

Oracle® Linux

Yum Modularization Notice

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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.

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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:

<https://docs.oracle.com/en/operating-systems/linux.html>.

Conventions

The following text conventions are used in this document:

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

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.

RPM Package Names	Description of Contents
<code>oraclelinux-release-el7</code>	Oracle Linux, UEK & Virtualization tools
<code>oraclelinux-release-el6</code>	
<code>oraclelinux-patchonly-release-el7</code>	Oracle Linux patch repositories (for Oracle Cloud Infrastructure customers only)
<code>oraclelinux-patchonly-release-el6</code>	
<code>oracle-softwarecollection-release-el7</code>	Software Collection Library for Oracle Linux
<code>oracle-softwarecollection-release-el6</code>	
<code>oracle-openstack-release-el7</code>	Oracle OpenStack for Oracle Linux
<code>oracle-openstack-release-el6</code>	
<code>oracle-spacewalk-server-release-el7</code>	Spacewalk Server
<code>oracle-spacewalk-server-release-el6</code>	
<code>oracle-spacewalk-client-release-el7</code>	Spacewalk Client
<code>oracle-spacewalk-client-release-el6</code>	
<code>oracle-gluster-release-el7</code>	Gluster Storage
<code>oracle-gluster-release-el6</code>	
<code>oracle-ceph-release-el7</code>	Ceph Storage
<code>oracle-release-el7</code>	Oracle Instant Client
<code>oracle-release-el6</code>	
<code>oracle-epel-release-el7</code>	EPEL for Oracle Linux

RPM Package Names	Description of Contents
<code>oraclelinux-developer-release-el7</code> <code>oraclelinux-developer-release-el6</code>	Packages for Developers and Oracle Cloud Infrastructure
<code>mysql-release-el7</code> <code>mysql-release-el6</code>	MySQL Community releases
<code>oracle-golang-release-el7</code>	Stable releases of the Go programming language
<code>oracle-php-release-el7</code> <code>oracle-php-release-el6</code>	Stable PHP releases
<code>oracle-nodejs-release-el7</code> <code>oracle-nodejs-release-el6</code>	Stable Node.js releases



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:

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

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

```
# 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:

```
# 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:

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

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

```
# 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>.