

# Updating to Oracle® Solaris 11.3

October 2019

This article details the steps required to update your Oracle Solaris 11 11/11, Oracle Solaris 11.1, or Oracle Solaris 11.2 system to Oracle Solaris 11.3 using the Image Packaging System (IPS), a feature of Oracle Solaris.

## Introduction to Updating a System to Oracle Solaris 11.3

In the Oracle Solaris 11 release, the IPS packaging system is used to perform software updates. This simplifies the process of updating a system regardless of whether you are updating single packages or multiple packages as part of an system update.

There are two sources of packages for Oracle Solaris 11 systems. The support repository is for customers with a support agreement, and the release repository is for customers without a support agreement. Each repository requires different steps to complete an OS update. See [“Determining Your Starting Point” on page 2](#) to determine which repository, version of the OS, and SRU you are using. Next, follow the steps in the appropriate procedure in [“Updating a System to Oracle Solaris 11.3” on page 4](#).

---

**Note** - There are no methods or tools available to update from Oracle Solaris 10 to Oracle Solaris 11. You must either do a fresh installation of Oracle Solaris 11 or migrate your Oracle Solaris 10 OS instances or zones to an Oracle Solaris 11 system. For more information, refer to [Transitioning From Oracle Solaris 10 to Oracle Solaris 11.3](#).

---

## Updating to Oracle Solaris 11.3 and Zones

All of the zones on your system will automatically be updated when you update the global zone. Make sure that you follow any specific instructions to deal with special packages as noted in the following procedures.

## Updating to Oracle Solaris 11.3 and Third-Party Packages

In general, third-party packages are not touched during the update process. Third-party services, and the software they deliver, will only be disturbed by the update process when the service shares configuration files with the OS, or when the files are installed in directories that are written over by the update process. See [“File Actions” in Packaging and Delivering Software With the Image Packaging System in Oracle Solaris 11.3](#).

## Determining Your Starting Point

The steps necessary to update your system differ depending on which repository you are using and on which version of the OS you are running. The following procedure helps you identify your starting point. The examples show output from various Oracle Solaris 11 release versions.

### ▼ How to Determine Your Starting Point

1. **Identify which repository is in use by checking the package publisher definition.**

If you are using an internal repository, then use a URL that identifies the local repository. In this example, the Oracle Solaris support repository is the configured package source.

```
$ pkg publisher
```

```
PUBLISHER      TYPE      STATUS URI
solaris        origin   online https://pkg.oracle.com/solaris/support/
```

For a system without a support contract and using the Oracle Solaris release repository, the output would look like:

```
$ pkg publisher
PUBLISHER      TYPE      STATUS URI
solaris        origin   online http://pkg.oracle.com/solaris/release/
```

## 2. Identify the OS that the system is running.

Use the `uname` command to display basic information about the system.

In this example, Oracle Solaris 11.1 is the installed OS.

```
$ uname -a
SunOS solaris 5.11 11.1 sun4v sparc SUNW,T5240
```

## 3. Verify which SRU your system is running by displaying the `pkg:/entire` version.

In this example, Oracle Solaris 11.1 has SRU 18.4 installed:

- 175.1 indicates Oracle Solaris 11.1
- 18.0.4 indicates SRU 18.4.

```
$ pkg list entire
NAME (PUBLISHER)          VERSION          IFO
entire                    0.5.11-0.175.1.18.0.4.0  i--
```

For the full FMRI, use the `-v` option:

```
$ pkg list -v entire
FMRI                                                                IFO
pkg://solaris/entire@0.5.11,5.11-0.175.1.18.0.4.0:20140401T195803Z  i--
```

For more information about how to display package and license info, see [Chapter 2, “Getting Information About Software Packages”](#) in *Adding and Updating Software in Oracle Solaris 11.3*.

### Example 1 Package Information Displayed for Oracle Solaris 11.1 Without SRUs

If your system has Oracle Solaris 11.1 installed without any SRUs, the package information looks like the following:

```
$ pkg list entire
NAME (PUBLISHER)          VERSION          IFO
entire                    0.5.11-0.175.1.0.0.24.2  i--
```

### Example 2 Package Information Displayed for Oracle Solaris 11 11/11 With an SRU

If your system has Oracle Solaris 11 11/11 installed with an SRU, the package information looks like the following. In this example, Oracle Solaris 11 11/11 SRU 10.5 is installed.

```
$ pkg list entire
NAME (PUBLISHER)          VERSION          IFO
entire                    0.5.11-0.175.0.10.0.5.0  i--
```

### Example 3 Package Information Displayed for Oracle Solaris 11 11/11 Without SRUs

If your system has Oracle Solaris 11 11/11 installed without any SRUs, the package information looks like the following:

```
$ pkg list entire
NAME (PUBLISHER)                VERSION                IFO
entire                          0.5.11-0.175.0.0.2.0  i--
```

## Updating a System to Oracle Solaris 11.3

Which procedure you should use depends on which package repository the system is configured to use, which OS is installed, and which SRU, if any, is installed.

- If your system is running Oracle Solaris 11.1 or Oracle Solaris 11.2 with or without an SRU, follow the instructions in [“How to Update a System Running Oracle Solaris 11.1 or Oracle Solaris 11.2 to Oracle Solaris 11.3”](#) on page 4.
- If your system is running Oracle Solaris 11 11/11 and an SRU, follow the instructions in [“How to Update a System Running Oracle Solaris 11 11/11 with an SRU to Oracle Solaris 11.3”](#) on page 5
- If your system is running Oracle Solaris 11 11/11 and is using the release repository, follow the instructions in [“How to Update a System Running Oracle Solaris 11 11/11 to Oracle Solaris 11.3 Using the Release Repository”](#) on page 6.

---

**Note** - The amount of time it takes to update a system depends on many factors, including system and network resources.

---

## ▼ How to Update a System Running Oracle Solaris 11.1 or Oracle Solaris 11.2 to Oracle Solaris 11.3

If Oracle Solaris 11.1 or Oracle Solaris 11.2 is installed with or without SRUs, no special steps are required to update the system.

### 1. Become an administrator.

For more information, see [“Using Your Assigned Administrative Rights”](#) in *Securing Users and Processes in Oracle Solaris 11.3*.

### 2. Update the system packages.

- If you are using the Oracle Solaris support repository, update the system packages.

```
$ pkg update --accept
```

- If you are using the Oracle Solaris release repository, review the update's license.

```
$ pkg info -r --license entire pkg://solaris/entire@0.5.11,5.11-0.175.3.17.0.5.0:
20170217T020457Z
```

If you accept the terms, update the system packages.

```
$ pkg update --accept
```

### 3. Reboot into Oracle Solaris 11.3 using the updated boot environment.

```
# reboot
```

## ▼ How to Update a System Running Oracle Solaris 11 11/11 with an SRU to Oracle Solaris 11.3

Some of the updates that were made in the Oracle Solaris 11 11/11 release require manual steps to complete the update process, depending on which SRU is installed on your system.

**Before You Begin** Make sure to verify which Oracle Solaris 11 SRU you have installed. For instructions, see [Step 3](#) in “[How to Determine Your Starting Point](#)” on page 2.

### 1. Become an administrator.

For more information, see “[Using Your Assigned Administrative Rights](#)” in *Securing Users and Processes in Oracle Solaris 11.3*.

### 2. For installed SRUs earlier than Oracle Solaris 11 11/11 SRU 10.5, update the system to Oracle Solaris 11 11/11 SRU 10.5.

This command creates a new Oracle Solaris 11 11/11 SRU 10.5 boot environment.

```
# pkg update --accept entire@0.5.11,5.11-0.175.0.10.0.5
# reboot
```

After you have updated and rebooted to SRU 10.5, perform the following steps on the Oracle Solaris 11 11/11 SRU 10.5 system to finish updating the system to Oracle Solaris 11.3.

### 3. For installed SRUs from Oracle Solaris 11 11/11 SRU 10.5 and later, update the system to Oracle Solaris 11.3.

#### a. SPARC only: For each zone, remove the `pkg:/system/ldoms/ldomsmanager` package.

For any SPARC based system that has one or more zones installed, you must remove the package from every zone as follows:

```
# for z in `zoneadm list`; do zlogin $z pkg uninstall ldomsmanager; done
```

#### b. Update the IPS package.

```
# pkg update package/pkg
```

Due to earlier bugs in some packages, it was possible to incorrectly install those packages on a system. The preceding command removes the following bad packages, if they are installed:

- x86: `pkg:/consolidation/ldoms/ldoms-incorporation`
- SPARC:
  - `pkg:/consolidation/nvidia/nvidia-incorporation`
  - `pkg:/driver/network/ethernet/elxl`
  - `pkg:/driver/network/ethernet/pcn`
  - `pkg:/driver/network/ethernet/dnet`
  - `pkg:/driver/network/ethernet/iprb`

#### c. Update the remaining system packages to create an updated boot environment.

```
# pkg update --accept
```

#### d. Reboot into Oracle Solaris 11.3 using the updated boot environment.

```
# init 6
```

## ▼ How to Update a System Running Oracle Solaris 11 11/11 to Oracle Solaris 11.3 Using the Release Repository

Updating to Oracle Solaris 11.3 is a multistep process because certain system packages must be updated before updating the remaining packages.

### 1. Become an administrator.

For more information, see “Using Your Assigned Administrative Rights” in *Securing Users and Processes in Oracle Solaris 11.3*.

### 2. Review the update's license.

```
$ pkg info -r --license entire pkg://solaris/entire@ 0.5.11-0.175.3.1.0.5.3:20180801T010146Z
```

### 3. If you agree to the license terms, update the system packages.

This command creates a new boot environment.

```
$ pkg update --accept
```

---

**Note** - For systems that cannot directly connect to Oracle's hosted package repositories, download the Oracle Solaris 11.1 Pre-Upgrade Repository Image. This image contains packages that you must update prior to updating to Oracle Solaris 11.3. See <http://www.oracle.com/technetwork/server-storage/solaris11/downloads/index.htm> for more information. The ISO image contains a README file that describes the necessary steps for constructing the repository and updating to Oracle Solaris 11.3.

---

### 4. Reboot into Oracle Solaris 11.3 using the updated boot environment.

```
# init 6
```

### 5. SPARC only: For each zone, remove the `ldomsmanager` package.

For any SPARC based system that has one or more zones installed, you must perform an additional step. For each zone installed on the system, remove the `pkg:/system/ldoms/ldomsmanager` package as follows:

```
$ for z in `zoneadm list`; do zlogin $z pkg uninstall ldomsmanager; done
```

### 6. Update the IPS package.

```
$ pkg update pkg:/package/pkg
```

### 7. Review the update's license.

```
$ pkg info -r --license entire pkg://solaris/entire@0.5.11,5.11-0.175.3.17.0.5.0:20170217T020457Z
```

### 8. If you agree with the license terms, update the rest of the packages.

```
$ pkg update --accept
```

### 9. Reboot into Oracle Solaris 11.3 using the updated boot environment.

```
# init 6
```

Updating to Oracle Solaris 11.3

**Part No: E54845**

Copyright © 2012, 2019, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

**Access to Oracle Support**

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

**Référence: E54845**

Copyright © 2012, 2019, Oracle et/ou ses affiliés. Tous droits réservés.

Ce logiciel et la documentation qui l'accompagne sont protégés par les lois sur la propriété intellectuelle. Ils sont concédés sous licence et soumis à des restrictions d'utilisation et de divulgation. Sauf stipulation expresse de votre contrat de licence ou de la loi, vous ne pouvez pas copier, reproduire, traduire, diffuser, modifier, accorder de licence, transmettre, distribuer, exposer, exécuter, publier ou afficher le logiciel, même partiellement, sous quelque forme et par quelque procédé que ce soit. Par ailleurs, il est interdit de procéder à toute ingénierie inverse du logiciel, de le désassembler ou de le décompiler, excepté à des fins d'interopérabilité avec des logiciels tiers ou tel que prescrit par la loi.

Les informations fournies dans ce document sont susceptibles de modification sans préavis. Par ailleurs, Oracle Corporation ne garantit pas qu'elles soient exemptes d'erreurs et vous invite, le cas échéant, à lui en faire part par écrit.

Si ce logiciel, ou la documentation qui l'accompagne, est livré sous licence au Gouvernement des Etats-Unis, ou à quiconque qui aurait souscrit la licence de ce logiciel pour le compte du Gouvernement des Etats-Unis, la notice suivante s'applique :

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

Ce logiciel ou matériel a été développé pour un usage général dans le cadre d'applications de gestion des informations. Ce logiciel ou matériel n'est pas conçu ni n'est destiné à être utilisé dans des applications à risque, notamment dans des applications pouvant causer un risque de dommages corporels. Si vous utilisez ce logiciel ou ce matériel dans le cadre d'applications dangereuses, il est de votre responsabilité de prendre toutes les mesures de secours, de sauvegarde, de redondance et autres mesures nécessaires à son utilisation dans des conditions optimales de sécurité. Oracle Corporation et ses affiliés déclinent toute responsabilité quant aux dommages causés par l'utilisation de ce logiciel ou matériel pour des applications dangereuses.

Oracle et Java sont des marques déposées d'Oracle Corporation et/ou de ses affiliés. Tout autre nom mentionné peut correspondre à des marques appartenant à d'autres propriétaires qu'Oracle.

Intel et Intel Xeon sont des marques ou des marques déposées d'Intel Corporation. Toutes les marques SPARC sont utilisées sous licence et sont des marques ou des marques déposées de SPARC International, Inc. AMD, Opteron, le logo AMD et le logo AMD Opteron sont des marques ou des marques déposées d'Advanced Micro Devices. UNIX est une marque déposée de The Open Group.

Ce logiciel ou matériel et la documentation qui l'accompagne peuvent fournir des informations ou des liens donnant accès à des contenus, des produits et des services émanant de tiers. Oracle Corporation et ses affiliés déclinent toute responsabilité ou garantie expresse quant aux contenus, produits ou services émanant de tiers, sauf mention contraire stipulée dans un contrat entre vous et Oracle. En aucun cas, Oracle Corporation et ses affiliés ne sauraient être tenus pour responsables des pertes subies, des coûts occasionnés ou des dommages causés par l'accès à des contenus, produits ou services tiers, ou à leur utilisation, sauf mention contraire stipulée dans un contrat entre vous et Oracle.

**Accès aux services de support Oracle**

Les clients Oracle qui ont souscrit un contrat de support ont accès au support électronique via My Oracle Support. Pour plus d'informations, visitez le site <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> ou le site <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> si vous êtes malentendant.