

# Maven self-update - user

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## Basic operations

This tool is shipped with Maven and provides a facility to up or downgrade the current installation to a different version, including a timestamped snapshot. The target environment is setup so that there only one Maven folder on the machine and you control what's installed there

How does it work.

There is a new command line script, shipped with maven - **mvnUpdate**. When you start it, it connects to a pre-configured repository, retrieves all available version and shows them as a selection list.

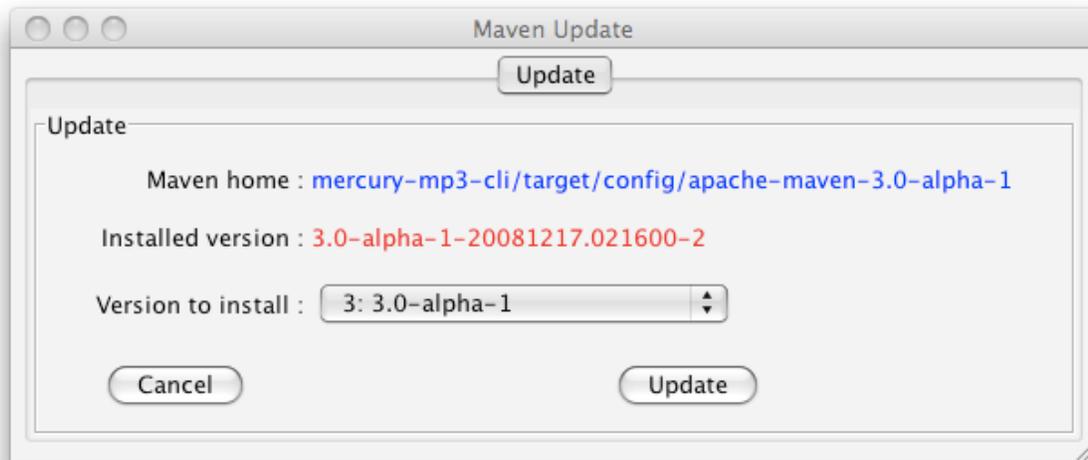
```
=====
Please select a version from the following list, currently installed is 3.0-alpha-1-20081217.021600-2
=====
```

```
1: 3.0-20081122.062742-13
2: 3.0-20081215.222827-14
3: 3.0-alpha-1
```

I want option # :

```
===== Problem =====
For input string: ""
=====
```

If you want fancy - run **mvnUpdate -g** and it will display the same in gui;



That was the hardest part, now - just select a version and wait for the tool to update Maven instance.

## Technical details

What happens behind the scene.

First of all - the updater connects to a repository and find a all the available versions. Then - after you select a version, it downloads version's CD - Configuration Descriptor and calculates a transitive closure for it. Then it reads the transitive closure of the current installation, and calculates which binaries should be added and which - deleted, delta+ and delta-.

Then it downloads all the delta+ binaries. If some are not available - it stops the operation and warns you of the not found binaries. If all delta+ are available - updater removes delta- binaries and copies delta+ into maven home. And that is it - you have a new version installed.

## CLI options

There are a lot of options available in this tool.

### Short description of all available CLI options

<b>-d, --show.details</b>	show detailed messages, be more talkative
<b>-g, --show.gui</b>	display GUI, you've seen this one above
<b>-h, --help</b>	displays this help screen
<b>-l, --show.local</b>	show local savepoints in the version selection list. This adds previously installed versions to the list
<b>-m, --maven.home</b>	maven instance root dir. This is the instance to update
<b>-r, --ver.repo</b>	repository url to prepend to the repository list
<b>-s, --settings</b>	settings file to use instead of /app/home/.m2/settings.xml
<b>-u, --cd.url</b>	url of the Configuration Descriptor. This allow us to send you a CLI to install an exact version
<b>-c, --closure</b>	This is mostly for Maven developers, to prepare CDs. expand dependencies from the supplied LDL to the full transitive closure
<b>-n, --no.test.binaries</b>	also for Maven developers - do not test closure binaries for existence when calculating it
<b>-t, --ztest</b>	this option is for testing only, and should not be used