redhat. | **CUSTOMER PORTAL**

How do I upgrade from Red Hat Enterprise Linux 6 to Red Hat Enterprise Linux 7?

⏱ Updated August 6 2014 at 5:19 AM

⚑ Issue

- How do I do in-place upgrading from Red Hat Enterprise Linux 6 to Red Hat Enterprise Linux 7?
- How do I use the preupgrade assistant and redhat-upgrade-tool to run a RHEL6 to RHEL7 upgrade?

Environment

- Red Hat Enterprise Linux 6.x to Red Hat Enterprise Linux 7

Product Variant	x86 Architecture	x86_64 Architecture	ppc64/s390x Architecture
Desktop Edition	Not supported	Not supported	N/A
Workstation Edition	Not supported	Not supported	N/A
Server Edition	Not supported	**Supported**	N/A
IBM POWER /System z	N/A	N/A	Planned for the future release

✔ Resolution

Overview

Red Hat Enterprise Linux 7 (RHEL 7) is the first major release of RHEL to allow in-place upgrades from the previous RHEL major release (RHEL 6). An in-place upgrade offers a way of upgrading a system to a new major release of Red Hat Enterprise Linux without removing the existing operating system.

This RHEL 6 to RHEL 7 upgrade procedure is fully supported if your Red Hat Enterprise Linux system meets the following criteria:

- **Latest Red Hat Enterprise Linux 6**: Before upgrading to RHEL 7, you must start with RHEL 6 and update your system to have the latest RHEL 6 packages installed. (This is covered in the procedure below.)

- **X86_64 Server edition**: Only the 64-bit (X86_64) server edition of Red Hat Enterprise Linux 6 can be upgraded with this procedure. Upgrades of RHEL Workstation and Desktop systems are not supported. Upgrades for the POWER and s390x architecture are planned for future releases. Upgrade from 32-bit architecture is not supported.

- **Limited package groups**: The upgrade process handles only the following package groups and packages: Minimal (@minimal), Base (@base), Web Server (@web-server), DHCP Server, File Server (@nfs-server), and Print Server (@print-server). Although upgrades of other packages and groups are not supported, in some cases, packages can be uninstalled from the RHEL 6 system and reinstalled on the upgraded RHEL 7 system without problem.

See What are the supported use cases for upgrading RHEL 6 to RHEL 7? (https://access.redhat.com/site/solutions/799813) for further details.

The upgrade procedure consists of the following basic steps:

1. Prepare for Upgrade: Make sure your system is backed up and up to date before beginning the preupgrade.
2. Install the Preupgrade Assistant: Enable the needed repositories and install the preupgrade packages.
3. Run the Preupgrade Assistant: Check your system for upgrade issues before running the actual upgrade. No changes are made to your system and you can repeat this step until all issues are dealt with.
4. Run the Upgrade: Perform the actual upgrade.
5. Provide Feedback: Create a debug log to send to Red Hat if there are problems.

Step 1: Prepare for Upgrade

A major operating system upgrade should not be take lightly. Before starting the upgrade procedure on a system that is in any way important to you, consider the following:

1. **Test first**: Do not attempt to perform an upgrade on a production system. You should first clone your system and test the upgrade procedure in a safe environment. Before using the **Red Hat Upgrade** tool, make sure you back up all of your data in order to avoid potential data loss.

2. **Convert to Subscription Management**: Red Hat Enterprise Linux 7 requires Subscription Management tools (such as subscription-manager) rather than RHN Classic tools (such as rhn_register). If your Red Hat Enterprise Linux 6 system is currently registered using RHN Classic tools, you can unregister it (see How to Unregister a System from RHN Classic or a Satellite (https://access.redhat.com/site/solutions/224973)), then register it using the subscription-manager command (see Get Started with Red Hat Subscription Management (https://access.redhat.com/site/articles/433903)). If you'd like

a more automated method, use the included migration script (https://access.redhat.com/site/solutions/129723) .

3. **Get the latest packages**: To make sure you have the latest packages, register and subscribe the system, then type the following:

```
# yum update -y
# reboot
```

4. **Consider other repositories**: For the upgrade to work properly, you may need access to software repositories beyond what is offered from the basic packages on the RHEL 7 DVD. In particular, the Extras repository in RHEL 7 contains some packages (mostly related to software development) that were in the RHEL 6 base system, but are not on the DVD.

   If you know that your upgrade requires packages (to meet dependencies) that are not in the RHEL 7 base repo, you can install a separate RHEL 7 system to act as a yum repository to serve the packages you need over FTP or HTTP. Refer to How can I subscribe to the new Extras channel/repo? (https://access.redhat.com/site/solutions/912213) to enable the Extras repository on the yum repository system and Use createrepo or reposync to create a local repository for updates (https://access.redhat.com/site/solutions/9892) to set up a repository that you can use during your upgrade. The command line for doing the upgrade (near the end of this procedure) would look something like the following: *redhat-upgrade-tool --device /dev/sdb --addrepo optional=http://host/repo*

Step 2: Install the Preupgrade Assistant

The Preupgrade Assistant (preupg command) lets you check for potential problems you might encounter with a Red Hat Enterprise Linux 6 to Red Hat Enterprise Linux 7 upgrade before any changes to your system are made. This will help you assess your chances of successfully upgrading to Red Hat Enterprise Linux 7 before the actual upgrade process begins.

NOTE: You can (and should) run Preupgrade Assistant multiple times to address anything that could cause problems before running the actual upgrade. The Preupgrade Assistant will not harm your installed system. However, once you perform an in-place upgrade on your system, it is not possible to get the previous working system back.

Preupgrade Assistant does the following:

- Assesses the system for possible in-place upgrade limitations, such as package removals, incompatible obsoletes, name changes, or deficiencies in some configuration file compatibilities.

- Provides a report with the analysis results.

- Provides data which could be used for "cloning" the system, if the in-place upgrade is not suitable.

- Provides some postupgrade scripts to finish more complex issues after the in-place upgrade.

- Leaves your system unchanged (except for storing information/logs, it doesn't modify the assessed system).

Because the Preupgrade Assistant is based on a module system, new checks and upgrade actions can be added relatively easily. So you can expect the tool to improve over time.

To install, configure, and run the Preupgrade Assistant, from the Red Hat Enterprise Linux 6.x system that you want to upgrade do the following steps:

1. **Enable preupgrade repositories**: Enable the repository that contains the **preupgrade-assistant**, **preupgrade-assistant-ui**, and **preupgrade-assistant-contents** packages. The repository is different, depending on whether you are connecting to a Red Hat Satellite Server or Subscription Management in the Red Hat portal:

   RHN Classic (Satellite):

   ```
   # rhn-channel --add --channel rhel-x86_64-server-extras-6
   ```

   Red Hat Subscription Management

   ```
   # subscription-manager repos --enable rhel-6-server-extras-rpms
   ```

2. **Install the preupgrade packages**: Preupgrade packages include preupgrade-assistant (contains the preupg command), preupgrade-assistant-ui (contains the optional web-based interface), and preupgrade-assistant-contents (contains modules that contain different tests). To install them, type the following:

   ```
   # yum -y install preupgrade-assistant preupgrade-assistant-ui preupgrade-assistant-contents
   ```

Step 3: Run the Preupgrade Assistant

With the preupgrade packages installed, you have the choice of running the Preupgrade Assistant to view the results locally or to serve results over the network (from a local httpd server). Those two choices are described below.

Choice 1: Run Preupgrade Assistant to View Locally

To run the preupg command so that the output is displayed on the screen and output to local files on the system you want to upgrade, follow the procedure below:

1. **Run the preupg command**: Run the **preupg** command to start the Preupgrade Assistant as follows:

   ```
   # preupg    With no options, produces result.html and tar.gz results files
   Preupg tool doesn't do the actual upgrade.
   Please ensure you have backed up your system and/or data in the event of a failed upgrade
    that would require a full re-install of the system from installation media.
   Do you want to continue? y/n
   ```

```
    y
Gathering logs used by preupgrade assistant:
All installed packages : 01/10 ...finished (time 00:01s)
    ...
|Removed rpms                                                    |needs_inspection |
|Content for enabling and disabling services based on RHEL 6 system |needs_inspection |
|Python 2.7.5                                                    |needs_inspection |
|Check for usage of dangerous range of UID/GIDs                  |needs_inspection |
|Packages not signed by Red Hat                                  |needs_action     |
 --------------------------------------------------------------------------------------------------
Tarball with results is stored here /root/preupgrade-results/preupg_results-140528114006.tar.gz .
The latest assessment is stored in directory /root/preupgrade .
Summary information:
We found some potential in-place upgrade risks.
Read the file /root/preupgrade/result.html for more details.
Upload results to UI by command:
e.g. preupg -u http://127.0.0.1:8099/submit/ -r /root/preupgrade-results/preupg_results-*.tar.gz .
```

Once the preupg process is done, you have several choices for viewing the results of the process.

2. **View preup results**: As preupg scans your system it lists each test it performs on the screen, followed by an exit code that describes the test's results. It also produces results files you can review in the following ways:

   preupg command line: Exit codes and results appear on the screen. You can just scroll back through those results to get a sense of how well each test succeeded. This only gives you exit codes, however, and not descriptions of each issue.

   result.html: The /root/preupgrade/result.html file can be opened in any Web browser. With no GUI, you can open the file with the links command or you could copy the file to another system that has a graphical browser to view the file.

3. **Check exit codes**: The Result shown for each test includes an exit code. Possible exit codes for the different plug-ins used by preupg include:

   PASS
   Means everything is fine. You should be able to proceed to the upgrade when all exit codes are listed as PASS.

   FAIL
   Extreme upgrade risks. In-place upgrade is not possible.

   NEEDS_ACTION
   High upgrade risk. Some action is needed from the administrator before running Red Hat Upgrade.

   NEEDS_INSPECTION
   Medium and lower risks. This exit code does not necessarily mean an upgrade will fail, but may result in a system that is not fully functional. Some parts need to be checked and, if needed, fixed by the administrator.

   FIXED
   Indicates that something was fixed automatically. You should not need to review it further.

   INFORMATIONAL
   Useful, but not critical, information.

   NOT_APPLICABLE
   The package you asked to test is not on the system.

   ERROR
   This usually indicates errors in the tools themselves. Report this type of problem to Red Hat Support.

4. **View the results**: As noted earlier, an HTML file containing a report of the results of preupg is stored on the local system. You can view that file using any Web browser. With no desktop installed, you could use the **links** command (links /root/preupgrade/result.html) or copy the file to a system that has a graphical Web browser available (such as Firefox). Here is an example of how you could view that file using firefox:

   ```
   # firefox file:///root/preupgrade/result.html
   ```

   The following figure shows an example of the report:
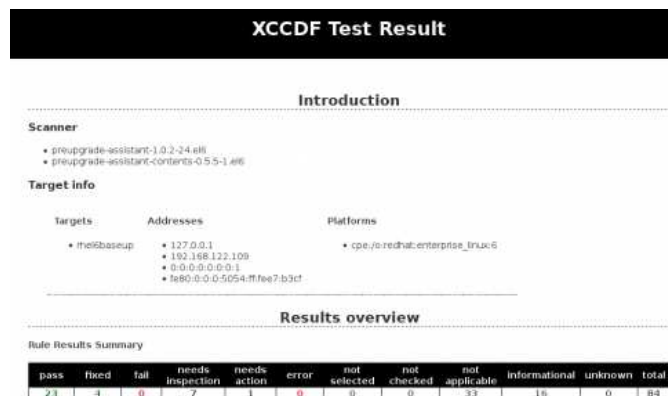
   For each Title, click the entry in the Result column. You will be able to see a description of the problem encountered and a description of how to solve it.

5. **View the README file**: There is also a README file in the output directory. Refer to that file for more information about the purpose, usage,

directory structure, exit codes, and risk explanations associated with the preupg tool.

6. **Make corrections**: Correct any errors encountered by the preupg command and run preupg again. Once you feel you have addressed all the issues that come up, you can proceed to the upgrade in Step 4.

Choice 2: Run Preupgrade Assistant to View Remotely

If you installed the preupgrade-assistant-ui package, then you can interact with the **Preupgrade Assistant**'s browser-based interface, which enables easy searching and filtering of the results. Because the upgrade procedure does not support updates of the GNOME desktop, this procedure gives you a way to display the results from the **Preupgrade Assistant** on a remote, graphical desktop.

WARNING: Using the **Preupgrade Assistant** Web UI, unlike other ways of using the preupg command, changes the content of the system you are upgrading by adding files to the /etc/httpd/conf.d directory and running an httpd service on that system to serve the content. You should not use this procedure in an environment if you are concerned about exposing data about your system to the network or if you want to avoid adding content to the system you are upgrading. An easier way to view preupg output graphically on a remote system is to copy the result.html file to that system and open it in a Web browser.

Do the following procedure if you want to use the **Preupgrade Assistant** Web UI to access preupgrade information from a browser over the network:

1. **Install httpd**: If it is not already installed on the RHEL 6 system you are upgrading, install the httpd package:

   ```
   # yum -y install httpd
   ```

2. **Configure conf.d file**: By default, the preupgrade UI service is only available to the local system (127.0.0.1). To make it available to all network interfaces on the local system (TCP port 8099 by default), type the following:

   ```
   # cd /etc/httpd/conf.d
   # mv 99-preup-httpd.conf 99-preup-httpd.conf.private
   # cp 99-preup-httpd.conf.public 99-preup-httpd.conf
   ```

3. **Edit the new .conf file**: As delivered the 99-preup-httpd.conf you just copied will make the preupgrade UI available through an IP address on the host. If you want to access this service using a hostname instead of an IP address, you can also change the "NameVirtualHost" line in this file. For example, the line **NameVirtualHost preupg-ui.example.com:8099** could be used to access the service if you had a DNS CNAME record pointing the name preupg-ui.example.com to the system you are upgrading.

4. **Open firewall and SELinux**: If you have a firewall running and SELinux in enforcing mode, you can use the following commands to allow access to the port needed get to the preupgrade UI service and set SELinux to permissive mode:

   ```
   # setenforce 0
   # iptables -I INPUT -m state --state NEW -p tcp --dport 8099 -j ACCEPT
   ```

   NOTE: To make the SELinux permissive mode more permanent (i.e. to survive a reboot), edit the /etc/sysconfig/selinux file and change the SELINUX line to read **SELINUX=permissive**.

5. **Restart the httpd service**: Type the following to have the httpd service start with the new configuration information:

   ```
   # service httpd restart
   ```

6. **Access preupgrade from a Web Browser**: From a Web browser on another system (we advice using the latest version of Firefox or Chrome), access the preupgrade Web ui service, using either the IP address (for example, http://192.168.99.1:8099) or hostname (for example, http://preupg-ui.example.com:8099).

7. **Add authentication information**: You can either add a user to authenticate or disable authentication to the Web ui.
   - **Authenticate**: The first time you access the preupgrade Web ui, you are offered the chance to add a user, email address, and password that can be used to gain access to the service or disable the authentication feature. (Later, if you would like to administer users, navigate to the User Management tab on the UI. You can create, edit and delete user roles there.) If you select "Submit" to create a new user, it will automatically enable authentication system if has been disabled.
   - **No authentication**: If you don't want to authenticate, just click on "Disable Authentication" and you may start using the Graphical Interface. Once you determine you have access to the preupgrade Web ui, you can go back to the system you are upgrading to gather and load preupgrade data.

8. **Run the preupg command**: To run the preupgrade so that the results are loaded into the preupgrade Web ui, type the following on the system where you are doing the upgrade:

   ```
   # preupg -u http://localhost:8099/submit/
   Preup tool doesn't do the actual upgrade.
   Please ensure you have backed up your system ...
   Do you want to continue? y/n y
   Gathering logs used by preupgrade assistant:
   All installed packages : 01/10 ...finished ...
      ...
   Report submitted successfully. You can inspect it at http://localhost:8099/1/detail/
   ```

9. **View the preupgrade reports**: Once the preupg has been run and submitted to the Web ui, return to your Web browser on the remote system and access the Web ui again (or just reload the page. Select the date of the preupgrade run to display the results of that preupgrade. Go through each item by clicking on it and make corrections necessary to fix the problem. An example of the preupgrade Web ui displaying a preupg run is shown here:
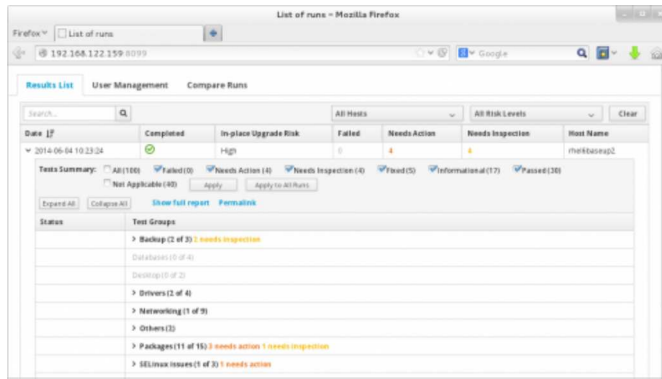
10. **Make corrections**: Correct any errors encountered by the preupg command and run the preupg to submit the data again. Once you feel you have addressed all the issues that come up, you can proceed to the actual upgrade in Step 4.

Step 4: Run the Upgrade

With the Preupgrade Assistant completed and all issues addressed, the next step is to go to the system you want to upgrade, install the redhat-upgrade-tool package, run the upgrade, and reboot, as described here:

IMPORTANT: Running the **Red Hat Upgrade** tool requires you run the **Preupgrade Assistant** tool as a pre-requisite. If you try to run **Red Hat Upgrade** firsthand on your system, it will exit with the following error: preupgrade-assistant has not been run

1. **Install redhat-upgrade-tool**: Run the following command to install the redhat-upgrade-tool package:

   ```
   # yum install redhat-upgrade-tool
   ```

2. **Disable all (RHEL6) repos prior to running redhat-upgrade-tool**:

   ```
   # yum install yum-utils
   # yum-config-manager --disable
   ```

3. **Run redhat-upgrade-tool**: To download the packages needed to upgrade to Red Hat Enterprise Linux 7 and prepare for the package installation you can use several different options to indicate the location of the installation packages.
   - To indicate the location of a repository that holds Red Hat Enterprise Linux 7 packages, use the --instrepo option. (You must create this repository yourself as Red Hat does not provide this.) In this example, we use an FTP site where the contents of the RHEL 7 DVD is copied to a directory called rhel7 on an available FTP server. You can also use an http or https site that contains the RHEL 7 packages:

     ```
     # redhat-upgrade-tool --network 7.0 --instrepo ftp://ftp.example.com/pub/rhel7/
     ```

     The version can be any number greater than your current system version. If an invalid version is specified, upgrade fails after attempting to contact non-existing repositories.
   - To upgrade your system through a mounted install media on your system, for example from a DVD or USB drive available from the /dev/sdb device, as root run the following command:

     ```
     # redhat-upgrade-tool --device /dev/sdb
     ```

     If this option is specified without a device, the tool scans all currently-mounted removable devices.
   - To upgrade your system using an ISO image, provide the path to the ISO image after the **--iso** option. For example, if the RHEL 7 installation DVD were located at **/var/isos/rhel7dvd.iso** on the local system, the command would look as follows:

     ```
     # redhat-upgrade-tool --iso /var/isos/rhel7dvd.iso
     ```

4. **Reboot**: To complete the installation, you need to reboot the system. After rebooting, depending on how many packages are being upgraded, it could take **anywhere from a few minutes to an hour or more** to complete. If all goes well, the system will reboot to Red Hat Enterprise Linux 7 and you can begin checking that the system works properly.

5. **Perform post-upgrade tasks**: The scripts that have been created by the **Preupgrade Assistant** for the `FIXED` items will run automatically after the upgrade. Any other post-upgrade tasks that the administrator should run manually are identified by the **Preupgrade Assistant** results.

6. **Check the system**: If your system had been properly registered and subscribed for RHEL 6, the upgrade process should have automatically resubscribed it for RHEL 7. To make sure the system was properly upgraded and subscribed as a RHEL 7 system, type the following:

   ```
   # yum repolist
   Loaded plugins: product-id, subscription-manager
   repo id              repo name                                            status
   rhel-7-rpms          Red Hat Enterprise Linux 7 Server (RPMs)             4,323
   # cat /etc/redhat-release
   Red Hat Enterprise Linux Server release 7.0 (Maipo)
   ```

7. **Fix repolist if necessary**: If the repository list was not properly upgraded to RHEL 7, unsubscribe the system, resubscribe it as a RHEL 7 system, and add the repositories you need (all available repositories should be listed in the /etc/yum.repos.d/redhat.repo file).

```
# subscription-manager remove --all
# subscription-manager unregister
# subscription-manager register
# subscription-manager attach --pool=poolID
# subscription-manager repos --enable=repoID
```

8. **Run yum update**: If the upgrade appears to be successful, upgrade all your new RHEL 7 packages to the latest version of those packages as follows:

```
# yum update -y
# reboot
```

Step 5: Provide feedback

Please provide feedback to Red Hat related to any problems you encounter during the upgrade process. We would appreciate you entering [bug reports (https://bugzilla.redhat.com)](https://bugzilla.redhat.com) or opening [support cases (https://access.redhat.com/support/cases/list/)](https://access.redhat.com/support/cases/list/) so we can address problems you encounter.

Please feel free to submit a debug log, which is located on the upgraded system in the following file:

```
/var/log/upgrade.log
```

Product(s)	Red Hat Enterprise Linux	Component	anaconda	Category	Upgrade	Tags	installation	migration	rhel_7	upgrade	yum

Comments

Kamesh Sampath (/user/2187883)
(/user/2187883)
Newbie
15 points

actually this did not work when I tried to do a network installation, i tried to do # redhat-upgrade-tool-cli --network 7.0 --instrepo ftp://ftp.redhat.com/pub/redhat/rhel/beta/7/x86_64/os which then started to download the packages and boot images. Also i was required to disable the existing rhel6-* official repos before starting the upgrade

December 14 2013 at 4:46 PM (https://access.redhat.com/solutions/637583#comment-602893)

Kyle Benson (/user/1910013)
(/user/1910013)
Red Hat
Pro
670 points

Hi Kamesh,

I think you were implying that the url needed to be changed from ftp://ftp.redhat.com/pub/redhat/rhel/beta/7/x86_64/os/Packages to ftp://ftp.redhat.com/pub/redhat/rhel/beta/7/x86_64/os is that right? I've done that, as yes the repodata is present in the above folder, this was a typo.

Was your upgrade successful? If not, it would be great to have you re-run with the --debuglog flag like so:

```
# redhat-upgrade-tool-cli --network 7.0 --instrepo ftp://ftp.redhat.com/pub/redhat/rhel/beta/7/x86_64/os --debuglog=/tmp/upgrade.log
```

As this provides useful debugging data.

Thanks!

December 15 2013 at 6:13 PM (https://access.redhat.com/solutions/637583#comment-602933)

Stephan Cook (/user/1385253)
(/user/1385253)
Active Contributor
190 points

Is the repo available in other than ftp format?

January 22 2014 at 7:21 PM (https://access.redhat.com/solutions/637583#comment-693883)

Andrius Benokraitis (/user/1249773)
(/user/1249773)
Red Hat
Guru
3606 points

Stephan - the best scenario is to have a local repo to point to, but was easiest to point to the FTP. This might not be the best or most reliable way depending on where you are located, connection, etc.

January 22 2014 at 9:54 PM (https://access.redhat.com/solutions/637583#comment-694063)

[(/user/1385253)]
Stephan Cook (/user/1385253)

Active Contributor

190 points

I agree, I tried utilizing the ISO option and it fails. Looks like it's a known issue.

https://bugzilla.redhat.com/show_bug.cgi?id=1054048

January 23 2014 at 9:06 PM (https://access.redhat.com/solutions/637583#comment-694803)

[(/user/2187883)]
Kamesh Sampath (/user/2187883)

Newbie

15 points

I never got it to work, but very keen in trying again , i downloaded the latest 6.5 image and doing a fresh upgrade let me see if this works.

January 24 2014 at 4:09 AM (https://access.redhat.com/solutions/637583#comment-694933)

[(/user/2184163)]
Weston Bassler (/user/2184163)

Newbie

15 points

Will these tools be available to migrate RHEL 4, and/or 5 systems to RHEL 7 as well? Or is this just going to available for RHEL 6 to 7?

February 14 2014 at 3:17 AM (https://access.redhat.com/solutions/637583#comment-706693)

Terry
[(/user/36033)]
Bowling (/user/36033)

Red Hat

Expert

890 points

Weston,

No, currently only upgrades from RHEL 6.5 -> RHEL 7.0 are in scope. Additional information can be found at:
- What's New in Red Hat Enterprise Linux 7 Beta? (https://access.redhat.com/site/solutions/634143)
- All things RHEL 7 Beta, and an FAQ around its release. (https://access.redhat.com/site/solutions/535473)

February 17 2014 at 2:48 PM (https://access.redhat.com/solutions/637583#comment-708053)

[(/user/856543)]
Akemi Yagi (/user/856543)

Expert

873 points

There is one thing that is not quite clear. In Step 3: Run the Upgrade, a link is given to download redhat-upgrade-tool as https://access.redhat.com/downloads/content/rhel_beta . From there, I assume one would go to:

https://access.redhat.com/downloads/content/226/ver=/rhel---7/x86_64/upgrade_to_rhel7_beta/extras

and download the .el6_5 version. I ask this because from the same original link, you can also get to the .el7 version of redhat-upgrade-tool (via the Packages tab).

March 26 2014 at 6:05 PM (https://access.redhat.com/solutions/637583#comment-729833)

[(/user/1249773)]
Andrius Benokraitis (/user/1249773)

Red Hat

Guru

3606 points

Akemi,

Since the upgrade is initiated on a RHEL 6 system, and the packages to install have not been officially released yet, we published the packages in the RHEL 7 Beta download site to download and install on the RHEL 6 systems.

I'd use the packages as above, and don't worry about the packages in the RHEL 7 package set.

March 26 2014 at 7:05 PM (https://access.redhat.com/solutions/637583#comment-729953)

[(/user/856543)]
Akemi Yagi (/user/856543)

Expert

873 points

Andrius,

Yes, that's exactly my point. I'd suggest that the current link be changed to ..../extras to make it easier for users -- just like the one in Step 2, 1) "rhel7 htb preupgrade downloads".

March 26 2014 at 8:20 PM (https://access.redhat.com/solutions/637583#comment-729983)

[(/user/127783)](/user/127783)

Frederico Passos (/user /127783)

Community Member

20 points

I'm trying an update with no success (RHEL 6.5 up to date). Can't enable the extras repo.

```
# subscription-manager repos --enable rhel-6-server-extras-rpms
Error: rhel-6-server-extras-rpms is not a valid repo ID. Use --list option to see valid
repos.
```

June 18 2014 at 8:09 PM (https://access.redhat.com/solutions/637583#comment-775063) - Edited

Mark
Flitter
(/user/5473)   (/user /5473)

Red Hat

Expert

951 points

Hi Frederico,

You don't say what you do have available, on my system I see:

```
[root@flits-selinuxperf ~]# subscription-manager list
+-------------------------------------------+
    Installed Product Status
+-------------------------------------------+
Product Name:   Red Hat Enterprise Linux Server
Product ID:     69
Version:        6.5
Arch:           x86_64
Status:         Subscribed
Status Details:
Starts:         07/05/14
Ends:           06/07/14

[root@flits-selinuxperf ~]# subscription-manager repos | grep 'ID:.*extras'
Repo ID:   rhel-6-server-extras-debuginfo
Repo ID:   rhel-6-server-extras-rpms
Repo ID:   rhel-6-server-extras-source-rpms
```

Does `subscription-manager` see your node as subscribed similar to above?

June 19 2014 at 11:56 AM (https://access.redhat.com/solutions/637583#comment-775453)

[(/user/127783)](/user/127783)

Frederico Passos (/user /127783)

Community Member

20 points

Hi,

My system subscription info:

```
root@IPAM ~ # subscription-manager list
+-------------------------------------------+
    Installed Product Status
+-------------------------------------------+
Product Name:   Red Hat Enterprise Linux Server
Product ID:     69
Version:        6.3
Arch:           x86_64
Status:         Subscribed
Status Details:
Starts:         12/29/2011
Ends:           12/29/2014

root@IPAM ~ # subscription-manager repos | grep 'ID:.*extras'
root@IPAM ~ #
root@IPAM ~ # cat /etc/redhat-release
Red Hat Enterprise Linux Server release 6.5 (Santiago)
```

June 20 2014 at 4:05 PM (https://access.redhat.com/solutions/637583#comment-776253) - Edited

[(/user/1130113)](/user/1130113)

Austin Ellis (/user/1130113)

Community Member

27 points

I could not get the upgrade to start. I always get:
[Errno 14] PYCURL ERROR 9 - "Server denied you to change to the given directory"

Is there some extra step to get access to the above mentioned ftp directory?

June 19 2014 at 10:48 PM (https://access.redhat.com/solutions/637583#comment-775803)

[(/user/1249773)](/user/1249773)

Andrius Benokraitis (/user /1249773)

I assume you changed "ftp.example.com" to your own repo, correct?

June 19 2014 at 11:56 PM (https://access.redhat.com/solutions/637583#comment-775813)

Red Hat
Guru
3606 points

(/user/1130113)
Austin Ellis (/user/1130113)
Community Member
27 points

Yes, although I thought I was supposed to use Red Hat's online repo, not one I setup myself. At any rate, I tried again using the "--iso" option, and that worked to get the upgrade started.

But then the upgrade crashed about halfway through, trying to update pango, with lots of GLib errors.

June 20 2014 at 12:52 AM (https://access.redhat.com/solutions/637583#comment-775833)

Petr
(/user/5612243)
Hracek (/user/5612243)
Red Hat
Newbie
10 points

Hello Austin,

did you exectute preupg binary which is supposed to be executed before redhat-upgrade-tool? Is it possible to send us report?

June 20 2014 at 8:29 AM (https://access.redhat.com/solutions/637583#comment-776023) - Edited

(/user/1130113)
Austin Ellis (/user/1130113)
Community Member
27 points

Yes, I did run the preupg tool, and tried to fix as many things as I could before I ran the upgrade.

I would be happy to provide the report, but where do I send it? Should I open a support case?

June 20 2014 at 6:28 PM (https://access.redhat.com/solutions/637583#comment-776323)

Chris
(/user/12003)
Negus (/user/12003)
Red Hat
Guru
1476 points

While Red Hat provided an FTP repository during RHEL 7 beta, we don't provide one for the released product. I added a line to the description above stating that you need to create this repository yourself from the RHEL 7 installation DVD. Refer to procedure 2.4 here for information on how to set up the FTP repo: https://access.redhat.com/site/documentation/en-US/Red_Hat_Enterprise_Linux/7/html/Installation_Guide/sect-making-media-additional-sources.html#sect-making-media-sources-network (https://access.redhat.com/site/documentation/en-US/Red_Hat_Enterprise_Linux/7/html/Installation_Guide/sect-making-media-additional-sources.html#sect-making-media-sources-network)

June 20 2014 at 2:05 PM (https://access.redhat.com/solutions/637583#comment-776173)

(/user/1130113)
Austin Ellis (/user/1130113)
Community Member
27 points

Thanks for the update. Adding to the description will help clarify things for the next guy.

June 20 2014 at 6:34 PM (https://access.redhat.com/solutions/637583#comment-776333)

(/user/8053873)
Ivan Kirtyanov (/user/8053873)
Newbie
5 points

worked perfect for me

June 25 2014 at 6:58 AM (https://access.redhat.com/solutions/637583#comment-778043)

(/user/3423363)
Grant Street (/user/3423363)
Community Member
74 points

When this is article recommended via "Recommendations Powered by Andreas Beta" It seems the whole article is included in the blurb. can this be fixed please?

June 30 2014 at 9:04 AM (https://access.redhat.com/solutions/637583#comment-780683)

Umar Nadeem (/user/7785343)   June 30 2014 at 8:38 PM (https://access.redhat.com/solutions/637583#comment-781223)

 (/user/7785343)   395   Thank you for your feedback Grant. I'll make sure it gets forwarded.

Red Hat   points

Active Contributor

 (/user/1707643)   Can Someone help me regarding the encountered error, After reboot the server OS upgrade was not initiated.

Ryan De Loreto (/user   Thank you.
/1707643)
                              [root@myserver~]# redhat-upgrade-tool --device /dev/sr0
Newbie   setting up repos...
                              Repository InstallMedia is listed more than once in the configuration
12 points   Repository dvd is listed more than once in the configuration
                              Repository rhel-source is listed more than once in the configuration
                              Repository rhel-source-beta is listed more than once in the configuration
                              preupgrade-assistant risk check found EXTREME risks for this upgrade.
                              Run preupg --riskcheck --verbose to view these risks.
                              Continuing with this upgrade is not recommended.
                              [root@myserver~]# reboot

July 7 2014 at 3:07 PM (https://access.redhat.com/solutions/637583#comment-783773)

 (/user/3926053)   You need to check the preupgrade-assistant output - and check the extreme risk issue - if you are able to

Ondrej Vasik (/user/3926053)   eliminate it, then you may be able to do the in-place upgrade - otherwise, it is not possible (in any supported way)
                              using the in-place upgrade tools. However - you can still use data from preupgrade assistant for the system
Red Hat   migration - you will have the package list for rhel7, modified configs, user data files... which should make your
                              migration easier anyway.
Community Member

20 points

July 25 2014 at 12:41 PM (https://access.redhat.com/solutions/637583#comment-794823)