

# 7. Release Package

---

This section contains the following information about the UNICOS 9.0 release package:

- UNICOS hardware and software requirements
- Licensing information
- Optional software orderable with UNICOS 9.0 release package
- Release package contents
- Release package ordering information

## 7.1 UNICOS 9.0 hardware and software requirements

The following subsections list the Cray Research systems supported with this release package, the programming environments supported with the UNICOS 9.0 release package, the software that the UNICOS 9.0 release requires, and the tested and supported upgrade paths.

### 7.1.1 *Cray Research systems supported with this release package*

The UNICOS 9.0 release supports the following series of Cray Research systems:

- CRAY T90 series: all models including CRAY T94, CRAY T916, and CRAY T932 systems
- CRAY Y-MP E series: all models including CRAY Y-MP 2E, CRAY Y-MP 4E, CRAY Y-MP 8E, and CRAY Y-MP 8I systems
- CRAY Y-MP M90 series: all models including CRAY Y-MP M92, CRAY Y-MP M94, and CRAY Y-MP M98 systems

- CRAY C90 series: all models including CRAY C916, CRAY C92A, CRAY C94, CRAY C94A, and CRAY C98 systems
- CRAY C90D series: all models including CRAY C92AD, CRAY C94D, and CRAY C98D systems
- CRAY J90 series: all models including CRAY J916 and CRAY J932 systems
- CRAY EL series: all models including CRAY Y-MP EL, CRAY EL92, CRAY EL94, and CRAY EL98 systems

### 7.1.2 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 and the OWS 9.0 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.

For the CRAY J90 series and CRAY EL series, the UNICOS 9.0 release package automatically includes the correct IOS release software.

### 7.1.3 Fortran run-time libraries

Sites installing the UNICOS 9.0 release must upgrade to a programming environment 1.2 or later release to obtain Fortran run-time libraries because these libraries are no longer released with the UNICOS system beginning with UNICOS 9.0.

**Note:** Sites running the UNICOS 8.3 restricted release also had this requirement because these libraries were not released with UNICOS 8.3.

### 7.1.4 Tested and supported upgrade paths

Customers running any version of UNICOS 8.0 or running the UNICOS 8.3 restricted release on one of the supported hardware platforms can upgrade directly to UNICOS 9.0.

Customers running any version of UNICOS prior to UNICOS 8.0 must first perform an initial installation of the UNICOS 8.0 release, and then upgrade to UNICOS 9.0.

Initial installations of UNICOS 9.0 are supported also.

### 7.1.5 Cray Research software products supported with this release package

The following subsections list the software products most commonly used in conjunction with the UNICOS operating system. The product release level required with UNICOS 9.0 is specified. For information about other products, contact your Cray Research representative.

#### 7.1.5.1 Programming environments supported with this release package

The UNICOS 9.0 release supports the following Cray Research programming environments, which are released separately from the UNICOS 9.0 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 1.2.1 for Cray PVP and MPP systems. See the *Programming Environment 1.2 Release Letter*, RL-5212 1.2.2, for additional information.
- Standard C Programming Environment 1.2.1 for Cray PVP and MPP systems. See the *Programming Environment 1.2 Release Letter*, RL-5212 1.2.2, for additional information.
- CF77 6.2.1 Programming Environment for Cray PVP and MPP systems. See the *Programming Environment 1.2 Release Letter*, RL-5212 1.2.2, for additional information.
- Cray C++ 1.0.3 for Cray PVP and MPP systems. See the *C++ 1.0.2 for MPP Release Letter*, RL-5160 1.0.2, and the *Programming Environment 1.2 Release Letter*, RL-5212 1.2.2, for additional information.
- C++ MathPack 1.0 for Cray PVP systems. See the *Cray C++ Library Products Technical Note*, SN-2129 1.0.2, for additional information.

- C++ MathPack 1.0.1 for Cray MPP systems. See the *Cray C++ Library Products Technical Note*, SN-2129 1.0.2, for additional information.
- C++ Tools 1.0 for Cray PVP systems. See the *Cray C++ Library Products Technical Note*, SN-2129 1.0.2, for additional information.
- C++ Tools 1.0.1 for Cray MPP systems. See the *Cray C++ Library Products Technical Note*, SN-2129 1.0.2, for additional information.
- CAM 2.1 (Cray Assembler for MPP). See the *Cray Assembler for MPP (CAM) Reference Manual*, publication SR-2510 2.1, for additional information.
- CRAY T3D Emulator 1.0.4 (on all platforms except CRAY T90 series). See the *CRAY T3D Emulator User's Guide*, publication SG-2500, for additional information.
- Cray Ada Environment 3.1.1 for CRAY Y-MP series and CRAY EL series; also for CRAY C90 series in compatibility mode.
- Pascal compiler 4.2.3 for CRAY Y-MP series, CRAY EL series, CRAY J90 series, and CRAY T90 series (non-IEEE systems only); also for CRAY C90 series in native mode.

#### 7.1.5.2 Other software supported with this release package

- Data Migration Facility 2.3

Data Migration Facility (DMF) 2.3 is the level of DMF required with UNICOS 9.0 on all platforms. For information on ordering DMF, contact your Cray Research representative.

- System Maintenance and Remote Testing Environment 5.0

SMARTE 5.0 is the level of System Maintenance and Remote Testing Environment (SMARTE) required with UNICOS 9.0. For information on ordering SMARTE, contact your Cray Research representative.

- ND40 Network Disk Support Software

Cray Research will supply ND40 Network Disk support software free of charge to customers purchasing disks from Cray Research. If a customer chooses to purchase their disks from another vendor, HIPPI disk software will be separately available and licensed for those customers. For more information about ND40 licensing or to purchase an ND40 license, contact your Cray Research representative. For information describing this product, see subsection 2.3.8, page 2–13, or contact your Cray Research representative.

- Distributed Computing Environment

Customers wishing to use the Cray Distributed Computing Environment (DCE) Client Services, must purchase a DCE license. For more information about DCE licensing or to purchase a DCE license, contact your Cray Research representative. For information describing this product, see subsection 2.5.6, page 2–22, or contact your Cray Research representative.

- Distributed File system

To use the Cray DCE Distributed File System, sites must purchase a DFS license. For more information about DFS licensing or to purchase a DFS license, contact your Cray Research representative. For information describing this product, see subsection 2.5.6, page 2–22 or contact your Cray Research representative.

For additional software availability, contact your Cray Research representative.

## 7.2 Licensing information

UNICOS is licensed under a software contract by Cray Research to its customers. For all Cray Research systems except CRAY J90 and CRAY EL systems, customers may select either a source code or a binary code license for the UNICOS 9.0 release; only a binary code license is available for CRAY J90 and CRAY EL systems.

**Note:** Customers planning to run this UNICOS release package on a Cray Research system purchased before May 12, 1992, require a UNICOS Set license; customers with a UNICOS Set license also need a TCP/IP license for this UNICOS release.

Customers planning to run this UNICOS release package on a Cray Research system purchased after May 12, 1992, require a UNICOS System Software license; customers with a UNICOS System Software license do not require any additional Cray Research licenses to receive the standard UNICOS 9.0 release package. Software for programming environments (compilers) and the Data Migration Facility (DMF), previously licensed with the UNICOS Set, are licensed separately from the UNICOS System Software license.

Other functionality is 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            Telephone: 1-612-683-7476  
Cray Research, Inc.            1-800-284-2729  
1440 Northland Drive            Fax: 1-612-683-7485  
Mendota Heights, MN 55120

### **7.2.1 UNICOS source code license**

To receive a UNICOS 9.0 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, Inc. or through Novell, Inc.

A UNICOS source code license is not supported for the CRAY J90 series or for the CRAY EL series.

**Note:** Customers with UNIX rights that allow them to receive the UNICOS 8.0 release do not need additional UNIX licensing for the UNICOS 9.0 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 subsection 7.2.4, page 7–10, or subsection 7.2.5, page 7–10.

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 9.0 release package, see subsection 7.3, page 7–12.

For more information about the flexible license manager (FLEXlm), or for information about products that are included in the UNICOS 9.0 release software but which require separate licenses and a FLEXlm license key to access the product, see subsection 7.2.3, page 7–8.

## 7.2.2 UNICOS binary code license

A binary code license is available for all UNICOS 9.0 supported systems.

**Note:** For the CRAY J90 series and the CRAY EL series, a binary license is required.

Customers who need a binary code license must obtain licenses directly from Cray Research, Inc. Cray Research sublicenses the appropriate binary license rights. These rights must be specified on the Cray Research software contract. There is a fee for binary rights.

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 subsection 7.2.4, page 7–10, or subsection 7.2.5, page 7–10.

For information about available optional software products that are included with your UNICOS license but which you must order to receive with your UNICOS 9.0 release package, see subsection 7.3, page 7–12.

For more information about the flexible license manager (FLEXlm), or for information about products that are included in the UNICOS 9.0 release software but which require separate licenses and a FLEXlm license key to access the product, see the following subsection.

### 7.2.3 *Separately licensed products*

The UNICOS 9.0 release includes the Flexible License Manager (FLEXlm), which controls the use of certain products in the UNICOS operating system. In UNICOS 9.0, the following products are licensed through FLEXlm:

- NQX product
- ONC+ technology
- StorageTek autoloader cartridge system support
- CRIBM/IBM 3495<sup>†</sup>/3494 support
- EMASS robotic and ER90 device product

Whether products are packaged with the UNICOS 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 instructions about installing them are sent to you by electronic mail.

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 Technical Support Center in the U.S. or from the service organization in other countries.

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

#### 7.2.3.1 *NQX software*

The NQX component of the Cray Network Queuing Environment (NQE) requires a separate license for each Cray Research system on which it will run. For more information about NQX licensing or to purchase an NQX license, contact your Cray Research representative.

For information describing this product, see subsection 2.5.1, page 2–18, or contact your Cray Research representative.

---

<sup>†</sup> Implementation of IBM 3495 Tape Library Dataserver support is deferred.



### 7.2.3.2 *ONC+ technology*

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 subsection 2.5.17, page 2–30, or contact your Cray Research representative.

### 7.2.3.3 *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 subsection 2.9.21, page 2–75, or contact your Cray Research representative.

### 7.2.3.4 *StorageTek Autoloader Cartridge Systems (ACS) support*

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 subsection 3.3, page 3–4, or contact your Cray Research representative.

### 7.2.3.5 *IBM 3495<sup>†</sup>/IBM 3494*

To use IBM 3495<sup>†</sup> and 3494 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.

For information describing this product, see subsection 2.3.2, page 2–10, or contact your Cray Research representative.

---

<sup>†</sup> Implementation of IBM 3495 Tape Library Dataserver support is deferred.

### 7.2.3.6 *EMASS robotic and ER90 device support*

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

For information describing this product, see subsection 2.3.6, page 2–12, or contact your Cray Research representative. For additional information on compatibility issues associated with these products, see subsection 3.3, page 3–4.

### 7.2.4 *Licensing contacts for customers in the U.S. and Canada*

For more information on the licensing and pricing of the UNICOS 9.0 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	Telephone: +1-612-683-5604
Cray Research, Inc.	Fax: +1-612-683-5599
655F Lone Oak Drive	
Eagan, MN 55121 USA	

### 7.2.5 *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 subsections.

### 7.2.5.1 *Cray European Regional Contract Administrators*

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

Europe North Sales Region	Nick Jacobs Cray Research (UK) Ltd. Oldbury Bracknell Berkshire, RG12 4TQ England	Telephone: +44-1344-722121 Fax: +44-1344-861715
Europe Central Sales Region	Christian Schaub Cray Research GmbH Riesstraße 25 80992 Munich Germany	Telephone: +49-89-14903 Fax: +49-89-1415959
Europe South Sales Region	Anne Daniel Cray Research France, S.A. 7, Rue de Tilsitt 75017 Paris France	Telephone: +33-1-44-09-14-00 Fax: +33-1-44-09-14-05

### 7.2.5.2 *Cray Japan Contract Administrator*

Customers in Japan can direct licensing inquiries to Tsukasa Sasaki at the following address:

Tsukasa Sasaki  
Cray Research (Japan), Ltd.  
Nikko Ichibancho Building  
13-3, Ichiban-cho  
Chiyoda-ku, Tokyo 102  
Japan

Telephone: +81-3-3239-6109  
Fax: +81-3-3239-1322

### 7.2.5.3 *Other customers*

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

Rodgers Naylor  
Director, Contracts Administration  
Cray Research, Inc.  
1440 Northland Drive  
Mendota Heights, MN 55120 USA

Telephone: +1-612-683-7403

Fax: +1-612-683-7297

## 7.3 **Optional software orderable with UNICOS 9.0 release package**

You can order the following software products on your UNICOS 9.0 software order form as optional software when you order your UNICOS 9.0 release package.

**Note:** These products are included with your UNICOS license, but they are not automatically shipped as part of the UNICOS 9.0 release package. If you want either of the following products, you must order them on the UNICOS 9.0 order form.

The products described are as follows:

- Kerberos Enigma software
- DWB

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

### 7.3.1 *Kerberos Enigma software*

The Kerberos Enigma software contains software for CRYPT and Kerberos. This 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.

### 7.3.1.1 *Kerberos Enigma software shipped within the U. S. and Canada*

For shipments within the U.S. and Canada, if you require Kerberos Enigma software, order it as optional software on the UNICOS 9.0 software order form.

Customers in the U.S. 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.

### 7.3.1.2 *Kerberos Enigma software shipped outside of the U.S. or Canada*

Customers outside the U.S. or Canada receive binary software regardless of whether their site has a source or binary UNICOS license. With this software, customers outside the U.S. and Canada can run Kerberos without support for the data stream encryption features. To order this software, use the UNICOS 9.0 software order form.

An export license from the U.S. Department of State is required for software shipments outside the U.S. 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 U.S. Department of State export licenses for UNICOS from Christine Miller at the following address:

Christine Miller  
Cray Research, Inc.  
1440 Northland Drive  
Mendota Heights, MN 55120 USA

Telephone: 1-800-284-2729  
                  +1-612-683-7476  
Fax:              +1-612-683-7485

### 7.3.2 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 9.0 software order form.

**Note:** A separate license is not required for DWB. UNICOS System Software and UNICOS Set licenses include binary licenses for DWB (Documenter's Workbench).

## 7.4 Release package contents

The UNICOS 9.0 release package will include the following:

- Software media that contains the UNICOS 9.0 release. For CRAY J90 systems, the release package also includes the IOS release software and the system console software CD. For CRAY EL systems, the release package also includes the IOS release software.
- One copy of the *UNICOS 9.0 Release Overview*, publication RO-5000 9.0.
- The UNICOS installation guide for your system.
- Online man page files. To display these files, use the `man(1)` command.
- Online diagnostics, providing system hardware tests.
- A CD-ROM that contains the CrayDoc viewer and the UNICOS publications. For a list of CrayDoc publications updated for this release, see subsection 5.3.1.2, page 5-11.
- A set of the UNICOS publications provided online through the Docview utility. For a list of updated Docview publications for this release, see subsection 5.3.1.2, page 5-11.
- The updated core set of printed UNICOS publications. For more information about the core set of printed UNICOS publications included with your release package, see subsection 5.4.1, page 5-17.

## 7.5 Release package ordering information

The UNICOS 9.0 release is distributed by order only to sites that have signed the appropriate Cray Research and UNIX software license agreements or to Cray Research personnel at Cray Research offices. The most current revision of the release package is supplied.

You can order UNICOS 9.0 in one of the following ways. Software will be shipped by ground service or 5-day international service unless otherwise requested.

- Use the CRInform online ordering service, which is accessible from the CRInform home page.

Under the **Cray Research Software** section, choose *Order Cray Software*.

- Call the Cray Research Distribution Center in Mendota Heights, MN, using one of the following telephone numbers:
  - 1-800-284-2729, extension 35907
  - +1-612-683-5907
- Fax your order to +1-612-452-0141.
- Send electronic mail to: [orderdisk@sdiv.cray.com](mailto:orderdisk@sdiv.cray.com)
- Customers outside the U.S. and Canada should contact their local service organization for ordering and documentation information.

Customers outside of 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, International Administration  
Cray Research, Inc.  
1440 Northland Drive  
Mendota Heights, MN 55120 USA.

Telephone: 1-800-284-2729  
                  +1-612-683-7476  
Fax:                  +1-612-683-7485

