



Kernel



```
# rpm --import https://www.elrepo.org/RPM-GPG-KEY-elrepo.org
# rpm -Uvh http://www.elrepo.org/elrepo-release-7.0-2.el7.elrepo.noarch.rpm
[ ] http://www.elrepo.org/elrepo-release-7.0-2.el7.elrepo.noarch.rpm
[ ] http://elrepo.org/elrepo-release-7.0-4.el7.elrepo.noarch.rpm
[ ] ... ##### [100%]
Updating / installing...
 1:elrepo-release-7.0-4.el7.elrepo ##### [100%]
```

[] 5.x []

```
# yum --enablerepo=elrepo-kernel install kernel-ml -y
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
* base: mirror01.idc.hinet.net
* elrepo: ftp.yz.yamagata-u.ac.jp
* elrepo-kernel: ftp.yz.yamagata-u.ac.jp
* extras: mirror01.idc.hinet.net
* updates: mirror01.idc.hinet.net

elrepo | 3.0 kB 00:00
elrepo-kernel | 3.0 kB 00:00
(1/2): elrepo/primary_db | 580 kB 00:00
(2/2): elrepo-kernel/primary_db | 2.1 MB 00:00
Resolving Dependencies
--> Running transaction check
---> Package kernel-ml.x86_64 0:5.18.6-1.el7.elrepo will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
```

```
=====
Package      Arch      Version      Repository      Size
=====
Installing:
kernel-ml     x86_64    5.18.6-1.el7.elrepo    elrepo-kernel    56 M

Transaction Summary
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=====
Install 1 Package

Total download size: 56 M
Installed size: 257 M
Is this ok [y/d/N]: y
Downloading packages:
kernel-ml-5.18.6-1.el7.elrepo.x86_64.rpm | 56 MB 00:05
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Warning: RPMDB altered outside of yum.
Installing : kernel-ml-5.18.6-1.el7.elrepo.x86_64 1/1
Verifying : kernel-ml-5.18.6-1.el7.elrepo.x86_64 1/1

Installed:
kernel-ml.x86_64 0:5.18.6-1.el7.elrepo

Complete!
```



```
# rpm -qa |grep kernel
kernel-tools-3.10.0-1160.66.1.el7.x86_64
kernel-3.10.0-1160.49.1.el7.x86_64
kernel-tools-libs-3.10.0-1160.66.1.el7.x86_64
kernel-3.10.0-1160.66.1.el7.x86_64
kernel-3.10.0-1160.53.1.el7.x86_64
kernel-3.10.0-1160.59.1.el7.x86_64
kernel-3.10.0-1160.62.1.el7.x86_64
```

```
kernel-ml-5.18.6-1.el7.elrepo.x86_64
```

The diagram illustrates the relationship between different components of a system across two versions: 'kernel' and 'kernel-5.18'. Each version has associated 'tools' and 'libs' (libraries).

- kernel:** Represented by a single row of 8 black squares.
- kernel-5.18:** Represented by a single row of 8 black squares.
- tools:** Represented by a single row of 12 black squares.
- libs:** Represented by a single row of 12 black squares.

Below these, a long row of 32 red squares is shown, with the label 'tools' positioned above the first 12 squares and 'libs' positioned above the remaining 20 squares. This row represents the combined set of tools and libraries for the system.

```
# yum remove kernel-tools-3.10.0-1160.66.1.el7.x86_64 kernel-tools-libs-3.10.0-1160.66.1.el7.x86_64
Loaded plugins: fastestmirror
Resolving Dependencies
--> Running transaction check
---> Package kernel-tools.x86_64 0:3.10.0-1160.66.1.el7 will be erased
---> Package kernel-tools-libs.x86_64 0:3.10.0-1160.66.1.el7 will be erased
--> Finished Dependency Resolution

Dependencies Resolved

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Package            Arch    Version              Repository    Size
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Removing:
kernel-tools       x86_64  3.10.0-1160.66.1.el7 @updates    337 k
kernel-tools-libs  x86_64  3.10.0-1160.66.1.el7 @updates     18 k

Transaction Summary

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Remove 2 Packages

Installed size: 355 k

Is this ok [y/N]:☐ ☐ ☐ ☐ y ☐
```

Kernel

```
# rpm -qa|grep kernel                                kernel-3.10.0-1160.49.1.el7.x86_64
kernel-3.10.0-1160.66.1.el7.x86_64
kernel-3.10.0-1160.53.1.el7.x86_64
kernel-3.10.0-1160.59.1.el7.x86_64
kernel-3.10.0-1160.62.1.el7.x86_64
```

kernel-ml-5.18.6-1.el7.elrepo.x86_64

❏ **kernel-ml-5.18.6-1.el7.elrepo.x86_64** ❏ **kernel-3.10.0-1160.66.1.el7.x86_64**
❏❏❏❏❏❏❏❏❏

```
# yum remove kernel-3.10.0-1160.49.1.el7.x86_64 kernel-3.10.0-1160.53.1.el7.x86_64 kernel-3.10.0-1160.59.1.el7.x86_64 kernel-3.10.0-1160.62.1.el7.x86_64
Loaded plugins: fastestmirror
Resolving Dependencies
--> Running transaction check
---> Package kernel.x86_64 0:3.10.0-1160.49.1.el7 will be erased
---> Package kernel.x86_64 0:3.10.0-1160.53.1.el7 will be erased
---> Package kernel.x86_64 0:3.10.0-1160.59.1.el7 will be erased
---> Package kernel.x86_64 0:3.10.0-1160.62.1.el7 will be erased
--> Finished Dependency Resolution
```

Dependencies Resolved

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=====				
Package	Arch	Version	Repository	Size
=====				
=====				
Removing:				
kernel	x86_64	3.10.0-1160.49.1.el7	@updates	64 M
kernel	x86_64	3.10.0-1160.53.1.el7	@updates	64 M
kernel	x86_64	3.10.0-1160.59.1.el7	@updates	64 M
kernel	x86_64	3.10.0-1160.62.1.el7	@updates	64 M

Transaction Summary

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Remove 4 Packages

Installed size: 257 M

Is this ok [y/N]:❏❏❏❏❏ y ❏

❏❏❏❏❏❏❏❏❏ libs ❏ tools ❏❏

```
# yum --enablerepo=elrepo-kernel install kernel-ml-headers kernel-ml-tools kernel-ml-tools-libs -y
Loaded plugins: fastestmirror
```

Loading mirror speeds from cached hostfile

- * base: mirror01.idc.hinet.net
- * elrepo: ftp.ne.jp
- * elrepo-kernel: ftp.ne.jp
- * extras: mirror01.idc.hinet.net
- * updates: mirror01.idc.hinet.net

Resolving Dependencies

--> Running transaction check
---> Package kernel-ml-headers.x86_64 0:5.18.6-1.el7.elrepo will be installed
---> Package kernel-ml-tools.x86_64 0:5.18.6-1.el7.elrepo will be installed
---> Package kernel-ml-tools-libs.x86_64 0:5.18.6-1.el7.elrepo will be installed
--> Finished Dependency Resolution

Dependencies Resolved

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Package	Arch	Version	Repository	Size
=====				
=====				

Installing:

kernel-ml-headers	x86_64	5.18.6-1.el7.elrepo	elrepo-kernel	1.6 M
kernel-ml-tools	x86_64	5.18.6-1.el7.elrepo	elrepo-kernel	267 k
kernel-ml-tools-libs	x86_64	5.18.6-1.el7.elrepo	elrepo-kernel	152 k

Transaction Summary

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Install 3 Packages				

Total download size: 2.0 M

Installed size: 6.2 M

Downloading packages:

- (1/3): kernel-ml-tools-5.18.6-1.el7.elrepo.x86_64.rpm | 267 kB 00:00
- (2/3): kernel-ml-tools-libs-5.18.6-1.el7.elrepo.x86_64.rpm | 152 kB 00:00
- (3/3): kernel-ml-headers-5.18.6-1.el7.elrepo.x86_64.rpm | 1.6 MB 00:00

Total 2.6 MB/s | 2.0 MB 00:00

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : kernel-ml-tools-libs-5.18.6-1.el7.elrepo.x86_64	1/3
Installing : kernel-ml-tools-5.18.6-1.el7.elrepo.x86_64	2/3
Installing : kernel-ml-headers-5.18.6-1.el7.elrepo.x86_64	3/3
Verifying : kernel-ml-headers-5.18.6-1.el7.elrepo.x86_64	1/3
Verifying : kernel-ml-tools-5.18.6-1.el7.elrepo.x86_64	2/3
Verifying : kernel-ml-tools-libs-5.18.6-1.el7.elrepo.x86_64	3/3

Installed:

kernel-ml-headers.x86_64 0:5.18.6-1.el7.elrepo
kernel-ml-tools.x86_64 0:5.18.6-1.el7.elrepo
kernel-ml-tools-libs.x86_64 0:5.18.6-1.el7.elrepo

Complete!



```
# yum update -y
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
* base: mirror01.idc.hinet.net
* elrepo: hkg.mirror.rackspace.com
* extras: mirror01.idc.hinet.net
* updates: mirror01.idc.hinet.net
Resolving Dependencies
--> Running transaction check
---> Package elrepo-release.noarch 0:7.0-4.el7.elrepo will be updated
---> Package elrepo-release.noarch 0:7.0-5.el7.elrepo will be an update
--> Finished Dependency Resolution
```

Dependencies Resolved

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Package	Arch	Version	Repository	Size
=====				
=====				

Updating:

elrepo-release	noarch	7.0-5.el7.elrepo	elrepo	8.6 k
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Transaction Summary

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Upgrade 1 Package

Total download size: 8.6 k

Downloading packages:

Delta RPMs disabled because /usr/bin/applydeltarpm not installed.

elrepo-release-7.0-5.el7.elrepo.noarch.rpm | 8.6 kB 00:00

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Updating : elrepo-release-7.0-5.el7.elrepo.noarch 1/2

Cleanup : elrepo-release-7.0-4.el7.elrepo.noarch 2/2

Verifying : elrepo-release-7.0-5.el7.elrepo.noarch 1/2

Verifying : elrepo-release-7.0-4.el7.elrepo.noarch 2/2

Updated:

elrepo-release.noarch 0:7.0-5.el7.elrepo

Complete!

Revision #2

Created 24 June 2022 08:55:00 by kevin

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