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# Upgrading to WEBpliance™ 3.1.3 for Linux® (LS)

December 30, 2002

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*WEBppliance for Linux[LS]\_Upgrade Guide - Version 3.1.3*





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# About this guide

## Introduction

This guide provides information about upgrading your existing WEBppliance™ for Linux (LS) server to Ensimg® WEBppliance 3.1.3 for Linux (LS).

Chapters in this guide include:

- [Chapter 1, “Preparing for upgrade”](#). This chapter provides information on the system requirements needed for upgrading to WEBppliance 3.1.3 for Linux (LS).
- [Chapter 2, “Compatibility with Customizations”](#). This chapter provides information on the compatibility checks and revisions that accompany any customization that you have applied to the existing version of WEBppliance for Linux (LS).
- [Chapter 3, “Upgrading to WEBppliance 3.1.3 for Linux \(LS\)”](#). This chapter provides information on upgrading to WEBppliance 3.1.3 for Linux (LS).
- [Chapter 4, “Troubleshooting upgrade issues”](#). This chapter encapsulates common problems encountered during upgrade and possible solutions to resolve them.

## Intended audience

This guide is designed to aid ISPs and Appliance Administrators in the planning and implementation of the upgrade process. Detailed, procedural steps are provided to guide users through the upgrade process.

## Printer-friendly version

This document is presented in HTML and PDF formats. If you are viewing it in HTML and want to print it in a book style, use the Acrobat® PDF version.

## Required skills

To use this guide, you need to be familiar with the Red Hat® Linux® platform, familiarity with RPM, and general Internet applications. In addition, you should have some networking knowledge.

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## Related documentation

The following documents provide additional information about WEBppliance 3.1.3 for Linux. You can find them on the Web at <http://www.ensim.com/support/wpls/index.html>.

- *WEBppliance 3.1.3 for Linux Release Notes*
- *WEBppliance 3.1 for Linux Technical Reference Guide*

## Additional resources

The following Online Help documents provide additional information about WEBppliance 3.1.3 for Linux. You can find them on the Web at <http://www.ensim.com/support/wpls/index.html>.

- *WEBppliance 3.1 for Linux Appliance Administrator's Online Help*
- *WEBppliance 3.1 for Linux Reseller Administrator's Online Help*
- *WEBppliance 3.1 for Linux Site Administrator's Online Help*
- *WEBppliance 3.1 for Linux User Administrator's Online Help*

## Document conventions

Throughout this guide, specific fonts are used to identify computer input, output, and interface elements.

Table 1 lists the typographic conventions used in this guide.

**Table 1. Typographic conventions**

Appearance of text	How it is used
Narrow bold text (sans serif font)	Used for button names, column names, field names, file names, keystrokes, menu items, and path names. <i>Example:</i> From the <b>File</b> menu, choose <b>Delete</b> , then click <b>OK</b> .
Bold, italic text (serif font)	Used for information you type. <i>Example:</i> Type <code>cd &lt;directory name&gt;</code> on the command line.
Courier (typewriter-style) font	Used for system messages and screen text. <i>Example:</i> The following message is displayed: <code>The server has been added.</code>

Key information is sometimes displayed using special headings and formats to make it stand out from regular text. The following special headings are used in this guide:



**Tip:** Information to help you perform procedures



**Note:** Supplemental information about tasks or concepts



**Important:** Supplemental information that is more important than a note



**Caution:** Warnings about potential damage to data or systems

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To obtain the latest product documentation or to utilize Ensim's self-help resources, visit the Ensim product support page at <http://www.ensim.com/support/wpls/index.html>.

If you need additional online support or if you would like to provide feedback about Ensim documentation, please enter a CaseConnect ticket at <https://onlinesupport.ensim.com>.



# Preparing for upgrade

## Introduction

This chapter describes how to prepare your environment for upgrading to WEBppliance 3.1.3 for Linux (LS).

Topics in this chapter include:

- “System requirements” on page 1-2
- “Web browser requirements” on page 1-4
- “Before you begin” on page 1-4

## About WEBppliance 3.1.3 for Linux

WEBppliance 3.1.3 for Linux is a software appliance designed to automate Web hosting for service providers and their resellers. WEBppliance 3.1.3 for Linux has four tiers of role-based self-administration control panels. Each tier targets the needs of service providers, resellers, site managers, or end users, providing each role with an easy-to-use interface that streamlines their most common configuration and administration tasks.

WEBppliance 3.1.3 for Linux upgrades the Apache® Web server software to the Apache 1.3.27 release. This release is recommended by Apache as the best of the 1.3 series.

The Apache 1.3.27 version is chiefly a security and bug fix release, particularly notable for addressing critical security vulnerabilities evidenced with previous versions.

For more details, please visit [www.apache.org](http://www.apache.org).

WEBppliance 3.1.3 for Linux also addresses a few bugs evidenced in the previous releases thus providing a more robust reliable operational environment.

You can upgrade to WEBppliance 3.1.3 for Linux from any of the following WEBppliance for Linux (LS) versions.

- 3.0.0
- 3.0.3
- 3.1.0
- 3.1.1

## System requirements

To upgrade to WEBppliance 3.1.3 for Linux (LS) on a Linux server, you must meet the following minimum system requirements.

- Access to the physical server
- Operating system - Red Hat Linux 7.2 operating system
- Processor – Pentium® II or III, Class 500 MHz or above or any Intel-compatible CPU of Class 500 MHz or above
- Hard Disk – Minimum 20 GB
- Memory – 128 MB of RAM (we recommend 256 MB or higher)



**Important:** If you upgrade this release with less memory (less than 128 MB), then the WEBppliance 3.1.3 for Linux installation may fail and potentially leave the server in an inconsistent state. If you are planning to run Tomcat as well, you should provision at least 512 MB RAM.

- Swap partition size – 256 MB
- CD-ROM drive
- “root” user access
- Network connectivity

### Disk usage per WEBppliance

Before you upgrade your WEBppliance, refer to the following table to ensure that your server has enough disk space available for the upgrade. Problems can arise from sufficient disk space not being available when systems are upgraded.

**Table 2. Disk space requirements**

	Disk space used- 3.1.0	Disk space used- 3.1.3
WEBppliance Base	472 MB	502 MB
<b>Add-on</b>	<b>Disk space used - 3.1.0/</b>	<b>Disk space used - 3.1.3</b>
Miva Merchant	13 MB	13 MB
MySQL	21 MB	21 MB
Tomcat	110 MB	110 MB

### Disk usage per site

WEBppliance attempts to minimize disk space requirements for a site by sharing some system files between sites. With this approach, excluding user data, each additional site can take as little as 300 to 400 KB of disk space. Very few services add significantly to a site's disk space usage when enabled, with the exception of SquirrelMail and Miva Merchant. Due to technical reasons, application files for SquirrelMail and Miva Merchant can not be shared. Refer to the following table to determine how much free disk space you will need for these two services.

**Table 3. Additional disk space for a single site with the Miva Merchant and SquirrelMail add-ons**

Add-on	Disk space used - 3.0.0/ 3.0.2/3.0.4	Disk space used - 3.1.3
SquirrelMail	2.0 MB	6.7 MB
Miva Merchant	9.9 MB	11.0 MB



**Important:** Before upgrading to WEBppliance 3.1.3, make sure that you have the 'patch' rpm package, installed on your system. patch is a standard UNIX utility shipped, by default, with the Red Hat Linux distribution and can be installed from the Red Hat Linux 7.2 CD. The patch rpm required is **patch -2.5.4-10.i386.rpm**. It is also available for download from [www.rpmfind.net](http://www.rpmfind.net).

## Web browser requirements

In order to view the upgraded application, it is recommended that you use one of the following browsers:

- Microsoft Internet Explorer, version 5.0 and later



**Important:** If you are using Internet Explorer version 6.0, verify that you have set your security settings (under Internet Options) to **medium**; otherwise some pages may not display properly.

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- Netscape 4.7x or 6.2

We do not recommend using Netscape 4.77, 6.0, and 6.1, since performance and functional problems have been experienced in these releases.

## Before you begin

Before you begin the upgrade, ensure that you have fulfilled the requirements enumerated below.



**Important:** If you are running a firewall on the server running WEBppliance or if the WEBppliance server is running in a NATed environment, please ensure that you can connect to ftp.ensim.com and retrieve files in passive mode FTP. If you are unable to do so, the upgrade will fail, in which case, please contact Ensim support.

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**Tip:** Before upgrading your server to WEBppliance 3.1.3, it is recommended that you back up the entire hard disk.

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**Important:** WEBppliance 3.1.3 for Linux upgrade will fail if it does not find the requisite RPM versions. The requisite RPMs are downloaded to the `/tmp/extrarpms` directory when you run the WEBppliance installer, `winstall-u.sh`. Ensure that you have the mandated list of RPMs before you begin upgrading.

You should have Perl 5.6.0 on your system. Upgrading to Perl 5.6.1 will cause WEBppliance to stop working.

We recommend that you attempt the upgrade during a low activity period.

Before you begin the upgrade, refer to the following sections/chapter.

- “System checks” on page 1-5
- Chapter 2, “Compatibility with Customizations”
- “Managing custom RPMs” on page 1-6
- “Other tasks” on page 1-7

## System checks

Ensure that your hardware is working perfectly before the upgrade by doing the following:

- Run **fsck** to check the integrity of your hard disk before upgrading.



**Note:** For more info on `fsck`, please refer to the man [Help] page.

- Faulty memory or disk can cause serious problems in the upgrade. To find potential problems with memory and disk, run **badblocks** on your disks and **memtest** (<http://www.qcc.sk.ca/~charlesc/software/memtester/>).

Note that `memtest` will significantly impact the performance of the system, as it consumes nearly all the memory on the system. Additionally, if the system does have bad memory, this may manifest itself as kernel panics and application segmentation faults that may mandate a manual restart of the system.

Sample command lines:

```
badblocks -vc <device> > /tmp/badblocks
```

If any blocks are listed in the above file, you should have the hard drive replaced. Hard drives typically have a number of spare blocks that will be used to transparently replace bad blocks; this test will only report bad blocks if all those spares have been consumed.

```
memtest all 1 --log
```

Check the output in the file **memtest.log** for errors. Note that using the **all** option will most likely force your system to start using swap space, which will significantly slow performance. If errors are found, you should have the memory in the system replaced. It is advisable to halt memtest as soon as it detects an error, as further testing could cause the system to crash, depending on the severity of the error.

## Managing custom RPMs

If you have installed any custom RPMs on your server, the upgrade script `wpinstall-u.sh` may fail due to RPM dependency errors. These errors must be resolved before the upgrade can be successful. There are two methods of addressing these dependency issues.

The first involves placing additional RPMs in the `/tmp/extrarpms` directory; these will be added to the candidate set the next time the upgrade is attempted. This is often required when you have installed custom RPMs that are dependent on versions of libraries that are older than what WEBppliance 3.1.3 for Linux installs during the upgrade.

The second method involves adding names of RPMs to the file `/tmp/extrarpms/exclude.list`. These RPMs will be excluded from the candidate set of RPMs that WEBppliance attempts to upgrade. This is typically required if you want to avoid upgrading or installing a particular RPM, or you have an RPM with a different name that provides the same functionality as one of the RPMs in the candidate set. For example, in the latter case, if you had installed the MySQL RPMs from `mysql.org`, which conflict with Red Hat's `mysql` RPMs. To exclude these RPMs from the upgrade, list the base names of the RPMs in `/tmp/extrarpms/exclude.list`. For example, to exclude Red Hat's `mysql` RPM, place the string **mysql** on a separate line in the `exclude.list` file. To exclude additional RPMs from the upgrade, place the base names of each RPM on a separate line in the file.

For more information about compatibility with customizations, see [Chapter 2, "Compatibility with Customizations"](#).

For troubleshooting the RPM dependency errors, see ["RPM dependency errors" on page 4-5](#).

## Other tasks

We recommend that you also perform the following tasks before starting with the upgrade.

- If you are upgrading from WEBppliance 3.0.x, and the `/etc/virtualhosting/tmpdirs` file has the following line:  
`/home/virtual:/home/virtual/FILESYSTEMTEMPLATE/.tmp`  
then, change this line to the following:  
`/home:/home/virtual/FILESYSTEMTEMPLATE/.tmp`
- Ensure that all sites in the site list are in a consistent state. Any inconsistencies will be displayed as text in the service configuration panel for that site. Sites can be made consistent by: editing the site, correcting any errors reported, and saving the changes made. Repeat until there are no more errors reported. **Also ensure that Microsoft® FrontPage® Server Extensions is consistent on all your sites.**
- Restart the system. Ensure that `postgresql` is running on startup.
- If you install MySQL with InnoDB support, either by replacing MySQL binaries or installing MySQL InnoDB rpms, and then upgrade WEBppliance, the upgrade may not be able to bring MySQL back up again. As a result, your MySQL-enabled sites may go into an inconsistent state. Reapply the MySQL binaries with InnoDB support and edit all the inconsistent virtual domains to bring them back to a consistent state.



# Compatibility with Customizations

## Introduction

This chapter explains issues that may arise with any customizations that you may have applied to your existing version of WEBppliance for Linux, and adequate instructions on how to address possible conflicts with pre/post upgrade actions.

- Customizations that do not require pre/post actions
- Customizations that require pre/post actions
- Conditions that will fail upgrade

## Customizations that do not require pre/post actions

The following customizations do not require any pre/post actions.

- Added files to /usr/lib/opcenter/fastcgi/extras
- Added customization files in /usr/lib/python2.1/site-packages/vh3/custom/
- Modified /etc/virtualhosting/ipranges file
- Modified files in /etc/appliance/customization
- Modified files in /etc/virtualhosting/templates that do not belong to SquirrelMail

## Customizations that require pre/post actions

The following customizations require either pre or post actions.

- **Appliance or Site Administrators have modified their <SITEROOT>/var/www/squirrelmail/config/config.php file**

Pre upgrade action required?

No.

**Problem/Solution:** You may experience errors in the SquirrelMail GUI and/or the GUI does not function correctly. To fix these issues, copy /etc/virtualhosting/templates/sqmail/var/www/squirrelmail/config/config.php to the affected site's var/www/squirrelmail/config/config.php file, then merge any customizations back to the site's var/www/squirrelmail/config/config.php file.

- **Modified /usr/lib/opcenter/bind/named\_conf\_zone.tmpl file**

Pre upgrade action required?

Yes, back up your named\_conf\_zone.tmpl file.

**Problem/Solution:** Your modifications will be lost after the upgrade. After the upgrade, reapply your changes back into /usr/lib/opcenter/bind/named\_conf\_zone.tmpl.

- **Modified DTML modifications to files under /usr/lib/opcenter**

Pre upgrade action required?

Yes, back up your custom dtml files.

**Problem/Solution:** Your modifications will be lost after the upgrade. After the upgrade, re-deploy your custom dtml files to /usr/lib/opcenter. Note that some dtml file have changed since 3.0.x. This will cause problems when you restore the 3.0.x dtml onto WEBppliance 3.1.3 for Linux. It is recommended that you note differences in the new 3.1.3 dtml file and re-implement your changes.

- **Installed PHP binaries on top of files owned by the PHP RPMs**

Pre upgrade action required?

No.

**Problem/Solution:** Your custom PHP binaries will be replaced with binaries from the (possibly older) PHP RPM shipped with WEBppliance during the upgrade. Either obtain, or build a PHP RPM that is compatible with Red Hat 7.2 and a higher version than the one supplied by WEBppliance 3.1.3 for Linux. Then, place the PHP RPMs in the /tmp/extrarpms directory before running winstall.sh or winstall-u.sh.

- **Installed MySQL with InnoDB support binaries on top of files owned by the MySQL RPMs**

Pre upgrade action required?

No.

**Problem/Solution:** WEBppliance upgrade goes through, but sites are left in an inconsistent state and MySQL fails to start. Either obtain, or build a MySQL RPM with InnoDB support and place the RPMs in the /tmp/extrarpm directory before running wpinstall.sh or wpinstall-u.sh.

- **Modified /usr/lib/opcenter/fastcgi/httpd-tmpl.conf file**

Pre upgrade action required?

Yes, back up your httpd-tmpl.conf file.

**Problem/Solution:** Your modifications will be lost after the upgrade. After the upgrade, reapply your changes back into /usr/lib/opcenter/fastcgi/httpd-tmpl.conf.

- **Modified /etc/httpd/conf/httpd\_app.conf to enable mod\_gzip**

Pre upgrade action required?

No.

**Problem/Solution:** Tomcat and other new WEBppliance 3.1.3 for Linux Web features do not work. Refer to the upgrade guide's section on merging WEBppliance's template httpd.conf file with your httpd.conf file (the topic *Upgrading the Apache httpd\_app.conf file* under *Post upgrade tasks* in *Upgrading from WEBppliance 3.0 to 3.1.3 for Linux*).

- **Modified non-config files that are owned by the rpm database**

Pre upgrade action required?

Yes, back up the binaries.

**Problem/Solution:** If you have compiled your own files and applied them on top of files that are owned by an RPM, which is part of the WEBppliance service (or part of the Red Hat 7.2 upgrade, if you are upgrading from WEBppliance 3.0.x for Linux), they may be in danger of being replaced when the upgrade happens. To see if a file is owned by an RPM, run the command

**rpm -qf <full\_path\_of\_binary>**. If the command returns the name of a RPM, then the file may be replaced by the end of the WEBppliance upgrade. A restore of the file may cause even more harm, as the file may not be compatible with the new upgraded WEBppliance 3.1.3 for Linux/Red Hat 7.2 environment. For example, if you compiled a binary that was linked against libcrypto.so.1 (a library file that provided by WEBppliance 3.0.x for Linux/Red Hat 7.1 environment), and then upgraded your WEBppliance 3.0.x for Linux/Red

Hat 7.1 to WEBppliance 3.1.3 for Linux/Red Hat 7.2, the binary will become unusable, as `libcrypto.so.1` is replaced with `libcrypto.so.2` in the new environment. To ensure compatibility, recompile your binaries under a Red Hat 7.2 system, or obtain the appropriate RPMs/source-rpms that are compatible with Red Hat 7.2.

- **Upgraded or replaced MySQL RPM (Red Hat RPM) with MySQL RPM (mysql.com rpm)**

**Pre upgrade action required?**

Yes, see solution below.

**Problem/Solution:** Running `wpinstall.sh` or `wpinstall-u.sh` fails with the following RPM conflicts.

```
MySQL conflicts with mysql-3.23.41-1
```

```
MySQL-devel conflicts with mysql-devel-3.23.41-1
```

```
MySQL-server conflicts with mysql-server-3.23.41-1
```

To resolve these conflicts, add `mysql`, `mysql-devel`, and `mysql-server` to the `/tmp/extrarpms/exclude.list` file.

- **Upgraded OpenSSH to a version above 3.1**

**Pre upgrade action required?**

Yes, see solution below.

**Problem/Solution:** Running `wpinstall.sh` or `wpinstall-u.sh` fails with an RPM dependency error as follows:

```
openssh = 3.1p1-6 is needed by openssh-askpass-3.1p1-6
```

```
libcrypto.so.1 is needed by openssh-3.4p1-1
```

```
libcrypto.so.1 is needed by openssh-clients-3.4p1-1
```

```
libcrypto.so.1 is needed by openssh-server-3.4p1-1
```

To resolve these dependency errors, do the following:

- Either obtain, or build an `openssh` RPM with the same version number that is compatible with Red Hat 7.2 and newer than the one provided by WEBppliance 3.1.3 for Linux. Place these `openssh` RPMs in the `/tmp/extrarpms` directory before running `wpinstall.sh` or `wpinstall-u.sh`.

**OR**

- Place the following files in `/tmp/extrarpms/exclude.list`

```
openssh
openssh-askpass
openssh-clients
openssh-server
```

- **Modified /var/www/html/index.shtml file**

**Pre upgrade action required?**

Yes, back up your /var/www/html/index.shtml file.

**Problem/Solution:** If you have modified the WEBppliance root level /var/www/html/index.shtml file, your changes will be lost after the upgrade. After the upgrade reapply your changes back to the file.

- **Modified /etc/php.ini file**

**Pre upgrade action required?**

Yes, back up your /etc/php.ini file.

**Problem/Solution:** If you have modified the /etc/php.ini file, your changes will be lost after the upgrade. After the upgrade, reapply your changes back to the file or restore from your backup.

- **Modified /etc/httpd/conf/virtual/site<n> files**

**Pre upgrade action required?**

Yes, back up your changes to any of the /etc/httpd/conf/virtual/site<n> files.

**Problem/Solution:** If you have modified any of the /etc/httpd/conf/virtual/site<n> files, your changes will be lost after the upgrade (your changes will be lost even when performing an enable/disable). Please refer to the section *Customizing Services*, under the chapter *Customizing WEBppliance 3.1 for Linux* in the guide *WEBppliance 3.1 for Linux Customization Guide*, on an upgrade/enable/disable-safe way of customizing these configuration files.

- **Modified /etc/proftpd/site<n> or /etc/proftpd/site<n>.anonftp files**

**Pre upgrade action required?**

Yes, back up your changes to any of the /etc/proftpd/site<n> or /etc/proftpd/site<n>.anonftp files.

**Problem/Solution:** If you have modified any of the /etc/proftpd/site<n>, /etc/proftpd/site<n>.anonftp files, your changes will be lost after the upgrade (your changes will be lost even when performing an enable/disable). Please refer to the section *Customizing Services*, under the chapter *Customizing WEBppliance 3.1 for Linux* in the guide *WEBppliance 3.1 for Linux Customization Guide*, on an upgrade/enable/disable-safe way of customizing these configuration files.

- **Modified the /etc/logrotate.conf file**

**Pre upgrade action required?**

Yes, back up your /etc/logrotate.conf file.

**Problem/Solution:** If you have modified the WEBppliance root level /etc/logrotate.conf file, your changes will be lost after the upgrade. After the upgrade reapply your changes back to the file or restore from your backup.

- **Modified default Service Plans**

**Pre upgrade action required?**

Yes, record the settings you have for your default plan.

**Problem/Solution:** The WEBppliance upgrade will overwrite the default Service Plan. After upgrading, you will need to reapply your default plan settings.

- **Latest version of kernel-headers (compatible with Red Hat Linux 7.2) rpm package is not installed**

**Pre upgrade action required?**

Yes, see solution below.

**Problem/Solution:** Running wpinstall.sh or wpinstall-u.sh fails with an RPM dependency error as follows:

```
kernel-headers is needed by glibc-devel-2.2.4-24
kernel-headers >= 2.2.1 is needed by glibc-devel-2.2.4-24
```

To resolve these dependency errors, do the following:

- a** Obtain the latest version for kernel-headers that is compatible with Red Hat 7.2.
- b** Place the kernel-headers rpm in the /tmp/extrarpms folder before running wpinstall.sh or wpinstall-u.sh.

- **Latest version of bc (compatible with Red Hat Linux 7.2) rpm package is not installed**

**Pre upgrade action required?**

Yes, see solution below.

**Problem/Solution:** Running `wpinstall.sh` or `wpinstall-u.sh` fails with an RPM dependency error as follows:

```
libreadline.so.1 is needed by bc-1.06-2
```

To resolve this dependency error, do the following:

- a Obtain the latest version for `bc` that is compatible with RedHat Linux 7.2.
- b Place the `bc` rpm in the `/tmp/extrarpms` folder before running `wpinstall.sh` or `wpinstall-u.sh`.

- **Latest version of dump (compatible with Red Hat Linux 7.2) rpm package is not installed**

**Pre upgrade action required?**

Yes, see solution below.

**Problem/Solution:** Running `wpinstall.sh` or `wpinstall-u.sh` fails with an RPM dependency error as follows:

```
libreadline.so.1 is needed by dump-0.4b21-3
```

To resolve this dependency error, do the following:

- a Obtain the latest version for `dump` that is compatible with Red Hat 7.2.
- b Place the `dump` rpm in the `/tmp/extrarpms` folder before running `wpinstall.sh` or `wpinstall-u.sh`.

- **File conflict error**

**Pre upgrade action required?**

Yes, see solution below.

**Problem/Solution:** Running `oem_installer.sh` again fails with the following error.

```
usr/bin/curl from curl-7.9.1-1 conflicts with the file from  
package curl-ssl-7.9.2-1
```

This error occurs because `curl-ssl-7.9.1-1` is present on the system. When `wpinstall-u.sh` tries to install `curl` and `curl-devel` packages, it conflicts with the files provided by `curl-ssl`.

To resolve this error, put the entries for `curl` and `curl-devel` in the `exclude.list` file present in the `/tmp/extrarpms` folder.

- **Sites are in an inconsistent state**

**Pre upgrade action required?**

No.

**Post upgrade action required?**

Yes, see solution below.

**Problem/Solution:** The `/var/log/appliance/ensim_appliance.log` file contains the following error and sites go into an inconsistent state.

The document root of the web server where you are trying to install the server extensions already contains a disk-based web.

To resolve the problem, do the following:

- Edit the file `/home/virtual/<domain>/var/www/html/_vti_pvt/service.cnf`, remove the following lines, and save the changes.

`vti_httpdversion: SX | FrontPage DBW`

`vti_webservertype: SR | diskweb`

## Conditions that will fail upgrade

- Faulty disk or memory.

Refer to the “System checks” section in [Chapter 1, “Preparing for upgrade”](#).

# Upgrading to WEBppliance 3.1.3 for Linux (LS)

## Introduction

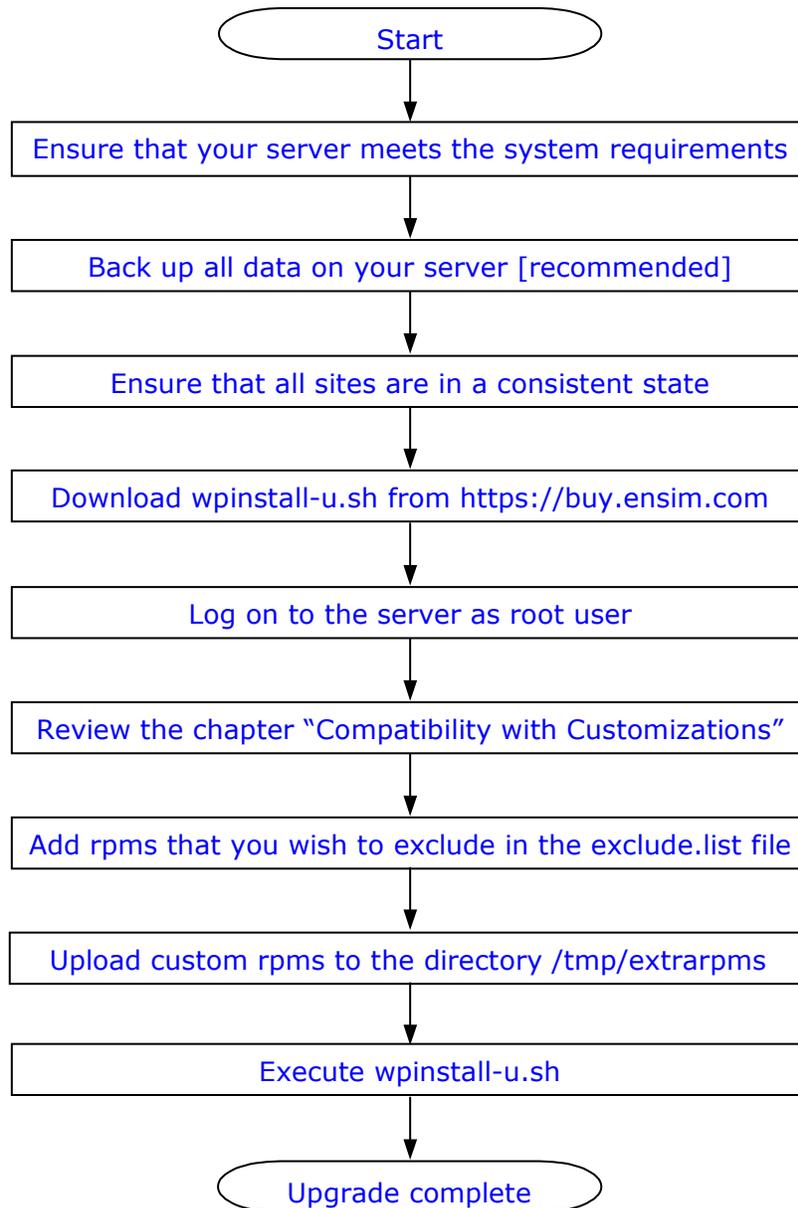
This chapter provides instructions on upgrading to WEBppliance 3.1.3 for Linux. You must fulfill the post-upgrade tasks to conclude the upgrade successfully.

Topics include:

- “An overview of the upgrade process” on page 3-2
- “Upgrading to WEBppliance 3.1.3 for Linux” on page 3-3
- “Post upgrade tasks” on page 3-6

## An overview of the upgrade process

The following illustration presents an overview of the upgrade process.



## Upgrading to WEBppliance 3.1.3 for Linux

Upgrading to WEBppliance 3.1.3 for Linux (LS) requires the **wpinstall-u.sh** script, which can be downloaded from <https://buy.ensim.com>.



**Important:** If you are running a firewall on the server running WEBppliance or if the WEBppliance server is running in a NATed environment, please ensure that you can connect to [ftp.ensim.com](https://ftp.ensim.com) and retrieve files in passive mode FTP. If you are unable to do so, the upgrade will fail, in which case, please contact Ensim support.



**Note:** The file **wpinstall-u.sh** refers to the WEBppliance installer for an upgradable WEBppliance license.

You can download the **wpinstall-u.sh** file to any directory, with free disk space of over 600 MB in its partition.

Once you have downloaded **wpinstall-u.sh**, you are ready to upgrade to WEBppliance 3.1.3 for Linux (LS) on your server.



**Important:** Before starting with the upgrade (from 3.0.x or 3.1.0), ensure that you have placed the newer versions of RPMs that you want upgraded in the **/tmp/extrapms** directory, and updated the file **/tmp/extrapms/exclude.list**. The rpms listed in the exclude.list file will **not** be upgraded. For more information about this file, see [“Managing custom RPMs” on page 1-6](#). For troubleshooting RPM dependency errors, see [“RPM dependency errors” on page 4-5](#).

The upgrade process may take several hours depending on the number of domains. It is recommended that you schedule the upgrade at a time of relatively low activity and inform Resellers and Site Administrators about domain downtime.

During upgrade, domains will be inaccessible. If errors are encountered, some of the domains may be in an inconsistent state or marked as being added. This will result in these domains being unreachable, until restored by following the instructions in [Chapter 4, “Troubleshooting upgrade issues”](#).

However, if you are upgrading from the 3.1.1 version, sites will not go into maintenance mode and therefore will be available for the period of time. Services such as Web, FTP, and Mail will continue to function during this upgrade. The control panel for Appliance Administrator, Site Administrator, User Administrator, and Reseller Administrator will, however be inaccessible, toward the end of the upgrade, for a short period of time as they will have to be restarted. These control panels will be inaccessible for the length of time that is required to restart your WEBppliance.

---



**Note:** The upgrade will enable services, mod\_perl and develenv, for all existing domains. If the upgrade includes MySQL, Miva, and Tomcat, the mod\_perl and develenv services are disabled by default.

---



### **Procedure: To upgrade to WEBppliance 3.1.3 for Linux (LS)**

- 1 Connect to the Linux server on which you want to upgrade to WEBppliance 3.1.3 for Linux (LS) using Telnet or SSH.



**Important:** If the connection is lost during an upgrade initiated over telnet or ssh, the rpm upgrade still continues to run. However, you need to ensure that the upgrade process has completed after reconnection. Once you have reconnected, determine whether the rpm upgrade has completed by searching for active rpm processes. If no active rpm processes are found, you can assume that the rpm upgrade is complete. Next, ensure that the rest of the upgrade process completes successfully by restarting WEBppliance. If you lose the telnet or ssh connection, follow the steps in the procedure below (assuming you are using bash).

Determine whether the rpm upgrade is complete by typing the following command.

```
ps ax |grep rpm
```

If no active rpm processes are found, you may assume that the rpm upgrade is complete.

Restart WEBppliance by typing the following command.

```
/etc/rc.d/init.d/webppliance restart
```

Background the rest of the upgrade process by pressing **CTRL+Z** and typing the following commands.

```
bg
```

```
disown -h %%
```

This will ensure that the WEBpliance upgrade continues successfully even if the connection is lost again.

- 2 Log on to the server as the root user.
- 3 At the command prompt (from the directory where you have downloaded the WEBpliance installer script), type the following command.
 

```
chmod +x winstall-u.sh
```

 This command makes the script executable, then type:
 

```
./winstall-u.sh
```

 or, at the command prompt, type the command:
 

```
bash ./winstall-u.sh
```
- 4 The Welcome Screen is displayed stating the actions that will be performed in case of an installation (pre-installation check), or an upgrade (upgrades RPMs to ensure Red Hat 7.2 system compatibility).  
Type **y** to proceed.
- 5 The License and Warranty Agreement is displayed. Type **y** to proceed.
- 6 Type **y** to accept the defaults.

The WEBpliance installer script **winstall-u.sh** upgrades your version of WEBpliance for Linux to 3.1.3 on your server.



**Tip:** After the upgrade, ensure consistency of your sites.

If during the upgrade, **winstall-u.sh** fails due to any RPM dependency errors, then do the following:

- 1 Copy the required RPMs to the **/tmp/extrarpms** directory.
- 2 Run **./winstall-u.sh** again.

Repeat the above steps until there are no more RPM dependency errors.

For more information about RPM errors see, [“RPM dependency errors”](#) on page 4-5 and [Chapter 2, “Compatibility with Customizations”](#).

## Post upgrade tasks

You must fulfill the following post-upgrade tasks to conclude the upgrade successfully.

### Upgrading the Apache `httpd_app.conf` file

WEBppliance leaves the `httpd_app.conf` file untouched during upgrade, as it may contain changes made by you or other installed Web-based applications. The `httpd_app.conf` file is preserved so that custom modifications are not lost. However, because of this, some of the new Web-based features will not be available to the upgraded sites.

These include the following:

- Tomcat support
- New URL format for name-based domains

In order to take advantage of these features, you will need to merge your custom configuration changes to a template `httpd_app.conf` provided by WEBppliance, by following these steps.



---

#### **Procedure: To upgrade the Apache `httpd_app.conf` file**

- 1** Backup your existing `/etc/httpd/conf/httpd_app.conf` to a safe location.
- 2** Copy the file `/usr/lib/opcenter/apache/install/httpd_app.conf` to `/etc/httpd/conf/httpd_app.conf`.
- 3** Replace all instances of LOCALIP and LOCALHOST in `/etc/httpd/conf/httpd_app.conf` with the WEBppliance server IP address and the hostname, respectively.
- 4** Edit the `/etc/httpd/conf/httpd_app.conf` file and add your custom configuration parameters.
- 5** Restart Apache by typing the following command.

```
/etc/rc.d/init.d/httpd restart
```

---

## Upgrading the SquirrelMail config.php file

After the upgrade, some sites may not be able to access SquirrelMail. To resolve this, you must upgrade the SquirrelMail config.php file.



---

### Procedure: To upgrade the SquirrelMail config.php file

- 1** Backup the original **config.php** file located in  
/etc/virtualhosting/templates/sqmail/var/www/squirrelmail/config/config.php.
- 2** Copy the **config.php** file located in  
/etc/virtualhosting/templates/sqmail/var/www/squirrelmail/config/config.php to  
the broken site's directory  
(/home/virtual/<domain>/var/www/squirrelmail/config/config.php).
- 3** After copying the file, change the file owner and group to match that of the original file.
- 4** If the original config.php file has been modified by Site Administrators, then they should merge the old and new config.php files.



# Troubleshooting upgrade issues

## Introduction

This chapter encapsulates common errors encountered during the process of upgrading to WEBppliance 3.1.3 for Linux (LS).

Topics include:

- [Telnet or ssh connection lost during upgrade](#)
- [Domains in an inconsistent state](#)
- [Upgrade fails if MySQL fails to start](#)
- [Post-upgrade Microsoft FrontPage Server Extensions problems](#)
- [Services down after upgrade](#)
- [Error Logs](#)
- [RPM dependency errors](#)

## Telnet or ssh connection lost during upgrade

Even if the connection is lost during an upgrade initiated over telnet or ssh, the rpm upgrade continues to run. However, you need to ensure that the upgrade process has completed after reconnection. Once you have reconnected, determine whether the rpm upgrade has completed by searching for active rpm processes. If no active rpm processes are found, you can assume that the rpm upgrade is complete. Next, ensure that the rest of the upgrade process completes successfully by restarting WEBppliance. If you lose the telnet or ssh connection, follow these steps (assuming you are using bash).

- 1 Determine whether the rpm upgrade is complete by typing the following command.

```
ps ax |grep rpm
```

If no active rpm processes are found, you may assume that the rpm upgrade is complete.

- 2 Restart WEBppliance by typing the following command.

```
/etc/rc.d/init.d/webppliance restart
```

- 3 Background the rest of the upgrade process by pressing **CTRL+Z** and typing the following commands.

```
bg
```

```
disown -h %%
```

This will ensure that the WEBppliance upgrade continues successfully even if the connection is lost again.

## Domains in an inconsistent state

WEBppliance goes into maintenance mode during upgrade. During maintenance mode, domains are brought down and brought back up with the new version of services. This process, (which can take several hours depending on the number of domains), may encounter problems as it loops through all domains. Once WEBppliance exits maintenance mode and goes into normal operation, the problem domains are marked, either as being inconsistent, or as being added, and can be seen as such in the site list of the Appliance Administrator. The Appliance Administrator can at this point attempt to bring up these domains by following these steps.



---

### Procedure: To restore domains

- 1 Connect to WEBppliance and log on as the Appliance Administrator.
- 2 Click the **Configure**  icon.
- 3 Click the **Save** button at the bottom of the Edit Site form. At this point, WEBppliance attempts to bring the domain out of its inconsistent state and report any accompanying errors. Once these errors are resolved, try editing the site again. Repeat the steps until the site is in a consistent state.
- 4 Once the site is consistent, it may be displayed in the site list as being disabled. If you wish to make the site active, click on the **Enable**  icon.

## Upgrade fails if MySQL fails to start

Sometimes, the upgrade process fails while upgrading from WEBppliance 3.1.1 to WEBppliance 3.1.3.

If the upgrade fails, please look for the following error logged in the `installer.err` file located in the same directory that contains the WEBppliance installer (`wpinstall.sh/wpinstall-u.sh`) script.

```
webppliance-mysql-3.1.3-4

Reversed (or previously applied) patch detected! Skipping patch.

1 out of 1 hunk ignored -- saving rejects to file /usr/bin/
safe_mysql_d.rej

Starting MySQL: [FAILED]

FAILURE:

Please do the following:

1. Consult /var/log/appliance/setup.err for the description and /
var/log/appliance/setup.log for the detail.

2. Try to address the problem.

3. Run the setup script again.

error: execution of %post scriptlet from webppliance-mysql-3.1.3-4
failed, exit status 1
```

If you locate this error in the `installer.err` file, do the following.

Run the commands:

```
# /etc/rc.d/init.d/mysqld restart

# /etc/rc.d/init.d/webppliance restart
```

This completes the upgrade process.

If this error is observed while upgrading from WEBppliance 3.0.x/3.1.0, please contact Ensim Support.

## Post-upgrade Microsoft FrontPage Server Extensions problems

Sometimes, you may encounter problems with Microsoft FrontPage Server Extensions after upgrading your WEBppliance to WEBppliance 3.1.3 for Linux. This may cripple Microsoft FrontPage Server Extensions functionality for the site.

If you experience problems with Microsoft FrontPage Server Extensions, please contact Ensim Support.

## Services down after upgrade

If you find that any of the services are down, after upgrading to WEBppliance 3.1.3 on a server with a large number of domains, then restart these from the Appliance Administrator interface.

To start any service, click **Services** in the left hand navigation bar, locate the service in the Services page, and click the **Restart** icon in the Actions column.

## Error Logs

WEBppliance failures and warnings are reported in the following three files located in the directory `/var/log/appliance`.

- **ensim\_appliance.log**: Contains problems reported while bringing the domain down and up during the maintenance mode (WEBppliance goes into this mode during an upgrade), and problems encountered when trying to edit the domain from the Command Line Interface and the Graphical User Interface.
- **setup.log**: Contains detailed progress reports generated during upgrade and installation. Also contains warnings.
- **setup.err**: Contains reports of serious errors and warnings encountered during upgrade and installation.

## RPM dependency errors

The upgrade process may bring up a number of RPM dependency errors due to conflicting RPMs. The following table contains some of the common errors that may be encountered during the upgrade, along with examples, the reason for the error, and the solution.

**Table 5. RPM dependency errors**

Error	Example	Cause	Solution
Conflict error	MySQL conflicts with mysql-3.23.41-1	The upgrade script (winstall.sh) is trying to install MySQL, which conflicts with the existing MySQL.	Add mysql to the file /tmp/extrarpms/exclude.list.
<shared_library>.so.<version> is needed by <RPM>	libreadline.so.4.1 is needed by bc-1.06-2	The upgrade script is trying to upgrade the readline RPM, which would have caused the libreadline.so.4.1 to be upgraded to a newer version. This means that the bc RPM, which depends on the older shared library must also be upgraded.	Obtain the latest version of the bc RPM and place it in the directory /tmp/extrarpms.
<RPM A> = <version X> is needed by <RPM B> <version Y>	openssh = 3.1p1-6 is needed by openssh-askpass-3.1p16	You have a version of an RPM that is newer than the one, the upgrade script is trying to install.	Examine the version of the required RPM that is already installed on the system. The required RPM is the one that is on the left side of the error (RPM A, in this case, openssh). If the version installed on the system is greater than the version of the needed RPM, then place the latest version of the dependent RPM (the right side RPM in the error, RPM B), in the directory /tmp/extrarpms. In this case, the dependent RPM is openssh-askpass-3.1p16. Hence, for example, if the installed version of the openssh RPM is openssh-3.44p1-1, then you must place the openssh-askpass-3.4p1-1.i386.rpm in the directory /tmp/extrarpms, before the upgrade.



**Important:** The upgrade script (winstall.sh) places all errors encountered, into the file **installer.err** in the current directory. See this file for more details about the error messages encountered.

---