Release Package [6]

This chapter contains the following information about the UNICOS 9.3 release package:

- UNICOS 9.3 release hardware and software requirements

- Licensing information

- Optional software

- Release package contents

- Ordering UNICOS 9.3 release package

6.1 UNICOS 9.3 release hardware and software requirements

This section lists the following:

- Cray Research hardware systems supported with this release

- Programming environments supported with the UNICOS 9.3 release package

- Software required by the UNICOS 9.3 release

- Tested and supported upgrade paths

- Cray Research software products supported

6.1.1 Cray Research systems supported

The UNICOS 9.3 release supports the following platforms:

- CRAY T90 GigaRing based series, including CRAY T90 CFP IEEE systems

- CRAY T90 IEEE *non*-GigaRing based systems

- CRAY J90se GigaRing based systems

6.1.2 OWS and IOS-E software

For Cray Research systems with an IOS-E and for the CRAY T90 series, it is recommended that you upgrade to the IOS-E 9.0.1.3/015 and the OWS 9.0.1.3/015 releases. For information about ordering the IOS-E 9.0 and OWS 9.0

releases, see the *Support System and IOS-E Release Overview*, publication RO–5060 9.0.

6.1.3 Fortran run-time libraries

Sites that install the UNICOS 9.3 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 also have this requirement. These libraries were not released with UNICOS 8.3.

6.1.4 Tested and supported upgrade paths

If your site runs any version of the UNICOS 9.1, or UNICOS 9.2 release, you can upgrade directly to the UNICOS 9.3 release. The exception to this is if you have a *non*-GigaRing system and you wish to upgrade to a GigaRing-based system. In this case, an initial installation is required.

Initial installs of GigaRing-based systems are supported with UNICOS 9.2 and beyond, while support of initial installs of Model-E based systems stopped after UNICOS 9.1.

6.1.5 Cray Research asynchronous software products supported

The following sections list the software products most commonly used in conjunction with the UNICOS operating system. The product release level required with UNICOS 9.3, if any, is specified. For information about other products, contact your Cray Research representative.

6.1.5.1 Programming environments supported

The UNICOS 9.3 release supports the following Cray Research programming environments, which are released asynchronously or otherwise separately from the UNICOS 9.3 release.

Note: For each programming environment release after the release level designated below, ensure your Cray Research system is supported before ordering an upgrade programming environment release package.

- CF90 Programming Environment 3.0 or later for Cray PVP and MPP systems. See the *Programming Environment Releases Overview*, 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*, publication RO–5212, for additional information.

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

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

- CAM 2.2 (Cray Assembler for MPP). See the *Cray Assembler for MPP (CAM) Reference Manual*, publication SR–2510 2.1, for additional information.

6.1.5.2 Distributed computing and networking software supported

The UNICOS 9.3 release supports the following Cray Research distributed computing and networking software products, which are released asynchronously or otherwise separately from the UNICOS 9.3 release.

- Distributed Computing Environment

  Customers wishing to use the Cray Distributed Computing Environment (DCE) Client Services, must purchase a DCE license. DCE 1.1 is the level of DCE required with UNICOS 9.3. 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*, 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 9.3 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*, publication RO–5237.

- Distributed File System

To use the Cray DCE Distributed File System (DFS), sites must purchase a DFS 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*, publication RO–5225 1.1, or contact your Cray Research representative.

- 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 9.3 supports the 1.4 version of SUPERLINK/VMS. For information describing this product, see the *SUPERLINK for DEC VAX OpenVMS and Alpha AXP Systems 1.4 Release OVerview*, 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 Y-MP, CRAY M90, CRAY C90, CRAY T90, CRAY EL92, CRAY EL94, CRAY EL98, CRAY J90 and CRAY T3E computer systems. UNICOS 9.3 supports the 3.1 version of CVT.

- 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 9.3 supports the 1.1 release of RQS/VMS. For information describing this product, see the *RQS for DEC VAX/VMS Systems 1.1 Release Overview*, 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 9.3 supports the 1.0 version of this product. For information on FES MVS see the *FES MVS 1.0 Installation and Administration Guide*, publication SG–5251.

6.1.5.3 Other software supported

The UNICOS 9.3 release supports the following Cray Research software products, which are released asynchronously or otherwise separately from the UNICOS 9.3 release.

- Data Migration Facility 2.4.8 or 2.5.4.2

  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 2.4.8 or 2.5.4.2 is the level of DMF required with UNICOS 9.3. For information on ordering DMF, contact your Cray Research representative.

- HIPPI disk support software

  Cray Research will supply HIPPI disk software free of charge to customers purchasing disks from Cray Research. If customers choose to purchase their disks from another vendor, HIPPI disk software will be separately available and licensed for those customers. For more information about HIPPI licensing or to purchase a HIPPI license, contact your Cray Research representative. For information describing this product, see the *UNICOS 9.0 Release Letter*, publication RO–5000, or contact your Cray Research representative.

- 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 9.3 supports the 2.0.8 release of CRL. For more information on ordering CRL, contact your Cray Research representative.

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 9.3 release is available as follows:

- For CRAY T90 systems, UNICOS 9.3 is available in source code format only.

- For CRAY J90se systems, UNICOS 9.3 is available in binary format only. CRAY J90se customers may, however, obtain an optional J90 UNICOS Source Materials package, providing they obtain a separate J90 UNICOS Source Materials license.

Note: UNICOS 9.3 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 9.3 release package (see Section 6.2.2, page 36 for information on UNIX license requirements). 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 9.3 release includes the Flexible License Manager (FLEXlm), which controls the use of certain products in the UNICOS operating system. In UNICOS 9.3, the following products 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/DTDL and CREMS/ER90

- BDS (Bulk Data Services)

- NQE (Network Queuing Environment)

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 the *UNICOS 9.0 Release Letter*, publication RO–5000, 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 *UNICOS 9.0 Release Letter*, publication RO–5000, 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.

For additional information, see the *UNICOS 9.0 Release Letter*, publication RO–5000, or 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/DTDL and CREMS/ER90

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

For information describing this product, see the *UNICOS 9.0 Release Letter*, publication RO–5000, or contact your Cray Research representative.

6.2.1.6 BDS (Bulk Data Services)

BDS will be available for Cray PVP systems for the first time starting with UNICOS 9.3. BDS is controlled by FLEXlm and requires a separate license for access.

6.2.1.7 NQE (Network Queuing Environment)

UNICOS 9.3 supports the 3.2 release of NQE. You are required to have a FLEXlm license for NQE 3.2 only if you did not purchase NQE 3.1.

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

6.2.2 UNICOS source code license

To receive a UNICOS 9.3 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 9.3 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 9.3 release package, see Section 6.2.1, page 34.

For more information about the FLEXlm license manager, or for information about products that are included in the UNICOS 9.3 release software but which require a FLEXlm license key to access the product, see Section 6.2.1, page 34.

6.2.2.1 UNIX System V licenses for CRAY J90 systems

CRAY J90 customers that have a standard binary release of UNICOS 9.3 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 only through Cray Research.

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

For more information on the licensing and pricing of the UNICOS 9.3 release, customers in the United States and Canada should see their account representative or contract administrator, 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)
Christian Schaub
Silicon Graphics GmbH
Am Hochacker 3
85630 Grasbrunn–Neukeferloh
Germany
Telephone: +49–89–14903
Fax: +49–89–1415959
Email: `chs@cray.com`

Europe South Sales Region (including France)
Cecile Goachet / Patricia Guillerm-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 Yuko Hizume at the following address:

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 9.3 software order form as optional software when you order your UNICOS 9.3 release package.

> **Note:** These products are included with your UNICOS license, but they are not automatically shipped as part of the UNICOS 9.3 release package. If you want any of the following products, you must order them on the UNICOS 9.3 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 9.3 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 9.3 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 9.3 software order form.

An export license from the U.S. Department of State is required for software shipments outside the United States or Canada. This export license is required in addition to the Department of Commerce export license necessary for Cray Research hardware. If a U.S. Department of State export license is **not** in place for the customer serial number for which the Kerberos Enigma software is desired, a U.S. Department of State 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 State Application Request for Kerberos Enigma.

You can obtain a U.S. Department of State 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 9.3 software order form.

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

6.4 Release package contents

The UNICOS 9.3 release package includes the following:

- Software media that contains the UNICOS 9.3 release. IOS-E sites automatically receive the OWS 9.0.1.3/015 and IOS 9.0.1.3/015 release package when the UNICOS 9.3 release is ordered.

  > **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 major releases, you can load source code into your system together with binary code packages before generation.

- Online man page files. To display these files, use the `man`(1) command.

- A CD-ROM that contains the DynaWeb server and the UNICOS publications.

- A set of printed publications.

6.5 Ordering the UNICOS 9.3 release package

UNICOS is distributed by order only to sites that have signed a Cray Research software license agreement for the 9.3 release of the product. The most current revision of the release package is supplied.

Please make sure your site has signed a Cray Research software license agreement before you order the UNICOS 9.3 release package (see Section 6.2, page 33, for details).

You can order the UNICOS 9.3 release package using one of the following methods:

- Customers who subscribe to the CRInform program can order software release packages electronically by using the `Order Cray Software` option.

- Customers can contact the order desk at the Cray Research Distribution Center by telephone (+1–612–683–5907 or 1–800–284–2729 extension 35907), through electronic mail (`orderdsk@cray.com`), or by fax (+1–612–452–0141).

- Customers outside of the United States and Canada should contact their local service organization for ordering and documentation information.

Software will be shipped by ground service or 5-day international service unless otherwise requested.

Sites outside the United States may be required to provide a customer-signed Letter of Assurance before this software can be shipped. Address questions about which customers must sign Letters of Assurance or which software requires such a letter to Christine Miller at the following address:

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

6.5.1 Further information

If you have questions, or if your site has not signed a Cray Research software license agreement, either contact your regional contract administrator or contact Barbara Easterly, Sarah White, or Jenny Gross at the following addresses:

Barbara Easterly
Cray Research
655F Lone Oak Drive
Eagan, MN 55121 USA
Telephone: +1–612–683–5662
Fax: +1–612–683–7145
Email: `easterly@cray.com`

Sarah White
Cray Research
655F Lone Oak Drive
Eagan, MN 55121 USA
Telephone: +1–612–683–5604
Fax: +1–612–683–7145
Email: whitess@cray.com

Jenny Gross
Cray Research
655F Lone Oak Drive
Eagan, MN 55121 USA
Telephone: +1–612–683–5661
Fax: +1–612–683–7145
Email: jenny@cray.com