

Release Package [6]

Note: The full contents of the UNICOS 10.0 release package are yet to be determined. As information becomes available, it will be added to this chapter.

This section contains the following information about the UNICOS 10.0 release package:

- UNICOS hardware and software requirements
- Licensing information
- Optional software which can be ordered with the UNICOS 10.0 release package
- Release package contents
- Release package ordering information

6.1 UNICOS 10.0 hardware and software requirements

The following sections list the following, supported with the UNICOS 10.0 release:

- Cray Research hardware platforms supported with UNICOS 10.0 (see Section 6.1.1, page 93)
- IOS-E and OWS software levels supported (see Section 6.1.2, page 94)
- Programming environments supported with the UNICOS 10.0 release package (see Section 6.1.3, page 94)
- Tested and supported upgrade paths (see Section 3.3, page 46)
- Cray Research software products supported (see Section 6.1.5, page 96)
- Cray Research asynchronous software products supported (see Section 6.1.5.2, page 98)

6.1.1 Cray Research systems supported with UNICOS 10.0

The UNICOS 10.0 release initially supports the following Cray Research systems:

- CRAY J90 systems with Model-V IOS
- CRAY C90, T90-CFP and T90-IEEE systems with Model-E IOS
- CRAY T90-CFP, T90-IEEE, and J90se systems with GigaRing IOS.
- Cray Research hosts for CRAY T3D systems, specifically CRAY T90 series with Cray floating-point CPUs and CRAY C90 series.

Note: CRAY J90++ and T90P (PV+) systems will be supported in a later release of UNICOS 10.0.

6.1.2 OWS and IOS-E software

For Cray Research systems with an IOS-E and for the CRAY T90 series, UNICOS 10.0 includes the IOS 9.0.1.3/015 release and the OWS 9.0.1.3/015 release.

GigaRing sites will also receive the current level of SWS-ION with UNICOS 10.0.

Note: If your site is licensed for supported UNICOS source code, you will receive a source code package, which lets you modify your code locally. For UNICOS 10.0, you can load source into your system together with binary code packages before generation.

For more information about ordering the IOS and OWS releases, see the *Support System and IOS-E Release Overview*, Cray Research publication RO-5060.

6.1.3 Programming environments supported with UNICOS 10.0

The UNICOS 10.0 release supports the following programming environments. These are asynchronous products, and therefore must be purchased and licensed separately from UNICOS 10.0. For more information, contact your Cray Research representative.

Note: You must make sure that your Cray Research system supports product upgrades beyond the release levels listed here, should you decide to purchase them.

- CF90 Programming Environment 3.0 or later for Cray PVP and MPP systems. See the *Programming Environment Releases Overview*, Cray Research publication RO-5212 3.0, for additional information.
- Cray C++ Programming Environment 3.0 or later for Cray PVP and MPP systems. This package includes Cray Standard C. See the *Programming*

Environment Releases Overview, Cray Research publication RO-5212, for additional information.

- C++ MathPack 3.0 or later for Cray PVP and MPP systems. See the *Cray C++ Library Products Technical Note*, Cray Research publication SN-2129 3.0, for additional information.
- C++ Tools 3.0 or later for Cray PVP and MPP systems. See the *Cray C++ Library Products Technical Note*, Cray Research publication SN-2129 3.0, for additional information.

6.1.3.1 Fortran run-time libraries

Sites that install the UNICOS 10.0 release must upgrade to a Programming Environment 1.2 or later release to obtain Fortran run-time libraries. This is because these libraries were no longer released with the UNICOS system beginning with UNICOS 9.0.

Note: Sites running the UNICOS 8.3 *restricted* release that upgrade to UNICOS 10.0 (via the upgrade path through UNICOS 9.0) also have this requirement. These libraries were not released with UNICOS 8.3. (See Section 3.3, page 46 for more information.)

6.1.4 Tested and supported upgrade paths

Sites running any version of UNICOS 9.0 or any 9.X IDS restricted releases on one of the supported hardware platforms (see Section 6.1.1, page 93) can upgrade directly to UNICOS 10.0.

Customers running any version prior to UNICOS 9.0 must first perform an upgrade installation to the UNICOS 9.0 release, then upgrade to UNICOS 10.0.

Initial installs of GigaRing-based systems have been supported since UNICOS 9.2; while support of initial installs of Model-E based systems stopped after UNICOS 9.1.

Note: If you have a *non*-GigaRing system and you wish to upgrade to a GigaRing-based system, you must perform an initial install.

For more information, see the following installation and upgrade publications:

- *UNICOS Installation Guide for CRAY J90 Model V based Systems*, Cray Research publication SG-5271 10.0

- *UNICOS Installation Guide for CRAY J90se GigaRing based Systems*, Cray Research publication SG-5296 10.0
- *UNICOS Installation Guide for CRAY C90, CRAY T90, and CRAY T90 IEEE Model E based Systems*, Cray Research publication SG-5297 10.0
- *UNICOS Installation Guide for CRAY T90 and CRAY T90 IEEE GigaRing based Systems*, Cray Research publication SG-5298 10.0

Contact your Cray Research representative for further information.

6.1.5 Cray Research software products supported

The following sections list the software products other than programming environments most commonly used in conjunction with the UNICOS operating system. The product release level required with UNICOS 10.0, if any, is specified. For information about other products, contact your Cray Research representative.

6.1.5.1 Distributed computing and networking software supported

The UNICOS 10.0 release supports the following Cray Research distributed computing and networking software products, which are released asynchronously or otherwise separately from the UNICOS 10.0 release.

- Distributed Computing Environment

Customers wishing to use the Cray Distributed Computing Environment (DCE) Client Services, must purchase a DCE Client Services license. DCE 1.1 is the level of DCE required with UNICOS 10.0. For more information about DCE licensing or to purchase a DCE license, contact your Cray Research representative. For information describing this product, see the *Cray DCE Client Services/Cray DCE DFS Server Release Overview*, Cray Research publication RO-5225 1.1, or contact your Cray Research representative.

- Distributed File System

To use the Cray DCE Distributed File System (DFS), sites must purchase a DFS Servers license, as well as a DCE Client Services prerequisite license. For more information about DFS licensing or to purchase a DFS license, contact your Cray Research representative. For information describing this product, see the *Cray DCE Client Services/Cray DCE DFS Server Release Overview*, Cray Research publication RO-5225 1.1, or contact your Cray Research representative.

- Network Queuing Environment

The Cray Network Queuing Environment (NQE) is a set of clients and servers that allow batch requests to be executed across a load-balanced network of hosts. UNICOS 10.0 supports NQE version 3.2 or later. For more information about NQE or to purchase an NQE license, contact your Cray Research representative, or see the *NQE Release Overview*, Cray Research publication RO-5237.

- SUPERLINK/VMS

SUPERLINK for DEC VAX/VMS Systems provides a link between DEC VAX/VMS systems and the UNICOS operating system on Cray Research PVP systems. UNICOS 10.0 supports the 1.4 version of SUPERLINK/VMS.

Note: You must purchase a SUPERLINK / VMS license to use this product.

For information describing this product, see the *SUPERLINK for DEC VAX OpenVMS and Alpha AXP Systems 1.4 Release Overview*, Cray Research publication RO-5090.

- Cray Visualization Toolkit (CVT)

The Cray Visualization Toolkit is a collection of tools that allows users to create visual interfaces for Cray Research-based applications. CVT software is appropriate for all CRAY C90, CRAY T90, CRAY J90 and CRAY T3E computer systems. UNICOS 10.0 supports the 3.1 version of CVT.

Note: You must purchase a CVT license to use this product.

- Remote Queuing System (RQS/VMS)

The Remote Queuing System (RQS) for DEC VAX/VMS Systems is used for remote job submission and control to Cray Research PVP systems from a DEC VAX/VMS running VMS 5.4 or later. UNICOS 10.0 supports the 2.0 release of RQS/VMS.

Note: You must purchase an RQS/VMS license to use this product.

For information describing this product, see the *RQS for DEC VAX/VMS Systems Release Overview*, Cray Research publication RO-5105.

- Front End Servicing for IBM/MVS Systems (FES MVS)

The Front End Servicing for IBM/MVS Systems (FES MVS) integrates UNICOS on-line tape management on CRAY Y-MP, CRAY J90, CRAY C90 or

CRAY T90 systems running UNICOS with tape management system for other computer systems running the IBM/MVS operating system. UNICOS 10.0 supports the 2.0 version of this product.

Note: You must purchase an FES/MVS license to use this product.

For information on FES MVS see the *FES MVS Installation and Administration Guide*, Cray Research publication SG-5251.

6.1.5.2 Storage management software supported

The UNICOS 10.0 release supports the following Cray Research software products. These are released asynchronously or otherwise separately from the UNICOS 10.0 release.

Note: Each of these products is licensed separately from UNICOS 10.0. For purchasing and licensing information, see your Cray Research representative.

- Data Migration Facility 2.5.4.4

The Cray Data Migration Facility (DMF) ensures the availability of file system space by moving selected files from online disk to an offline storage medium. DMF 2.5.4.4 is the level of DMF supported by UNICOS 10.0.

- HIPPI disk support software

Cray Research will supply HIPPI disk software free of charge to customers purchasing disks from Cray Research. If customers purchase their disks from a third party, HIPPI disk support software must be licensed and purchased from Cray Research.

- Cray REELibrarian (CRL)

CRL is a client/server volume management system that controls a centrally stored library of tapes (or volumes) and allows requests for tape mounts. UNICOS 10.0 supports the 2.0.8 release of CRL.

For additional software availability, contact your Cray Research representative.

6.2 Licensing information

The UNICOS operating system is licensed under a software contract by Cray Research to its customers. The UNICOS 10.0 release is available as follows:

- For CRAY T90 systems, UNICOS 10.0 is available in source and binary formats.
- For all CRAY J90 systems, including J90se, UNICOS 10.0 is available in binary format only. CRAY J90 customers may, however, obtain an optional J90 UNICOS Source Materials package, providing they obtain a separate J90 UNICOS Source Materials license.

Note: UNICOS 10.0 release package requires a UNICOS System Software license; customers with a UNICOS System Software license do not need additional Cray Research licenses to receive the standard UNICOS 10.0 release package (see Section 6.2.2, page 102 for information on UNICOS source code license requirements, and Section 6.2.3 and Section 6.2.4 for information on licensing contacts). Software for programming environments (compilers) and the Data Migration Facility (DMF) are licensed separately from the UNICOS System Software license. Other functionality is also offered as separately licensed products.

Customers outside the United States and Canada must sign a Letter of Assurance before software can be shipped. Address all questions regarding which customers have signed a Letter of Assurance, or which software requires this letter to Christine Miller, at the following address:

Christine Miller
Cray Research, Inc.
655F Lone Oak Drive
Eagan, MN 55121
Telephone: +1-612-683-7476
Fax: +1-612-683-7297

6.2.1 Products that require Flexible License Manager keys

The UNICOS 10.0 release includes the Flexible License Manager (FLEXlm), which controls the use of certain products in the UNICOS operating system. The following products, packaged with UNICOS 10.0, are licensed through FLEXlm:

- ONC+
- UNICOS shared file system
- CRSTK/STKRED
- CRIBM/IBM 3495 (implementation of IBM 3495 Tape Library Dataserver support is deferred)

- CREMS/DTDLD and CREMS/ER90
- BDS (Bulk Data Services) Server
- BDS (Bulk Data Services) Client
- NQE (Network Queuing Environment)

Note: Unlike other FLEXlm products, NQE is no longer packaged with the UNICOS operating system.

Whether products are packaged with the UNICOS operating system or separately packaged, the license keys are generated by the Cray Research order desk during the product order cycle. After the order desk has received notice of the order, it issues the contracted license keys. The license keys and installation instructions are sent by electronic mail.

For a complete list of Cray Research products that operate with UNICOS software, contact your Cray Research representative.

If a licensed product has been installed and a problem arises that is suspected to be related to the license key, it is possible to get an emergency key from the Customer Service Call Center in the United States or from the service organization in other countries.

6.2.1.1 ONC+

To use ONC+ technology, sites must purchase an ONC+ license. For more information about ONC+ licensing or to purchase an ONC+ license, contact your Cray Research representative.

For information describing this product, see *ONC+ Technology for the UNICOS Operating System*, Cray Research publication SG-2169, and the *UNICOS Networking Facilities Administrator's Guide*, Cray Research publication SG-2304, or contact your Cray Research representative.

6.2.1.2 UNICOS Shared File Systems

To use UNICOS shared file systems (SFS), sites must purchase an SFS license. For more information about SFS licensing or to purchase an SFS license, contact your Cray Research representative.

For information describing this product, see the *Shared File System (SFS) Administrator's Guide*, Cray Research publication SG-2114, or contact your Cray Research representative.

6.2.1.3 CRSTK/STKRED

To use StorageTek RedWood drive autoloader cartridge system support, sites must purchase a CRSTK/STKRED license. For more information about CRSTK/STKRED licensing or to purchase a CRSTK/STKRED license, contact your Cray Research representative.

6.2.1.4 CRIBM/IBM 3495

To use IBM 3495 support software, sites must purchase a CRIBM/IBM 3495 license. For more information about CRIBM/IBM 3495 licensing or to purchase a CRIBM/IBM 3495 license, contact your Cray Research representative.

Implementation of IBM 3495 Tape Library Dataserver support is deferred.

6.2.1.5 CREMS/DTDLD and CREMS/ER90

To use the EMASS robotic and ER90 device products, sites must purchase a CREMS/DTDLD license. For more information about CREMS/DTDLD licensing or to purchase a license, contact your Cray Research representative.

For more information describing these products, see *Tape Subsystem Administration*, Cray Research publication SG-2307 and *Tape Subsystem User's Guide*, Cray Research publication SG-2051, or contact your Cray Research representative.

6.2.1.6 BDS (Bulk Data Services) Server

BDS Server data transfer product is available for Cray PVP systems for UNICOS 10.0. BDS Server is controlled by FLEXlm and requires a separate license for access.

For more information on this product, see the `bds(8)` man page, or contact your Cray Research representative.

6.2.1.7 BDS (Bulk Data Services) Client

BDS Client data transfer product is available for Cray PVP systems for UNICOS 10.0. BDS Client is controlled by FLEXlm and requires a separate license for access.

For more information on this product, see the `bds(8)` man page, or contact your Cray Research representative.

6.2.1.8 NQE (Network Queuing Environment)

Unlike other FLEXlm products, NQE is no longer packaged with the UNICOS operating system. It is delivered as a separate media which includes the following functionality:

- NQE functionality: This requires a separate NQE license and FLEXlm key in order to access.
- NQS and FTA functionality: This does not require a separate FLEXlm key. Rights to use the NQS and FTA functionality are included with the UNICOS System Software license. The NQE media is automatically shipped with UNICOS 10.0 so that customers will have access to NQS and FTA functionality.

For information describing this product, see the *NQE Release Overview*, Cray Research publication RO-5237, or contact your Cray Research representative.

6.2.2 UNICOS source code license

To receive a UNICOS 10.0 source code license, customers must first obtain a UNIX source code license for the UNIX System V, Release 4.0 (SVR 4.0). Customers can obtain these rights through Cray Research, or through The Santa Cruz Operation, Inc. (SCO).

Note: Customers with UNIX rights that allow them to receive the UNICOS 9.0 release do not need additional UNIX licensing for the UNICOS 10.0 release.

For information on who to contact if you have licensing questions, or if your site has not signed all appropriate Cray Research software license agreements, see Section 6.2.3 or Section 6.2.4.

For information about available optional software products that are included with your UNICOS license but which you must order to receive them with your UNICOS 10.0 release package, see Section 6.3, page 105.

For more information about the FLEXlm license manager, or for information about products that are included in the UNICOS 10.0 release software but which require a FLEXlm license key to access the product, see Section 6.3, page 105.

6.2.2.1 UNIX System V licenses for CRAY J90 systems

CRAY J90 customers that have a standard binary release of UNICOS 10.0 must have a UNIX System V, Release 4.0 *binary* license, available only through Cray Research.

CRAY J90 customers with the J90 Source Materials Option need an additional UNIX System, Release 4.0 *source* license, available through Cray Research, or through The Santa Cruz Operation, Inc. (SCO).

6.2.3 Licensing contact for customers in the U.S. and Canada

For more information on the licensing and pricing of the UNICOS 10.0 release, customers in the United States and Canada should see their account representative or contract negotiator, or contact Sarah White at the following address:

Sarah White
Cray Research
655F Lone Oak Drive
Eagan, MN 55121 USA
Telephone: +1-612-683-5604
Fax: +1-612-683-7145

6.2.4 Licensing contacts for customers outside the U.S. and Canada

Customers outside the U.S. and Canada may obtain further licensing and export information by contacting their account representative or the individuals listed in the following sections.

6.2.4.1 Cray European Regional Contract Negotiators

Customers in Europe can direct licensing inquiries to the following Regional Contract Administrators:

Europe North Sales Region (including UK / Ireland / Russia / Poland / Denmark / Finland / Norway / Sweden / Netherlands)
Nick Jacobs
Cray Research (UK) Ltd.
Oldbury
Bracknell
Berkshire, RG12 4TQ, England
Telephone: +44-1189-257041

Fax: +44-1189-257106
Email: niknik@cray.com

Rest of Europe and South Africa
Simon Locke
Cray Research (UK) Ltd., c/o SGI Ltd
1530 Lakeside, Arlington Bus. Park
Theale Berkshire
Reading, RG7 4SB, England
Telephone: 44-1189-257049
Fax: 44-1189-257946
Email: srl@cray.com

Europe Central (including Germany and Austria)
Thomas Wegener
Silicon Graphics GmbH
Am Hochacker 3
85630 Grasbrunn-Neukeferloh
Germany
Telephone: +089-46108-321
Fax: +089-46108-322
Email: thomas@munich.sgi.com

Europe South Sales Region (including France)
Cecile Goachet / Patricia Guillermin-Brillet
Silicon Graphics France
21, rue Albert Calmette
78351 Jouy en Josas
France
Telephone: +33-01-34-88-82-51
Fax: +33-01-34-65-96-19
Email: cecile@cray.com and pguiller@paris.sgi.com

6.2.4.2 Cray Japan Contracts / Legal

Customers in Japan can direct licensing inquiries to Shinji Uekusa or Yuko Hizume at the following addresses:

Shinji Uekusa
Nihon Silicon Graphics Cray K.K.
31F, Yebisu Garden Place, 4-20-3
Ebisu, Shibuya-ku
Tokyo
Japan 150

Telephone: +81-3-5488-5692
Fax: +81-3-5420-1867
Email: uekus@nsg.sgi.com

Yuko Hizume

Nihon Silicon Graphics Cray K.K.
P.O. Box 5011 Yebisu Garden Place Tower
4-20-3, Ebisu
Shibuya-ku, Tokyo 150
Japan

Telephone: +81-3-5488-1819
Fax: +81-3-5420-7020
Email: hizume@nsg.sgi.com

6.2.4.3 Other customers

International customers outside Europe and Japan can direct licensing inquiries to Rodgers Naylor at the following address:

Rodgers Naylor
Director of Contracts
Cray Research, a Silicon Graphics Company
655F Lone Oak Drive
Eagan, MN 55121 USA
Telephone: +1-612-683-7403
Fax: +1-612-683-7297
Email: naylorgr@cray.com

6.3 Optional software

You can order the following software products on your UNICOS 10.0 software order form as optional software when you order your UNICOS 10.0 release package.

Note: These products are included with your UNICOS license, but they are not automatically shipped as part of the UNICOS 10.0 release package. If you want any of the following products, you must order them on the UNICOS 10.0 order form.

The products described are as follows:

- Kerberos Enigma software
- DWB

For a complete list of Cray Research products that operate with the UNICOS 10.0 operating system, contact your Cray Research representative.

6.3.1 Kerberos Enigma software

The Kerberos Enigma software contains software for CRYPT and Kerberos. The Kerberos Enigma tape replaces the CRYPT and RPC Enigma tapes. The Kerberos Enigma software is available in both binary and source code, depending on the license terms with each customer and on-site location.

6.3.1.1 Kerberos Enigma software shipped within the U.S. and Canada

For shipments of Kerberos Enigma software within the United States and Canada, order it as optional software on the UNICOS 10.0 software order form.

Customers in the United States and Canada receive tapes that include versions of the Kerberos programs that support data stream encryption. The software is available in either source or binary form, depending on the license terms with each customer.

6.3.1.2 Kerberos Enigma software shipped outside of the U.S. or Canada

Customers outside the United States and Canada receive binary software regardless of whether their site has a source or binary UNICOS license. With this software, customers outside the United States and Canada can run Kerberos without support for data stream encryption. To order this software, use the UNICOS 10.0 software order form.

An export license from the U.S. Department of Commerce is required for Cray Research hardware and software shipments outside the United States or Canada. If a U.S. Department of Commerce export license is **not** in place for the customer serial number for which the Kerberos Enigma software is desired, a U.S. Department of Commerce Application Request for Kerberos Enigma is required before an export license can be processed. If an export license already exists, the statement is **not** required. The Kerberos Enigma binary software order form contains a U.S. Department of Commerce Application Request for Kerberos Enigma.

Note: Jurisdiction for exporting Kerberos has recently changed from the U.S. Department of State to the U.S. Department of Commerce. Customers who currently hold export licenses with the Department of State do not need to re-apply for new licenses with the Department of Commerce. Current Department of State licenses are still valid through the expiration date listed on the license, or until we have shipped the maximum number of copies of Kerberos allowed under the license.

You can obtain a U.S. Department of Commerce export licenses for UNICOS from Christine Miller at the following address:

Christine Miller
Cray Research, Inc.
655F Lone Oak Drive
Eagan, MN 55121
Telephone: +1-612-683-7476
Fax: +1-612-683-7297
Email: millercm@cray.com

6.3.2 DWB

DWB is based on Documenter's Workbench from Novell, Inc. Only binary software is provided.

DWB is packaged separately from the UNICOS operating system. To receive DWB, order it using the "Additional Software" section of the UNICOS 10.0 software order form.

Note: A separate license is not required for DWB. UNICOS System Software and UNICOS Set licenses include binary licenses for DWB.