Oracle Legal Notices

Copyright © 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.

Abstract

This document contains information about an update to repository configuration file distribution for repositories on the Oracle Linux yum server. This document may be updated after it is released. To check for updates to this document, and to view other Oracle documentation, refer to the Documentation section on the Oracle Technology Network (OTN) Web site:

https://www.oracle.com/technology/documentation/

This document is intended for users and administrators of Oracle Linux. It describes a change to the way in which Oracle distributes the configuration information for Oracle Linux yum server repositories. The document provides an explanation for the changes and instructions on migrating to the new repository configuration system. This notice complements changes to other documentation that is provided for this Oracle Linux release.

Document generated on: 2019-09-05 (revision: 8257)
Table of Contents

Preface .................................................................................................................................................. v
1 Notice Description ................................................................................................................................. 1
2 Action Items ........................................................................................................................................ 3
  2.1 Checking a System for Modular Yum ............................................................................................... 3
  2.2 Updating to Modular Yum ................................................................................................................. 3
  2.3 Installing Additional Repository Configurations ................................................................................ 4
  2.4 Maintaining Yum Repository Configuration ....................................................................................... 5
  2.5 Recovering Modular Yum Configuration ............................................................................................ 6
Preface

The *Oracle Linux Yum Modularization Notice* provides information about an update to the distribution mechanism that is used by Oracle to provide access to repository configuration information for the Oracle Linux yum server. The document provides an explanation for the changes and also provides instructions on migrating to the new repository configuration system. This notice complements changes to other documentation that is provided for this Oracle Linux release.

**Audience**

This document is written for system administrators who maintain software updates for Oracle Linux using the Oracle Linux yum server. If your systems are subscribed to the Unbreakable Linux Network (ULN), they are unaffected by this change. It is assumed that readers have a general understanding of the Linux operating system.

**Related Documents**

The latest version of this document and other documentation for this product are available at:


**Conventions**

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><strong>italic</strong></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
Chapter 1 Notice Description

Effective January of 2019, Oracle changed the way in which it distributes the configuration information for yum repositories provided by the Oracle Linux yum server.

In previous years, Oracle provided a single repository configuration file that was shipped by default on the installation media of each Oracle Linux release. This file could also be downloaded directly from the Oracle Linux yum server over an HTTP connection by using a utility like wget or curl.

As different software projects and packages were added to the Oracle Linux yum server, new repository configurations were added to the yum repository configuration file. Further changes to repository naming and organization resulted in additional changes to the file, requiring users to maintain updates manually and to reconcile the repositories that were enabled and those that were disabled.

Due to the monolithic nature of the file and shortcomings in the mechanism that is used to deliver updates to repository configuration, the repository configuration has been modularized in favor of smaller repository files that are more targeted in scope. These configuration files are packaged as RPM files that will be shipped on subsequent installation media and which are made available within the _latest repositories on the Oracle Linux yum server.

The original repository configuration files located at https://yum.oracle.com/public-yum-ol7.repo and at https://yum.oracle.com/public-yum-ol6.repo remain available but are deprecated in favor of the new modularized approach. While it is still possible to download and use these files, the files may not be updated for future changes to the Oracle Linux yum server repositories. You should update your systems to use the modular yum configuration as soon as possible.

Documentation for Oracle Linux is updated to reflect these changes. Note that any remaining instructions for downloading the old monolithic configuration file are deprecated. The instructions provided in this document should be used instead.
Chapter 2 Action Items

Table of Contents

2.1 Checking a System for Modular Yum ................................................................. 3
2.2 Updating to Modular Yum ................................................................. 3
2.3 Installing Additional Repository Configurations ........................................ 4
2.4 Maintaining Yum Repository Configuration ................................................ 5
2.5 Recovering Modular Yum Configuration .................................................... 6

This chapter describes the steps that you may need to take on any systems running Oracle Linux to cater to this update.

If your system is already configured to use the modular release RPM-based yum configuration system, no additional action is required; you can install additional yum repository configuration files, as needed, by following the instructions in Section 2.3, “Installing Additional Repository Configurations”.

2.1 Checking a System for Modular Yum

To check that your system is using the new modular yum configuration, perform the following actions:

1. Check that you have the appropriate base oraclelinux-release-rel package installed for your Oracle Linux release. For example, on Oracle Linux 7, do:

   # rpm -q oraclelinux-release-el7
   oraclelinux-release-el7-1-1.el7.noarch

2. Check that you do not have an old monolithic public-yum-rel.repo yum repository configuration file enabled. For example, on Oracle Linux 7, do:

   # ls /etc/yum.repos.d/public-yum-ol7.repo
   ls: cannot access /etc/yum.repos.d/public-yum-ol7.repo: No such file or directory

   If this file exists and you have the base oraclelinux-release-rel package installed, you may still need to run the /usr/bin/ol_yum_configure.sh script. See Section 2.2, “Updating to Modular Yum”.

If your system is already configured to use the modular yum configuration system, no additional action is required and you can install additional yum repository configuration files, as needed, by following the instructions in Section 2.3, “Installing Additional Repository Configurations”.

2.2 Updating to Modular Yum

If you are using the old monolithic public-yum-rel.repo yum repository configuration file, you must first install the appropriate base oraclelinux-release-rel package for your Oracle Linux release. For example, on Oracle Linux 7, do:

   # yum install oraclelinux-release-el7

   Note that if you have the _latest repository enabled for your Oracle Linux release, the package is also automatically installed when you run the yum update command.

   After this package is installed, several small repository configuration files are created in /etc/yum.repos.d. By default, if a monolithic public-yum-rel.repo yum repository configuration file already exists, the new modular yum repository configuration files are disabled.
To complete the update, and to migrate the settings contained in an existing `public-yum-rel.repo` yum repository configuration file, you must run the `/usr/bin/ol_yum_configure.sh` script that is included in the latest `oraclelinux-release-rel` package.

The `/usr/bin/ol_yum_configure.sh` script installs any additional release RPM files that are required to match the repositories you have enabled in the existing `public-yum-rel.repo` yum repository configuration file. The script also updates any of the smaller, modular repository configuration files to enable or disable repositories to match your original configuration. Finally, the script disables the monolithic repository file by renaming it to `public-yum-rel.repo.rpmnew-disabled`. The new modular repository configuration files are enabled.

Your system is now current and all updates to yum configuration are handled automatically when you run the `yum update` command. You can install additional yum repository configuration files, as needed, by following the instructions in Section 2.3, “Installing Additional Repository Configurations”.

### 2.3 Installing Additional Repository Configurations

After you have updated to use the modular yum configuration, all of the yum repositories that you previously enabled are also enabled. However, previously, to enable another yum repository you could download the latest version of the monolithic yum configuration file and edit that. Now, you need to install the appropriate package to obtain the yum repository configuration file where this information is installed.

At the time of this change, the packages listed in the following table are available for this purpose.

<table>
<thead>
<tr>
<th>RPM Package Names</th>
<th>Description of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>oraclelinux-release-el7</td>
<td>Oracle Linux, UEK &amp; Virtualization tools</td>
</tr>
<tr>
<td>oraclelinux-release-el6</td>
<td></td>
</tr>
<tr>
<td>oraclelinux-patchonly-release-el7</td>
<td>Oracle Linux patch repositories (for Oracle Cloud Infrastructure customers only)</td>
</tr>
<tr>
<td>oraclelinux-patchonly-release-el6</td>
<td></td>
</tr>
<tr>
<td>oracle-softwarecollection-release-el7</td>
<td>Software Collection Library for Oracle Linux</td>
</tr>
<tr>
<td>oracle-softwarecollection-release-el6</td>
<td></td>
</tr>
<tr>
<td>oracle-openstack-release-el7</td>
<td>Oracle OpenStack for Oracle Linux</td>
</tr>
<tr>
<td>oracle-openstack-release-el7</td>
<td></td>
</tr>
<tr>
<td>oracle-openstack-release-el7</td>
<td></td>
</tr>
<tr>
<td>oracle-openstack-release-el7</td>
<td></td>
</tr>
<tr>
<td>oracle-spacewalk-server-release-el7</td>
<td>Spacewalk Server</td>
</tr>
<tr>
<td>oracle-spacewalk-server-release-el6</td>
<td></td>
</tr>
<tr>
<td>oracle-spacewalk-client-release-el7</td>
<td></td>
</tr>
<tr>
<td>oracle-spacewalk-client-release-el16</td>
<td></td>
</tr>
<tr>
<td>oracle-gluster-release-el7</td>
<td>Gluster Storage</td>
</tr>
<tr>
<td>oracle-gluster-release-el16</td>
<td></td>
</tr>
<tr>
<td>oracle-ceph-release-el7</td>
<td>Ceph Storage</td>
</tr>
<tr>
<td>oracle-release-el7</td>
<td>Oracle Instant Client</td>
</tr>
<tr>
<td>oracle-release-el6</td>
<td></td>
</tr>
<tr>
<td>oracle-epe1-release-el7</td>
<td>EPEL for Oracle Linux</td>
</tr>
</tbody>
</table>
Maintaining Yum Repository Configuration

### RPM Package Names

<table>
<thead>
<tr>
<th>Package Name</th>
<th>Description of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>oraclelinux-developer-release-el7</td>
<td>Packages for Developers and Oracle Cloud Infrastructure</td>
</tr>
<tr>
<td>oraclelinux-developer-release-el6</td>
<td></td>
</tr>
<tr>
<td>mysql-release-el7</td>
<td>MySQL Community releases</td>
</tr>
<tr>
<td>mysql-release-el6</td>
<td></td>
</tr>
<tr>
<td>oracle-golang-release-el7</td>
<td>Stable releases of the Go programming language</td>
</tr>
<tr>
<td>oracle-php-release-el7</td>
<td>Stable PHP releases</td>
</tr>
<tr>
<td>oracle-php-release-el6</td>
<td></td>
</tr>
<tr>
<td>oracle-nodejs-release-el7</td>
<td>Stable Node.js releases</td>
</tr>
<tr>
<td>oracle-nodejs-release-el6</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

Additional repositories are available for Oracle Cloud Infrastructure customers to facilitate the use of some supported tools within this environment.

To obtain a current listing of all of the release packages that are available for your Oracle Linux release, use the `yum` command to list packages with the `release-el` name scheme. For example, you would search for all of the release packages that are available for Oracle Linux 7 as follows:

```bash
# yum list *release-el7*
```

To install any of these yum release packages, use the `yum install` command, for example:

```bash
# yum install oracle-softwarecollection-release-el7
```

After a release package is installed, some repositories within the installed repository configuration files are enabled by default. However, in some cases you may need to enable additional repositories that you wish to use within a configuration. If you have the `yum-utils` package installed, you can use `yum-config-manager` to enable a repository, for example:

```bash
# yum-config-manager --enable ol7_addons
```

If you need to disable a repository, you can also use `yum-config-manager` to achieve this. For example:

```bash
# yum-config-manager --disable ol7_spacewalk27_client
```

Use `yum repolist` to see which repositories are enabled or disabled on your system:

```bash
# yum repolist enabled
# yum repolist disabled
```

### 2.4 Maintaining Yum Repository Configuration

Yum repository configuration is automatically synchronized with updates at Oracle by using the `yum` command. To keep your yum repository configurations current, perform a regular system update. When you perform system updates by using the `yum update` command, any installed yum release packages are updated and the repository configuration files are updated at the same time.
2.5 Recovering Modular Yum Configuration

If, for some reason, you remove all configuration to access the Oracle Linux yum server repositories, create a temporary yum repository configuration file at `/etc/yum.repos.d/ol7-temp.repo` with the following as the minimum required content:

```
[ol7_latest]
name=Oracle Linux $releasever Latest ($basearch)
baseurl=https://yum.oracle.com/repo/OracleLinux/OL7/latest/$basearch/
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-oracle
gpgcheck=1
enabled=1
```

Then, reinstall the `oraclelinux-release-el7` package to restore the default yum configuration:

```
# yum reinstall oraclelinux-release-el7
# rm /etc/yum.repos.d/ol7-temp.repo
```

For more information about manually setting up Oracle Linux yum server repository configuration files, see [https://yum.oracle.com/getting-started.html](https://yum.oracle.com/getting-started.html).