

**Maintenance Update Notice:
DG/UX™ System 5.4 Release 3.00
for
AViiON® Computers Maintenance
Update MU05**

April 1995

Part number 017-600062-06

This release notice applies to the following models:

P001
Q001

This Maintenance Update is intended to protect your system from known instances of improper program execution or data corruption. Please install this Maintenance Update immediately. This Maintenance Update must be installed only on AViiON computers running DG/UX System 5.4R3.00, including those with previous 5.4R3.00 Maintenance Updates installed.

Special instructions for installing this Maintenance Update are documented in this notice. You must follow these instructions in order to properly install this Maintenance Update.

Restrictions and Trademarks

This software is made available solely pursuant to the terms of a DGC license agreement which governs its use.

Restricted Rights Legend

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at Defense Federal Acquisition Regulation (DFARS) 252.227-7013 and in subparagraphs (a) through (d) of the Commercial Computer Software Restricted Rights clause at Federal Acquisition Regulations (FAR) 52.227-19, whichever may apply.

Data General Corporation
4400 Computer Drive
Westboro, MA 01580

AViiON and **CLARiiON** are U.S. registered trademarks of Data General Corporation.

CLARiiON and **DG/UX** are trademarks of Data General Corporation.

Legato NetWorker is a trademark of Legato Systems, Inc.

NFS is a U.S. registered trademark of Sun Microsystems, Inc.

ONC and **SunOS** are trademarks of Sun Microsystems, Inc.

OSF/Motif is a trademark of the Open Software Foundation, Inc.

UNIX is a registered trademark of Novell, Inc. Inc.

X Window System is a trademark of Massachusetts Institute of Technology.

Maintenance Update Notice:

DG/UX™ System 5.4 Release 3.00 for AViiON® Computers Maintenance Update MU05

017-600062-06

Revision History:

Effective with:

Original Release – March 1994 DG/UX System 5.4 Release 3.00 Maintenance Update MU01,
Revision 2 – June 1994 DG/UX System 5.4 Release 3.00 Maintenance Update MU02
Revision 3 – June 1994 DG/UX System 5.4 Release 3.00 Maintenance Update MU02
Revision 4 – September 1994 DG/UX System 5.4 Release 3.00 Maintenance Update MU03
Revision 5 – December 1994 DG/UX System 5.4 Release 3.00 Maintenance Update MU04
Revision 6 – April 1995 DG/UX System 5.4 Release 3.00 Maintenance Update MU05

Contents

1	Introduction	5
2	Product Description	5
2.1	Individual Patches	5
2.2	Maintenance Update	6
3	Environment	6
3.1	Hardware	6
3.2	Software	7
4	Patches	7
5	Product Improvements	8
6	Notes and Warnings	9
6.1	Using sysadm to add shared disk devices	9
7	Files	10
8	Installation Instructions	16
8.1	Loading the Maintenance Update from Tape or CD-ROM	16
8.1.1	Bringing Your System Down to the SCM	17
8.1.2	Booting Standalone Sysadm from the Maintenance Update Tape	17
8.1.3	Booting Standalone Sysadm from the Maintenance Update CD-ROM	17
8.1.4	Preparing Your Disks	18
8.1.5	Checking File Systems	18
8.1.6	Loading the Maintenance Update Software	19
8.1.7	Building a Kernel Using Your Custom Kernel	19
8.1.8	Building a Kernel Using Autoconfigure	20
8.1.9	Deregistering the CD-ROM Drive	21
8.2	Creating a Maintenance Update Tape	21

1 Introduction

This Maintenance Update Notice describes Maintenance Update op-sys-x_5.4R3.00.MU05 for DG/UX™ 5.4R3.00 Systems running on Data General's family of AViiON™ computers. In addition, this notice may also include information not currently available in the product manuals (e.g., information developed after the current manuals were printed, or corrections to current manuals).

This printed notice always accompanies the software. You may print additional copies of this notice after you have installed the product. A copy suitable for line printers can be found in the file **/usr/release/op-sys-x_5.4R3.00.MU05.un**. In the event of differences between the printed copy of the notice and the copy on the distribution medium, the printed copy takes precedence.

This Maintenance Update consists of the following parts:

Part Description	Part Number
DG/UX for AViiON Systems Maintenance Update op-sys-x_5.4R3.00.MU05 Notice	017-600062-06
DG/UX for AViiON Systems Maintenance Update op-sys-x_5.4R3.00.MU05 Tape Media	079-600384-04
DG/UX for AViiON Systems Maintenance Update op-sys-x_5.4R3.00.MU05 CD-ROM Media	068-600102-05

2 Product Description

2.1 Individual Patches

For DG/UX 5.4R3.00 and C2/B1 Trusted DG/UX 5.4R3.00T, Data General releases patches named and numbered on a per product basis. The products using this convention include, but are not limited to, dgux, tcpip, nfs, X11, xdt, and networker. Data General will produce and deliver individual patches in response to Software Trouble Reports. For DG/UX Revision 5.4R3.00 the naming convention is:

dgux_5.4R3.00.pmm

where *mm* refers to the individual patch number for the product. Per-product patch numbers are unique and always increase numerically.

During the support period for a product, it may be necessary to release multiple patches that replace the same file. In this case, a later patch will contain all fixes released in previous patches; therefore when you have two patches to the same file, always load the patch with the higher number. The patch with the lower patch number is superseded by the patch with the higher number. In general, however, patches which do not replace previously modified files are separate entities (ie. not cumulative).

2.2 Maintenance Update

Starting with DG/UX™ 5.4R3.00, all product improvements and enhancements for the two most current revisions of DG/UX completed since the last Maintenance Update (or since the release of a new revision) are collected into a Maintenance Update approximately every two months. A Maintenance Update contains a number of product packages; each package is applicable to a single product. Maintenance Updates for a given revision are cumulative, so you should load the Maintenance Update with the highest number available for your revision.

The Maintenance Update name is of the form:

op-sys-x_baseRrel.MU nn

where *base* is the base-release number, *rel* is the release number against which this MU may be applied, and *nn* is the number of this MU. MUs are numbered sequentially, starting at 01 for each new revision of DG/UX.

This Maintenance Update is named:

op-sys-x_5.4R3.00.MU05

This Maintenance Update is a bootable, standalone sysadm format tape or CD-ROM which contains one product package per sysadm loadable package. The packages on this op-sys-x_5.4R3.00.MU05 Maintenance Update are:

- dgux
- tcpip
- dgux.man
- nfs
- X11
- gcc
- networker

3 Environment

3.1 Hardware

DG/UX Operating System Maintenance Update op-sys-x_5.4R3.00.MU05 will run on all hardware supported by DG/UX 5.4R3.00.

This Maintenance Update also includes support for the AViiON AV 9500 Plus system, model ID G70619. **WARNING:** If you are converting your 45 MHz AV 9500 system to a 50 MHz AV 9500 Plus system, you must completely install DG/UX on the system prior to replacing the system

board(s).

3.2 Software

Your system needs to be running DG/UX 5.4R3.00 system software. Apply this Maintenance Update ONLY on DG/UX 5.4R3.00. This Maintenance Update must NOT be applied to C2/B1 Trusted DG/UX systems. Note the following file system free space requirements needed for successfully loading this Maintenance Update:

- There must be 344064 bytes (672 blocks) of free space plus the space required for a new kernel (approximately the same amount of space required for your current kernel) in the root file system.
- There must be 2752512 bytes (5376 blocks) of free space in the usr file system.
- If you are loading the networker package, there must be 1032192 bytes (2016 blocks) of free space in the /usr/opt/networker file system.
- If you are loading the X11 package, there must be 1261568 bytes (2464 blocks) of free space in the /usr/opt/X11 file system.

4 Patches

The package numbers below indicate those individual patches that are included in this Maintenance Update. All non-obsolete patches with numbers equal to or less than the Maintenance Update package numbers are included in this Maintenance Update.

- Product Package "dgux", number dgux_5.4R3.00.136
- Product Package "tcpip", number tcpip_5.4R3.00.19
- Product Package "nfs", number nfs_5.4R3.00.01
- Product Package "X11", number X11_5.4R3.00.03
- Product Package "networker", number networker_5.4R3.00.03
- Product Package "gcc", number gcc_5.4R3.00.01
- Product Package "dgux.man"

For those systems that have loaded individual DG/UX 5.4R3.00 patches, extensions, supplements, or special releases, follow this outline to determine if you need to reload any of these previously applied packages.

Any previously released Maintenance Updates for this revision are included in this Maintenance Update, and will be properly overwritten.

This Maintenance Update supersedes the following items previously released for

DG/UX 5.4R3.00:

- Special Release dgux_sr.940217
- DG/UX System 5.4R3.00 Maintenance Update MU01
- DG/UX System 5.4R3.00 Maintenance Update MU02
- DG/UX System 5.4R3.00 Maintenance Update MU03
- DG/UX System 5.4R3.00 Maintenance Update MU04
- Special Release dgux_sr.940502
- Layered Software Prerequisite for ORACLE Parallel Server (dgux_5.4R3.00.s01)

If previously applied patches have an individual patch number greater than the Maintenance Update package number, then they must be reloaded. For example, if you have installed the DG/UX patch dgux_5.4R3.00.p137 it must be reloaded because its patch number, 137, is greater than 136, which is the DG/UX package number (dgux_5.4R3.00.136), for this Maintenance Update.

If previously applied patches have a patch number less than or equal to the Maintenance Update package number, then these patches have been either superseded by another patch in this Maintenance Update or obsoleted and do NOT need to be reloaded. For example, if you have installed the DG/UX patch dgux_5.4R3.00.p06 it does not need to be reloaded because its patch number, 06, is less than or equal to the DG/UX package number 136, dgux_5.4R3.00.136, for this Maintenance Update.

If previously applied patches or extensions appear to conflict with this Maintenance Update, call the Customer Support Center for assistance.

5 Product Improvements

As part of Data General's ongoing product improvements, resolutions to the following Software Trouble Reports are included in this Maintenance Update.

AUSC-10153	NASC-18709	NASC-19603
AUSC-10157	NASC-18717	NASC-19676
AUSC-10164	NASC-18725	NASC-19692
EURO-610000047	NASC-18750	NASC-19698
EURO-610000063	NASC-18751	NASC-19699
EURO-615108489	NASC-18798	NASC-19701
EURO-616102069	NASC-18802	NASC-19717
EURO-616202175	NASC-18832	NASC-19728
EURO-616202404	NASC-18845	NASC-19732
EURO-616504873	NASC-18853	NASC-19747
EURO-616601063	NASC-18860	NASC-19775
EURO-618109214	NASC-18875	NASC-19783

EURO-618402330	NASC-18876	NASC-19807
EURO-690500001	NASC-18908	NASC-19902
EURO-741100079	NASC-18921	NASC-19908
FRA-1126	NASC-18932	NASC-19927
FRA-1131	NASC-18977	NASC-19940
GER-15243	NASC-19004	NASC-19955
HOLL-520	NASC-19010	NASC-19971
INTL-1009	NASC-19012	NASC-20020
INTL-1056	NASC-19016	NASC-20043
INTL-1059	NASC-19105	NASC-20071
INTL-1103	NASC-19109	NASC-20086
INTL-1126	NASC-19119	NASC-20086
JAPN-868	NASC-19125	NASC-20091
JAPN-873	NASC-19154	NASC-20102
JAPN-874	NASC-19191	NASC-20103
JAPN-884	NASC-19192	NASC-20119
JAPN-887	NASC-19202	NASC-20122
JAPN-889	NASC-19211	NASC-20157
JAPN-893	NASC-19216	NASC-20157
JAPN-910	NASC-19236	NASC-20164
JAPN-917	NASC-19252	NASC-20283
NASC-15800	NASC-19268	NASC-20340
NASC-16668	NASC-19275	NASC-20397
NASC-17602	NASC-19282	NASC-20430
NASC-17868	NASC-19295	NASC-20469
NASC-17987	NASC-19313	NASC-20554
NASC-18103	NASC-19328	NASC-20605
NASC-18469	NASC-19339	NASC-20918
NASC-18479	NASC-19364	SPA-991
NASC-18483	NASC-19377	SWE-770
NASC-18527	NASC-19432	SWE-799
NASC-18585	NASC-19434	SWE-810
NASC-18631	NASC-19443	SWE-837
NASC-18656	NASC-19573	SWE-837

A set of additional product improvements has also been included in this Maintenance Update. Contact your local Data General Support Center for descriptions of these STRs and other product improvements.

6 Notes and Warnings

6.1 Using sysadm to add shared disk devices

The **sysadm** operations for adding shared disk devices present misleading lists of available device specifications. This problem affects the query **Disk Array Device Specification** of the operation **Availability->Shared Disk->Devices->Add->Disk Array**, and the query **Disk Unit Device Specification** of the operation **Availability->Shared Disk->Devices->Add->Disk Unit**. In this Maintenance Update the selection lists for these queries include all disk devices configured on the sys-

tem. However, the choices should be limited to disk devices that are not found in your kernel configuration file; see **system(4)**.

To work around the above problem, when adding a shared disk device select only a device specification that you have already removed from the **system(4)** file. In addition, watch for **sysadm** warning messages like the following:

```
Physical disk 'sd(dgsc(2,7),0,0)' is not safe for shared access:
The default kernel autoconfigures device 'sd(dgsc(2,7),0,0)'
```

If **sysadm** displays a warning message similar to the above, abort the operation at the confirmation prompt that accompanies the message. Then either reconfigure the kernel to remove the device specification you chose, or choose a different device specification for your shared disk (one that has already been removed from the kernel configuration). For further information about configuring your system for disk sharing, see the manual *Managing the DG/UX (TM) System for the ORACLE Parallel Server (TM)* (093-701134).

7 Files

The files in the list below have been modified since the previous release or Maintenance Update. Note that the `/etc/issue` file contains, as usual, information specific to this update:

DG/UX Operating System MU 5.4R3.00.MU05

dgux:

```
/dgux.installer
/etc/issue
/etc/shreddisk/devices.proto
/etc/shreddisk/hosts.proto
/etc/svcmgr.rclinktab.proto
/etc/svcmgr.rcrmtab.proto
/sbin/init
/sbin/mount
/sbin/setup.d/root/dgux_5.4R3.00.p32__r.svcmgr.do
/sbin/setup.d/root/dgux_5.4R3.00.s01__6.r.R300toR300s01.do
/sbin/setup.d/root/dgux_5.4R3.00.s01__9.r.last.do
/sbin/su
/sbin/swapon
/sbin/ttymon
/usr/bin/admdevice
/usr/bin/admfailoverdisk
/usr/bin/admfailoverip
/usr/bin/admfailovergiveaway
/usr/bin/admfailovertakeaway
/usr/bin/admfilesystem
/usr/bin/admpackage
/usr/bin/admpdisk
/usr/bin/admshreddiskdevice
/usr/bin/admshreddiskhost
```

```

/usr/bin/admswap
/usr/bin/admvdisk
/usr/bin/awk
/usr/bin/cpio
/usr/bin/csh
/usr/bin/env
/usr/bin/failovermon
/usr/bin/ksh
/usr/bin/login
/usr/bin/lsd
/usr/bin/montbl
/usr/bin/nps
/usr/bin/pkgtrans
/usr/bin/sar
/usr/bin/uucp
/usr/catman/a_man/man1/dgs_strerr.lm.z
/usr/catman/a_man/man1/dgs_syslog.lm.z
/usr/catman/a_man/man1/dgsvc_d.lm.z
/usr/catman/a_man/man1/dgsvc_inetd.lm.z symbolic link to dgsvc_d.lm.z
/usr/catman/a_man/man1/dgsvc_mid.lm.z symbolic link to dgsvc_d.lm.z
/usr/catman/a_man/man1/dgsvc_pwd.lm.z symbolic link to dgsvc_d.lm.z
/usr/catman/a_man/man1/dgsvc_sizer.lm.z
/usr/catman/a_man/man1/dgsvc_timd.lm.z symbolic link to dgsvc_d.lm.z
/usr/catman/a_man/man1/dgsvcmon.lm.z
/usr/catman/a_man/man1/svcmgr.lm.z
/usr/dglib/libc.so.1
/usr/dglib/libtrust.so
/usr/etc/master.d/dgux
/usr/include/aa_internals.h
/usr/include/limits.h
/usr/lib/libc.so
/usr/lib/libdgp.a
/usr/lib/libtrust.a
/usr/lib/libtrust.so
/usr/lib/libtrust.so.1
/usr/lib/locale/C/LC_MONETARY
/usr/lib/locale/POSIX <symbolic link to C>
/usr/lib/locale/jp.euc/LC_MONETARY
/usr/lib/lp/lpNet
/usr/lib/lp/lpsched
/usr/lib/sa/sadc
/usr/lib/sysadm/C/menus/Groupmgmt.menu
/usr/lib/sysadm/C/menus/SharedDisk.menu
/usr/lib/sysadm/C/menus/SharedDiskDevices.menu
/usr/lib/sysadm/C/menus/SharedDiskDevicesAdd.menu
/usr/lib/sysadm/C/menus/SharedDiskHosts.menu
/usr/lib/uucp/uucico
/usr/options/dgux.name
/usr/options/dgux_5.4R3.00.MU05.name
/usr/release/dgux_5.4R3.00.MU05.fl
/usr/release/dgux_5.4R3.00.s01.sn
/usr/release/op-sys-x_5.4R3.00.MU05.un

```

```
/usr/sbin/.dft_threshold
/usr/sbin/cron
/usr/sbin/deblock
/usr/sbin/dgs_strerr
/usr/sbin/dgs_syslog
/usr/sbin/dgsvc_bthresh
/usr/sbin/dgsvc_d
/usr/sbin/dgsvc_down
/usr/sbin/dgsvc_inetd
/usr/sbin/dgsvc_mid
/usr/sbin/dgsvc_pwd
/usr/sbin/dgsvc_sizer
/usr/sbin/dgsvc_timd
/usr/sbin/dgsvcmom
/usr/sbin/dump
/usr/sbin/dump2
/usr/sbin/fsck
/usr/sbin/init.d/rc.dgrmserv
/usr/sbin/init.d/rc.dgserv
/usr/sbin/init.d/rc.sharedisk
/usr/sbin/mkfs
/usr/sbin/mountd
/usr/sbin/pkgadd
/usr/sbin/pkgchk
/usr/sbin/setup.d/usr/dgux_5.4R3.00.s01__6.u.R300toR300s01.do
/usr/sbin/setup.d/usr/dgux_5.4R3.00.s01__9.u.last.do
/usr/sbin/setup.d/usr/dgux__2.u.sysadm.do
/usr/sbin/sharediskd
/usr/sbin/svcmgr
/usr/sbin/swapon
/usr/sbin/systemtape
/usr/sde/m88kdguxelf/usr/lib/libc.a
/usr/sde/m88kdguxelf/usr/lib/libp/libc.a
/usr/src/uts/aviion/cf/Libs.odg
/usr/src/uts/aviion/cf/system.odg.proto
/usr/src/uts/aviion/lb/cien.a
/usr/src/uts/aviion/lb/cm.a
/usr/src/uts/aviion/lb/conf.a
/usr/src/uts/aviion/lb/csm.a
/usr/src/uts/aviion/lb/deb.a
/usr/src/uts/aviion/lb/dev.a
/usr/src/uts/aviion/lb/dfm.a
/usr/src/uts/aviion/lb/dgen.a
/usr/src/uts/aviion/lb/dl.a
/usr/src/uts/aviion/lb/ether.a
/usr/src/uts/aviion/lb/exc.a
/usr/src/uts/aviion/lb/faam.a
/usr/src/uts/aviion/lb/ffm.a
/usr/src/uts/aviion/lb/fpx.a
/usr/src/uts/aviion/lb/fsck.a
/usr/src/uts/aviion/lb/hfm.a
/usr/src/uts/aviion/lb/ilacc.a
```

```

/usr/src/uts/aviion/lb/io.a
/usr/src/uts/aviion/lb/iscd.a
/usr/src/uts/aviion/lb/init.a
/usr/src/uts/aviion/lb/izscd.a
/usr/src/uts/aviion/lb/kdi.a
/usr/src/uts/aviion/lb/lance.a
/usr/src/uts/aviion/lb/lm.a
/usr/src/uts/aviion/lb/mpl.a
/usr/src/uts/aviion/lb/mts.a
/usr/src/uts/aviion/lb/nc.a
/usr/src/uts/aviion/lb/nfm.a
/usr/src/uts/aviion/lb/nk.a
/usr/src/uts/aviion/lb/nu.a
/usr/src/uts/aviion/lb/odg.a
/usr/src/uts/aviion/lb/pc.a
/usr/src/uts/aviion/lb/pdep.a
/usr/src/uts/aviion/lb/pefn.a
/usr/src/uts/aviion/lb/pm.a
/usr/src/uts/aviion/lb/ps.a
/usr/src/uts/aviion/lb/psm.a
/usr/src/uts/aviion/lb/qm.a
/usr/src/uts/aviion/lb/rm.a
/usr/src/uts/aviion/lb/rpc.a
/usr/src/uts/aviion/lb/sc.a
/usr/src/uts/aviion/lb/scall.a
/usr/src/uts/aviion/lb/sci.a
/usr/src/uts/aviion/lb/sfm.a
/usr/src/uts/aviion/lb/sig.a
/usr/src/uts/aviion/lb/so.a
/usr/src/uts/aviion/lb/srv.a
/usr/src/uts/aviion/lb/su.a
/usr/src/uts/aviion/lb/tm.a
/usr/src/uts/aviion/lb/ts.a
/usr/src/uts/aviion/lb/uc.a
/usr/src/uts/aviion/lb/ufm.a
/usr/src/uts/aviion/lb/vdev.a
/usr/src/uts/aviion/lb/vdm.a
/usr/src/uts/aviion/lb/vitr.a
/usr/src/uts/aviion/lb/vmc.a
/usr/stand/boot.aviion
/usr/stand/sysadm

```

tcip:

```

/usr/bin/bootpd
/usr/bin/mailq linked to /usr/bin/sendmail
/usr/bin/newaliases linked to /usr/bin/sendmail
/usr/bin/rlogin
/usr/bin/sendmail
/usr/bin/smtp linked to /usr/bin/sendmail
/usr/bin/telnetd
/usr/etc/master.d/tcip

```

```

/usr/include/netinet/tcp.h
/usr/options/tcpip.name
/usr/options/tcpip_5.4R3.00.MU05.name
/usr/release/op-sys-x_5.4R3.00.MU05.un
/usr/release/tcpip_5.4R3.00.MU05.fl
/usr/src/uts/aviion/lb/arp.a
/usr/src/uts/aviion/lb/conf.a
/usr/src/uts/aviion/lb/inet.a
/usr/src/uts/aviion/lb/inso.a
/usr/src/uts/aviion/lb/ip.a
/usr/src/uts/aviion/lb/netinet.a
/usr/src/uts/aviion/lb/sl.a
/usr/src/uts/aviion/lb/tcp.a
/usr/src/uts/aviion/lb/udp.a

```

dgux.man:

```

/usr/catman/a_man/man1/admdevice.1m.Z
/usr/catman/a_man/man1/admfilesystem.1m.Z
/usr/catman/a_man/man1/admpdisk.1m.Z
/usr/catman/a_man/man1/admshareddiskdevice.1m.Z
/usr/catman/a_man/man1/admshareddiskhost.1m.Z
/usr/catman/a_man/man1/admswap.1m.Z
/usr/catman/a_man/man1/admvdisk.1m.Z
/usr/catman/a_man/man1/mount.1m.Z
/usr/catman/a_man/man1/shareddiskd.1m.Z
/usr/catman/a_man/man1/swapon.1m.Z
/usr/catman/a_man/man4/shareddisk.4m.Z
/usr/catman/p_man/man4/fstab.4.Z
/usr/options/dgux.man.name
/usr/options/dgux.man_5.4R3.00.MU05.name
/usr/release/dgux.man_5.4R3.00.MU05.fl
/usr/release/op-sys-x_5.4R3.00.MU05.un

```

nfs:

```

/usr/options/nfs.name
/usr/options/nfs_5.4R3.00.MU05.name
/usr/release/op-sys-x_5.4R3.00.MU05.un
/usr/release/nfs_5.4R3.00.MU05.fl
/usr/sbin/automount

```

X11:

```

/bin/X symbolic link to Xdg
/usr/opt/X11/bin/xdm
/usr/opt/X11/bin/Xdg
/usr/options/X11.name
/usr/options/X11_5.4R3.00.MU05.name
/usr/release/op-sys-x_5.4R3.00.MU05.un
/usr/release/X11_5.4R3.00.MU05.fl

```

gcc:

```

/usr/lib/gcc-2/gcc
/usr/lib/gcc-2/gcc-ccl
/usr/options/gcc.name
/usr/options/gcc_5.4R3.00.MU05.name
/usr/release/op-sys-x_5.4R3.00.MU05.un
/usr/release/gcc_5.4R3.00.MU05.fl

```

networker:

```

/usr/opt/networker/sbin/nsrd
/usr/opt/networker/bin/compressasm
/usr/opt/networker/bin/compressasm
/usr/opt/networker/bin/logasm
/usr/opt/networker/bin/mailasm
/usr/opt/networker/bin/mbackup
/usr/opt/networker/bin/mminfo
/usr/opt/networker/bin/mmlocate
/usr/opt/networker/bin/mmpool
/usr/opt/networker/bin/mrecover
/usr/opt/networker/bin/networker
/usr/opt/networker/bin/nsr.help
/usr/opt/networker/bin/nsr_shutdown
/usr/opt/networker/bin/nsr_support
/usr/opt/networker/bin/nsradmin
/usr/opt/networker/bin/nsrcat
/usr/opt/networker/bin/nsrck
/usr/opt/networker/bin/nsrexecd
/usr/opt/networker/bin/nsrim
/usr/opt/networker/bin/nsrindexasm
/usr/opt/networker/bin/nsrsls
/usr/opt/networker/bin/nsrmm
/usr/opt/networker/bin/nsrmmdbasm
/usr/opt/networker/bin/nsrwatch
/usr/opt/networker/bin/rap
/usr/opt/networker/bin/rapcheck
/usr/opt/networker/bin/rapxfer
/usr/opt/networker/bin/rawasm
/usr/opt/networker/bin/recover
/usr/opt/networker/bin/recoverindex
/usr/opt/networker/bin/save
/usr/opt/networker/bin/savefs
/usr/opt/networker/bin/savegroup
/usr/opt/networker/bin/saveindex
/usr/opt/networker/bin/scanner
/usr/opt/networker/bin/tapeexercise
/usr/opt/networker/bin/uasm
/usr/opt/networker/bin/xlateasm
/usr/opt/networker/bin/xrap
/usr/opt/networker/demo/asm/hideasm
/usr/opt/networker/demo/asm/nsrfile

```

```
/usr/opt/networker/demo/asm/tarasm
/usr/opt/networker/sbin/nsrindexd
/usr/opt/networker/sbin/nsrmmd
/usr/opt/networker/sbin/nsrmmdbd
/usr/opt/networker/sbin/rapd
/usr/options/networker.name
/usr/options/networker_5.4R3.00.MU05.name
/usr/release/op-sys-x_5.4R3.00.MU05.un
/usr/release/networker_5.4R3.00.MU05.fl
/usr/sbin/setup.d/usr/networker_5.4R3.00.p03__1.u.setup.do
```

A list of files for each product package included in Maintenance Update op-sys-x_5.4R3.00.MU05 is contained in a file in the **/usr/release** directory.

8 Installation Instructions

8.1 Loading the Maintenance Update from Tape or CD-ROM

This Maintenance Update is a bootable tape or CD-ROM and consists of those packages listed in the section titled "Maintenance Update", and contains the files (listed by package) in the section of this document titled "Files".

IMPORTANT: LOAD ONLY THE PACKAGES THAT APPLY TO YOUR SYSTEM.

Note that this Maintenance Update may NOT be applied to C2/B1 Trusted DG/UX systems. Contact your local Data General Support Center for information regarding Maintenance Updates for C2/B1 Trusted DG/UX systems.

Follow the instructions below for either "Booting Standalone Sysadm from the Maintenance Update Tape" or "Booting Standalone Sysadm from the Maintenance Update CD-ROM", then proceed to the section titled "Preparing Your Disks".

Installing this Maintenance Update on systems that are partners in a failover configuration may require that each system be installed while its failover partner is powered off. This is required when the disks in the dual-initiator configuration share a single SCSI bus in the following way. When the Maintenance Update tape is booted, the installer kernel will size all SCSI busses on a system, using the SCSI ID set for an adapter in the PROM or, if none is set, defaulting to SCSI ID 7. If using the default SCSI ID 7, and if the failover partner host is up and running and using SCSI ID 7 on the same bus, the failover partner will panic. If your system is configured in this manner, you must install each system with the other powered off.

If neither of the systems in the dual-initiator configuration uses SCSI ID 7, you may install the Maintenance Update on either system while the other is running. If one of the systems in the dual-initiator configuration uses SCSI ID 7, the SCSI ID of the adapter on the other system must be set in PROM to use a SCSI ID other than 7 in order for you to be able to install the Maintenance Update on one system while the other is running.

8.1.1 Bringing Your System Down to the SCM

You must bring your system down to the SCM to boot this Maintenance Update tape or CD-ROM.

To bring your system down to the SCM, perform the following:

```
# cd /
# shutdown -g0 -y
# halt -q
```

8.1.2 Booting Standalone Sysadm from the Maintenance Update Tape

Insert the Maintenance Update tape in your tape drive.

The following instructions assume that your tape drive is configured at SCSI ID 4.

To boot the tape on an AViiON model 100, 200, 300, 400, 3000, 4000 or 4300:

```
SCM> b st(insc(),4)
```

To boot the tape on the Ciprico SCSI tape drive of an AViiON model 5000, 6000, 7000 or 8000:

```
SCM> b st(cisc(),4)
```

To boot the tape on the SCSI II tape drive of an AViiON model 5000, 6000, 7000 or 8000:

```
SCM> b st(dgsc(),4)
```

To boot the tape on an AViiON model 450, 500, 530, 550, 4500, 4600, 5500, 8500, or 9500:

```
SCM> b st(ncsc(),4)
```

8.1.3 Booting Standalone Sysadm from the Maintenance Update CD-ROM

Insert the Maintenance Update CD-ROM in your CD-ROM drive.

The following instructions assume that your CD-ROM drive is configured at SCSI ID 3.

To boot the CD-ROM installer kernel on an AViiON model 100, 200, 300, 400, 3000, 4000 or 4300:

```
SCM> b sd(insc(),3) -i
```

To boot the CD-ROM installer kernel on the Ciprico SCSI CD-ROM drive of an AViiON model 5000, 6000, 7000 or 8000:

```
SCM> b sd(cisc(),3) -i
```

To boot the CD-ROM installer kernel on the SCSI II CD-ROM drive of an AViiON model 5000, 6000, 7000 or 8000:

```
SCM> b sd(dgsc(),3) -i
```

To boot the CD-ROM installer kernel on an AViiON model 450, 500, 530, 550, 4500, 4600, 5500, 8500, or 9500:

```
SCM> b sd(ncsc(),3) -i
```

8.1.4 Preparing Your Disks

You must now prepare your disks:

1. Choose the option "Install Software" from the Standalone Sysadm Main Menu.
2. Choose the option "Prepare physical disks" from the Install Software Menu. Prepare all of your physical disks except those you do not wish to convert to vdm format and those that are to be used as raw disks.
3. Select the option "Prepare virtual disks" from the Install Software Menu and accept the defaults.
4. Return to the Standalone Sysadm Main Menu by typing "".

Proceed to the section titled "Checking File Systems".

8.1.5 Checking File Systems

If you previously loaded:

```
DG/UX System 5.4R3.00 Maintenance Update MU01,  
DG/UX System 5.4R3.00 Maintenance Update MU02,  
DG/UX System 5.4R3.00 Maintenance Update MU03,  
DG/UX System 5.4R3.00 Maintenance Update MU04,  
Special Release dgux_sr.940217, or  
Special Release dgux_sr.940502
```

and checked your file systems during the installation, you may skip to "Loading the Maintenance Update Software". If you have not previously loaded one of the above packages and checked your file systems, or are not certain whether or not one of these packages was loaded and the file systems checked, you must check all of the file systems on your system now:

1. Choose the option "File System".
2. Select the option "Unmount", and unmount the /mnt/root and /mnt/usr file systems.

3. Select the option "Check", and perform this step on all file systems, including /mnt/root and /mnt/usr. This is necessary in order to completely correct a possible data corruption problem fixed in this Maintenance Update. Type "?" at the prompt "File System(s) to Check:" to see the current name you should use to specify each file system. Note that entries for raw disks (e.g., swap) will also be listed; do not perform this step on raw disk entries. There is no need for you to specify any fsck options; the default options are sufficient.
4. Once you have checked all of your file systems, select the "Mount" option, and mount the /mnt/root and /mnt/usr file systems. Also mount any other file systems which contain files required to build your kernel. For example:

```
File System(s) to Mount: /mnt/usr/opt/netware
```

In addition, if /var is a separate file system on this system, mount it by executing the following:

Escape to the shell by typing "!":

```
Enter a number, a name, ? or <number>? for help, <NL> to
redisplay menu or q to quit: !
```

Mount /dev/dsk/var:

```
# mount /dev/dsk/var /mnt/root/var
```

Return to sysadm:

```
# exit
```

5. Return to the Standalone Sysadm Main Menu by typing "~".

8.1.6 Loading the Maintenance Update Software

1. Choose the option "Install Software".
2. Select the option "Load Software". When prompted to specify software packages to load, type "?" to list the packages, and select only those packages appropriate to your system. **WARNING: If you are loading this Maintenance Update from within the same sysadm session used to load DG/UX System 5.4 Release 3.00, do not select the option "All"; instead, select each individual package or range of packages you wish to load.**

Your response to the question "Automatically rebuild kernel after loading?", as well as the remainder of the installation procedure, will depend upon whether or not you wish to retain any kernel customizations.

8.1.7 Building a Kernel Using Your Custom Kernel

WARNING: automatically rebuilding your kernel after loading will cause you to lose system file customizations. To retain your current customized system file, reply "no" to the question "Automatically rebuild kernel after loading?".

Accept the defaults for setting up software packages. In order to properly load this Maintenance Update, all of the following packages (if applicable to your system) must be set up:

```
dgux
dgux_5.4R3.00.p32
dgux_5.4R3.00.p87
dgux_5.4R3.00.p129
dgux_5.4R3.00.s01
networker_5.4R3.00.p03
```

Note that any packages loaded prior to installing this Maintenance Update that require setting up but for which the setup was not previously performed will be set up at this time.

Reply "no" when prompted to build a kernel. Accept the defaults for rebooting the kernel, but re-type the boot string, replacing "-3" with "-1" so that the system will boot to run level 1. Once the system has rebooted, login as root. Invoke sysadm:

```
# sysadm
```

Select option **System->Kernel->Build** to rebuild your custom kernel. If your system is a diskless server, its client kernels must also be rebuilt. Once your kernel has been rebuilt you must reboot your system in order for the changes to take effect.

8.1.8 Building a Kernel Using Autoconfigure

If you have not customized your kernel, or do not care to retain any kernel customizations, accept the default response (yes) to the questions "Automatically rebuild kernel after loading?" and "Automatically reboot after building kernel?".

Once the software is loaded, accept the defaults for setting up software packages. In order to properly load this Maintenance Update, all of the following packages (if applicable to your system) must be set up:

```
dgux
dgux_5.4R3.00.p32
dgux_5.4R3.00.p87
dgux_5.4R3.00.p129
dgux_5.4R3.00.s01
networker_5.4R3.00.p03
```

Note that selecting the defaults will cause any packages loaded prior to installing this Maintenance Update that require setting up but for which the setup was not previously performed to be set up at this time.

The kernel will be rebuilt and rebooted automatically at this point. If your system is a diskless server, its client kernels must also be rebuilt.

8.1.9 Deregistering the CD-ROM Drive

If you loaded this Maintenance Update from CD-ROM media, use **sysadm Device->Disk->Physical->Deregister** to deregister the CD-ROM drive. Make sure you give the full name of the device. If you do not know the name, typing "?" when you are prompted for the device will give you the list of all currently registered devices. Once the CD-ROM drive is deregistered, you may remove the media from the drive.

8.2 Creating a Maintenance Update Tape

If the Maintenance Update is delivered as a tar format file that consists of images that are sysadm loadable, you can create a sysadm bootable tape that can be applied on any AViiON system with a tape drive. First you will need to extract the images into an empty directory. To extract these images from the tar format file, perform the following steps:

```
# mkdir -p /var/tmp/MU
# cd /var/tmp/MU
# tar xvf <full_path_name_of_file>
```

To create a sysadm bootable tape that can be loaded and installed using the directions in this notice, follow the steps below:

```
# cd /var/tmp/MU
# ./Docs/MakeTape /dev/rmt/<tape_device>
```

--- End of Maintenance Update Notice ---



017-60062-06