP 5.4.1 Patch 02. With this patch and also in 5.4.2, EINVAL will be returned to the user application.

- STR: SPA 000000885
REV: 5.40 ORIG-ID: FIB_TCPIP_PAN
- PROBLEM SUMMARY:**
Another PANIC 121000034.

ANSWER SUMMARY:
This problem will be fixed in DG/UX TCP/IP 5.4.2. In the meantime, please install DG/UX TCP/IP 5.4.1 Patch 02. With this patch, and also in 5.4.2, EINVAL will be returned to the user application.

TCP/IP for AViiON

- KERNEL STR: NASC000012198
REV: 4.34 ORIG-ID: E062340

PROBLEM SUMMARY:

Receiving panic 1000001's after upgrading to 4.34 of dgux on a diskless workstation.

ANSWER SUMMARY:

This problem is fixed with TCP/IP patch 4.31.00.54 which has already been supplied to you.

TCP/IP for AVIION**STR ANSWER REPORT**
for DG/UX TCP/IP FOR AVIION

- STR: NASC000012539
REV: 5.41 ORIG-ID: AA041092A

PROBLEM SUMMARY:

A server application using sockets does not free the port even though it uses the close system call to close the port. The server application is unable to re-open the port for approx. 1 minute.

ANSWER SUMMARY:

The client and server applications should be modified to use the socket option SO_REUSEADDR to avoid this condition. This option is documented in Programming with TCP/IP on the DG/UX system (093-701024) in chapter 3.

- STR: UKSC000056801
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:

AV8 DG/UX 5.41 to AV4 DG/UX 4.31: TCP/IP remsh works first attempt then fails subsequent attempts "Excessive number of retries" until port times out. Occurs when running 5.4 < = > 4.3, 5.4 < = > 5.4 is fine. 4.3 < = > 4.3 always was "poor".

ANSWER SUMMARY:

We believe this is a problem with DG/UX TCP/IP 4.31. Please install Patch #50 for TCP/IP to the 4.31 system. If the problem persists, please submit a new STR with the /dgux image running on the 4.31 system and the commands necessary to reproduce the problem (if applicable).

TCP/IP for AViION



TCP/IP for AVIION**STR ANSWER REPORT**

for DG/UX TCP/IP FOR AVIION

- STR: JAPN000000677
REV: 5.40 ORIG-ID: NDG 2542

PROBLEM SUMMARY:
Panic 121000034

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX TCP/IP. EINVAL is now returned if a user application attempts to reconnect a socket that has already executed a connect(2) call. In the meantime, please install DG/UX TCP/IP 5.4.1 patch 02 that will also return EINVAL to the user application. This problem will be source fixed in DG/UX TCP/IP 5.4.2.

- STR: JAPN000000678
REV: 5.40 ORIG-ID: NDG 2543

PROBLEM SUMMARY:
Panic 121000034 (with reproduce program)

ANSWER SUMMARY:

This problem will be corrected in revision 5.4.2 of DG/UX TCP/IP. EINVAL is now returned if a user application attempts to reconnect a socket that has already executed a connect(2) call. In the meantime, please install DG/UX TCP/IP 5.4.1 patch 02 that will also return EINVAL to the user application.

TCP/IP for AVIIION

TCP/IP for AVIION

STR ANSWER REPORT
for DG/UX TCP/IP FOR AVIION

- STR: NASC000012743
REV: 4.31 ORIG-ID: Q451320

PROBLEM SUMMARY:
Cannot mail to a user on the internet, unless the gateway host to that domain is specified in the address.

ANSWER SUMMARY:
As we agreed, we are closing this STR since the problem does not occur under revision 5.4 of DG/UX TCP/IP.

TCP/IP for AViON

TCP/IP for AViON

STR ANSWER REPORT for DG/UX TCP/IP FOR AViON

- STR: NASC000012338
REV: 5.40 ORIG-ID: Q448014
- PROBLEM SUMMARY:**
.nfsxxxx files are NOT cleaned up on AViON filesystems when mounted on SUN systems.

ANSWER SUMMARY:
This problem is not reproducible with our SunOS 4.1.1 server and DG/UX 5.4.1. Since you have not been able to provide us with the additional information that we need, we are closing this STR. If you continue to experience this problem, please submit a new STR that includes the information we have listed on the attached page.

- STR: NASC000013370
REV: 5.41 ORIG-ID: U27463
- PROBLEM SUMMARY:**
Ping command does not return the correct address or host name.
- ANSWER SUMMARY:**
A patch, tcpip_5.4.1.p10a, has been provided to correct this problem.

- STR: NASC000013442
REV: 5.41 ORIG-ID: U53176
- PROBLEM SUMMARY:**
Having trouble with "s" option in sendmail.cf.
- ANSWER SUMMARY:**
The DG/UX TCP/IP sendmail process does not queue the message until after the recipient has been resolved. If the DNS resolver is unavailable this adds a delay to the queueing of the message, but in case of a failure, the mailer program that invoked sendmail will be returned an error and then the mailer can notify the user via a local mailer or message.

- STR: NASC000013451
REV: 5.41 ORIG-ID: U44438
- PROBLEM SUMMARY:**
TERM does not get set to default of 'vt100' in the csh, if telnet'ing from a non-DG/UX system.
- ANSWER SUMMARY:**
As we agreed in our phone conversation, we are closing this STR. The problem was resolved by

replacing your /etc/login.csh file with the login.csh.proto file.

- STR: UKSC000059358
REV: 5.41 ORIG-ID:
- PROBLEM SUMMARY:**
When issuing the command rcp -fp filename filename:remotebox the following error is displayed if the file is more than 1 year old Protocol screwup : mtime.sec not delimited

ANSWER SUMMARY:
The -f switch is in internal switch to rcp. It is not a valid user-interface switch. Depending on how the user invokes rcp, the rcp client builds a request packet to the server specified. One of the arguments (or switches) specified in this packet is the "f" switch (and another may be "t") to indicate which host will be transferring and which will be receiving the file.

TCP/IP for AViON



TCP/IP for AVIION**PROGRAMMING NOTES/DOCUMENTATION****TCPIP (AX) REV 4.31 [remsh/rlogin]**

Replacement rlogin and remsh executables.

Patch 4.31.00.52 is available from your local DG Representative. This patch is applicable to all systems running DG/UX TCP/IP 4.31. Note that TCP/IP revision 4.31 ships with DG/UX revisions 4.32, 4.33 and 4.34.

This patch contains replacement executables for remsh and rlogin. These modules address a problem where a users rlogin/remsh request would hang if the users application that invoked rlogin/remsh had more than 15 files already opened at the time rlogin/remsh was invoked.

TCPIP (AX) REV 4.31

Replacement inso.a library.

Patch 4.31.00.51 is available from your local DG Representative. This patch is applicable to all systems running DG/UX TCP/IP 4.31. Note that TCP/IP revision 4.31 ships with DG/UX revisions 4.32, 4.33 and 4.34.

This patch contains a replacement library for inso.a that addresses a problem on multi-JP systems where a buffer could be freed twice under heavy load with a large user count connecting over the network (typically telnet). The symptom of the problem would usually be a 2000107 or 1000036 panic.

TCPIP (AX) REV 4.31

Replacement tcp.a library.

Patch 4.31.00.50 is available from your local DG Representative. This patch is applicable to all systems running DG/UX TCP/IP 4.31. Note that TCP/IP revision 4.31 ships with DG/UX revisions 4.32, 4.33 and 4.34.

This patch contains a replacement library for tcp.a. It addresses a problem if the user set the socket option SO_LINGER on a connected socket. When the user set the option, the time value passed as an argument was ignored, therefore the SO_LINGER option was not set at all on the socket. When the socket was closed, if there was outstanding data to be transmitted, it was discarded.

This patch includes TCP/IP patches #12, #35 and #46.

TCP/IP for AViON

TCP/IP for AVIION**PROGRAMMING NOTES/DOCUMETATION**

TCPIP (AX) REV 5.4

Replacement inso.a library.

Patch tcpip_5.4.p03 is available. This patch is applicable to all systems running DG/UX TCP/IP 5.4.

This patch contains a replacement library for inso.a that addresses a problem on multi-JP systems where a buffer could be freed twice under heavy load with a large user count connecting over the network (typically telnet). The symptom of the problem would usually be a 2000107 or 1000036 panic.

TCPIP (AX) REV 5.4

Panic code 121000034.

Patch tcpip_5.4.0.p02 fixes a problem where a packet is delivered to the Internet Socket Subsystem (inso.a) that contains an incorrect error number. The resulting panic code is 121000034.

This patch is available from the Customer Support Center in Atlanta.

This problem is source fixed in DG/UX TCP/IP release 5.4.1.

As a temporary workaround if there is a delay in receiving the patch, add this route to your system: route add default your-hostname 0. Route will determine if it is to be a host or network route.

TCP/IP for AViON

TCP/IP for AViiON

PROGRAMMING NOTES/DOCUMETATION

TCPIP (AX) REV 5.4.1 [sendmail]

Sendmail will ignore a users .forward file if the uid is greater than 32767.

Patch tcpip_5.4.1.p01 fixes a problem with sendmail where a users .forward file in their home directory is not used if the users ID (uid) is greater than 32767. Sendmail has been fixed to allow user ID's in the range of 0 - 65535.

TCP/IP for AViiON

VMARK DG/UNIVERSE FOR AVIION

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>DG/UniVerse is a powerful database management and applications development system that offers a sophisticated fourth-generation solution to the problem of managing information in a growing business. Developed in the C Language, DG/UniVerse is compatible with Pick and Prime INFORMATION at the applications and user interface Levels.</p> <p>DG/Universe has all the proven features of a business-oriented relational database management system: built-in data dictionaries, variable structure data files, an English-Like query language and report writer, the BASIC programming language enhanced for commercial applications, and an interactive command language that supports stored command sequences.</p> <p>DG/UniVerse provides businesses the opportunity to select state-of-the-art hardware and a database management system that runs proven commercial applications.</p>	<p>Product: VMARK DG/UniVerse for AViION</p> <p>Model #: D055A</p> <p>Current Rev. 6.3.1.4 SSS Shipped: 12/91</p> <p>Previous Rev: 5.4.3.1 Support Effective Until: 06/92</p>

VMARK DG/UNIVERSE FOR AVIION

VMARK DG/UNIVERSE FOR AVIION

VMARK DG/UNIVERSE FOR AVIION**STR ANSWER REPORT**

for VMARK uniVerse

-
- STR: NASC000011516
REV: 54.13 ORIG-ID: Q401195
PROBLEM SUMMARY:
F correlative does not return the desired results when used on a multi-valued field.
ANSWER SUMMARY:
This F correlative returns the correct information. The behavior is consistent on the latest revision of Ultimate (190H) and uniVerse.
-

- STR: NASC000011153
REV: 54.31 ORIG-ID: Q363985
PROBLEM SUMMARY:
A PROC aborts intermittently for unknown reasons.
ANSWER SUMMARY:
This problem is not reproducible on the current revision of DG/uniVerse running on DG/UX 5.4. Please upgrade your DG/uniVerse software to revision 6.3.1.4. If the problem persists, please submit a new STR with a reproducible test case.
-

VMARK DG/UNIVERSE FOR AVIION



VMARK DG/UNIVERSE FOR AVIION



VMARK DG/UNIVERSE FOR AVIION**STR ANSWER REPORT**

for VMARK uniVerse

-
- STR: NASC000008910
REV: 54.31 ORIG-ID: DG INTERNAL

PROBLEM SUMMARY:
The statment GO TOP will not compile but rather gives the error "Label P not defined". If the statement is changed to "GO TO TOP", it will compile successfully.

ANSWER SUMMARY:
This problem is fixed in revision 6.3.2.2 of DG/uniVerse.
-
- STR: NASC000011548
REV: 63.14 ORIG-ID: Q405085

PROBLEM SUMMARY:
Universe log files are overwritten after reving up to 6.3 from 5.4 of Universe.

ANSWER SUMMARY:
This problem is fixed in revision 6.3.2.2 of DG/uniVerse.
-
- STR: NASC000011941
REV: 63.14 ORIG-ID: Q429622

PROBLEM SUMMARY:
After a system crash, the jobs in the print queues are lost.

ANSWER SUMMARY:
This problem is fixed in revision 6.3.2.2 of DG/uniVerse.
-
- STR: NASC000012249
REV: 63.14 ORIG-ID: Q446676

PROBLEM SUMMARY:
A program which attempts to reference an Array with an Index that is out of bounds causes the compiler to abort and core dump.

ANSWER SUMMARY:
This problem is fixed in revision 6.3.2.2 of DG/uniVerse.
-

VMARK DG/UNIVERSE FOR AVIION



VMARK DG/UNIVERSE FOR AVIION**STR ANSWER REPORT**

for VMARK uniVerse

- STR: UKSC000055807
REV: 63.14 ORIG-ID:

PROBLEM SUMMARY:

UniVerse 6.3.1.4. During a benchmark a create and write and subsequent reading of a record caused UniVerse to hang. The file being written to is corrupted and requires re-sizing before re-use.

ANSWER SUMMARY:

The hang in this benchmark is caused by a bug in the benchmark itself. The script, toms.scr, kills phantom processes with the -9 option. This option is destructive because the shared memory segment can't be removed and any locks held by the process can't be released. This hang was due an orphan lock left by the killed phantoms. If you must kill a uv process, use the -15 option.

- STR: UKSC000055808
REV: 63.14 ORIG-ID:

PROBLEM SUMMARY:

UniVerse 6.3.1.4. Using a Wyse-50 terminal running with terminal type of wy-50 causes UniVerse to abort when displaying a screen from a benchmark application. Using a vt100 with terminal type = vt100 works OK.

ANSWER SUMMARY:

This is not a problem. uniVerse does not provide a terminal definition called wy-50. The proper setting should be wy50. If you set the TERM variable to wy50, the abort will not occur.

- STR: NASC000012724
REV: 63.22 ORIG-ID: Q467884

PROBLEM SUMMARY:

A user defined verb that contains a cpio command does not write the output of that command to the COMO record when COMO is turned on.

ANSWER SUMMARY:

You need to use a "C" for "External program COMO" in field 4 which is the processor mode of the verb entry. For more information, see the description of the verb entry in Chapter 3 of the "System Description Manual".

VMARK DG/UNIVERSE FOR AVIION

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PROGRAMMING NOTES/DOCUMENTATION

DG/uniVerse (AX) REV 6.3

Type 30 (Dynamic) File problems in DG/uniVerse 6.3.1.

Vmark Software, Inc. recently issued a Customer Service Bulletin which warned customers who were using Type 30 (Dynamic) files under Release 6.3.1 of DG/uniVerse. A number of problems were reported to Vmark which should be corrected by Revision 6.3.2. These problems include file corruptions in certain situations. If you are using dynamic files, Vmark strongly suggests that you convert these files to static hashed files until these problems can be fixed.

VMARK DG/UNIVERSE FOR AVIION

VMARK DG/UNIVERSE FOR AVIION**PROGRAMMING NOTES/DOCUMENTATION**

DG/uniVerse (AX) REV 6.3

CLEAR.FILE may corrupt files in uniVerse 6.3.2.2.

The only way this problem can occur is if you upgraded Revision 5.4.3.1 of DG/uniVerse directly to Revision 6.3.2.2, skipping Revision 6.3.1.4. If this is the case, and you use the uniVerse command, CLEAR.FILE, the file which you clear may become corrupted and any subsequent writes or reads to that file may return "operation failure" errors. To prevent these files from getting corrupted, the command RESIZE filename * * * must be run on the file BEFORE the CLEAR.FILE command is run. This problem will be corrected in Revision 6.3.3 of DG/uniVerse.

DG/uniVerse (AX) REV 6.3

Printing to /dev/lp from DG/uniVerse fails on DG/UX 5.4.1.

Printing to a parallel printer on /dev/lp when running DG/uniVerse on a DG/UX 5.4.1 system does not print the entire document correctly. The workaround for this problem is to make the device entry for the printer which uses /dev/lp point to /dev/null and create a driver script which contains the line:

```
cat - > /dev/lp
```

If you have any questions on creating a driver script, please refer to the uniVerse "Administrators Guide", Chapter 11. This problem will be corrected in a future revision of DG/uniVerse.

VMARK DG/UNIVERSE FOR AVIION

VMARK DG/UNIVERSE FOR AVIION**PROGRAMMING NOTES/DOCUMENTATION****DG/uniVerse (AX) REV 6.3.3.1A**

Previously in uniVerse release 6.3.2.2, Vmark recommended that secondary index files not be used due to index file corruptions. The secondary index file code was extensively modified in uniVerse release 6.3.3.1A to improve performance and correct the file corruption problems, so that customers could use alternate keys.

Vmark performed rigorous testing using secondary index files prior to release of uniVerse 6.3.3.1A, however, a new problem has been discovered in release 6.3.3.1A, where a secondary index file becomes corrupt under certain situations. The problem appears to occur when removing/deleting oversized alternate key records (records ranging from 2K to 8K or larger). When this problem occurs, the uniVerse process aborts, leaving a group lock on the alternate key. Any uniVerse process waiting on the alternate key group lock, will appear to hang, until the lock is removed. The secondary index file is then out of sync with the data file and should be rebuilt. This problem is currently under investigation, however, uniVerse customers should not use secondary index files in their production environment until this problem is resolved.

A problem has been found in uniVerse release 6.3.3.1A pertaining to the uniVerse configuration variable, MFILES. This problem occurs when a file that is opened and cleared in a BASIC program cannot be written to if it is rotated out after a CLEAR.FILE, but before the write. The program will abort with the following error:

Date/time stamp in file header has been modified. Unable to reopen file unit ...

This problem has been seen when using BASIC CLEARFILE or executing a CLEAR.FILE, however, there might be other circumstances where this problem can occur.

The work around for this problem is to increase the value for the MFILES parameter in the uvconfig file, so that you will not have to rotate files via the rotating file pool. The MFILES parameter will have to be set larger than the number of files an application can open simultaneously. Currently, the default value for MFILES is 12 and should always be 8 less than the DG/UX kernel parameter SDESLIM. The default value of SDESLIM is 64 so you could set MFILES as large as 56 without having to build a new DG/UX kernel. If you need an extremely large number of files, SDESLIM can be set as high as 2048, therefore the maximum MFILES is 2040. In addition, by changing the MFILES parameter, the performance can also be improved.

It should be noted, that once the error described above is displayed, the problem will continue to occur, but this message will not be displayed for another user. If the MFILES parameter is not increased, file corruption can occur.

VMARK DG/UNIVERSE FOR AVIION

X.25 for AViION SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The X.25 for AViION System product provides wide area networking support for the AViION series of computers. With X.25 your system can communicate with compatible X.25 systems over Packet Switched Data Networks (PSDNs). The product provides a full featured X.25 DTE implementation supporting both the 1980 and 1984 CCITT specifications. The X.25 for AViION Systems product also provides limited DCE functionality to support communication with other AViION systems over directly connected lines (no intervening PSDN).</p> <p>The X.25 for AViION Systems product provides a programming interface called the X.25 Provider Interface (XPI). This allows the customer to write applications that use an X.25 interface for communication.</p> <p>The X.25 for AViION Systems product supports the transmission of the TCP/IP protocol over wide area networks. The support is provided as an interface module called 'IXE' which exists between the X.25 modules and the TCP/IP modules. Support for the TCP/IP protocol itself is not provided with the X.25 For AViION Systems product -- ask your Data General salesperson.</p> <p>The X.25 For AViION Systems product also supports the transmission of higher layer protocols such as PAD X.28 and X.29 and ISO protocols. These higher layer protocols are not available with this product -- ask you Data General salesperson.</p>	<p>Product: X.25 for AViION SYSTEMS</p> <p>Model #: C008A</p> <p>Current Rev. 2.20 SSS Shipped: 03/92</p> <p>Previous Rev: 2.10 Support Effective Until: 10/01/92</p> <p>Release Notice: 085-600312-00</p>

DOCUMENTATION

Title	Part Number
Setting Up and Managing X.25 on the DG/UX System	093-701071-02
Programmer's Reference for the X.25 Provider Interface on the DG/UX	093-701082-01

X.25 for AVIION SYSTEMS

X.25 for AViiON SYSTEMS

STR ANSWER REPORT
for X.25 for AViiON Systems

- STR: JAPN000000619
REV: 2.10 ORIG-ID: NDG 2483

PROBLEM SUMMARY:
Shell script for X.25 start menu on sysadm
"startnet"

ANSWER SUMMARY:
This problem will be fixed in DG/UX X.25 Revision
2.20.

- STR: NASC000010978
REV: 2.10 ORIG-ID: PL0015

PROBLEM SUMMARY:
When a user logs on through PAD, there are no
ways to figure out his physical location.

ANSWER SUMMARY:
This functionality is currently available in the
release product.

X.25 for AVIION SYSTEMS

X.25 for AViION SYSTEMS

X.25 for AViiON SYSTEMS

STR ANSWER REPORT

for X.25 for AViiON Systems

- STR: NASC000012278
REV: 4.32 ORIG-ID: Q449329

PROBLEM SUMMARY:

System hang on an AViiON 6220 running 4.32 of DG/UX.

ANSWER SUMMARY:

As we discussed, this STR has been closed. After upgrading to DG/UX 5.4.1 you are no longer experiencing system hangs on the AViiON 6220.

X.25 for AVIION SYSTEMS

X.25 for AViiON SYSTEMS**STR ANSWER REPORT**

for X.25 for AViiON Systems

- STR: NASC000013137
REV: 2.20 ORIG-ID: E409073

PROBLEM SUMMARY:

X.25 incorrectly accepts international (DATAPAC) calls which contain national facility markers in the connect packet by echoing back those facilities.

ANSWER SUMMARY:

This problem is fixed in X.25 2.20 with patch x25_2.20.0.p02. This will also be fixed in X.25 release 2.30.

- STR: NASC000013139
REV: 2.20 ORIG-ID: E410343

PROBLEM SUMMARY:

When in sysadm under tables->x25hosts and creating a second x25 host with the same Call User Data Area, the error "Clashes with your token" is returned.

ANSWER SUMMARY:

This problem is fixed with X.25 2.20 patch x25_2.20.0.p03. This will also be fixed in release X.25 revision 2.30.

X.25 for AVIION SYSTEMS

X.25 for AViON SYSTEMS



X.25 for AViiON SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****X25 (AX) REV 2.10 [kernel]**

Patch # 2 for X.25 2.10 is available.

Patch x25_2.10.0.p02 addresses a problem where a clear call with facilities sent to the AViiON would be rejected with a diagnostic error indication of Packet too Long. This patch allows the clear to be processed correctly, but the facilities are not passed up to the user application.

This patch also includes a change that alters the amount of time it takes X.25 to return "Clear - Out of Order" when a user attempts to issue a call over a subnet that is currently down. Currently, a user would issue a call request on a subnet and if the line was down for some reason (modem failure, cable failure, etc), the user application would not be returned a status indicating a failure to complete the call for 30 seconds. Each subsequent call on that subnet would also experience the 30 second delay in the reporting of the error that the call could not be completed. Patch x25_2.10.0.p01 modifies X.25 so that calls placed on a subnet/line that is currently down or unavailable will return an error to the user immediately so corrective action (i.e. use another subnet) can be taken. The first timeout will not be immediate however, this timeout value is controlled by the level 2 (LAPB) timers. Once the level 2 timeout occurs, X.25 will return the "Clear - Out of Order" error to the user.

X25 (AX) REV 2.20

Incorrect symbolic link for the xpi + (6) man page.

The symbolic link for the xpi + (6) man page is incorrect. The correct link should be a symbolic link to the xpi.6.z file in the same directory.

If you wish to correct this, execute the following commands as root:

```
cd /usr/catman/x25_man/man6
rm xpi + .6.z
ln -s xpi.6.z xpi + .6.z X25
```

(AX) REV 2.20

DG/UX 5.4.1 requires DG/UX X.25 2.20

Please note that if you are currently running DG/UX 5.4 and X.25 2.10, and you wish to upgrade to DG/UX 5.4.1 you must also upgrade to revision 2.20 of X.25. Revision 2.10 of X.25 will not run on DG/UX 5.4.1

X.25 for AViiON SYSTEMS

X.25 for AVIION SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****X25 (AX) REV 2.20**

Incorrect symbolic links for several man pages.

The symbolic links for the following man pages are incorrect. The correct resolution path follows the "->" symbol.

man3:

endsubnetent.3n.z	-> getsubnetent.3n.z
endxhostent.3n.z	-> getxhostent.3n.z
getaddrbyid.3n.z	-> getsubnetent.3n.z
getsubnetbyid.3n.z	-> getsubnetent.3n.z
getsubnetbyname.3n.z	-> getsubnetent.3n.z
getxhostbyaddr.3n.z	-> getxhostent.3n.z
getxhostbyname.3n.z	-> getxhostent.3n.z
setsubnetent.3n.z	-> getsubnetent.3n.z
setxhostent.3n.z	-> getxhostent.3n.z

man4:

extraformat.4.z	-> qosformat.4.z
-----------------	------------------

man6:

xpi+.6.z	-> xpi.6.z
----------	------------

The system administrator can delete the incorrect symbolic links and add these to the appropriate x25 man page directories.

X.25 for AVIION SYSTEMS

X WINDOWS (AViiON)

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>DG/UX X Windows is a combination of the AView Graphics Library, X Window System™, Motif™, and Looking Glass®. The X Window System consists of an X server, a set of X clients, programming libraries, and on-line documentation. The X server manages a raster display and related input devices. X clients are applications which communicate with the X server to perform terminal emulation, window management, and other necessary functions. The subroutine libraries allow programmers to implement applications of their own.</p> <p>Motif consists of the mwm window manager, a User Interface Language (uil) compiler, subroutine libraries, demos, and on-line documentation. Motif is a derivate product to Open Software Foundation, Inc's OSF/Motif™.</p> <p>Looking Glass is a desktop manager for the X Window System. It provides a visual environment for running programs and manipulating files. Extensive use of icons and Motif compliance provide power and ease of use. Refer to the Looking Glass Release Notice (085-600204) for details on use and installation of Looking Glass.</p>	<p>Product: X WINDOWS (AViiON)</p> <p>Model #: H001A</p> <p>Current Rev. r4 SSS Shipped: 03/91</p> <p>Release Notice: 085-600134-03</p>

DOCUMENTATION

Title	Part Number
AVX-30 Release Notice	085-600144-02
Looking Glass™ Release Notice	085-600224-00
Looking Glass™ Update Notice	078-600041-00
X Windows System User's Guide	069-100229-02
AView for AViiON Systems Release Notice	085-600253-00
Looking Glass User's Guide	069-100357-00
Programmer's Reference for AView Graphics Library	093-000717-00

X WINDOWS (AViiON)

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STR ANSWER REPORT for DG/UX X WINDOWS FOR AVIION

- STR: NASC000011395
REV: 4.00 ORIG-ID: Q400788
- PROBLEM SUMMARY:**
The X library header files are not ANSI compliant. Numerous errors are encountered at compile time when the -ansi option of cc (or gcc) is used.

ANSWER SUMMARY:
Per section 5.1 of the revision 5.4 Unix Release Notice, one of four -d feature set macros need to be used if using the -ansi option.

- STR: JAPN000000595
REV: 4.32 ORIG-ID: NDG 2457
- PROBLEM SUMMARY:**
XtKeysymToKeycodeList dose not work on segmentation faults

ANSWER SUMMARY:
The problem you reported will be fixed in the forthcoming release of DG/UX, revision 5.4.2.

- STR: JAPN000000598
REV: 4.32 ORIG-ID: NDG 2461
- PROBLEM SUMMARY:**
X-client program using XmCreateScrolledWindow often causes core.(SIGSEGV)

ANSWER SUMMARY:
The problem you reported will be fixed in the forthcoming release of DG/UX, revision 5.4.2.

- STR: NASC000010093
REV: 4.32 ORIG-ID: Q318181
- PROBLEM SUMMARY:**
4.32 of xterm outputs incorrect key codes for the HOME and END key on AV300 workstations.

ANSWER SUMMARY:
The problem you reported is fixed in DG/UX 5.4.1.

- STR: NASC000010441
REV: 4.32 ORIG-ID: Q338591
- PROBLEM SUMMARY:**
The X11 xterm client returns escape sequences that are different than what is defined in the terminfo database for the home and end keys.

ANSWER SUMMARY:
The problem you reported is fixed in DG/UX 5.4.1.

- STR: NASC000010455
REV: 4.32 ORIG-ID: Q337696
- PROBLEM SUMMARY:**
The X11 mterm client program does not interpret the newline key correctly when used with its -async option in vt100 emulation mode.

ANSWER SUMMARY:
The problem you reported is fixed in DG/UX 5.4.

- STR: NASC000010842
REV: 4.32 ORIG-ID: Q355082
- PROBLEM SUMMARY:**
XAllocColor fails to return the closest value when the color map gets filled up. Instead it returns a previous value.

ANSWER SUMMARY:
XAllocColor properly returns a status of zero, because no matching cell exists and there are no unallocated cells. If the returned status is zero, the values stored in colorcell_def should be ignored. In read/write colormap, it does not return the closest available read-only colorcell that has already been allocated.

- STR: NASC000010995
REV: 4.32 ORIG-ID: Q377501
- PROBLEM SUMMARY:**
User's that use ftp and log in as xdm have root access to the system which results in a security leak.

ANSWER SUMMARY:
The problem you reported is fixed in DG/UX 5.4.1. The 5.4.1 ftp daemon will not allow access to login names listed in the /etc/ftpd.deny file. The file /etc/ftpd.deny.proto will be loaded with update 5.4.1 and contain 'xdm' in its list. As a temporary measure, we suggest that you treat xdm like root, and assign it a password that has limited distribution.

- STR: UKSC000049326
REV: 4.32 ORIG-ID: USE OF 'IC_ENV
- PROBLEM SUMMARY:**
Per Manual; ic_env file can be 'sourced in' using dot command in .profile. When logging in using xdm a shell is executed using .Xsession as an argument.

X WINDOWS (AVIION)

STR ANSWER REPORT for DG/UX X WINDOWS FOR AVIION

- STR: NASC000011191
REV: 4.32 ORIG-ID: E061553
- PROBLEM SUMMARY:
We receive intermittent core dumps when logging out of a Xdm session.
- ANSWER SUMMARY:
The problem you reported is fixed in the forthcoming update to DG/UX, revision 5.4.1.

- STR: JAPN000000646
REV: 5.40 ORIG-ID: NDG 2509
- PROBLEM SUMMARY:
XDrawLine drae incorrect line.
- ANSWER SUMMARY:
The problem you reported is fixed in X11R5, which will be release with DG/UX revision 5.4.2.

- STR: JAPN000000647
REV: 5.40 ORIG-ID: NDG 2510
- PROBLEM SUMMARY:
XDrawRectangle can't draw right-hand line.
- ANSWER SUMMARY:
The problem you reported is fixed in DG/UX revision 5.4.1.

- STR: NASC000011393
REV: 5.40 ORIG-ID: Q400604
- PROBLEM SUMMARY:
The -ls and -e switches of xterm do not work together. When used together the -e 'some_command' executes fine but the login script (.profile) is not run.
- ANSWER SUMMARY:
The problem you reported is a restiction for the xterm(1) X client. It can either act on the -ls option and execute the user's .login or .profile script or it can act on the -e option and execute the program given with that option. When both -e and -ls are used together, the -e option will be honored.

- STR: NASC000011858
REV: 5.40 ORIG-ID: E062010
- PROBLEM SUMMARY:
Core files are being created when users log out of a session that was started using xdm.
- ANSWER SUMMARY:
The problem you reported is fixed in the forthcoming update to DG/UX, revision 5.4.1.

X WINDOWS (AViiON)

X WINDOWS (AVIION)**STR ANSWER REPORT**
for DG/UX X WINDOWS FOR AVIION

- STR: NASC000011623
REV: 5.40 ORIG-ID: Q412229

PROBLEM SUMMARY:

When window images are displayed using xwud, if the maximize button of the image is selected, the window does not maximize but simply jumps back to its original location if moved. It can be decreased but not increased in size.

ANSWER SUMMARY:

The behavior you described is expected. If you use xprop(1) to display the properties of the window, you will see that the program specified maximum size is the size of the window that was dumped with xwd(1). When maximized, the window will either return to its initial position (if moved from that position when normalized) or its position when it was last in the maximized state.

- MTERM STR: NASC000011973
REV: 5.40 ORIG-ID: Q431441

PROBLEM SUMMARY:

Mterm loses track of the cursor position when editing text files in SED when the lines are longer than 80 characters and the console characteristic /wrp is enabled in D410 emulation mode.

ANSWER SUMMARY:

The problem you reported is fixed in DG/UX Update 5.4.1.

- MTERM STR: UKSC000055560
REV: 5.40 ORIG-ID:

PROBLEM SUMMARY:

Application writes a form in protected mode to an mterm in D410 emulation mode. User fills in unprotected fields, and the program issues an erase unprotected command. mterm aborts, and the window disappears.

ANSWER SUMMARY:

We were unable to reproduce the problem reported with the materials required. Should you continue to experience this problem, please submit another STR along with a file that reproduces the problem that we can cat(1) to the mterm.

X WINDOWS (AViiON)



X WINDOWS (AViiON)**STR ANSWER REPORT**
for DG/UX X WINDOWS FOR AVIIION

-
- STR: NASC000010876
REV: 4.32 ORIG-ID: Q360226

PROBLEM SUMMARY:
Error - "parse error before 'new'", is returned by the 1.37.2 Gnu C++ compiler when the extern keyword is used to include X11/Motif header files in Gnu C++ programs.

ANSWER SUMMARY:
The problem you reported is fixed in Motif Revision 1.2, which will be released with DG/UX 5.4.2.
-
- STR: NASC000012114
REV: 5.41 ORIG-ID: Q440314

PROBLEM SUMMARY:
The 5.41 mterm client program is not handling tabs and newlines correctly when the terminal modes have been changed from one type to another in the same mterm session.

ANSWER SUMMARY:
The problem you reported is fixed in DG/UX 5.4.2.
-
- LOOKING GLASS STR: NASC000012326
REV: 5.41 ORIG-ID: Q454867

PROBLEM SUMMARY:
In Looking Glass 2.0 and above, when you quit and then start lg again, windows do not open in the same positions they were in before quitting. This feature worked fine at Release 1.0 which ran under DG/UX 4.3x.

ANSWER SUMMARY:
Due to the window manager governing Looking Glass' behavior, the user must be sure to set the appropriate window manager attributes relating to window placement in order for windows to retain their position from execution to execution.
-
- MTERM STR: NASC000012266
REV: 5.40 ORIG-ID: D-JDM-4

PROBLEM SUMMARY:
D410 emulation fails on wide documents and cursor positioning to column/row 9.

ANSWER SUMMARY:
We were unable to reproduce the problem reported; therefore, we are closing this STR with your approval.

X WINDOWS (AViiON)

X WINDOWS (AVIION)

STR ANSWER REPORT for DG/UX X WINDOWS FOR AVIION

- STR: FRA 000000733
REV: 5.40 ORIG-ID: DJEBBARI C:FR

PROBLEM SUMMARY:

When running the "STAT" benchmark, response time are not constant. This has been isolated to the XtPending function, and the following code: (see following details).

ANSWER SUMMARY:

XtPending is a system CPU intensive call, which the application is making many times per second. The application should use XtAppMainLoop() to control event processing and use XtAppAddTimeOut() or XtAppAddWorkProc() to setup processing for additional funtions being performed by the application.

- STR: NASC000011987
REV: 5.40 ORIG-ID: JH-920218

PROBLEM SUMMARY:

There is a problem with the Athena widget set which is demonstrated by a problem with the accompanying program. When the size of the widget is too small (between 0 and 1), the widget dies with an error message.

ANSWER SUMMARY:

The problem you reported is fixed in DG/UX 5.4.2.

- STR: NASC000012170
REV: 5.40 ORIG-ID: Q444336

PROBLEM SUMMARY:

System hang on AV310 running DG/UX 5.4 with 911209 patch level.

ANSWER SUMMARY:

The console on the AV310 was hanging because a cron job was clearing files created by grfxd in /tmp. This problem was resolved by removing the cron job that deleted grfxd files in /tmp.

- MTERM STR: NASC000012529
REV: 5.41 ORIG-ID: D-91040901

PROBLEM SUMMARY:

mterm crashes when CEO calculator is invoked.

ANSWER SUMMARY:

The "DefaultWindowMenu" defined in the .mwmrc file assigns the Alt-F4 key sequence to the f.kill function, which closes the window. The workaround for this behavior is to define an "MtermWindowMenu" in

your .mwmrc which assigns alternate mwm accelerators for the 'Alt' keys used by mterm for DG emulation. This procedure is documented in the mterm(1) man page.

- MTERM STR: NASC000012671
REV: 5.41 ORIG-ID: JDM-8

PROBLEM SUMMARY:

d410 mode behaves erratically under CEO, sometimes not displaying the first 1 or 2 characters on a line, sometimes inserting characters into a document being edited, and sometimes not displaying contents of a received message correctly.

ANSWER SUMMARY:

The D410 is an 81x24 terminal. Setting the mterm D410 window geometry to 80x24 causes problems for the D410 emulator. The mterm man page has also been corrected in DG/UX 5.4.2 to correctly specify the mterm D410 window size.

- MTERM STR: NASC000012672
REV: 5.41 ORIG-ID: JDM-8-1

PROBLEM SUMMARY:

When mterm is started in d410 mode, it exhibits erratically behavior when used with CEO and wide documents.

ANSWER SUMMARY:

The D410 is an 81x24 terminal. Setting the mterm D410 geometry to 80x24 causes problems for the emulator. The references in the mterm man page to the D410 window size have been changed to reflect the true (81x24) size of the mterm window.

- MWM STR: NASC000012263
REV: 5.40 ORIG-ID: Q422387

PROBLEM SUMMARY:

We are finding core files on the system which appear to be coming from the Motif Window Manager (mwm). We have included several of these core files for analysis along with other X Windows files listed herein.

ANSWER SUMMARY:

The problem is fixed in DG/UX revision 5.4.

- UIL STR: NASC000012469
REV: 5.41 ORIG-ID: Q463000

PROBLEM SUMMARY:

The warning "Warning: The XmForm control is not supported for the XmPromptDialog object" is incor-

X WINDOWS (AViiON)

rectly returned by the uil compiler shipped with rev 5.41 of unix when a Xmform widget is included in a XmPromptDialog.

ANSWER SUMMARY:

The problem you reported is fixed in the forthcoming release of DG/UX, revision 5.4.2. DG/UX 5.4.2 contains Motif 1.2, which resolves the problem you are experiencing with the UIL compiler.

- XDGMAIL STR: NASC000012702
 REV: 5.41 ORIG-ID: E408858

PROBLEM SUMMARY:

The options under the "Include Message" setting in the xdgmmail "Options" menu choice are not currently being grayed out so that a user can tell which option is selected.

ANSWER SUMMARY:

The problem you reported is fixed in the forthcoming release of DG/UX, revision 5.4.2.

- XEDIT STR: NASC000011997
 REV: 5.40 ORIG-ID: Q435806

PROBLEM SUMMARY:

The xedit, X11r4 client is setting the execute file attribute on the text files that it creates by default.

ANSWER SUMMARY:

The problem you reported is fixed in the forthcoming release of DG/UX, revision 5.4.2.

- XRDB STR: NASC000012706
 REV: 5.41 ORIG-ID: E408921

PROBLEM SUMMARY:

Error - "676 unterminated comment", is returned from the xrdb client when trying to load or merge a new resource into the resource database when the resource ends with a "**".

ANSWER SUMMARY:

More precisely, the error only occurs when a line contains "/*" and there is no matching "*/". The reason is that xrdb runs its input through 'cpp', and "/*" starts a C comment, which is not terminated. The '*' in "/*" should be escaped with a '\', which was mentioned as a workaround in the STR description.

X WINDOWS (AVIION)**STR ANSWER REPORT**

for DG/UX X WINDOWS FOR AVIION

- LG STR: NASC000012684
REV: 5.41 ORIG-ID:

PROBLEM SUMMARY:

Looking Glass and db_build should not create .lgdb files in DG/UX system directories. These files cause network and lpsched problems.

ANSWER SUMMARY:

The problem you report will be fixed in Looking Glass 2.2 in DG/UX revision 5.4.2. As recommended, the file, exclude.lgdb, will be updated to include /var/lp, /var/spool/lp, and /etc/lp.

- MTERM STR: NASC000012024
REV: 4.34 ORIG-ID: Q437062

PROBLEM SUMMARY:

Mterm leaves a core file after exiting out of a mterm session.

ANSWER SUMMARY:

The problem has been fixed in mterm for DG/UX X WINDOWS 5.42.

- XDGMAIL STR: NASC000012696
REV: 5.41 ORIG-ID: E408851

PROBLEM SUMMARY:

The xdgmail client is randomly deselecting messages within a group of selected messages when using the delete message menu command or button.

ANSWER SUMMARY:

The problem you reported is fixed in xdgmail on DG/UX 5.4.2.

- XSERVER STR: NASC000012833
REV: 5.41 ORIG-ID: E409043

PROBLEM SUMMARY:

Non-horizontal lines which are one pixel in width disappear when magnified (i.e., zoomed in on).

ANSWER SUMMARY:

The problem you reported is fixed in the forthcoming release of DG/UX, revision 5.4.2.

X WINDOWS (AViiON)

X WINDOWS (AVIION)

STR ANSWER REPORT

for DG/UX X WINDOWS FOR AVIION

- LIBXAW STR: NASC000013098
REV: 5.41 ORIG-ID: U025531

PROBLEM SUMMARY:

Error - "ld:xpostit: fatal error: symbol referencing errors", is returned by the linker when a customer tries to use the Athena Widget set in a program.

ANSWER SUMMARY:

The xpostit client will need to be changed to be compatible with X11R4. We do not build libXaw with XAW_BC defined, therefore the client must be updated from an X11R3 client to an X11R4 client.

- MOTIF STR: NASC000011976
REV: 4.32 ORIG-ID: Q431641

PROBLEM SUMMARY:

Pull down menus are getting detached from the main menu bar in UIM/X.

ANSWER SUMMARY:

This problem is fixed in Motif revision 1.1.4.

- MOTIF STR: NASC000013284
REV: 5.41 ORIG-ID: U031759

PROBLEM SUMMARY:

The menu that is associated with a Option Menu Button Widget is intermittently displayed at the right or left edge of the workstation window instead of being popped up at the same location as the Option Menu Button.

ANSWER SUMMARY:

The problem you reported is fixed in Motif 1.2, which will be released with DG/UX revision 5.4.2.

- MTERM STR: NASC000013090
REV: 5.41 ORIG-ID: U029391

PROBLEM SUMMARY:

The 5.41 Mterm is incorrectly displaying the ceo cursor when it is used to edit a datatable, which causes the character that is highlighted by the cursor to be distorted.

ANSWER SUMMARY:

The problem you reported is fixed in the forthcoming release of DG/UX, revision 5.4.2.

- MTERM STR: NASC000013158
REV: 5.41 ORIG-ID: X000097

PROBLEM SUMMARY:

mterm locks up when function keys are pressed and .editreadrc has a hist_recall = \^w statement and filec is NOT set if csh is login shell.

ANSWER SUMMARY:

The problem you reported is fixed in DG/UX 5.4.2.

- XSERVER STR: NASC000013174
REV: 5.41 ORIG-ID: E409958

PROBLEM SUMMARY:

Incorrect results are returned from the X11 rev 5.41/5.40 XDrawLine() function.

ANSWER SUMMARY:

The problem you reported will be fixed in DG/UX 5.4.3. As a possible workaround until DG/UX 5.4.3 is available, we recommend using a line width greater than or equal to one. The problem only occurs with the default line width of zero.

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STR ANSWER REPORT for DG/UX X WINDOWS FOR AVIION

- LIBXM STR: NASC000013614
REV: 5.40 ORIG-ID: U064663

PROBLEM SUMMARY:

The XmSelectionBox inherited resources XmNtextFontList and XmNlabelFontList are being ignored when the selection dialog box is created in a UIL program.

ANSWER SUMMARY:

As we discussed, we were unable to reproduce the problem you reported with the description provided. We created our own UIL based program which uses the functions mentioned in the STR. We built and tested it on both a DG/UX 5.4/Motif 1.1.1 system and a DG/UX 5.4.1/Motif 1.1.3 system without experiencing any problems.

- MTERM STR: NASC000013741
REV: 5.40 ORIG-ID: DNE-920812

PROBLEM SUMMARY:

When CEO is started, the MTERM on the AV310 locks up and the user must kill the MTERM process in order to get control back.

ANSWER SUMMARY:

The use of 'cu' to establish an asynchronous connection is not supported from within mterm. Mterm supplies its own asynchronous support. See the mterm manual page for a description of the -async and -ty command line options.

- MTERM STR: NASC000012548
REV: 5.41 ORIG-ID: X000059

PROBLEM SUMMARY:

The 'mterm' client overrides user specified icon bitmap. This was not the case in rev 5.4.

ANSWER SUMMARY:

The problem you reported is fixed in Patch Level 1 to DG/UX 5.4.2. Until that is available, you may use the Mterm*iconPixmap resource to specify your mterm icon bitmap.

- MTERM STR: NASC000012928
REV: 5.41 ORIG-ID: U005565

PROBLEM SUMMARY:

The mterm client is failing with a signal 11 fault and terminating with a core dump under DGUX 5.4.1.

ANSWER SUMMARY:

The problem you reported is fixed in DG/UX 5.4.2. The fix was made to the mterm client.

X WINDOWS (AViiON)



GNU C COMPILER

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>GNU C is an ANSI-compliant C compiler that is also compatible with PCC. GNU C supports a high level of optimization, subject to user control through various command-line options. The GNU compiler offers a number of extensions to ANSI C, including the asm, typeof, and inline constructs. GNU C adheres to the 88open Object Compatibility Standard [OCS] in terms of assembler code generated, calling sequence, and alignment.</p> <p>We provide two means of invoking the GNU C compiler: /bin/gcc and /bin/cc. The /bin/cc invokes the GNU C compiler with the - traditional switch, and its compatible with System V in terms of its switches. The /bin/gcc program supports the normal GNU switches, and defaults to mostly ANSI C plus the GNU C extensions.</p> <p>DG'S Release 2.2.3 of GNU C is based on Version 2.2.2 of the compiler from the Free Software Foundation. The GNU General Public License provides you with the opportunity to obtain source code for the GNU C compiler for the AViiON. This is available on the AViiON Contributed Software distribution (Model #R006AZN20A) from Data General. The GNU General Public License does not in any way restrict the distribution of software compiled with GNU C or linked with gnlub or any other libraries supplied with DG/UX on AViiON system.</p>	<p>Product: GNU C COMPILER</p> <p>Model #: P001A</p> <p>Current Rev. 2.2.3 SSS Shipped: 09/92</p> <p>Previous Rev: 1.96.4 Support Effective Until: 04/01/93</p> <p>Release Notice: 085-600319-00</p>

GNU C COMPILER

GNU C COMPILER**STR ANSWER REPORT**

for DG/UX GNU C FOR AVIION

- STR: NASC000011738
REV: 1.37 ORIG-ID: PL0029

PROBLEM SUMMARY:

When code is included through an include file, it is inaccessible through any debuggers because the C compiler does not store any information about the include file.

ANSWER SUMMARY:

This is a limitation due to the fact that our debugging information is in the COFF format. The COFF format does not make it possible to generate debugging information for code that is included through an include file.

- STR: NASC000011739
REV: 1.37 ORIG-ID: PL0030

PROBLEM SUMMARY:

The "strncat" function is defined as using an unsigned integer as its third argument. A negative number is still accepted and used as such.

ANSWER SUMMARY:

The problem you report is resolved in Revision 1.96.4 or a subsequent revision of GNU C, which will be released with Revision 5.4.1 of DG/UX. The new option, -Wconversion, will generate a warning for this situation.

GNU C COMPILER



GNU C COMPILER

GNU C COMPILER**STR ANSWER REPORT**

for DG/UX GNU C FOR AVIION

- STR: NASC000012568
REV: 196.40 ORIG-ID: Q454682

PROBLEM SUMMARY:

The ternary operator fails at gcc 1.96. Worked fine at Rev 1.37.

ANSWER SUMMARY:

The problem you reported is resolved in Revision 2.1.4 or a subsequent revision of GNU C, which will be released with Revision 5.4.2 of DG/UX.

- STR: NASC000012623
REV: 196.40 ORIG-ID: PL0036

PROBLEM SUMMARY:

A macro generates a warning when it contains "< <" and does not when it contains the equivalent "*256".

ANSWER SUMMARY:

The gcc compiler is generating an appropriate warning in this situation. Section 3.3.7 of the ANSI Standard states "If the value of the right operand is negative or is greater than or equal to the width in bits of the promoted left operand, the behavior is undefined." Shifting by 8 bits and multiplying by 256 is not the same due to different promotions before the operation takes place.

- STR: NASC000012624
REV: 196.40 ORIG-ID: PL0037

PROBLEM SUMMARY:

The C pre-processor generates an error caused by code that is excluded by it.

ANSWER SUMMARY:

This is not a problem with GNU C. Please refer to the manual "Using and Porting GNU CC" on page 36. It is documented there that this situation will produce an error. The best solution to correct this problem is to put the offending text into a C comment delimited by /* ... */. However, the -traditional option on gcc suppresses these error messages.

GNU C COMPILER

GNU C COMPILER**STR ANSWER REPORT**
for DG/UX GNU C FOR AVIION

- STR: NASC000012857
REV: 196.40 ORIG-ID: E409221

PROBLEM SUMMARY:

GNU Rev 1.95 (5.41 DGUX) does not correctly handle a cast of an unsigned character to an integer.

ANSWER SUMMARY:

This problem is fixed in Revision 2.1.11 or a subsequent revision of GNU C, which will be released with revision 5.4.2 of DG/UX.

- STR: NASC000012960
REV: 196.40 ORIG-ID: U020115

PROBLEM SUMMARY:

Error "No prototype is scope for global function def" is returned by the Gnu C compiler when the compiler is invoked with the -Wmissing-prototypes switch and the prototype is in the same source file as the function definition.

ANSWER SUMMARY:

The problem you report is resolved in Revision 2.1.11, or a subsequent Revision of GNU C, which will be released with Revision 5.4.2 of DG/UX.

GNU C COMPILER



MV DATA CENTER MANAGER FOR AVIION

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The MV Data Center Manager is AViiON Workstation software which addresses the needs of customers who manage several computers in a data center. Each of these systems has an operator console, and the system manager currently must move from console to console in the data center.</p> <p>MV Data Center Manager allows these data centers to be managed from a SINGLE AViiON workstation. The system manager first configures the hosts he/she wants to manage. Each MV's operator console becomes an active window on the workstation. In addition, MV Data Center Manager allows the system manager to configure applications and macros to be run on a managed host by simply making menu choices. MV Data Center Manager makes viewing the operator console log more manageable by storing all console input and output on the local disk.</p>	<p>Product: MV DATA CENTER MANAGER FOR AViiON</p> <p>Model #: R045A</p> <p>Current Rev. 1.00 SSS Shipped: 01/92</p> <p>Release Notice: 085-001243-00</p>

DOCUMENTATION

Title	Part Number
Using the MV Data Center Manager	093-000769-00

MV DATA CENTER MANAGER FOR AVIION

NETWARE TRANSPORT for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>NetWare Transport for AViiON Systems is licensed to the AViiON server platform. It includes Novell transport software for DG/UX; NetBios interface libraries for DG/UX; Portable C Interface header files and Library for DG/UX, Novell transport software for DOS, Windows 3.0, and OS/2; NetBios interface libraries for DOS, Windows 3.0, and OS/2.</p> <p>Four model numbers are available for NetWare Transport for AViiON Systems, C021AZM, for AViiON 3200 Series Servers, C021AZS, for AViiON 4000 Series Servers, CO21AZU for 5000/6000 Series Servers (except 5240 and 6240), and C021AZV for AViiON 7000/8000 Series Servers (including 5240 and 6240).</p>	<p>Product: NETWARE TRANSPORT for AViiON SYSTEMS</p> <p>Model #: C021A</p> <p>Current Rev. 1.40 SSS Shipped: 06/92</p> <p>Previous Rev. 1.31 Support Effective Until: 01/01/93</p> <p>Release Notice: 085-001236-02</p>

DOCUMENTATION

Title	Part Number
NetWare Client Release Notice	085-001186-00
NetWare for AViiON Series Systems Concepts	069-000483-00
NetWare for AViiON Series Systems: Installation Manual	069-000488-03
NetWare for AViiON Series Systems: System Administration	069-000487-03
NetWare for AViiON Series Systems System Messages	069-000485-00
NetWare for AViiON Series Systems User Book	069-000486-00
NetWare for AViiON Series Systems Utilities	069-000484-00
NetWare for AViiON Series Systems Worksheets	069-000510-00
NetWare for AViiON Series Systems: C Interface Reference Guide	069-000567-00
Addendum to NetWare for AViiON Series Systems: Utilities	086-000199-00
Programming with Transport Interfaces for AViiON Series Systems	069-000482-01

NETWARE TRANSPORT for AVIION SYSTEMS

NETWARE TRANSPORT for AViiON SYSTEMS**PROGRAMMING NOTES/DOCUMENTATION****NETWARE FOR AVIIION****PATCH LEVEL 8 TO NETWARE FOR AVIIION SYSTEMS 1.30 NOW AVAILABLE**

NetWare for AViiON Systems has released its first patch level to revision 1.30. This patch level contains 8 fixes and is for revision 1.30 only. The descriptions are listed below. The fixes are for a mixture of both Transport and Services problems. If you feel you need one of these fixes, please contact your Customer Support Center.

Patch Level 1.30.0.8:

Patch 1: NetWare Engines were not de-allocating and reusing memory correctly causing "Process Memory Exhausted" errors.

Patch 2: NetWare for AViiON Systems now properly handles the deletion of directories that contain a "." as part of their name.

Patch 3: NetWare will no longer give the error "NWInform: Received Unknown NCP. Func. 0x3B (000000)" when using the NETX, EMSNETX and XMSNETX redirectors.

Patch 4: NetWare will no longer consume shared memory causing a shutdown of services.

Patch 5: NetBIOS counts have been greatly increased over previous releases.

Patch 6: Multiple problems with the NetWare Portable C Interface (API Library) have been corrected.

Patch 7: Print job configuration information managed from PCONSOLE no longer gets lost.

Patch 8: Signal handlers within application programs built with the NetWare Portable C Interface no longer become corrupt.

NETWARE TRANSPORT for AViON SYSTEMS

AV OBJECT OFFICE

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The AV Object Office software is an office automation system that gives you access to filing and printing services from Novell NetWare®, and mailing services from MHS by Action Technologies™ (Message Handling Service). The AV Object Office environment is built upon Microsoft Windows™ and Hewlett-Packard NewWave™, software packages that provide a basic set of tools for managing information on your workstation. With the addition of the AV Object Office tools, Novell Netware®, and MHS, you can exchange information with other MHS users on the network. You can also use the filing and printing resources available on the network.</p>	<p>Product: AV OBJECT OFFICE</p> <p>Model #: A090A</p> <p>Current Rev. 1.00 SSS Shipped: 08/91</p> <p>Release Notice: 085-001197-00</p>

DOCUMENTATION

Title	Part Numbers
Using the AV Object Office Software	069-000547-00
Installing the AV Object Office Software	069-000548-00

Also included with AV Object Office are:

- HP NewWave User's Guide
- HP NewWave Bridge Guide
- HP NewWave Installation Guide
- HP NewWave Agent User's Guide
- HP NewWave Support Guide
- HP NewWave Agent Guide
- HP NewWave Agent Task Language Guide

AV OBJECT OFFICE

AV OBJECT OFFICE**PROGRAMMING NOTES/DOCUMENTATION****AVOFFICE (AX) REV 1.00**

Replacement PCAP and FCAP files available:

The replacement files contain fixes which are experienced when printing in HP mode:

- 1) The problem when using avp_hp* Pcap entries which caused printed text to indent three spaces to the right of the margin, has been corrected.
- 2) Blank pages of paper are no longer ejected from HP printers after each print job. (Except when remote printing to the hplj3, 1 blank page may still be ejected after each print job.)
- 3) The problem where quality/semi-quality printing on the hplj3 (using avp_hp_jetll* Pcap entry) caused incorrect page breaks to occur, has been corrected.

The replacement Pcap and Fcap files are available from your Data General representative.

AVOFFICE (AX) REV 1.00

WARNING: CPD's with AV Office Mail:

The AV Office document "Installing and Configuring the AV Office System" and the AV Office 1.0 Release Notice, recommend implementing control point directories (cpd(1)), with AV Office Mail in order to control resource limits. However, this causes DG/UX 5.4 to report erroneous results to AV Office concerning the percent full capacity of the cpd. This results in the corruption of an AV Office Mail "index file" UAP/umail/text/ < username > /mbox#/DETAILS. Applying DG/UX patch dgux_5.4.0.p24 prevents filesystems from becoming corrupt.

Further investigation of the (cpd(1)) implementation also shows that mailboxes are not a good application for control point directories. The reason is that upon creation of a control point directory, DG/UX creates a set number of inodes associated with that directory size. Therefore, there are two ways that your control point directory can become "full". The first is that you have run out of "disk space", the second is that you have used all your inodes. Because mail messages can be small in size, it is a real possibility that you might run out of inodes before running out of disk space. We recommend that you DO NOT implement control point directories with your AV Office mail directories.

If your site has already implemented cpd's with AV Office mail, apply DG/UX patch dgux_5.4.0.p24 (for DG/UX 5.4 systems). This patch is available from your local Support Center.

Also, should you experience multiple mailboxes, call you local support center for help in restoring your user's mailboxes.

AV OBJECT OFFICE

AV OBJECT OFFICE

PROGRAMMING NOTES/DOCUMENTATION

AVOFFICE (AX) REV 1.00

AV Office 1.00 with DG/UX 5.4.1:

AV Office 1.00 will run with DG/UX 5.4.1. As well, the incompatibility with EDITREAD and AV Office has been fixed in DG/UX 5.4.1. AV Office will continue to warn you that it has found .editreadrc; you can ignore this warning message.

What you need to do if:

- * You are upgrading your DG/UX 5.4 system which currently has AV Office 1.00 installed:

This requires no additional setup.

- * You are running DG/UX 5.4.1 and now installing AV Office 1.00:

Install AV Office as documented. Be sure to verify that you have 10,000 blocks in /usr to install AV Office Windows. If not, grow the filesystem. (NOTE: this is a change from the installation guide - due to the new X11 implementation, AV Office now loads into /usr space instead of /usr/opt/X11.) Once the AV Office installation has been completed, run the following X11 setup script.

```
/usr/sbin/setup.d/usr/X11__0.X11.done /usr
```

For further information, refer to the DG/UX X Window Update Notice found in /usr/opt/X11/release. Reference Section 4.2.4 - X11 Directories, and 5.1.3 - X11 Applications.

Change to AVCW rules:

Due to the 5.4.1 X11 implementation, AV Office windows reports a problem trying to locate the avcw_icon. The reason for this is that a relative path was used; which is no longer valid. To correct this problem you must edit the following files:

```
/usr/x/lib/sysinfodir/C
/usr/x/lib/sysinfodir/english
/usr/opt/avoffice/avcw/bin/avcw_rules
```

In each of the above files, locate the following string:

```
picture = ../../../../avoffice/avcw/bin/avcw_icon;
```

and replace it with the following:

```
picture = /usr/opt/avoffice/avcw/bin/avcw_icon
```

AVOFFICE (AX) REV 1.00

DICTIONARIES: SUBSTITUTING BRITISH ENGLISH FOR AMERICAN ENGLISH

If you are running a straight AV Office American English installation with American English licenses, and want to substitute British English dictionaries for American English dictionaries, do the following:

WARNING: With this setup the language available will show as American, even though the language you are using is British.

AV OBJECT OFFICE

- 1) Save all American English files from the /usr/opt/avoffice/UAP/dict directory.
Become root:

```
# cd /usr/opt/avoffice/UAP/dict
# mkdir engdict.orig
# mv *001* engdict.orig/
# mv defaults dicts languages dictmain.cmp engdict.orig/
```

- 2) Untar ukdict.tar. This will move all of the British English files into the /usr/opt/avoffice/UAP/dict directory. (These files have been renamed to include the American English lang code instead of the British English language code. Example: hy044a05.exc is now named hy001a05.exc. The only files that were not renamed were defaults, dicts, and languages. These files do not change their name depending on the language code.)

The following files are included in the ukdict.tar file. They should be installed with the following permissions:

```
-r--r--r-- root root defaults
-rw-rw-rw- root other dictmain.cmp
-r--r--r-- root root dicts
-rw-rw-rw- root other hy001a05.exc
-rw-rw-rw- root other hy001a05.hyp
-rw-rw-rw- root other hy001a05.lex
-r--r--r-- root root languages
-rw-r--r-- root other th001a06.lex
-rw-r--r-- root other ve001a51.lex
-rw-r--r-- root other ve001b51.lex

# cd /usr/opt/avoffice/UAP/dict
# tar xvf ukdict.tar
```

- 3) Bring up AV Office - you should now have access to the British English dictionaries!

NOTE: Installation of the Additional Dictionary Pack will provide multiple language dictionaries. The steps described in this bulletin article would not be required if you install the Additional Dictionary Pack.

AV OBJECT OFFICE**PROGRAMMING NOTES/DOCUMENTATION****AVOFFICE (AX) REV 1.00**

Patch for AVOW to allow 8-bit characters

There is a problem displaying 8-bit characters in AV Office Windows. The problem resulted when the uxin-
voke binary disallowed 8-bit characters by resetting the stty setting istrip, to strip input characters to seven
bits. This problem became apparent on the international keyboards when using 8-bit characters, and also
when using ALT sequences to generate 8-bit characters.

The uxinvoke binary fixes the problem using 8-bit characters on the international keyboards. However,
generating 8-bit characters with an ALT sequence will still not work in AV Office Windows.

To generate 8-bit characters from international keyboards, install the new uxinvoke binary.
Installation procedure:

1. As "root", bring up AV Office, escape to the shell using the command ESC ESC \$, and then change
to the directory containing the AV Office binary programs using the command:

```
cd $Uniplex/bin
```

2. Save the existing version of uxinvoke. eg:

```
mv uxinvoke uxinvoke.orig
```

3. Load the new program from tape.
4. Ensure the program has the appropriate permissions:

```
chmod 555 uxinvoke
```

NOTE: you will need to repeat these steps if you subsequently install AV Office Windows.

AV OBJECT OFFICE

AV OBJECT OFFICE

PROGRAMMING NOTES/DOCUMENTATION

AVOFFICE (AX) REV 1.00

Datalink 1.0 documentation set not in sync with software

Customer's ordering Datalink 1.0 are being shipped "Datalink User's Guide", Issue 2. The Issue 2 set of documentation was actually written for the next revision of Datalink - which is not available at this time.

Please note that Datalink 1.0 supports the following Databases:

Informix 2.0 and 2.1

Oracle V5 and V6

Ingres V6

*****NOTICE*****

Due to limited availability, the Informix 4 products are not supported in this release of Uniplex Datalink. Informix 4.0 products include Informix 4 Standard Engine and Informix 4 On-Line. References to Informix 2.0, Informix 2.1, Informix-Net, Informix-Turbo and Turbo-Net are supported.

Please disregard the references to the Informix 4 (Standard Engine and On-Line) on the following pages:

SECTION	PAGE(s)
Introduction	Intro-3
Installation	1-3 Table of Contents Chapter 2
Chapter 2 Informix	2-1 to 2-9, 2-12, 2-14 to 2-15, 2-19 to 2-20
Index	

On pages 2-19 to 2-20 the following Interface Flags are specific to the Informix 4 products:

- DBRENAME
- DBINTERVAL
- DBDIME
- DBYTE
- DBTEXT
- DBVARCHAR

Please consult your Data General sales representative for availability of Datalink 1.10 on your system.

AVOFFICE (AX) REV 1.00

AV Office Printing fixes:

Fixes for the following AV Office printing problems are available:

- 1) The problem when using avp_hp* Pcap entries which caused printed text to indent three spaces to the right of the margin, has been corrected.
- 2) Blank pages of paper are no longer ejected from HP printers after each print job. (Except when remote printing to the hplj3, 1 blank page may still be ejected after each print job.)
- 3) The problem where quality/semi-quality printing on the hplj3 (using avp_hp_jetII* Pcap entry) caused incorrect page breaks to occur, has been corrected.

AV OBJECT OFFICE

4) The problem where the page length and mandatory page break commands were not working properly, has been corrected. However, this change introduces a limitation where page length must be set to (pagelength = maxprintablelines - 1) to avoid blank page ejection between pages. There is currently no fix for this limitation.

5) The problem where easiprint was not recognizing stty options provided on the spooler line, has been corrected.

*****HOW TO INSTALL*****

As root, do the following:

1) Make back-ups of current files:

```

/usr/opt/avoffice/print/model/avprint_hplj
/usr/opt/avoffice/UAP/Pcap
/usr/opt/avoffice/UAP/Fcap
/usr/opt/avoffice/UAP/avoffice/cmds/avprint

```

2) Install files from tarfile:

```

cd /usr/opt/avoffice
tar xvf printer_fix2.tar

```

3) Verify/set permissions of files:

```

-r-xr-xr-x root other 33536 avprint_hplj
-r--r--r-- root other 372711 Pcap
-r--r--r-- root other 393307 Fcap
-r-xr-xr-x root other 2165 avprint

```

4) Any printers which are currently using the avprint_hplj model file must be modified through sysadm. This will allow those printers to utilize the new avprint_hplj model file.

Select Device/Printer/Devices/Modify

New Line through all questions except:

Model: standard --change to avprint_hplj

If setting the printer up for the first time, reference "Installing and Configuring the AV Office System", (chapter 4) for additional information.

DG/UX

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>DG/UX™ is a native UNIX® operating system, implemented on Data General Corporation's ECLIPSE® MV/Family and DS/Family systems. DG/UX features virtual memory management to take advantage of the 32-bit ECLIPSE system's virtual storage design and UNIX multiprogramming (sometimes referred to as multitasking in the UNIX world).</p> <p>DG/UX is a complete UNIX operating system. It includes its own system management functions, programming utilities, and languages. DG/UX delivers demand paging, communications/networking support, and program portability. It includes:</p> <ul style="list-style-type: none"> ● Support for DG/UX languages: C, FORTRAN 77, Pascal, Common Lisp and macro assembler ● Support for Graphical Kernel System (GKS) ● The UNIX dbx source level debugger ● Support for distributed file system, NFS ● uucp for standard UNIX file transfers across asynchronous lines ● Support for TCP/IP protocol support over Ethernet ● Standard UNIX utilities for maintaining programs ● The Bourne and C shell (csh) user interface 	<p>Product: DG/UX</p> <p>Model #: 30927, 31055</p> <p>Current Rev. 4.00 SSS Shipped:10/18/88 Update: 02 SSS Shipped:02/15/89</p> <p>Previous Rev: 3.11 Support Effective Until: No longer supported</p> <p>Release Notice: 085-000666-05 Update Notice: 078-000261-08</p> <p style="text-align: center; margin-top: 20px;">This product is Category C.</p>

DOCUMENTATION

Title	Part Number
DG/UX System Administrator's Reference Guide	093-701008-02
DG/UX System User Reference Manual	093-701007-01
Installing and Managing the DG/UX System	093-701029-00
Porting Software to DG/UX Systems	093-701036-00
Programmer's Guide to the DG/UX System	093-701032-00
Programmer's Reference for the DG/UX System, Volume 1	093-701041-00
Programmer's Reference for the DG/UX System, Volume 2	093-701042-00
The DG/UX System Overview	069-701012-00
Using DG/UX X Window Guide	069-701009-00
Using the DG/UX System	093-701030-00
Using the Multi-extensible Debugger	093-701035-00
Writing a Device Driver for the DG/UX System	093-701037-00
C Language Reference	093-000583-00
Using the Standard C Runtime Environment	093-000584-00

DG/UX

DG/UX

DG/UX

STR ANSWER REPORT
for Multi-User DG/UX

- LINT STR: NASC000004706
 REV: 4.02 ORIG-ID: E058260

PROBLEM SUMMARY:
LINT will fail if a structure contains 147 or greater elements. This will occur in a source file or a header file. The error is "stack overflow".

ANSWER SUMMARY:
The problem described is a current restriction of LINT. When using LINT, please do not specify more than 146 elements in a structure.

DG/UX



LAN MANAGER for AViiON

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>LAN Manager for AViiON Systems is licensed on a user count basis regardless of AViiON server class. It includes LAN Manager software for DG/UX and a complete set of documentation. Client diskettes for use with this product are available in model number 32193 which is provided with this server product.</p>	<p>Product: LAN MANAGER FOR AViiON SYSTEMS</p> <p>Model #: C102A</p> <p>Current Rev. 1.10 SSS Shipped: 03/92</p> <p>Release Notice: 085-001234-00</p>

DOCUMENTATION

Title	Part Number
Administering LAN Manager for AViiON Systems	093-000727-00
Addendum to Administering LAN Manager for AViiON Systems	086-000184-00
Getting Started with Lan Manager for AViiON Systems	093-000728-00
Installing LAN Manager for AViiON Systems	093-000730-00
Addendum to Installing LAN Manager for AViiON Systems	086-000185-00
LAN Manager for AViiON Systems Programmer's Reference	093-000726-00
LAN Manager for AViiON Systems Troubleshooting and Command Reference	093-000729-00
Addendum to LAN Manager for AViiON Systems Troubleshooting and Command Reference	086-000183-00
Using LAN Manager for AViiON Systems	093-000725-00

LAN MANAGER for AViiON

TUXEDO SYSTEM/T for AViiON

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>TUXEDO System/T for AViiON (model number Q013A) is a transaction processing monitor for Unix systems.</p> <p>TUXEDO System/WS for AViiON (model Q014A) allows UNIX workstations to run TUXEDO clients processes without the overhead of /T on the workstations.</p> <p>TUXEDO System/WS for MS-DOS (model number 32038) allows MS-DOS workstations to run System /T client processes.</p> <p>These products provide a state-of-the-art platform on which distributed Unix-based On-Line Transaction Processing (OLTP) systems may be built.</p>	<p>Product: TUXEDO SYSTEM/T for AViiON</p> <p>Model #: Q013A</p> <p>Current Rev. 4.20 SSS Shipped: 03/92</p> <p>Release Notice: 085-600309-00</p>

DOCUMENTATION

Title	Part Number
TUXEDO System /WS for Aviiion Release Notice	085-600310-00
TUXEDO Data Entry System Guide	069-701093-00
TUXEDO FML Programmer's Guide	069-701092-00
TUXEDO Product Overview	069-701088-00
TUXEDO Transaction Monitor Administrator's Guide	069-701090-00
TUXEDO Transaction Monitor Installation Guide	069-701089-00
TUXEDO Transaction Monitor Programmer's Guide	069-701091-00
TUXEDO Transaction Monitor Reference Manual	069-701095-00
TUXEDO Workstation Guide	069-701094-00

TUXEDO SYSTEM/T for AViiON

TUXEDO SYSTEMS/WS for AViiON

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>TUXEDO System/T for AviiON (model number Q013A) is a transaction processing monitor for Unix systems.</p> <p>TUXEDO System/WS for AViiON (model Q014A) allows UNIX workstations to run TUXEDO clients processes without the overhead of /T on the workstations.</p> <p>TUXEDO System/WS for MS-DOS (model number 32038) allows MS-DOS workstations to run System /T client processes.</p> <p>These products provide a state-of-the-art platform on which distributed Unix-based On-Line Transaction Processing (OLTP) systems may be built.</p>	<p>Product: TUXEDO SYSTEM/WS for AViiON</p> <p>Model #: Q014A</p> <p>Current Rev. 4.20 SSS Shipped: 03/92</p> <p>Release Notice: 085-600310-00</p>

DOCUMENTATION

Title	Part Number
TUXEDO System /T for AviiON Release Notice	085-600309-00
TUXEDO Data Entry System Guide	069-701093-00
TUXEDO FML Programmer's Guide	069-701092-00
TUXEDO Product Overview	069-701088-00
TUXEDO Transaction Monitor Administrator's Guide	069-701090-00
TUXEDO Transaction Monitor Installation Guide	069-701089-00
TUXEDO Transaction Monitor Programmer's Guide	069-701091-00
TUXEDO Transaction Monitor Reference Manual	069-701095-00
TUXEDO Workstation Guide	069-701094-00

TUXEDO SYSTEMS/WS for AVIIION

X.400 for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Revision 2.00 is the second release of the X.400 for AViiON product. AV/X4.00 is comprises three components: An 1984-conformant X.400 Message Transfer Agent (X400), an X.400-to-SMTP Gateway (smtpgw) and an X.400 Application Program Interface (API) as specified by X.400 API Association.</p> <ul style="list-style-type: none"> ● X400 - Provides X.400 (Layer seven) services as defined by the CCITT and ISO standards for X.400 messaging systems. X400 conforms to the 1984 version of the X400 standards and is qualified to operate over TPO/X.25, TP4/IP/X.25 and TP4/IP/LAN and TPO/TCP/IP. AV/X.400 for AViiON Systems may be used as a relaying point to other MTAs in the X.400 network. ● smtpgw - Provides a gateway between the AV/X.400 MTA and the SMTP RFC 821, RFC 822, (Unix Mail) network. The mappings used between the two networks conform to RFC 1148. Smtg Gateway management is also integrated into the DG/UX SYSADM management. ● apial - This release also provides support for applications developed using X.400 Applications Program Interface Association's (APIA's) API rev 1.0. A portable version of the Retix APIA Library for AViiON systems is also included in this release. 	<p>Product: X.400 for AViiON SYSTEMS</p> <p>Model #: C098A</p> <p>Current Rev. 2.00 SSS Shipped: 03/92</p> <p>Previous Rev: 1.00 Support Effective Until: 10/01/92</p> <p>Release Notice: 085-001198-01</p>

DOCUMENTATION

Title	Part Number
Setting Up and Managing X.400 for AViiON Systems	093-000750-02
Programming the AV/X.400 APIA Gateway Application Program Interface	093-000811-00

X.400 for AViON SYSTEMS

X.400 for AViiON SYSTEMS**STR ANSWER REPORT**
for X.400 for AViiON Systems

- STR: WEBO000036857
REV: 1.00 ORIG-ID:

PROBLEM SUMMARY:

If the SMTP Gateway receives SMTP messages with no "Date:" field, this may cause the gateway to core. This can occur if the "Date" header has been commented out in the local sendmail.cf file.

ANSWER SUMMARY:

It is unusual not to use "Date:" in smtp message headers. The problem can be avoided by using the Date header in all mail and altering the sendmail.cf file appropriately. The problem has been fixed in Rev 2.00 of the product.

- STR: WEBO000036858
REV: 1.00 ORIG-ID:

PROBLEM SUMMARY:

If the X.400 MTA attempts to setup an association to an MTA which is configured as not using MTA name and password but does send it anyway, and is also configured with the no_auth flag, the MTA may core.

ANSWER SUMMARY:

The problem can be avoided by always using MTA name and password for authentication. The problem has been fixed in Rev 2.00 of the product.

X.400 for AViON SYSTEMS



API LU6.2 for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>API LU6.2 for AViiON Systems is the software product which, when used in conjunction with SNA for AViiON Systems and SDLC for AViiON Systems or Token Ring for AViiON Systems, allows user-written applications to communicate with distributed applications through an IBM SNA Network. By providing access to LU 6.2 protocols (APPC), API LU6.2 provides a method for AViiON users to exchange information with users on IBM Systems, as well as other AViiON Systems (remote applications may reside on PU Type 4 or 5 Nodes, or peer PU Type 2.1 nodes).</p> <p>API LU6.2 for AViiON Systems is a set of C Language subroutines that the user can call. They provide interprocess communication functions. While knowledge of SNA protocols is required, programmers using this interface can develop sophisticated and flexible applications.</p>	<p>Product: API LU6.2 for AViiON SYSTEMS</p> <p>Model #: C014B</p> <p>Current Rev. 3.00 SSS Shipped: 09/91</p> <p>Previous Rev: 2.00 Support Effective Until: No longer supported</p> <p>Release Notice: 085-001230-00</p>

DOCUMENTATION

Title	Part Number
Using API LU6.2 for AViiON Systems	093-000680-01

API LU6.2 for AViiON SYSTEMS

API LU6.2 for AViiON SYSTEMS



API LU6.2 for AVIION SYSTEMS



DATA ACCESS LANGUAGE for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>This is the first release of the Data Access Language for AViiON Systems product. Data Access Language for AViiON Systems 1.00 consists of several database server programs which are designed to operate on any AViiON server; and conforms to Apple Computer, Inc. DAL specifications for accessing relational database management systems via SQL-like commands.</p> <p>This revision of Data Access Language for AViiON Systems supports the following relational database management systems:</p> <ul style="list-style-type: none"> ● INFORMIX ● INGRES ● ORACLE <p>over the following networks:</p> <ul style="list-style-type: none"> ● ASYNC ● TCP/IP ● ADSP (AppleTalk Data Stream Protocol). 	<p>Product: DATA ACCESS LANGUAGE for AViiON SYSTEMS</p> <p>Model #: C145A</p> <p>Current Rev. 1.00 SSS Shipped: 03/92</p> <p>Release Notice: 085-001260-00</p>

DOCUMENTATION

Title	Part Number
Customizing the DG/UX System	093-701101-00
Installing and Configuring OpenMAC Transport for AViiON Systems	093-000753-00
Installing and Managing DG TCP/IP (DG/UX)	093-701051-00
Installing the DG/UX System	093-701087-00
Managing the DG/UX System	093-701088-00

DATA ACCESS LANGUAGE for AViON SYSTEMS

MESSAGE HANDLING SERVICE (MHS) for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>MHS for AViiON Systems is a Message Handling Service licensed to the AViiON server platform. It includes MHS for AViiON Systems software for DG/UX.</p> <p>The product is compatible with DOS versions of MHS. The DOS MHS interface is Microsoft Windows based; thus allowing an easier graphical interface for operation and maintenance of MHS connectivity.</p> <p>MHS messages can consist of text or binary data, and can convey any of the following: ASCII text files, graphic files, text generated by word processor, spreadsheet work and print files, databases or entries, records or financial transactions, and executable program code.</p> <p>The model numbers for AViiON Systems are: C136AZM for 3200 Series Systems. C136AZS for 4000 Series Systems. C136AZU for 5000 and 6000 Series Systems, except 5240, 6240. C136AZV for 7000 and 8000 Series Systems, and 5240, 6240 Systems.</p>	<p>Product: MESSAGE HANDLING SERVICE (MHS) for AViiON SYSTEMS</p> <p>Model #: C136A</p> <p>Current Rev. 1.00 SSS Shipped: 03/92</p> <p>Release Notice: 085-001223-00</p>

DOCUMENTATION

Title	Part Number
Installing and Managing Message Handling Service (MHS) for AViiON Systems	069-000625-00

MESSAGE HANDLING SERVICE (MHS) for AViION SYSTEMS

MESSAGE HANDLING SERVICE (MHS) for AVIION SYSTEMS



MICRO FOCUS COBOL-2

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The Micro Focus COBOL/2 system consists of a compiler, native code generator, run-time system, linker, ANIMATOR, and Conversion Series 3 and 5 utilities.</p> <p>ANIMATOR is an interactive program debugging tool for use with Micro Focus COBOL/2 programs.</p> <p>Conversion Series 3 is a Micro Focus utility designed to assist in the migration of applications from the RM/COBOL environment to the Micro Focus COBOL/2 environment.</p> <p>Conversion Series 5 is a Micro Focus utility designed to assist in the migration of DG Interactive COBOL applications to the Micro Focus COBOL/2 environment.</p>	<p>Product: MICRO FOCUS COBOL-2</p> <p>Model #: L013A</p> <p>Current Rev. 1.20 SSS Shipped: 07/91</p> <p>Previous Rev: 1.1.2 Support Effective Until: No longer supported</p> <p>Release Notice: 085-600234-01</p>

DOCUMENTATION

Title	Part Number
Micro Focus COBOL/2 Release Notes for DG/UX Systems	069-100355-01

MICRO FOCUS COBOL-2

MICRO FOCUS COBOL-2**PROGRAMMING NOTES/DOCUMENTATION****COBOL MF (AX) REV 1.2**

Micro Focus COBOL/2 Rev 1.2 for AViiON Systems replacement module

A new replacement module to fix a problem with SORT has been released. This update fixes a bug where the sort status variable was not getting updated with the correct status code when disk space was exhausted during the sort operation. A cobol version file, cobver, is also being released to update the Product Reference Number (PRN) to 6.10.

Move the tar file mf1.2_05.tar to a temporary directory and then extract the update modules with "tar -xvf mf1.2_05.tar". Check the readme file for instructions on how to install the update.

MICRO FOCUS COBOL-2

MICRO FOCUS COBOL-2

PROGRAMMING NOTES/DOCUMENTATION

COBOL MF (AX) REV 1.2

Porting applications to Micro Focus COBOL/2 on the AViiON

The document PORTING_TO_MF contains a list of some things to be aware of when porting to Micro Focus COBOL/2 from other cobol products. It also lists some porting issues specific to AOS/VS COBOL and ICOBOL.

MICRO FOCUS COBOL-2

RPC TOOL for AViiON SYSTEMS, SPX

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Release 1.00 is the first release of the RPC TOOL for AViiON Systems, SPX product. RPC TOOL for AViiON Systems, SPX 1.00 is a flexible software development tool that helps you design and develop distributed applications for a network by using Remote Procedure Call (RPC) technology. The interface to the RPC TOOL for AViiON Systems, SPX is derived from standard C syntax and declarations. Likewise, all output is C source code, capable of being compiled by your C compiler.</p> <p>RPC TOOL for AViiON Systems, SPX is a ported version of the Netwise RPC Tool.</p> <p>Model number C141A of the RPC TOOL for AViiON Systems, SPX software consist of the following four main components.</p> <p>RPC COMPILER - Generates C language source code, called the RPC code, to support network communication specifically for your application.</p> <p>NETWORK LIBRARY - Provides routines that present a network-independent interface to the RPC code and are used by the communicating programs to establish a dialog with one another. The network library supplied with this version of the RPC TOOL interfaces to the TLI/SPX transport provider.</p> <p>SERVER CONTROL PROCEDURES - Provides source code modules that you can plug into your server programs to handle client requests and to control server function.</p>	<p>Product: RPC TOOL FOR AViiON SYSTEM, SPX</p> <p>Model #: C141A</p> <p>Current Rev. 1.00 SSS Shipped: 03/92</p> <p>Release Notice: 085-001255-00</p>

DOCUMENTATION

Title	Part Number
The C Language RPC TOOL Reference for TLI/SPX on AViiON Series System	069-000624-00
The C Language RPC Tool User Guide	069-000489-01
The Quick Start Guide	069-000490-00

RPC TOOL for AViON SYSTEMS, SPX

SNA RJE for AViiON SYSTEMS

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>SNA RJE provides the DG AViiON System with the ability to emulate a IBM 3776 model 3 Communications Terminal. This will allow a user who develops the job control and data sets for his host processing on the DG AViiON to submit the same to a host with an RJE facility and to capture and process on the DG AViiON the resultant output.</p> <p>The platform will consist of the DG AViiON system running DG/UX with the SNA package supplying the SNA connection to the host with the link transmission accomplished by the Systech synchronous communications adapter.</p> <p>You interface with the product using a DG AViiON workstation or with a connection to an asynchronous terminal.</p>	<p>Product: SNA RJE for AViiON SYSTEMS</p> <p>Model #: C013B</p> <p>Current Rev. 3.00 SSS Shipped: 09/91</p> <p>Previous Rev: 2.00 Support Effective Until: No longer available</p> <p>Release Notice: 085-001225-00</p>

DOCUMENTATION

Title	Part Number
Using SNA RJE for AViiON Systems	093-000678-00

SNA RJE for AViiON SYSTEMS

SNA RJE for AViiON SYSTEMS

STR ANSWER REPORT
for SNA RJE FOR AViiON SYSTEMS

- STR: NASC000011446
REV: 3.00 ORIG-ID: FOWLER-RJE1

PROBLEM SUMMARY:
When attempting to transmit a large file to JES3 via RJE configured for a single LU, sense code 2002 is returned.

ANSWER SUMMARY:
The problem of RJE returning the sense code 2002 was corrected in the new RJE executable that was previously sent to you. This problem will be fixed in source in revision 3.10 of SNA RJE for AViiON Systems.

SNA RJE for AViiON SYSTEMS



SNA RJE for AViON SYSTEMS

SNA RJE for AVIION SYSTEMS

STR ANSWER REPORT
for SNA RJE FOR AVIION SYSTEMS

- STR: NASC000012989
REV: 3.00 ORIG-ID: U20881

PROBLEM SUMMARY:
Traffic to IBM host hangs if a job is submitted to rje while a job is being received from the IBM.

ANSWER SUMMARY:
We have been unable to reproduce this problem; therefore, we could not determine the cause of the hang. As a workaround to this problem, you should define at least one LU for RJE to use.

SNA RJE for AVIION SYSTEMS

INTERACTIVE UNIX

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Interactive Unix is an enhanced, high performance UNIX product family developed by INTERACTIVE System Corporation (the developer of the UNIX System V.3/386 for AT&T). It is a multi-user general purpose operating system that runs off Data General Corporation's DASHER/386 systems Release 3.2.</p> <p>The Interactive Unix product family provides a powerful multi-user, multi-taskin platform for a wide range of applications. It includes support for peripheral devices, access MS-DOS, and popular Berkeley enhancements. Release 2.2.1 is capable of running application binaries for:</p> <ul style="list-style-type: none"> ● Interactive Unix System V/386 ● System V/286 ● Microsoft XENIX 386 ● Microsoft XENIX 286 <p>Interactive Unix supports program development, execution of runtime applications, connections to industry-standard networks, and text processing capabilities. The Interactive Unix modules may be integrated with VP/ix (MS-DOS under Unix) and the TEN/PLUS user interface package. Interactive TCP/IP network software and Interactive Network Extensions (Sun Microsystem's NFS Network File System) is also available for Interactive UNIX 2.2.1.</p>	<p>Product: INTERACTIVE UNIX</p> <p>Model #: Q002B</p> <p>Curent Rev. 2.21 SSS Shipped: 05/91</p> <p>Release Notice: 085-600255-00</p>

DOCUMENTATION

Title	Part Number
386/ix Operating System Guide and Release Notes	069-701046-01
386/ix PC-Interface™ UNIX® Server Module Guide	069-701077-00
C Shell Guide	069-701047-00
Sendmail Guide	069-701028-00
TEN/PLUS User Interface Guide and Release Notes	069-701025-01
TEN/PLUS Keyboard Template	093-701043-00

INTERACTIVE UNIX

INTERACTIVE UNIX**STR ANSWER REPORT**

for 386/IX 'MULTI-USER'

- LPI C STR: UKSC000053127
REV: 3.22 ORIG-ID: IX 3.22 LPI-C

PROBLEM SUMMARY:

User is experiencing various problems with LPI-C despite having installed patch SSU.23.

ANSWER SUMMARY:

Interactive Systems Corporation has been made aware of the problems you are encountering and suggests some workarounds. Further information on the SSU.23 release of LPI-C is included in the form of release notes.

INTERACTIVE UNIX



INTERACTIVE UNIX**PROGRAMMING NOTES/DOCUMENTATION****INTERACTIVE UNIX (IX)****CONFIGURING 10495 AND 10628 MUX BOARDS IN RECENT DG PC'S**

Some restrictions have been encountered when configuring Computone MUX boards (models 10495 and 10628) in the new DG PC's. These boards are memory mapped devices requiring 128kb of system memory. The entries below outline the correct configuration for each PC, and indicate any known restrictions. The Tables referred to can all be found in the "Models 10495 and 10628 Communications Board User Information" guide shipped with each board (014-001698).

- | | |
|-----------|--|
| 386-33L | Use the default memory mapped location at the 14th megabyte. Total system memory is limited to 12MB if any Computone boards are to be configured. The correct switch settings for this address are shown in Table 1 (page 1) of the DG User Information guide. |
| 486SX-20A | Use the memory mapped location, as specified in Table 2 (page 2) of the DG User Guide, at the 14th megabyte. System memory should be limited to 14MB when 10495, or 10628 mux boards are installed. |
| 486-33TE | Install between 512-640k in lower memory. See Table 3 (Page 2) in the DG User guide for switch settings. Remember to disable this area of memory using the ESIA setup facility. |

INTERACTIVE UNIX

BUSINESS BASIC for 386/ix

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>Data General's Business BASIC is a powerful interactive programming language designed for use in producing business applications. Business BASIC lets mutple users program, test, debug and execute programs independently. It provides many of the standard BASIC commands, statements, and functions. It also contains specialized statements and functions that handle file access, format control, and system functions.</p> <p>Business BASIC operates under Data General's AOS/VS, AOS/VS II, DG/UX, and DG/RDOS operating systems on Data General machines ranging from the DESKTOP GENERATION Model 10 to the MV/40000 to the AViiON line. It also operates under INTERACTIVE Systems Corporation's INTERACTIVE UNIX on the Dasher series of machines. INTERACTIVE UNIX is an enhanced, high performance UNIX operating system.</p> <p>Business BASIC supports numerous file structures, including ISAM files, logical files, subfiles within a master file, and linked-available-record files. Under the AOS/VS operating system, it includes an interface to Data General's INFOS II system, which allows Business BASIC statements to manipulate INFOS II files. An interface is also furnished for user-written assembly-language routines under the AOS/VS and DG/RDOS operating systems. Under DG/UX and I/UNIX, Business BASIC provides an interface for user-written C language routines.</p>	<p>Product: BUSINESS BASIC for 386/ix</p> <p>Model #: L004A</p> <p>Current Rev. 1.20 SSS Shipped: 05/92</p> <p>Previous Rev: 1.10 Support Effective Until: 12/01/92</p> <p>Release Notice: 085-600141-05</p>

DOCUMENTATION

Title	Part Number
Commands, Statements, and Functions in Business Basic	093-000351-02
Learning Business Basic	093-000684-00
Subroutines, Utilities, and the Business BASIC CLI	093-000389-02
Using Business BASIC on DG/UX and 386/ix Systems	093-000685-02

BUSINESS BASIC for 386/ix

BUSINESS BASIC for 386/ix

STR ANSWER REPORT for BUSINESS BASIC FOR 386/IX

- STR: ITAL000000133
REV: 1.10 ORIG-ID: MI-91-29 (QUA)

PROBLEM SUMMARY:

The instruction "PRINT 0 ^ 10 ^ N" is valid till N is less than 5, when N is above this limit the result is still given, but it takes more time (proportionally to the value of N).

ANSWER SUMMARY:

This problem of raising 0, 1, or -1 to a large power is corrected for the next revision or update after revision 1.10 of Business BASIC for I/UNIX.

- STR: ITAL000000136
REV: 1.10 ORIG-ID: MI-91-32 (QUA)

PROBLEM SUMMARY:

In arithmetic operations the precedence of the operators that have the same precedence is not respected. "PRINT 2 ^ 1 ^ 2" gives a result of 2 instead of 4.

ANSWER SUMMARY:

This problem is corrected for the next revision or update after revision 1.10 of Business BASIC for I/UNIX.

- STR: NASC000010692
REV: 1.10 ORIG-ID: Q351243

PROBLEM SUMMARY:

Function keys are echoing on the screen after reving from 1.02 bbasic to 1.10 on a 386.

ANSWER SUMMARY:

The functionality of function keys is corrected in revision 1.10 to emulate the way function keys work in AOS/VS Business BASIC. Business BASIC on DG/UX now supports AOS/VS CHARACTERISTICS/FKT/OFF and CHARACTERISTICS/FKT/ON when using the -F switch at execution. If you use the -F switch, the value of the function key is not echoed.

- STR: NASC000010802
REV: 1.10 ORIG-ID:

PROBLEM SUMMARY:

Problems using function keys with non-DG terminals under revision 1.10 (eg. Wyse terminals running vt220 emulation) we cannot get the function keys to work at all.

ANSWER SUMMARY:

We are unable to reproduce the problem you describe with the information provided. Please see the Software Trouble Report Requirements section of the revision 1.10 Release Notice for a list of the information required. If you are not using a terminfo file supplied with Business BASIC, you may need to customize your terminfo file as described in TERMINFO.DOC.

- STR: NASC000010804
REV: 1.10 ORIG-ID:

PROBLEM SUMMARY:

STMA 22 to display a message in a window no longer works when using the -D switch. Error 25, option is not in this system, is returned.

ANSWER SUMMARY:

STMA 22 is no longer used as a helper for the HELLO program; therefore, the documentation has been removed from the COMMANDS, STATEMENTS, AND FUNCTIONS IN BUSINESS BASIC manual (093-000351-02). This will also be documented in the revision 1.20 Release Notice.

- LS.A STR: NASC000010890
REV: 1.10 ORIG-ID: CSS-001

PROBLEM SUMMARY:

UNLOCK statement does not work properly.

ANSWER SUMMARY:

A replacement library, ls.a, is available to correct this problem with UNLOCK and LOCK.

- MD.A STR: ITAL000000132
REV: 1.10 ORIG-ID: MI-91-28 (QUA)

PROBLEM SUMMARY:

Dividing ZERO by 10 ^ 10 or larger causes a "core dumped".

ANSWER SUMMARY:

This problem with division is corrected for the next revision of Business BASIC for I/UNIX after revision 1.10.

BUSINESS BASIC for 386/ix



BUSINESS BASIC for 386/ix**STR ANSWER REPORT**
for BUSINESS BASIC FOR 386/IX

-
- STR: ITAL000000137
REV: 1.10 ORIG-ID: MI-92-1 (QUAN)

PROBLEM SUMMARY:
INPUT FILE USING when at EOF, causes the input string to receive the value of the last INPUT in the program.

ANSWER SUMMARY:
This problem with INPUT FILE is corrected for revision 1.20 of Business BASIC for Interactive UNIX systems.
-
- STR: ITAL000000138
REV: 1.10 ORIG-ID: MI-92-2 (QUAN)

PROBLEM SUMMARY:
If the string to be EXTRACTed is spaces, the string variable receiving the extracted field remains unchanged and will contain exactly what it had in it before the EXTRACT statement.

ANSWER SUMMARY:
This problem with EXTRACT is corrected for revision 1.20 of Business BASIC for Interactive UNIX systems.
-
- STR: ITAL000000139
REV: 1.10 ORIG-ID: MI-92-3 (QUAN)

PROBLEM SUMMARY:
When INPUT FILE reaches EOF on one file than READ FILE is unable to read from another file.

ANSWER SUMMARY:
This problem with INPUT FILE is corrected for revision 1.20 of Business BASIC for Interactive UNIX systems.
-

BUSINESS BASIC for 386/ix



BUSINESS BASIC for 386/ix



ICOBOL for 386/ix

PRODUCT DESCRIPTION	SOFTWARE STATUS REPORT
<p>The Interactive COBOL compiler, revision 1.70, for Interactive UNIX Systems is an update of the 1.60 compiler for Interactive UNIX Systems. It is intended for use on DASHER/386 or DASHER/486 machines running Interactive UNIX, revision 2.01 or greater. The 1.70 revision of the ICOBOL compiler introduces several new language features and contains corrections to many bugs. It produces code revision 9 .pd and .dd files by default and is upwardly compatible with the ICOBOL 1.51 compiler.</p> <p>The updated documentation for "Using Interactive COBOL on DG/UX and Interactive UNIX Systems" and the updated "Interactive COBOL Programmer's Reference" manual contains the most up-to-date information about the Interactive COBOL compiler.</p> <p>The Interactive COBOL compiler for Interactive UNIX Systems produces code revisions 6, 7, 8, and 9 of Interactive COBOL .pd and .dd files. The ability to debug a COBOL program requires compilation with the -d option.</p>	<p>Product: ICOBOL for 386/ix</p> <p>Model #: L006A</p> <p>Current Rev. 1.70 SSS Shipped: 08/91</p> <p>Previous Rev: 1.60</p> <p>Support effective until: 03/01/92</p> <p>Release Notice 085-600209-03</p>

DOCUMENTATION

Title	Part Numbers
Using Interactive COBOL on DG/UX and 386/ix Systems	069-000359-03
Interactive COBOL Programmer's Reference	093-705013-05

ICOBOL for 386/ix

ICOBOL for 386/ix**STR ANSWER REPORT**
for INTERACTIVE COBOL FOR 386/IX

- ICX STR: UKSC000052338
REV: 1.70 ORIG-ID:

PROBLEM SUMMARY:

The use of "SELECT filename ASSIGN TO DISPLAY" fails to work under both DG/UX revisions 4.32 and 5.4 if the file open is "OPEN EXTEND". Refer to manual 069-000396 (Using Interactive COBOL on DG/UX & 386/ix systems) page 1-13.

ANSWER SUMMARY:

This problem is fixed by a new runtime system in the replacement modules 1.70.03 available from your local Data General representative. The runtime system will correctly allow a file ASSIGNED to DISPLAY to be opened in EXTEND mode.

ICOBOL for 386/ix

ICOBOL for 386/ix

STR ANSWER REPORT
for INTERACTIVE COBOL FOR 386/IX

- REORG STR: NASC000012428
 REV: 1.70 ORIG-ID: Q461675

PROBLEM SUMMARY:
REORG, ICOMPACT and ICVERIFY show a revision of 1.60 instead of 1.70 when executed.

ANSWER SUMMARY:
The problem of ICOBOL's shell utilities reporting the wrong revision number is fixed in replacement module 1.70.07, provided on the enclosed 150 mb cartridge. The utilities reorg, icverify and iccompact will now show a revision of 1.70 when executed.

ICOBOL for 386/ix



ICOBOL for 386/ix

PROGRAMMING NOTES/DOCUMENTATION

ICOBOL (IX) REV 1.70 [crev]

Corrected CREV utility for revision 1.70

A corrected CREV utility is being released to correct a problem with opening source files whose names consist of a single uppercase letter or an uppercase letter followed only by digits.

ICOBOL for 386/ix

ICOBOL for 386/ix**PROGRAMMING NOTES/DOCUMENTATION**

ICOBOL (IX) REV 1.70

IX-COBOL-I Revision 1.70 Replacement Modules

A new compiler, a new optimizer, a new runtime system, a new legend creator and a new minisam global server (mgs) are being released to correct some problems discovered in Interactive COBOL 1.70 and subsequent replacement modules. In addition, two library files are being released in order that the runtime system can be rebuilt which contains these fixes. Also a new optional behavior is being introduced in a new options files. Please see the 1.70.03.ix.fixes file for a complete description of the problems fixed.

The tar dump file, 1.70.03.tar, is in tar format and contains the following files:

config/libmisam.a	bin/icx	bin/icopt
config/libicx.a	bin/icobol	bin/lgc
config/options	bin/mgs	

To load these files into the ICOBOL directory structure, do the following:

- 1) Make backups of the aforementioned files
- 2) Change directories to /usr/opt/icobol_1.70 or \$IC_ROOT
- 3) Bring servers down with ic_down, so no one will be accessing icx
- 4) Become superuser
- 5) tar -xvf 1.70.03.tar

ICOBOL for 386/ix

ICOBOL for 386/ix

PROGRAMMING NOTES/DOCUMENTATION

ICOBOL (IX) REV 1.70

IX-COBOL-I Revision 1.70 Shell Utilities

The ICOBOL shell utilities reorg, icverify and reorg are being reissued in order to correct the problem of the wrong revision number being reported in the banner of each utility. The banner of these utilites will now report revision 1.70. This corrects the problem reported in str nasc-12428.

ICOBOL for 386/ix

OPEN SYSTEM PRODUCTS SOFTWARE REVISION LIST
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This report summarizes software release activity for Open System Software Products. It documents the revision/update levels and date of shipment for the current supported revision of the products.

PRODUCTS	MODEL #	REV/UPDATE	SHIP	
<u>AVIION PRODUCTS</u>				
DG/UX OPERATING SYSTEM	P001A	5.42	00	09/92
		5.40	00	09/91
		5.40	01	02/92
API LU6.2 FOR AVIION SYSTEMS	C014B	3.00	00	09/91
		2.00	00	01/90
API LUO 1,2,3 FOR AVIION SYSTEMS	C015B	3.00	00	09/91
		2.00	00	01/90
AV OBJECT OFFICE	A090A	1.00	00	08/91
BUILDER XCESSORY FOR AVIION SYSTEM	R029A	1.01	00	03/91
BUSINESS BASIC FOR AVIION	L005A	1.20	00	12/91
		1.10	00	07/91
*** C + + (AT&T) - FOR SERVER	L018A	2.12	00	05/92
		2.1.1	00	10/91
*** C + + (AT&T) - FOR WORKSTATION	L019A	2.1.1	00	10/91
		2.10	00	12/90
CMIP/CMIS AGENT FOR AVIION SYSTEMS	C124A	3.00	00	07/92
DATA ACCESS LANGUAGE FOR AVIION SYSTEMS	C145A	1.00	00	03/92
DG/NETBEUI FOR AVIION SYSTEMS	C086A	1.10	00	03/92
		1.00	00	07/91
DG SORT/MERGE UTILITY FOR AVIION SYSTEMS	R042A	1.03	00	08/91
DG/UX TAPE INTERCHANGE UTILITIES	R032A	1.00	00	04/91
DNI FOR AVIION SYSTEMS	C083A	1.10	00	09/91
		1.00	00	03/91
FTAM FOR AVIION SYSTEMS	C095A	3.00	00	07/92
		2.10	00	02/92
		2.00	00	10/91

*** Note: This product requires DG/Ux 5.4 revision or later.

OPEN SYSTEM PRODUCTS SOFTWARE REVISION LIST
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PRODUCTS	MODEL #	REV/UPDATE	SHIPPED
GNU C COMPILER	P001A	1.96.4 00	02/92
		1.37.31 00	09/91
GNU C + + COMPILER FOR AVIION SYSTEMS	L021A	1.37 00	07/90
		1.37 02	09/91
GREEN HILLS C-88000	L001A	1.8.6 00	03/92
		1.8.5.00 00	08/90
GREEN HILLS FORTRAN-88000	L002A	1.8.6 00	03/92
		1.8.5 01	08/90
GREEN HILLS PASCAL-88000	L003A	1.8.6 00	03/92
		1.8.5 01	08/90
ICOBOL FOR AVIION	L007A	1.70 00	08/91
INTERACTIVE COBOL RUNTIME FOR AVIION	L015A	1.70 00	08/91
LAN MANAGER FOR AVIION SYSTEMS	C102A	1.10 00	03/92
LOOKING GLASS PROFESSIONAL FOR AVIION SYSTEMS	R041A	2.00 00	08/91
MESSAGE HANDLING SERVICE (MHS) FOR AVIION SYSTEMS	C136A	1.00 00	03/92
MICRO FOCUS COBOL-2 FOR AVIION	L013A	1.20 00	07/91
MICRO FOCUS FORMS-2 FOR AVIION	R008A	1.3.9 00	07/91
MXDB FOR AVIION SYSTEMS	R007A	2.10 00	05/92
		2.00 00	09/91
MV DATA CENTER MANAGER FOR AVIION	R045A	1.00 00	01/92
NETWARE SERVICES FOR AVIION SYSTEMS	C020A	1.40 00	06/92
		1.30 00	11/91
		1.30 01	03/92
NETWARE TRANSPORT FOR AVIION SYSTEMS	C021A	1.40 00	06/92
		1.30 00	11/91
		1.30 01	03/92
ONC/NFS SYSTEM FOR AVIION	C002A	4.30 00	07/90
		4.30 01	10/90
OPEN MAC/SERVICES FOR AVIION	C118A	1.10 00	06/92
		1.00 00	11/91
OPEN MAC TRANSPORT	C117A	1.10 00	06/92
		1.00 00	11/91
		1.00 01	03/92

OPEN SYSTEM PRODUCTS SOFTWARE REVISION LIST
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PRODUCTS	MODEL #	REV/UPDATE	REV/UPDATE	SHIPPED
OSI/PLATFORM FOR AVIION SYSTEM	C094A	3.00	00	07/92
		2.01	00	11/91
PAD FOR AVIION SYSTEMS	C009A	2.20	00	03/92
		2.10	00	09/91
RPC TOOL FOR AVIION SYSTEMS, SPX	C141A	1.00	00	03/92
SDLC FOR AVIION SYSTEMS	C010B	3.00	00	09/91
		2.10	01	10/90
SECURE RPC FOR AVIION	R010A	4.30	00	07/90
SNA 3270 FOR AVIION SYSTEMS	C012B	3.00	00	09/91
		2.01	00	02/91
SNA FOR AVIION SYSTEMS	C011B	3.00	00	09/91
		2.10	00	02/91
SNA RJE FOR AVIION SYSTEMS	C013B	3.00	00	09/91
		2.00	00	02/90
SNA TOKEN RING FOR AVIION	C121A	1.00	00	09/91
SOFTPC	A001B	2.01	00	04/92
		2.00	00	01/92
TCP/IP FOR AVIION	C001A	4.30	00	07/90
		4.30	01	10/90
TUXEDO SYSTEM/T FOR AVIION	Q013A	4.20	00	03/92
TUXEDO SYSTEM/WS FOR AVIION	Q014A	4.20	00	03/92
UIM/X FOR AVIION	R033A	2.00	00	05/92
		1.00	00	07/91
VMARK UNIVERSE FOR AVIION	D055A	6.3.1.4	00	12/91
VTP FOR AVIION	C096A	3.00	00	07/92
		2.00	00	10/91
X.25 FOR AVIION SYSTEMS	C008A	2.20	00	03/92
		2.10	00	09/91
X.400 FOR AVIION SYSTEMS	C098A	3.00	00	07/92
		2.00	00	03/92
X WINDOWS (AVIION)	H001A	r4	00	03/91

OPEN SYSTEM PRODUCTS SOFTWARE REVISION LIST

PRODUCTS	MODEL #	REV/UPDATE		SHIPPED
<u>386/IX PRODUCTS</u>				
INTERACTIVE UNIX RUNTIME	Q002B	2.21	00	05/91
386/IX ONC/NFS	C005B	2.00	00	10/89
BUSINESS BASIC FOR 386/IX	L004A	1.20	00	05/92
		1.10	00	07/91
ICOBOL FOR 386/IX	L006A	1.70	00	08/91
INTERACTIVE COBOL RUNTIME FOR 386/IX	L014A	1.70	00	08/91
MICRO FOCUS COBOL-2	L013A	1.1	00	12/89
MICRO FOCUS FORMS-2	R008A	1.3	00	12/89

DIRECT ACCESS TO SOFTWARE HELP SERVICE

INTRODUCING DASH

DASH.. Direct Access to Software Help

DASH electronic services provide electronic access to software assistance, available 7 days a week, 24 hours a day via toll free modem access (1-800-DASH CSC).

Free of charge, DASH Basic provides the Data General user community with a bulletin board feature as well as customer to customer E-Mail.

In addition to the DASH Basic services above, DASH Plus provides the following features and benefits **free of charge** to Data General AViiON hardware service agreement customers and ALL Support Plus customers.

Features

Benefits

Electronic Search Program (ESP)
allows customers to query a data base of common symptoms and solutions for DG/UX problems.

Provides an immediate solution to the most common questions and problems and STR tracking.

Electronic Problem Submission
allows customers to submit software questions electronically.

Provides next day response to software inquiries from the same specialists that provide telephon support.

Electronic Ordering of Patches
allows customers to order fixes and patches.

Provides timely distribution of solutions to known problems.

DASH ELECTRONIC SERVICES SHEET

A set of electronic services, DASH is designed to provide you timely, easy access to information that will assist you in the use and operation of your Data General products. DASH services are delivered via toll-free modem access, 24 hours a day, 7 days a week.

DASH Basic Services include:

* Availability: Free to any Data General customer, whether or not you purchase any services.

* A bulletin board feature that allows you to:

-Read timely, important information about Data General hardware and software products and services. Information such as:

Tips on how to use products;
Interesting new applications;
New products and services announcements.

-Post information for other bulletin board subscribers.

DIRECT ACCESS TO SOFTWARE HELP SERVICE

- * Customer-to-customer E-mail which allows customer-to-customer messaging for DASH customers.

DASH Plus Services include:

- * Availability: Free of charge to Data General AViiON hardware service agreement customers and ALL Support Plus customers.

- * DASH Plus customers will be able to:

-Use the **Electronic Search Program, ESP**, to search our electronic information database of known answers to the most common Data General hardware and software question and problems

-Submit specific requests for assistance with covered software problem Response to these submissions will be before the end of the next business day.

-Look up the status of Software Trouble Reports (STRs).

-Place electronic orders for identified patches or fixes. Wherever possible, we will deliver fixes electronically. As an added feature for "non-electronic distributed" fixes, we offer Express Media (over-night delivery) for a flat charge of \$150.

Both DASH Basic and DASH Plus are available now, and can be accessed via modem by calling 1-800-DASH CSC. Log-on procedures are very easy-to-follow.

SOFTWARE PROBLEM MANAGEMENT DEPARTMENT

INTRODUCING SPMD

The Software Problem Management Department (SPMD) is a centralized facility for receiving and tracking North American and some International Software Trouble Reports. All mail-in STRs which originate from North American and from those countries that do not have a Support Center should be mailed to this group at the following address:

Data General Corporation
1626 Jeurgens Court
Norcross, GA 30093
USA
ATTENTION: SPMD

Customers with Support Plus contracts with the North American Customer Support Center are encouraged to call the Customer Support Center for assistance in filing STRs. SPMD screens STRs initiated from the North American Customer Support Center and OIS, as well as those received by mail.

SPMD provides these services:

- Data entry of North American mail-in and OIS STRs
- Data entry of International STRs from countries that have no Support Center
- Written acknowledgement of North American STRS
- Screening and escalation of North American and those International STRs processed by SPMD
- Monitoring of STRs throughout the process, until the STR answers are mailed to the originators
- Review of North American STR answers for clarity
- Mailing of North American STR answers
- Telephone status information for STR processed by SPMD, 9:00am to 5:00pm Eastern Standard Time
- Forwarding of RFE STRs to DG Corporate Marketing and Software Development organizations as well as to the North American Data General Users Group

A customer guide to aid you in completing STR forms as well as additional STR forms (#013-289 for the guide) are available for order. For your conv

Venience, an electronic STR form is provided on AOS/VS, AOS/VS-II, and DG/UX release tapes.

If you have a Support Plus contract with the North American Customer Support Center and you have a need to file an STR, please call the CSC and have a Software Support Representative (SSR) file the STR for you. An SSR will discuss your problem with you and ensure that a thorough and technically correct STR is filed in your behalf. If you have filed an STR through the CSC, and upon further investigation it is determined that there is a need for additional information to process the STR, or a tape which you submitted is not readable, and individual from the SPMD group will contact you to obtain the necessary materials.

If your STR was a Request for Enhancement (RFE), SPMD will send you a written acknowledgement of your request after forwarding the request to Corporate Marketing and Software Development management for consideration. Copies of requests are also periodically sent to the North American Data General Users' Group. If you feel your Request for Enhancement requires special attention, please contact your local Data General Sales Office for assistance.

If you have any problems or questions regarding STRs that SPMD processed or STR answers that SPMD has sent you, please contact Renita Allen, the SPMD Administrator. She can be reached at the North American Customer Support Center's 1-800-DG-HELPS toll-free number. Be sure to mention to the Customer Support Representative who answers your call that you wish to discuss an STR that you have previously filed. If your call needs to be escalated, Renita will put you in touch with the appropriate SPMD individual or manager to discuss the situation in detail and initiate the escalation.

SOFTWARE PROBLEM MANAGEMENT DEPARTMENT

DATA GENERAL SERVICES

DATA GENERAL PROFESSIONAL SERVICES

Data General offers professional software AOS/VS and UNIX development and consulting services through the Professional Services Group for AOS/VS, UNIX, and PC based systems. You can arrange for everything from a performance tune-up to consulting on a custom application or communications development or network services. We will also audit your system and provide a professional analysis of its performance to help you with future planning. We can also assist in the intergration of third party software applications and provide full software conversion and porting services.

The Professional Services Group is comprised of software specialists with broad experience in commercial and technical application design and development. Our "inside track" on DG proprietary and open-industry operating systems and hardware enables us to work faster and more efficiently with these products than anyone else can. We offer you competitive expert assistance with developing new applications and for porting existing applications to Data General Systems.

Need more info?

The Professional Services Group can help you position your applications to take advantage of the newest, most innovative hardware and software systems being developed today. For more information on how we can serve you, contact your local Data General Sales office or complete the coupon below and mail it to:

**Irvine, CA: 2603 Main Street
Suite 360
Irvine, CA 92714
(714) 724-3500**

**Atlanta, GA: 3617 Parkway Lane
Royal Peachtree Corners
Norcross, GA 30092
(404) 448-6072**

Please send me more information about:

- Audit and Analysis
- Custom Development
- Performance Tuning
- Network Services
- Start-Up Services (CEO, VSII, DG/UX)
- Porting and Conversion Assistance
- Other: _____

Name: _____

Company Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone Number: _____

DATA GENERAL SERVICES