

CONVERGENT TECHNOLOGIES

RELEASE NOTICE FOR 11.5 Standard Software Update (SAA-3101)

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NOTE

This Release Notice is for Standard Software. Detailed Operating System information is contained in a separate Release Notice for the CTOS/VM and CTOS/SRP Operating Systems.

Please read the entire contents of this release notice before you begin installation.

This specification assumes prior knowledge of the following documents:

11.3/11.4 Standard Software Release Notice

Executive Manual, Fourth Edition

CTOS System Administrator's Guide

CTOS/VM Concepts Manual

CTOS/VM Reference Manual, Volumes 1 & 2

1.0 DESCRIPTION OF PROGRAMS

1.1 Description of Programs

This Release Notice describes the 11.5 Standard Software Update. This release, as the name implies, is an update to Standard Software 11.3/11.4. As such, it doesn't contain all the files usually distributed in a standard software release. Instead, it includes only those files which are needed in order to support CTOS/VM 2.4.

As described in the CTOS/VM 2.4 Release Notice, the primary purpose in releasing CTOS/VM 2.4 is to support Unisys data communications hardware and software. Therefore, the primary purpose in releasing 11.5 Standard Software Update is to support the installation requirements of Unisys software packages. The specific Unisys hardware and software products supported and some terminology notes, are listed in the first two sections of the CTOS/VM 2.4 Release Notice.

The 11.5 Standard Software Update Release Notice provides a description of the product, a list of the contents of the Distribution Diskettes, installation procedures, and other information pertinent to this update release of Standard Software.

The release chronology of Standard Software numbering is as follows:

10.x	(with CTOS 9.4 thru 9.x)
II 1.0	(with CTOS II 1.0)
11.0	(with CTOS/VM 2.0)
11.2	(with CTOS/SRP 1.4)
11.3	(with CTOS/VM 2.2)
11.3/11.4	(with CTOS/VM 2.3)
11.3/11.4/11.5	(with CTOS/VM 2.4)

Version 11.5 Standard Software Update distribution package consists of the following diskettes:

Initialization (2 diskettes)

Initialization Continuation (4 diskettes)

11.5 Update (3 diskettes) - These diskettes contain the following programs:

Bootstrap	Bootstraps a workstation
Command	Adds and removes Executive commands
DisplayConfig	Displays the NGEN configuration
ExtCrashDump	Dumps high memory (above 1 MB) after a system crash
Files	Lists disk file names and attributes
FixRequestText	Repairs Unisys loadable request files
ListRqSet	Creates a text file for loadable requests (used later by MakeRqSet)
MakeRqSet	Creates loadable request files (e.g. Request.sys)
Restore	Restores previously archived files
SIM	Software Installation Manager, installs Unisys products
XBif	Serves the NGEN X-Bus
XC002Server	Serves the NGEN port expander communications module

2.0 Changes from Prior Versions

2.1 Changes from Standard Software 11.3/11.4

The following files are being re-released:

- A. **Command.run** – This is simply the 11.4 version repackaged.
- B. **Install.sub** – This submit file, which is invoked by the Executive command 'Install', has been modified to invoke the new submit file CheckForInstall.sub (described below).
- C. **InstallNewRequests.sub** – This file, which replaces InstallNewRequest.sub, may be used by both Unisys and Convergent submit files during software installation.
- D. **Restore.run** – This is simply the 11.4 version repackaged.
- E. **Bootstrap.run** – Now resets Unisys intelligent datacomm modules it finds on the X-Bus.
- F. **DisplayConfig.run** and **DisplayConfigMsg** – Now displays Unisys intelligent datacomm modules.
- G. **ExecMsg** – Contains additional messages required by some of the 11.5 standard software files.
- H. **ExtCrashDump.run** – Now supports the largest amounts of memory available on the 386i. Also supports the 25 Mhz 386i.
- I. **Files.run** – Contains a new optional parameter called 'Suppress error msgs'.
- J. **ListRqSet.run** – Contains a new optional parameter called 'Exclusion List'. Request codes entered in this field will be excluded from the second and all subsequent request files entered for the first parameter. In addition, ListRqSet now recognizes the new NetRouting token OpenFhLL. See section 5.3 for addition information regarding net routing.

- K. **MakeRqSet.run** – Recognizes a new NetRouting token called OpenFhLL. This token is used by the Unisys networking product B–Net II. OpenFhLL instructs B–Net II not to close a connection when the program which opened the connection terminates. See section 5.3 for addition information regarding net routing.
- L. **XBif.run** – Now supports Unisys intelligent datacomm modules.
- M. **XC002Server.run** – Commline modifications were made to support Unisys datacomm products. The operation of existing software which uses the XC002 remains unchanged.

1.3 Additions to Standard Software 11.3/11.4

The following files are additions to standard software 11.3/11.4:

- A. **Ctos.lib** – New files are added to Ctos.lib (if present) to support the new CTOS/VM 2.4 calls 'GetSerialNumber', 'GetSerialNumberOldOs', 'AllocUserNumbers' and 'DeallocUserNumbers'. These are all described in the CTOS/VM 2.4 Release Notice.
- B. **CheckForInstall.sub** – This submit file is automatically invoked by the Executive commands 'Install', 'Software Installation' and 'XE Software Installation' in order to verify the type (CT or Unisys) of installation diskette present.
- C. **FixRequestTxt.sub**, **FixRequestTxtM.sub**, and **FixRequestTxt.run** – These files are automatically invoked by the Executive command 'Software Installation' and 'XE Software Installation'. Several Unisys software products package the loadable request file Request.F.sys, which contains request definitions which conflict with some Convergent requests. The FixRequestTxt program automatically detects the presence of Request.F.sys on a Unisys installation diskette and patches the request codes in question so the conflict doesn't occur.
- D. **SIM.run**, **SIMInstall.sub**, **SIMMsg.bin**, **SIMRqInstall.sub**, and **InstallCmds.run** – These files

all are part of the Unisys Software Installation Manager. They are automatically invoked by the 'Software Installation' and 'XE Software Installation' commands.

- E. **SoftwareInstallation.sub** – This submit file is invoked by the Executive command 'Software Installation'. It installs Unisys software from a diskette placed in [f0] to a workstation hard disk.
- F. **XESoftwareInstallation.sub** – This submit file is invoked by the Executive command 'XE Software Installation'. It installs Unisys software from a diskette placed in [f0] to an SRP (XE520 in Unisys terminology) master.

3.0 CONTENTS OF DISTRIBUTION DISKETTES

The 11.5 Standard Software Update distribution diskettes set are your master copy, and have been shipped write-protected. They should not be write-enabled, nor should they be used as a working copy.

Standard Software / CTOS/VM 2.4 Initialization

Diskette 1 of 2, <Sys> directory

1024x768_80Sys.font	720x348_80Sys.font
SignOn.run	SignOn.txt
Config.sys	Sys.cmds
ExecMsg.bin	t1Sys.font
VDM_BM.run	InstallVDM.run
VDM_Ch.run	

Diskette 2 of 2, <Sys> directory

1024x768_80Sys.font	720x348_80Sys.font
SignOn.run	Config.sys
SignOn.txt	Sys.cmds
ExecMsg.bin	t1Sys.font
InstallVDM.run	VDM_VGA.run

Standard Software Initialization Continuation

Diskette 1 of 4, <Sys> directory

.user	80x34_CharSys.font
PtrBConfig.sys	AllFiles.fl
Real>SignOn.txt	Config.sys
Request.sys	Continue.run
SignOn.run	Continue.txt
SignOn.txt	SplBConfig.sys
Exec.run	SplCnfg.sys
ExecMsg.bin	SplConfig.sys
SubCmd.run	Init.sub
Submit, run	Init.user
Sys.Cmds	Install.sub
SysAllFiles.fl	Installrequest.sub
IVolume.run	SysInit.txt
VDM_BM.run	LptConfig.sys

Diskette 2 of 4, <Sys> directory

1024x768_80Sys.font	LCopy.run
720x348_80Sys.font	LInstall.run
AllFiles.fl5	Continue.run
Next.sub	Continue.txt
Request.2.sys	Sys.cmds
Exec.run	Vdm_CH.Run
t1Sys.font	ExecMsg.bin
InstallVDM.run	Vdm_Vga.Run

Diskette 3 of 4, <Sys> directory

AllFiles.fl5 Exec, run ExecMsg.bin sysImage.sys
LCopy.run Next, sub sys.cmds

Diskette 4 of 4, <Sys> directory

AllFiles.fl5	LInstall.run
Exec.run	Next.sub
ExecMsg.bin	Request.2.sys
Sys.cmds	InstallVDM.run
sysImage.sys	LCopy.run
t1Sys.font	

11.5 Standard Software Update

Diskette 1 of 3, <Sys> directory

All.sub	legalese
Local.sub	Delete.fl5
Master.sub	getSerialNumberOldOs.obj
Submit.fl5	11.5_RqLabl.obj
HdInstall.sub	UpdateCmds.sub
InstallConfig.sys	UpdateCTOSlib.sub
fSRP.obj	

Diskette 1 of 3, <CT> directory

CheckForInstall.sub	Restore.Run
Command.Run	SIM.Run
FixRequestTxt.run	SIMInstall.Sub
FixRequestTxt.sub	SIMMsg.Bin
Install.sub	SIMRqInstall.Sub
InstallCmds.run	SoftwareInstallation.Sub
InstallNewRequests.Sub	XESoftwareInstallation.Sub

Diskette 1 of 3, <RelNote> directory

ReleaseNotice

Diskette 2 of 3, <CT> directory

Bootstrap.run	ExecMsg.txt
DisplayConfig.run	ExtCrashDump .run
DisplayConfigMsg.bin	Files.run
DisplayConfigMsg.txt	ListRqSet.run
ExecMsg.bin	MakeRqSet.run

Diskette 3 of 3, <CT> directory

XBif.run	XC002Server.run
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4.0 COMPATIBILITY

4.1 Workstation Software Environment

- A. Standard Software Update 11.5 is intended for use with CTOS/VM 2.4 or later. However, Standard Software Update 11.5 is backward compatible for use on all workstations (NGEN's, IWS's, and AWS's). To work correctly in these environments, the workstation must be running the following minimum versions of CTOS:

IWS	9.1
AWS	9.11
NGEN Series 186	9.1 or later
NGEN Series 286	9.7 or VM 2.0 or later
NGEN Series 286i	VM 2.0 or later
NGEN Series 386	9.8 or VM 2.0 or later
NGEN Series 386i	VM 2.4 or later

- B. If you attempt to run 11.5 Standard Software Update on a version of CTOS prior to 9.1, a status code 247 (incorrect OS version) will be returned.

4.2 Hardware Configurations Supported

Please refer to the CTOS/VM 2.4 Release Notice for the list of hardware supported.

5.0 SOFTWARE INSTALLATION

If you have a system that is already running some version of CTOS, before starting installation, be sure that no system services are installed and that the Context Manager is not installed.

If you plan to install Standard Software Update 11.5 and a new version of CTOS (e.g. CTOS/VM 2.4), you must install the Standard Software before installing the OS.

5.1 Required Hardware

NOTE

A minimum of a 20 megabyte hard disk is recommended for installation of Standard Software.

Installation of 11.5 Standard Software Update on an SRP master requires a workstation with a hard disk and a floppy drive.

5.2 Theory of Installation

The 11.5 Standard Software Update consists of three sets of diskettes:

Initialization – 2 Diskettes

These are used to boot a system with an uninitialized hard disk. Diskette 1 of 2 can be used for systems with all video types except VGA. Diskette 2 of 2 must be used with systems with VGA (GC-104 or GC-004) video. This initialization set replaces those packaged with 11.3/11.4 Standard Software.

Initialization Continuation – 4 Diskettes

After booting a system with one of the above Initialization diskettes, these diskettes are used to initialize the hard disk and copy a minimal system to it so the system can be booted from its own hard disk. This initialization set replaces those packaged with 11.3/11.4 Standard Software.

11.5 Standard Software Update – 3 Diskettes

These diskettes contain files that have been updated since the 11.3/11.4 Standard Software release. They must be installed after initializing your system (if necessary) and installing Standard Software 11.3/11.4.

IMPORTANT NOTE

11.5 Standard Software Update is an update to Standard Software 11.3/11.4.

If your system is already running Standard Software 11.3/11.4, then you only need to install the three 11.5 Standard Software Update diskettes using the procedure listed below.

If your system is running Standard Software previous to 11.3/11.4, then you must install Standard Software 11.3/11.4 prior to installing 11.5 Standard Software Update.

5.3 Installation Procedures

Before installing Standard Software Update 11.5, you must install Standard Software 11.3/11.4 by following the directions listed in section 5 of the Standard Software 11.3/11.4 Release Notice. Follow all the directions and completely finish installing Standard Software 11.3/11.4 before returning to this point.

IMPORTANT NOTE

If you need to initialize a system disk, then follow the directions given in the Standard Software 11.3/11.4 Release Notice. However, substitute the Initialization diskettes supplied with this release for the Initialization diskettes supplied with Standard Software 11.3/11.4 and CTOS/VM 2.3.

The installation submit files may display error messages while creating directories, copying files, deleting files, or renaming files. You may disregard these error messages.

Characters that you must type are shown in **boldface**. Special keys, such as RETURN and GO, are shown in uppercase.

After installing Standard Software 11.3/11.4, you may install the 11.5 Standard Software Update. To do this, put disk 1 of the three disk set 11.5 Standard Software Update in any floppy drive and enter the following command:

Command **Install**

Install

[Floppy (default = [f0]) [fx]

where x is the number of the floppy drive into which you inserted the diskette. If the installation is done from [f0], you do not need to enter [f0] on the [Parameters] line.

- A. Now follow the directions presented on the screen and select the appropriate options. The selection of options is accomplished in the same manner as the Standard Software 11.3/11.4 installation.
- B. The required files will be copied to the [Sys]<Sys> directory and some new commands will be created. In addition, you are given the option of adding new modules to CTOS.lib.
- C. Insert diskettes 2 and 3 when prompted.

5.4 Operating System Installation

You may now install CTOS/VM 2.4 by following the directions given in the CTOS/VM 2.4 Release Notice.

6.0 SUPPLEMENTARY INFORMATION

6.1 Installation of Unisys Software

11.5 Standard Software Update supports the installation of Unisys datacomm software. Installation of Unisys software is similar to the installation of Convergent software, however some of the details are different.

To install a Unisys product, the installation diskette must be inserted in device [f0]. To install the software on your local hard disk, enter the command 'Software Installation'. To install the software on your workstation or SRP master hard disk, enter the command 'XE Software Installation'.

Both of these commands invoke various submit files and the Unisys SIM program, which accomplishes all aspects of software installation. The answering of questions and selection of options on the screen is done in a manner similar to Convergent installations.

Before installing a Unisys product, always read the accompanying reference manual which contains detailed installation information. Also, read the RIF (Release Information File) which is contained on the product diskette. The RIF is the Unisys equivalent of a release notice.

NOTE

Unisys software products are installed by issuing the Executive command: **Software Installation**

Convergent products continue to be installed by issuing the Executive command: **Install**

6.2 Specific Unisys Product Notes

This section contains notes pertaining to the installation and use of some specific Unisys products on CTOS/VM 2.4

Unisys datacomm terminal emulators and status monitors - Some of these are unable to display color on EV

workstations. Fortunately, all other aspects of the software functions correctly. The products which have this problem are:

SNA 3270 Emulator 7.0
BSC 3270
B-Net II NCU 1.0.2

This problem will be corrected in future releases of these products.

ModemServer & Unisys X.25 – If these products are both installed using the ports of an XC002, the ModemServer will be unable to reset the modem. This is a bug in the XC002 Server and will be corrected in the next release of standard software. The work around, if both of these products are installed on the same workstation, is to install one of them such that it uses the ports of the main processor. Another solution is to install one or both of them on a Unisys ID2 module.

Ct-Mail 7.0 and B-Net II – There is a request code conflict when installing both of these products on the same workstation. The problem is Ct-Mail defines certain request codes as short-lived and B-Net II defines them long-lived. The solution is to modify one of the loadable request files to make them consistent. The recommendation is to modify the Ct-Net 7.0 loadable request file and change 'OpenFh' to 'OpenFhLL'.

An additional problem arises when running Ct-Mail 7.0 over B-Net II. For Ct-Mail 7.0 to function over B-Net II, the B-Net Transport service must be installed whether or not it is required in the particular B-Net II configuration.

IDMSS – The Unisys IDMSS product is required for the use of Unisys intelligent modules (ID2, EN3, TR2). Convergent customers will probably be confused during the installation of IDMSS due to naming and version number differences between Convergent and Unisys. When installing IDMSS, when prompted to press GO or CANCEL-GO during the version number checks, **always press GO**.

When installing IDMSS on a cluster workstation, you are given an option to update Request.sys on the master as well as the cluster workstation. You should always take the option, otherwise the master will crash with erc 80 when IMSP is installed on the cluster.

LU6.2 (APPC) – If LU6.2 is installed on a cluster workstation and the SNA Transport Service is installed on the master, you will not be able to configure LU6.2 for more than 1 LU without hanging the cluster station. This is because LU6.2 keeps a large number of requests outstanding at the master (2 per LU). The solution is to increase the new sysgen parameter `MaxXBlocksPerUser` (which is defaulted to 4). You will need to increase `MaxXBlocksPerUser` by 2 for each LU desired. See the CTOS/VM 2.4 Release Notice for further information on `MaxXBlocksPerUser`.

MHS – The Unisys MHS IHI (Interactive Human Interface) product runs in real mode and uses a large amount of memory in the first 1 megabyte of memory. If you attempt to run other real mode programs on a system containing MHS IHI, then memory limitations will result. It has also been found that MHS IHI can run out of memory when installed on systems containing a GC-X03 module.

Other known MHS problems are:

MHS will not pick up the GPS default printer names from GPS. Instead, you must manually type in the printer name.

MHS cannot print to a remote GPS printer over B-Net II.

When both MHS and CT-Mail are resident in memory at the same time, CT-Mail will display "Master went down" in the upper right hand corner of the screen. However, CT-Mail is still fully operational.

RAF – The Remote Access Facility (RAF) should not be used on the 286i. Frequent crashes and hangs will result. The product has been found to work correctly on all other hardware.

6.3 Net Routing Notes

The net routing conventions have been slightly modified for CTOS/VM 2.4. Net routing is defined for request codes in loadable request files. Formerly, Convergent defined the token 'OpenFh' to indicate a handle was to be opened long lived. This means a net connection will not be severed when the application which issued the open request terminates. The addition of the token 'CloseAtTermination' indicates the

handle is short lived. This means the net connection is to be automatically severed when the application terminates.

In practice, all Convergent applications opened connections short lived. In fact, since Ct-Net didn't even look at the OpenFh and CloseAtTermination bits, a connection was always opened short lived.

Unisys B-Net II does pay attention to the routine bits. In BTOS (the Unisys version of CTOS), 'OpenFh' is interpreted to indicate short lived and a different token, 'OpenFhLL', indicates long lived. In an effort to merge these two conventions so Unisys software could be installed on CTOS/VM, the following have been adopted.

'OpenFh' now always indicates short lived. The token 'CloseAtTermination' is redundant and is automatically appended by MakeRqSet and ListRqSet whenever 'OpenFh' is found.

'OpenFhLL' now always indicates long lived.

This means that request codes which use the token OpenFh will now be interpreted as opening short lived handles. If you wish a handle to be opened long lived, then you must change the request code definition to 'OpenFhLL'.

6.4 Request Code Notes

During integration testing of CTOS/VM 2.4 and 11.5 Standard Software Update, several request code overlap problems were encountered when installing Unisys datacomm products. The majority of these problems were solved by the addition of FixRequestTxt which is packaged with this release. However, it is impossible to verify request code compatibility of all combinations of Convergent software (old and new) and Unisys software. In addition, customer supplied request codes could also come into conflict.

If you run into a request code overlap problem when installing a software product, MakeRqSet will supply an error message on the screen and a listing file. By examining the listing file, you will be able to determine exactly which request codes are causing the problem. Most request code conflicts can simply be resolved by determining which loadable request file should have precedence and bumping the version number of the request codes in conflict. Please refer to the [CTOS System](#)

Administrator's Guide for details on the List Request Set and Make Request Set commands. If you run into a request code conflict when installing Unisys or Convergent products and are unable to determine which request codes should have precedence, please contact Technical Support.

7.0 DOCUMENTATION UPDATES

The following update notices document changes to 11.5 Standard Software Update:

Executive Reference. Fourth Edition, Update Notice 2 (DAA-122).

CTOS System Administrator's Guide. First Edition, Update Notice 1 (DAA-116).

Status Codes Manual. Third Edition, Supplement (DAA-107).

CTOS/VM Reference Manual. Volumes 1 & 2, First Edition, Update Notice 2 (DAA-113).

8.0 KNOWN ERRORS AND OMISSIONS

- A. **MakeRqSet:** message number 157 in the message file StdSoftMsg.txt, is as follows:

:157: "none"

Unfortunately, this message is not used by MakeRqSet. For international customers the workaround is to not translate this message. In any case, the word none is never seen by the end user.