

Usage Guide

Summary

This document outlines the basic client usage of IUS. For common questions regarding IUS please see the FAQs (./FAQs/). Legal stuff can be found in our End User Agreement (<https://dl.iuscommunity.org/pub/ius/IUS-COMMUNITY-EUA>).

Package Categories ¶

IUS packages will fall into two different categories.

- **Primary Packages:** IUS packages that are newer versions of applications or languages that already exist in RHEL or EPEL. Whenever possible, these packages will be updated inline with a major upstream branch (usually the major.minor version). These packages represent the primary purpose of IUS, and thus have the highest priority and focus.
- **Secondary Supporting Packages:** IUS packages that are required by or extend the functionality of primary packages. Common examples include PECL modules for PHP and PyPI modules for Python. Occasional we may also need a newer version of a system library in order to compile a primary package (although we try to compile against stock libraries whenever possible). Supporting packages might not replace anything in RHEL or EPEL, but sometimes do. While primary packages follow major upstream branches, secondary packages will typically only exist for the absolute latest upstream version. There can be multiple packages for the latest upstream version when the software must be built against a specific primary package, such as programming language libraries. Updates for secondary packages might not occur as often as primary packages.

Package Types

IUS packages will be one of two different types.

- Safe Replacement Packages (./SafeRepo/#safe-replacement-package)
- Parallel Installable Packages (./SafeRepo/#parallel-installable-package)

Configuration

Configuration steps can be found in our getting started guide (./GettingStarted/).

Installing IUS Packages

There are multiple ways to install IUS packages. The best method will depend on the type of package and whether or not the stock equivalent is already installed.

Safe Replacement Packages

Safe replacement packages (`../SafeRepo/#safe-replacement-package`) completely replace their stock equivalents, and cannot be installed at the same time. If the stock equivalent of an IUS package is not already installed, then you can just directly install the desired package.

asciinema demo (<https://asciinema.org/a/24585>)

```
yum install redis30u
```

If the stock/EPEL equivalent of an IUS package is already installed, you must uninstall it first. If other packages depend on your installed stock package, you may need to perform the removal and installation in a single transaction. The native yum way to do this is via yum shell (<http://man7.org/linux/man-pages/man8/yum-shell.8.html>).

asciinema demo (<https://asciinema.org/a/24507>)

```
yum shell
> erase mysql-libs
> install mysql56u mysql56u-libs mysql56u-server mysqlclient16
> run
```

IUS also maintains the yum replace plugin (<https://github.com/iuscommunity/yum-plugin-replace>) to simplify this process. It is available in our repositories.

asciinema demo (<https://asciinema.org/a/24503>)

```
yum install yum-plugin-replace
yum replace php --replace-with php56u
```

There is another option in the new dnf (<https://dnf.readthedocs.org>) package manager. The flag `--allowerase` (https://dnf.readthedocs.org/en/latest/cli_vs_yum.html#packages-replacement-without-yum-shell-or-yum-swap) allows you erase conflicting packages in the same transaction.

Note: Dnf is not yet available in base RHEL, but has been backported to EPEL 7.

asciinema demo (<https://asciinema.org/a/24559>)

```
dnf --allowerase install git2u
```

Parallel Installable Packages

Parallel packages (`../SafeRepo/#parallel-installable-package`) are specifically designed to coexist with their stock equivalent. This means that they can be directly installed just like any other package.

asciinema demo (<https://asciinema.org/a/24505>)

```
yum install python34u
```

Reverting To Stock Packages

If you want to switch from an IUS package back to the stock equivalent, you can just reverse the process you used to install it. For example, you can switch the erase/install commands in yum shell, or change the order of package sets specified to the replace plugin.

Using Testing Repositories

New packages requests and package updates appear in the testing repositories before graduating to the stable repositories. While we do not recommend using the testing repositories in production, there may be a time when you need use them.

asciinema demo (<https://asciinema.org/a/a1dznemtxfczm4t8309i9kgi4>)

```
yum --enablerepo=ius-testing install php56u-pecl-uploadprogress
```