Ensim Pro and Ensim Basic 10.2.0 for Linux Upgrade Guide

18 January 2007

This guide provides instructions for upgrading to Ensim[®] Pro and Ensim Basic 10.2.0 for Linux[®] from Ensim Pro and Ensim Basic version 10.0.0 or 10.1.0. For simplicity, Ensim Pro and Ensim Basic 10.2.0 for Linux are referred to as "Ensim Control Panel" throughout the document.

Ensim Control Panel 10.2.0 supports the following operating systems: FC 6 (Fedora[™] Core 6), FC 4, CentOS 4.4 (Community Enterprise Operating System 4.4), and RHEL 4 (Red Hat[®] Enterprise Linux ES Release 4).

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Before you upgrade

The following section describes the minimum requirements and provides a checklist to help you prepare for the upgrade.

Minimum requirements

To upgrade to Ensim Control Panel 10.2.0, your system needs to meet the following requirements.

Requirements	Description
File system	EXT3 Important: Quotas may not function as intended if you use other file systems.
Disk space	At least 40 GB

 Table 1.
 Requirements for upgrading Ensim Control Panel

Requirements	Description		
Disk space partitioning	/ 5 GB or more		
(assuming minimum disk	/usr 5 GB or more		
space of 40 GB)	/swap Twice the size of RAM		
The size of the partitions can vary in proportion to the size	/var 4 GB or more		
of the disk space.	/home 20 GB or more (depending on the number of sites you want to host)		
	Important: Do not create /home/virtual on a separate partition. The Site Administrator dashboard reports incorrect disk usage if the directory is created on a separate partition.		
Connectivity	Network connectivity with Internet access		
FTP access	Required if you want the installer to obtain the installation files from Ensim's FTP server or your local FTP server.		
Software	One Ensim Control Panel 10.2.0 CD-ROM		
	Required if you want the installer to obtain the installation files from the CD-ROM)		
License	Ensim Control Panel 10.0.0 or 10.1.0 license		
	Note: Ensim Control Panel 10.2.0 does not require you to purchase a new license. When you upgrade, Ensim Control Panel uses the license installed on version 10.0.0 or 10.1.0.		
Other requirements	"root" user access		

Table 1. Requirements for upgrading Ensim Control Panel

Upgrade checklist

Use the following checklist to verify that you have adequately prepared your system for a successful upgrade.

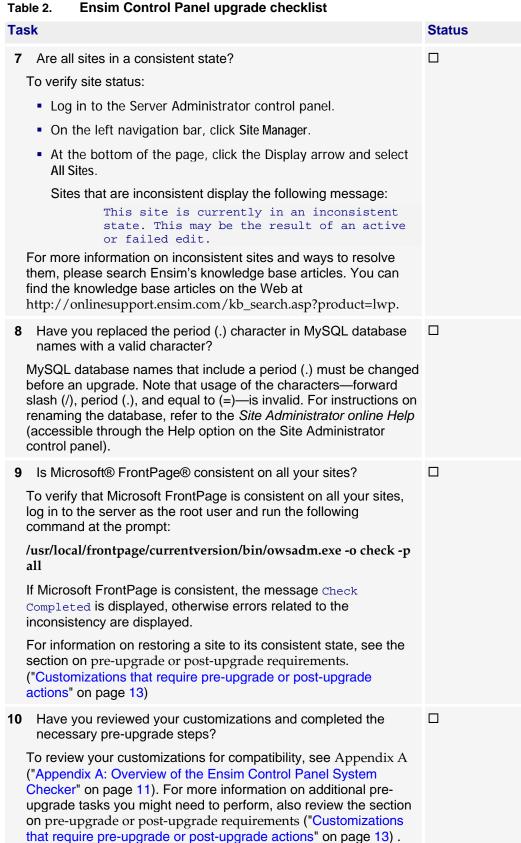
Table 2. Ensim Control Panel upgrade checklist

Task		Status
1	Have you backed up the hard disk?	
	Note: Before upgrading, back up the entire hard disk to prevent loss of data if the upgrade fails.	

Tab	e 2. Ensim Control Panel upgrade checklist	
Tas	k	Status
2	If you have upgraded your operating system (OS), have you verified the version compatibility of the following Red Hat Package Manager (RPMs) with the upgraded OS ?	
	 python-kid 	
	 python-elementtree 	
	 python-urlgrabber 	
	 python-sqlite 	
	• ZSI	
2	f you have upgraded your operating system, for example from FC to FC 4, the above-mentioned RPMs must be updated for compatibility with FC 4.	
3	Have you installed the RPM up2date on the server (if using Red Hat Network (RHN) for obtaining RPM updates)?	
F	You must install the RPM up2date on the server if you want to use RHN for obtaining RPM updates. After installing the RPM, run the up2date utility to register the server with RHN.	
4	If you are upgrading from FC 2 to FC 4, have you uninstalled the RPM spamassassin-tools (if installed on the server)?	
F	f you are upgrading from FC 2 to FC 4, you must uninstall the RPM spamassassin-tools from the server, otherwise the upgrade vill fail. To uninstall the RPM, run the following command:	
1	pm -e spamassassin-tools	
5	Have you set up a yum repository (if not using RHN)?	
t i i s	You must set up a yum repository on your local FTP server or on the server on which you are installing Ensim Control Panel. The installer obtains the operating system RPMs and the required RPM updates from the repository during the upgrade. For instructions on setting up a yum repository on your local FTP server, refer to the document Setting up a local FTP server to install Ensim Pro and Ensim Basic for Linux at http://www.ensim.com/support/pro/linux/index.html.	
6	Have you uninstalled the following RPMs (if installed on your server)—vsftpd, postfix, and apt?	
l 1 U r	Jninstall vsftpd and postfix. If you use the apt tool for updating inux packages, uninstall the apt RPMs— apt, atrpms, atrpms- package-config, libapt-pkg—before you upgrade, otherwise the upgrade might fail. The installer uses the yum tool to provide the equisite package management environment. The presence of apt RPMs can cause RPM conflicts during the upgrade.	
	f you want to use apt to obtain updates, you must install the tool after upgrading Ensim Control Panel.	

 Table 2.
 Ensim Control Panel upgrade checklist

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Tab	e 2. Ensim Control Panel upgrade checklist	
Tas	k	Status
11	Does the installer have access to one of the following repositories.	
	 Local FTP server: If you have configured the installer to obtain the Ensim Control Panel files from a local FTP server, make sure that the installer has access to the specified FTP server. You need to specify the server name or the IP address. The local FTP server must mirror the directory structure on Ensim's FTP server. For instructions, refer to the document <i>Setting up a local FTP server to install Ensim Pro</i> <i>and Ensim Basic for Linux</i> at http://www.ensim.com/support/pro/linux/index.html. 	
	• Ensim Control Panel CD-ROM: If you have configured the installer to obtain the Ensim Control Panel files from the Ensim Control Panel CD-ROM, ensure that the installer has access to the CD-ROM for obtaining the Ensim Control Panel files.	

Table 2. Ensim Control Panel upgrade checklist

Upgrading to Ensim Control Panel 10.2.0

The following section provides instructions for upgrading to Ensim Control Panel 10.2.0 from Ensim Control Panel 10.0.0 or 10.1.0.

Supported operating systems: FC 6 (Fedora[™] Core 6), FC 4, CentOS 4.4 (Community Enterprise Operating System 4.4), and RHEL 4 (Red Hat[®] Enterprise Linux ES Release 4).

Estimated upgrade time

The time required to upgrade may vary depending on your server hardware (CPU and memory resources available), the speed of your network connection, and the number of sites hosted on Ensim Control Panel server. The time required to upgrade an Ensim Control Panel server is approximately **60** minutes and the time required to upgrade the sites hosted on Ensim Control Panel is approximately **3** minutes per site. So, assuming there are 10 sites hosted on the Ensim Control Panel server, it will take approximately **90** minutes to complete the upgrade (60 minutes for the server and 30 minutes for 10 sites).

Note: Sites hosted on Ensim Control Panel will be accessible during the upgrade and services such as Web, FTP, and Email will continue to function, except when the site is being upgraded. However, the control panels will be inaccessible during the upgrade. This could typically range from a few minutes to a few hours depending on the number of sites hosted on the server.

Upgrade instructions

This section provides instructions for upgrading to Ensim Control Panel 10.2.0. Ensure that you review the system requirements and the upgrade checklist discussed in the previous section ("Before you upgrade" on page 1).



▼ To upgrade to the latest version of Ensim Control Panel:

- 1 Log in to the server on which you want to upgrade Ensim Control Panel.
- **2** Verify that you have upgraded to version 10.0.0 or 10.1.0, as described in the *Ensim Pro and Ensim Basic for Linux Upgrade Guide* for the 10.0.0 or 10.1.0 release.
- **3** Obtain the installer script **ensim-installer.py** from the Ensim Control Panel CD-ROM or from the FTP server.

Important: The Ensim Pro installer varies for different operating systems. Make sure that you obtain the installer that corresponds to your operating system. Note that the installer for RHEL and CentOS operating systems is the same.

Option 1: Ensim Control Panel CD-ROM

To use this option, you need to purchase the Ensim Control Panel CD-ROM from the storefront https://buy.ensim.com.

To access the installer script, mount the CD-ROM.

- a Insert the Ensim Control Panel CD-ROM into the CD-ROM drive of the server.
- **b** To access the contents of the CD-ROM, mount the CD-ROM by typing the following command. Do not mount the CD-ROM if you have enabled **AutoMount** on your server.

mount /mnt/cdrom

c Browse to the installer script **ensim-installer.py** (located at **/mnt/cdrom**).

Option 2: FTP server

To use this option, you need to download the installer script **ensim-installer.py** from the Ensim support Web site http://www.ensim.com/support/downloads.html.

4 Run the installer script by typing the following command at the prompt. The following table describes key command options. Use the **--help** option with the script to learn more about the various command options you can use with the script.

python ensim-installer.py <installation_files_source> <repository>

Table 3. Command	otions		
Option	Description		
<repository></repository>	Depending on the source of the repository, replace the variable with the appropriate option as indicated.		
	 updater <tool_name>. Indicates that the installer obtains the operating system RPMs and updates using yum or the up2date utility. Replace <tool_name> with one of the following values:</tool_name></tool_name> 		
	 yum (updater=yum). The installer obtains the operating system RPMs and updates using the yum utility. 		
	 up2date (updater=up2date). The installer obtains the operating system RPMs and updates using the up2date utility from RHN. 		
	In using up2date, be aware that:		
	 To obtain the RPMs from RHN, you must be a subscribed member of RHN and the server on which you are upgrading Ensim Control Panel must be registered with the network. For details, refer to https://rhn.redhat.com/help/faq. 		
	 When you obtain automatic updates from RHN, you must exclude certain RPMs that are incompatible with Ensim Control Panel. The list of RPMs that cannot be upgraded are published in the knowledge base article at http://onlinesupport.ensim.com/TWKB/ViewCase.asp?K nowledgeID=2215. 		
	 -o <os_repository> and -u <updates_repository>. Indicates that the installer obtains the operating system RPMs and updates from a local FTP server or a local system.</updates_repository></os_repository> 		
	<os_repository> is the complete path containing the operating system RPMs.</os_repository>		
	<updates_repository> is the complete path containing the RPM updates.</updates_repository>		
	If the repository is on an FTP server, specify the path as follows: ftp:// <i><path_to_ftp></path_to_ftp></i>		
	If the repository is on your local system, specify the path as follows: file:/// <i><path_to_repository></path_to_repository></i>		

Table 3. Command options

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Option	Description	
<installation_files_source></installation_files_source>	Indicates the repository (Ensim's FTP server, local FTP server, or the CD-ROM) from where the Ensim Control Panel installation files are obtained. Replace the variable with one of the following options as indicated.	
	 ftp-server=<ftp_url>. Indicates that the installer obtains the installation files from an FTP repository (Ensim's FTP server or your local FTP server).</ftp_url> 	
	•cdrom Indicates that the installer obtains the installation files from the Ensim Control Panel CD-ROM. If you choose the CD-ROM option, you will be prompted to insert the CD-ROM.	
Note: Running the installer with the -n and -p options does not change the previously suser name and password information of your account. If you want to change you credentials, log into the Server Administrator control panel after the upgrade are use the Change Administrator option.		

Examples

In the following example, the command upgrades Ensim Control Panel on RHEL to the latest version by obtaining the necessary Ensim Control Panel files from the CD-ROM and the operating system RPMs and updates from RHN.

python ensim-installer.py --cdrom --updater=up2date

In the following example, the command upgrades Ensim Control Panel on RHEL by obtaining the necessary Ensim Control Panel files from Ensim's FTP server and the operating system RPMs and updates from a local FTP server.

python ensim-installer.py --ftp-server=ftp.ensim.com -o ftp://ftp.example.com/path/os -u ftp://ftp.example.com/path/updates

The installer performs the following tasks during the upgrade:

- Performs a system check to ensure that the system provides a compatible environment for the upgrade. At the end of the check, the installer displays the number of errors or warnings encountered. The results of the check (list of checks, status of each check, and details about errors or warnings) are logged in the file /var/log/ensim/installer.log and can be viewed after the completion of the upgrade process. For details about the System Checker and its results, see Appendix A ("Appendix A: Overview of the Ensim Control Panel System Checker" on page 11).
- Backs up the appldb database.
- Starts upgrading Ensim Control Panel.
- Restores the appldb database.
- Configures the Ensim Control Panel server.
- Restarts the Ensim Control Panel server.

You may refer to the log file /var/log/ensim/installer.<version>.<release>-<upgrade-attempt>.log for details on the upgrade process. If you encounter problems during the upgrade, resolve the issues using the troubleshooting information ("Troubleshooting upgrade or installer issues" on page 9).

Important: If you are upgrading Ensim Control Panel using Telnet or SSH, do not disconnect the session during the upgrade. If the connection is lost for any reason, reconnect to your server and locate the message Ensim Control Panel is upgraded to 10.2.0 in the file /var/log/appliance/history. The message indicates that the upgrade has successfully completed. If you are unable to locate the message, run the command, ps -ax.
If there are RPM processes active, the command will list the RPMs (running RPM processes indicate that the upgrade is in progress). Do not interrupt the upgrade. When the upgrade is complete, restart the server manually using the command:

/etc/rc.d/init.d/epld restart

5 If you want to upgrade your operating system to another supported version, upgrade the operating system as described in the documentation of the operating system, obtain the installer that corresponds to the upgraded operating system, and run the installer again.

Important: You must re-install Ensim Control Panel by running the installer again after you upgrade the operating system.
 For CentOS users: Do not re-install Ensim Control Panel 10.2.0 if you have already installed it before upgrading the operating system.

Upgrade complete

This completes the installation instructions.

Troubleshooting upgrade or installer issues

If you encounter problems that you cannot troubleshoot or resolve using the information in the following table, contact Ensim for online support at https://onlinesupport.ensim.com. You may also refer to the log file /var/log/ensim/installer.</version>.<release>-<upgrade-attempt>.log to review the list of successful and unsuccessful events recorded during the upgrade.

Symptom	Description	Solution
When you run the command, "hostname" the value "myhost" is returned by the command instead of "myhost.mydomain.com".	The host name of the server is incorrect.	Check the file /etc/sysconfig/network. The host name must be a fully qualified domain name. See the following example. Incorrect: myhost Correct: myhost.mydomain.com

Table 4. Thoubleshooting upgrade of installer issues		
Symptom	Description	Solution
During upgrade, the following message is displayed: check_hostname <failed></failed>	The host file is incorrect.	The file /etc/hosts should contain the host name and IP address of your server (see the following example). If it does not, use an editor to modify the file.
		Example
		/etc/hosts begin file
		127.0.0.1 localhost.localdomain localhost
		1.2.3.4 myhost.mydomain.com myhost
		/etc/hosts end file
		where 1.2.3.4 is the IP address of myhost.mydomain.com
Unable to connect to Ensim's FTP server.	Failed to download the metadata from ftp.ensim.com.	Ensure that your server is connected to the Internet.
	Error initializing setup.	
Cannot download or install updates.	Error downloading/installing updates.	The error log contains a list of all the updates that could not be downloaded. Download these updates and install them on the server before re-starting the server to upgrade Ensim Control Panel.
Cannot download Ensim Control Panel.	Error downloading Ensim Control Panel.	Ensure that your server is connected to the Internet.

Table 4. Troubleshooting upgrade or installer issues

Post-upgrade tasks

This section explains the tasks that you need to perform after you upgrade to the latest version of Ensim Control Panel.

Upgrading the SquirrelMail file config.php

After the upgrade, some sites might be unable to access SquirrelMail. To resolve this, you need to upgrade the SquirrelMail file **config.php**.

▼ To upgrade the SquirrelMail file config.php:

1 Log in to the Ensim Control Panel server as the **root** user.

2 Back up the original configuration file

/home/virtual/<domain>/var/www/squirrelmail/config/config.php using the following command:

cp /home/virtual/<domain>/var/www/squirrelmail/config/config.php <directory>/config.php.bak where <directory> is the directory to which you want to copy the file.

- **3** Copy the file /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).
- 4 After copying the file, change the file owner and group to match that of the original file.
- **5** If the original **config.php** file has been modified by Site Administrators, then they should merge the old and the new **config.php** files.

Regenerating the Sendmail configuration file after an upgrade

To retain any customizations made to the file, Ensim Control Panel does not regenerate the Sendmail configuration file after an upgrade. To take advantage of new service features or security fixes, you might need to regenerate the file manually after the upgrade.

▼ To regenerate the file after an upgrade:

- 1 Log in to the Ensim Control Panel server as the **root** user.
- **2** Back up your existing Sendmail configuration file using the following command.

cp /**etc/mail/sendmail.cf** *directory>***/sendmail.cf.bak** where *directory>* is the directory in which you want to copy the file.

3 Regenerate the Sendmail configuration file by typing the following command at the prompt.

/usr/bin/m4 /usr/lib/opcenter/sendmail/install/sendmail.mc > /etc/mail/sendmail.cf

4 Restart the Sendmail service using the following command.

/etc/rc.d/init.d/sendmail restart

Appendix A: Overview of the Ensim Control Panel System Checker

The **Ensim Control Panel System Checker** is a tool that evaluates the compatibility of customizations (on an existing Ensim Control Panel server) with the latest version of Ensim Control Panel. It reports potential conflicts and ways to resolve them.

The installer automatically runs the System Checker before upgrading an existing version of Ensim Control Panel. At the end of the check, it displays the number of errors or warnings encountered. The results of the system check (list of checks, status of each check, and details about errors or warnings) are logged in the file /var/log/ensim/installer.

Interpreting the results of the check

As the System Checker performs each check, it displays the name, brief description, and outcome of the check.



The outcome can be any of the following:

- OK. Displayed when the check is successful
- WARNING. Displayed when the check encounters an exception that **might** interfere with the upgrade process
- **ERROR.** Displayed when the check encounters an exception that **will** interfere with the upgrade process and cause it to fail

When the outcome of the check is a warning or an error, details about the exception are provided.

The System Checker report provides the following information:

- A detailed list of exceptions observed on hosted sites
- A detailed list of exceptions observed on the server
- Recommended actions to be performed before the upgrade
- Recommended actions to be performed after the upgrade

Note: The recommended actions provide general solutions for problems. If the recommendations are appropriate for your problems, perform the pre-upgrade steps and run the installer again. For instructions, see the upgrade instructions (on page 5).

At the end of the check, a summary of the results is displayed, in the following format:

```
SUMMARY for domain(s) error(s), m> warning(s), k> domain(s) with issues
```

Where:

- <hostname> is the host name of your Ensim Control Panel server
- <n> indicates the number of errors
- *<m>* indicates the number of warnings
- <k> indicates the number of domains for which exceptions have been observed

Appendix B: Reviewing customizations

The following sections list additional customizations that need to be reviewed before or after the upgrade.

Important: If you have customized Ensim Control Panel, we recommend that you contact Ensim Support to verify the impact of these customizations on the upgrade process. Ensim provides professional services that help you with the upgrade process.

Customizations that do not require pre-upgrade or post-upgrade actions

The following customizations do not require any pre-upgrade or post-upgrade actions.

- Files added to /usr/lib/opcenter/fastcgi/extras
- Customization files added to /usr/lib/ensim_python/site-packages/vh3/custom/
- Files modified in /etc/virtualhosting/ipranges



- Files modified in /etc/appliance/customization
- Files modified in /etc/virtualhosting/templates that do not belong to SquirrelMail

Customizations that require pre-upgrade or post-upgrade actions

The following customizations require either pre-upgrade or post-upgrade actions.

Bind-mounting directories under a site's file system

Note: Ensim Control Panel disables sites before upgrading them resulting in loss of bindmounted directories. If the bind-mounted directory is essential for Ensim Control Panel to proceed with the upgrade, the upgrade fails. This has been observed with the bind-mounted directory **/usr/lib/perl**.

Pre-upgrade action required?

Yes.

Unmount the bind-mounted directory using the following command:

umount <dir_name> where <dir_name> is the absolute path of the bind-mounted directory.

Post-upgrade action required?

Yes. Your bind-mounted directories will be lost. You can bind-mount the directories again using the following command.

mount -b <dir_to_mnt> <bindmount_dir>

where:

<dir_to_mnt> is the absolute path of the directory you want to mount.>bindmount_dir> is the absolute path of the location where you want to mount the directory.

Files modified in /usr/lib/opcenter/bind/named_conf_zone.tmpl

Pre-upgrade action required?

Yes. Back up the file **named_conf_zone.tmpl**.

Post-upgrade action required?

Yes. Your modifications may be lost after the upgrade. To resolve this issue, re-apply your changes to the file **/usr/lib/opcenter/bind/named_conf_zone.tmpl**.

PHP binaries installed over files owned by the PHP RPMs

Pre-upgrade action required?

Yes. Your custom PHP binaries may be replaced with binaries of the PHP RPM shipped with Ensim Control Panel during the upgrade. To prevent your custom binaries from being replaced during the upgrade, run the script **ensim-installer.py** with the option -- **exclude=**<*pkg1,pkg2,...>*. This step prevents the specified packages from getting replaced during the upgrade process.

For more information on usage of the option, use the **--help** option with the script. For example, to exclude the PHP packages **php**, **php-devel**, run the script as follows: **python ensim-installer.py --exclude=php**,**php-devel**

• Post-upgrade action required?

No.

Modifications made to the non-config files owned by the RPM database replaced during the upgrade

Pre upgrade action required?

Yes. Back up the binaries.

Post-upgrade action required?

Yes. Custom-compiled files owned by an RPM (which is part of Ensim Control Panel) may get replaced during the upgrade.

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 an RPM, the file is replaced during the upgrade. To ensure compatibility, recompile your binaries, or obtain the appropriate RPMs/source-RPMs that are compatible with the operating system in use.

Modifications made to the file /var/www/html/index.shtml

Pre-upgrade action required?

Yes. Back up the file /var/www/html/index.shtml.

Post-upgrade action required?

Yes. Modifications made to the Ensim Control Panel root level file /var/www/html/index.shtml may be lost after the upgrade. To resolve this issue, re-apply your changes to the file /var/www/html/index.shtml.

Modifications made to the file /etc/php.ini

Pre-upgrade action required?

Yes. Back up the file /etc/php.ini.

Post-upgrade action required?

Yes. Modifications made to the **/etc/php.ini** file may be lost after the upgrade. To resolve this issue, re-apply your changes to the file or restore them from your backup.

Modifications made to the files /etc/httpd/conf/virtual/site<n>

Pre-upgrade action required?

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

Post-upgrade action required?

Yes. Modifications made to any of the /etc/httpd/conf/virtual/site<*n*> files may be lost after the upgrade (your changes will be lost even when performing an enable or disable operation). To resolve this issue, you must re-apply the modifications to the files manually.

Modifications made to the files /etc/proftpd/site<n> or

/etc/proftpd/site<n>.anonftp

Pre upgrade action required?

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

Post-upgrade action required?

Yes. Modifications made to the files /etc/proftpd/site<n> and /etc/proftpd/site<n>.anonftp are lost after the upgrade (your changes will be lost even when performing an enable or disable operation). To resolve this issue, re-apply your changes to the file or restore them from your backup.

Modifications made to the file /etc/logrotate.conf

Pre-upgrade action required?

Yes. Back up the file /etc/logrotate.conf.

Post-upgrade action required?

Yes. Modifications to the Ensim Control Panel root level file **/etc/logrotate.conf** may be lost after the upgrade. To resolve this issue, re-apply your changes to the file or restore them from your backup.

Modifications made to the default Service Plans

Pre-upgrade action required?

Yes. Back up the settings of your default Service Plan.

Post-upgrade action required?

Yes. The Ensim Control Panel upgrade overwrites the default Service Plan. To resolve this issue, you must restore the Service Plan backup, which you backed up before the upgrade.

Sites that use Microsoft FrontPage Server Extensions in an inconsistent state

Pre-upgrade action required?

No.

Post-upgrade action required?

Yes. When sites that use Microsoft FrontPage Server Extensions go into an inconsistent state, the following error message is displayed.

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

▼ To resolve this issue:

- a Open the file /home/virtual/<domain>/var/www/html/_vti_pvt/service.cnf.
- **b** Remove the following lines and save your changes.

vti_httpdversion:SX | FrontPage DBW

vti_webservertype:SR|diskweb

Support and feedback

For Ensim online support or feedback, use the following links:

- http://support.ensim.com to create an Ensim Support account and access other documentation
- https://onlinesupport.ensim.com to log in to Ensim Support using an existing account
- http://onlinesupport.ensim.com/kb_search.asp?product=lwp to search the knowledge base

• http://www.ensim.com/about/feedback.asp to provide feedback to Ensim

Note: All customers receive passwords that allow access to the Ensim Support site. If you do not have a password, contact your organization's liaison to Ensim.

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