
Linux VPS 3.0

Release Notes

First Edition
December 2006

Introduction

Important: This document is based on the most recent, available information regarding the release of Linux VPS 3.0. Future revisions of this document are to include updates not only to the status of features, but also to provide an overview of updates to customer documentation.

The release of Linux VPS enables you to reach an additional set of customers located in North America. This is in addition to the Asia Pacific region where the previous version of Linux VPS was introduced. This release of the platform provides a newer set of features designed and implemented to suit the value-added reseller (VAR), small hosting service provider (HSP), application service provider (ASP), independent software vendor (ISV), and to any small- and medium-sized business (SMB) in the region. This document provides administrators who possess minimal to moderate technical skills with a guide to the latest documentation and other sources of information available at the time of the release. This document also includes any cautions and warnings specific to this release.

For more information, refer to the following documents which are suitable for print and are delivered, without charge, electronically in Portable Document Format (PDF) and/or Rich Text Format (RTF):

- *Linux VPS 3.0 Technical Overview*
- *Linux VPS 3.0 User's Guide*
- *Linux VPS 3.0 Getting Started Guide*

In addition, you can also refer to the following electronically delivered Web content:

- Frequently-asked questions (FAQ)
- Server Software Notification List

Status of Features

Linux VPS 3.0 introduces new features, enhances previously introduced features, and maintains previously introduced features.

What's New?

The following table describes the status of new features included with this release:

Feature	Status
Accrisoft	This release introduces support for Accrisoft e-commerce software (http://www.accrisoft.com/). You can use the software to build and manage profitable Web sites. Accrisoft is a fee-based, optional application. This release also provides an installation script to assure the software operates fully and correctly on your account. An uninstall script assures that you can remove the software completely and effectively if you need to do so.
Ant	This release introduces support for Ant, a Java-based build tool. The open-source software is maintained and distributed by the Apache Ant Project (http://ant.apache.org/).

What's New? (*Continued*)

Feature	Status
ClamAV	This release introduces support for ClamAV anti-virus software. The software is maintained by the ClamAV project (http://www.clamav.net/) and is distributed under the terms of the Gnu Public License (GPL). The software is free-of-charge. Also with this release, install (<code>vinstall</code>) and uninstall (<code>vuninstall</code>) scripts enable you to more easily configure the software.
Firewall	This release introduces a pre-installed, pre-configured firewall. This feature enables you to take advantage of an iptables utility without needing to know the technical details of the rules language.
GnuPG	This release introduces support for Gnu Privacy Guard (<i>GnuPG</i>) implementation of the Open Pretty Good Privacy (<i>OpenPGP</i>) standard described in Request For Comments (RFC) 2440. The encryption software is distributed by the GNU project (http://www.gnupg.org/) under the terms of the GNU General Public License (GPL). The software is pre-installed on your account by default.
FormMail	This release introduces support for nms FormMail (http://nms-cgi.sourceforge.net/). You can use custom installation scripts to install, configure, and/or uninstall the software. The software is maintained by the nms Project. The project is hosted by SourceForge and the software is distributed under the terms of the Open Source Technology Group (OSTG).
phpMyAdmin	This release introduces support for the phpMyAdmin database administration tool (http://www.phpmyadmin.net/home_page/index.php). The tool is maintained by the phpMyAdmin Development Team and is distributed under the terms of the Gnu Public License (GPL). This release also provides custom installation scripts you can use to install, configure, and/or uninstall the tool.
ShopSite	This release introduces support for the latest, stable version of ShopSite (http://shopsite.com/) shopping cart software. You can use the software to build and manage profitable Web sites which include a shopping cart function. The software enables your account to process payments in real time. This release also provides an installation script to assure the software operates fully and correctly on your account. An uninstall script assures that you can remove the software completely and effectively if you need to do so.

What's New? (*Continued*)

Feature	Status
SquirrelMail	This release introduces support for SquirrelMail. The Web mail package is maintained and distributed by the SquirrelMail Project Team (http://www.squirrelmail.org/about.php). You can use custom installation scripts to install, configure, and/or uninstall the package...
Swish-e	This release introduces support for the latest, stable version of the Simple Web Indexing System for Humans – Enhanced (<i>Swish-e</i>) system. The system, distributed by the Swish-e Project (http://swish-e.org) under the terms of the GNU General Public License (GPL), enables you to index collections of Web pages and other files. You can use custom installation scripts to install, configure, and/or uninstall the software.
The Webalizer	This introduces support for the latest, stable version of the Webalizer (http://www.mrunix.net/webalizer/) to provide a Web server log file analysis program. The program is maintained by the Webalizer team and is distributed under the terms of the Gnu Public License (GPL). Your account includes a set of custom installation scripts and support for multiple languages.
Zend Optimizer	This release introduces support for Zend Optimizer (http://www.zend.com/). The software is maintained and distributed by Zend, Technologies. Support for the software includes custom installation scripts.

Enhanced Features

The following table describes the status of enhancements to previously introduced features included with this release:

Feature	Status
Apache Web Server	With this release, Apache Web server 2.x continues as a pre-installed core service included with your account. Web server and Web Server Modules are provided by the Apache Hypertext Transfer Protocol (HTTP) Server (http://httpd.apache.org/). With this release support for HTTP is enhanced to include Secure HTTP (HTTPS). Further, HTTP/HTTPS supports your optional usage of multiple IP addresses per server account. With this release, the <code>mod_php</code> and <code>mod_perl</code> Apache HTTP modules are also pre-installed on your account by default.
Customer Documentation	In addition to this document, the <i>Linux VPS Technical Overview</i> , <i>Linux VPS 3.0 Getting Started Guide</i> , <i>Linux VPS 3.0 User's Guide</i> and Linux VPS frequently-asked questions (FAQ) are available on the Web. Refer to the <i>Linux VPS 3.0 User's Guide</i> for "Notices and Documentation Conventions."

Enhanced Features (*continued*)

Feature	Status
FTP	<p>This release continues to support the following File Transfer Protocol (FTP) features:</p> <ul style="list-style-type: none">• FTP server (ProFTPD)• Anonymous FTP access• Unlimited FTP users <p>FTP server features are offered by continuing to support proFTPD (http://www.proftpd.org/) software. The software is maintained by the ProFTPD Project under the terms of the Gnu Public License (GPL). With this release, support for FTP is enhanced to include Secure FTP (S-FTP). Secure FTP is offered by introducing support for OpenSSH (http://www.openssh.com/) is developed and maintained by the OpenBSD Project. The software is distributed under the terms of the OpenBSD license.</p>
IP Addresses	<p>With this release, your account continues to support a single, dedicated IP address (IPv4) as well as a host name. In addition, however, this release supports a fee-based, optional Multiple IP address service (also IPv4). There is a maximum number of optional IP addresses you can purchase based on the type of Linux VPS account:</p> <ul style="list-style-type: none">• Linux VPS Basic: Add four (4) additional IP addresses for a total of five (5).• Linux VPS Pro: Add nine (9) additional IP addresses for a total of ten (10).• Linux VPS Pro Plus: Add nineteen (19) additional IP addresses for a total twenty (20).

Enhanced Features (*continued*)

Feature	Status
Java	<p>For Linux VPS Pro Plus only, this release continues to provide default, pre-installed support for Java Platform, Standard Edition (also known as <i>Java 2 Platform</i>). In particular, this release enhances support for the following technologies and packages:</p> <ul style="list-style-type: none"> • J2SE Software Development Kit (SDK) • Java Servlet Technology • Java Server Pages (JSP) Technology • Tomcat Java Servlets <p>J2SE SDK is maintained by the Sun Developer Network (http://java.sun.com/javase/technologies/core/index.jsp) and is distributed under the terms of Sun Microsystems, Inc. Your account utilizes Tomcat (http://tomcat.apache.org/) to provide Java Servlet Technology and Java Server Pages Technologies. Tomcat is maintained by the Apache Software Foundation, developed under the terms of the Java Community Process, and is distributed under the terms of the Apache Software Foundation.</p> <p>This release enhances support for the Java 2 Platform by providing custom installation scripts (<code>vinstall</code>) and uninstallation scripts (<code>vuninstall</code>).</p> <p>Note: Many Java applications consume significant CPU and memory resources and may not be appropriate for use on a VPS. For more, see “Linux VPS and Java Applications” on page 11.</p>
Mailing List Package	<p>This release enhances the following mailing list package features:</p> <ul style="list-style-type: none"> • Majordomo (http://www.greatcircle.com/majordomo/). • FML (http://www.fml.org/). • Mailman (http://www.gnu.org/software/mailman/index.html). <p>These features now include custom installation scripts. The previous release supports the features but relies upon RPM for installation and configuration tasks.</p>
Memory	<p>Memory limits are enhanced for this release, as follows:</p> <ul style="list-style-type: none"> • Linux VPS Basic – 128 MB (512 MB burstable) • Linux VPS Pro – 256 MB (1GB burstable) • Linux VPS Pro Plus – 512 MB (1.5 burstable)
MySQL	<p>MySQL (http://www.mysql.com/) continues to provide an open source database. This release also provides a set of custom installation scripts for the database.</p>
Namazu	<p>With this release, Namazu (http://www.namazu.org/) continues to provide a full-text search engine.</p>
Open Webmail	<p>With this release, support for the Open Webmail system (http://openwebmail.org/) includes a custom installation utility.</p>

Enhanced Features (*continued*)

Feature	Status
PHP	With this release, PHP: Hypertext Preprocessor or <i>PHP</i> (http://www.php.net/) continues to provide a general-purpose scripting language. This release provides a set of custom installation scripts you can use to install, configure, and uninstall the language.
Podcasting	Support for storage, distribution, and exchange of multimedia files (<i>podcasting</i>) continues with this release. In addition, podcasting is now included in the configuration options presented through the CPX: Control Panel.
Procmal	With this release you can use a custom installation script (<code>vinstall</code>) to install Procmal (http://www.procmal.org/). The software provides mail processing and mailing list suites. This release does not include a custom script to automate the removal of the suite from your account.
SpamAssassin	SpamAssassin (http://spamassassin.apache.org/) provides a mail filter which attempts to identify spam. The filter is maintained by the Apache SpamAssassin Project and distributed under the terms of the Apache Software Foundation. With this release, support for the filter is enhanced to include an installation script (<code>vinstall</code>) as well as an uninstall script (<code>vuninstall</code>). SpamAssassin is an important additional feature of your account. It is not pre-installed by default.
SSL	This release continues to provide privacy and encryption by means of support for the Secure Sockets Layer or <i>SSL</i> protocol (http://www.apache-ssl.org/). And with this release, SSL features are enhanced to include default multiple, private SSL certificates and SSL email encryption.

Enhanced Features (*continued*)

Feature	Status
Vinstall Utility	<p>This release enhances support for custom installation scripts. Use the vinstall utility to add the following additional programs and packages:</p> <ul style="list-style-type: none">• Accrisoft• ClamAV• FormMail• Java SDK• Mailman• MySQL• Open Webmail• Postgres• PHP• PHPMyAdmin• ShopSite• SpamAssassin• SquirrelMail• Swish-E• Tomcat Java Servlet• Urchin• Webalizer• WordPress• Zend Optimizer <p>Note: Many Java applications consume significant CPU and memory resources and may not be appropriate for use on a VPS. For more, see “Linux VPS and Java Applications” on page 11.</p>
WordPress	<p>With this release support for the WordPress (http://wordpress.org/) personal publishing platform is enhanced to include a set of custom installation scripts. You can now use the scripts to more effectively install, configure, and/or uninstall the platform.</p>

Maintained Features

The following table describes the status of features which are maintained with this release:

Feature	Status
Auto responder	Your account continues to support automated responder services.
No Bandwidth Charges	Your account continues to provide bandwidth without charge. In addition, your account does not include any form of bandwidth shaping.
CGI	Your account continues to support full Common Gateway Interface (CGI) capability.
Configuration Files	Your account continues to support full access to configuration files for system and application software.
CPX: Control Panel	<p>This release continues to support CPX: Control Panel. The control panel is a server management Web interface maintained by Verio (http://www.verio.com/) and distributed free-of-charge for use on VPS accounts. This release also includes support for an installation and an uninstall script. With this release, the following tasks are excluded from the CPX: Control Panel:</p> <ul style="list-style-type: none"> • Assigning an IP address to a vhost • Installing SSL certificate(s) for vhosts • Assigning an IP address to a vhost • Configuring firewall Settings <p>Refer to CPX: Control Panel release notes, getting started guide, and user's guide for more information.</p>
Dedicated IP Address	Your account continues to support A dedicated IP address (IPv4) and hostname.
Disk Space	<p>Your account continues to provide the following disk space per plan:</p> <p>Linux VPS Basic –10 GB</p> <p>Linux VPS Pro – 20 GB</p> <p>Linux VPS Pro Plus – 40 GB</p>
Domains	Your account continues to support multiple domain hosting.
Dovecot	This release continues support for Dovecot (http://www.dovecot.org/). The package provides a secure Internet Message Access Protocol (IMAP) server.
GCC	This release continues support for the GNU Compiler Collection (GCC). The collection provides program language compilers developed and distributed by the GNU project (http://gcc.gnu.org/).
Independent File System	With this release, your account continues utilize an independent file system to handle its own processes, applications, users, and files.
Mail Service	<p>Your account continues to include email services by means of the following protocols:</p> <ul style="list-style-type: none"> • IMAP – Dovecot secure IMAP server software with no limit for IMAP email accounts. • POP – Without limit for POP email accounts. • SMTP –Sendmail with unlimited aliases.

Maintained Features (*continued*)

Feature	Status
osCommerce	With this release, support for osCommerce (http://www.oscommerce.com/) continues. The software provides online shopping cart functionality. Refer to <i>Linux VPS 3.0 User's Guide</i> for installation instructions.
Perl	Perl (http://www.cpan.org/) continues to provide a cross-platform programming language. The language (Perl) and the Apache modules (<code>mod_perl</code>) are pre-installed on your account by default.
Port Access	Your account continues to provide access to all ports.
PostgreSQL	With this release, PostgreSQL (http://www.postgresql.org/) continues to provide a relational database system. Your account supports custom installation (<code>vininstall</code>) and uninstallation (<code>vuninstall</code>) scripts.
Python	With this release, Python (http://www.python.org/) continues to provide a dynamic programming language comparable to Tcl, Perl, Ruby, Scheme, and Java. This release supports Python as a core service installed by default on your account.
RHEL	Red Hat Enterprise Linux or <i>RHEL</i> (http://www.redhat.com/) provides the operating system for your account. The RHEL operating system, including the version utilized by your account, is maintained and distributed by Red Hat, Inc.
Root Access	Your account continues to provide root access. Your account also enables you to establish security and to limit root access.
RPM	Red Hat Package Manager or <i>RPM</i> (http://www.rpm.org/) provides a command line-driven package management system. The package enables you to install, uninstall, verify, query, and update software features on your account.
Rsync	This release supports Rsync (http://rsync.samba.org/), an open source utility which provides fast incremental file transfer. Your account supports the latest, stable of the utility.
Ruby	Ruby (http://www.freshports.org/lang/ruby18/) provides interpreted scripting language for object-oriented programming. This release supports the latest, stable version at the time of release.
Save Logs	Your account continues to provide saved logs (or <i>savelogs</i>) as a part of the default, pre-configured installation. For more, see "Resume Logging and Access Log Files" on page 11.
Server Logs	Your account continues to provide full access to server log files.
SSH	This release continues to support Secure Shell (SSH) access security as a pre-installed, default core service for your account. The service continues to be implemented by means of OpenSSH (http://www.openssh.com/). The service is maintained by and distributed under the terms of the OpenBSD Project. With this release, OpenSSH also provides Secure FTP (S-FTP) access for your account. Previously, S-FTP relied upon the default RHEL operating system and commands.

Maintained Features (*continued*)

Feature	Status
Telnet	Your account continues to exclude Telnet services from the default, installed applications provided by your account.
Unauthorized Relay Protection	Your account continues to provide unauthorized relay protection.
Users	Your account continues to support management and configuration for multiple users, groups, and their (shell, Web, FTP, email) privileges. Your account continues to enable you to establish quotas for each user.

Cautions and Warnings

Following are cautions and warnings regarding the following Linux VPS 3.0 features:

Linux VPS and Java Applications

Many Java applications consume significant CPU and memory resources and may not be appropriate for use on a VPS. Java applications on a VPS should be restricted for use only on websites with a low expected workload. In addition, some larger Java applications may not be suitable for use on a VPS even with low workloads.

There are a wide range of Java-based applications. Some are designed to handle multiple services and others focus on a smaller range of services. As an example, Zimbra (<http://www.zimbra.com/>) is open-source server and client software used to process email, group calendaring, and contacts. In addition, the software supports Web document management and authoring. The software offers a wide range of services, some of which duplicate applications included with the default configuration of Linux VPS Pro Plus. The software offers these services by drawing on Java and its own, duplicate installation of Tomcat. These factors make the software better suited to a more powerful, dedicated server offering such as MPS.

Alternatively, JSP Wiki (<http://www.jspwiki.org/>) uses standard Java 2 Platform, Enterprise Edition (J2EE) components such as Java, servlets, and JSP. The software enables collaborative authoring for Web sites. The software enables visitors to comment upon, add to, or remove from Web page (or *wiki*) content. The open-source software focuses on providing a singular, unique service. It does this by utilizing the Java components which are part of the default configuration of Linux VPs Pro Plus. And the software does not duplicate services which are also supported by Linux VPS, such as email.

JSP Wiki is an example of a Java-based application which is well-suited to Linux VPS Pro Plus only when put under low to moderate workloads. Results will vary by application, but JSPWiki running on a Linux VPS Pro Plus will potentially handle up to tens of thousands of wiki page views per day. Should hundreds of thousands of wiki page views per day be required, upgrading to a dedicated server such as a Managed Private Server (MPS) is recommended.

Verio strongly recommends sufficient performance testing of your Java application on a Linux VPS before relying on it for critical business needs. Verio also recommends building contingency plans in case your Java application does not perform as expected; alternative solutions may include:

- Extensive optimization of the Java application.
- Moving the Java application to a dedicated server, such as the MPS.
- Implementing an alternative solution to using Java (For example: moving away from Java to an optimized C program.)

For details of Linux VPS plan resource allocations and recommended usage, please refer to the *Linux VPS 3.0 Technical Overview*.

Resume Logging and Access Log Files

After you save system logs by running a `savelog` command for `/var/log` files, you can expect that `savelog` files are created and original system log files are deleted. In order to access original log files and to resume logging, you must restart the `syslog` daemon by issuing a signal hang up (`sig_hup`) command, as follows:

```
# kill -hup syslog
```

In addition, there are variations of the signal hang up command and you can issue a restart command such as `# service syslog restart`. For more information about these commands and other restart and/or signal hang up commands, refer to the inline RHEL command reference (*man pages*).

Assign Provisioned IP Addresses Only

Caution: Do not specify a different IP address than those assigned to your account at the time of provisioning. If you do, your account will not function. This is true of any IP address, even those you might see displayed as an unused IP address for the subnet of your account. Your account will not function with any other IP addresses and you will not be able to see information about any aspect of the data traffic associated with any other IP addresses.

The Red Hat Enterprise Linux (RHEL) operating system supports a standard, UNIX/Linux command which enables you to see the status of network interfaces for your account. Use the command for diagnostic and configuration tasks. For example, if you issue `ifconfig` command without any additional argument, all of the currently active interfaces are displayed. If you issue the command with the additional argument of `-a`, all of the interfaces, including inactive ones are displayed. Beyond the simple display of interfaces, the command includes additional arguments which enable you to specify an IP address for each network interface.

If you do specify another address in error, the remedy is to log into your account as root and use the `ifconfig` command to specify a correct IP address. Since your account does support multiple IP addresses, you can specify any of the IP addresses you own and have provisioned as a part of your account.

For more details about the `ifconfig` command, refer to the RHEL operating system *man pages*.

File System Utilities and Your Online Back up Files

Caution: During the time period the file system utility is backing up your account's files and directories, it is possible for any user with root access to your account to inadvertently alter or delete those files and directories.

System administrators use a file system utility such as `cloneDir` to duplicate directories of files (or *backup files*). In addition to creating backup files, the utility also preserves timestamps and reproduces ownership and permission levels. By performing all of these tasks, the utility builds a reliable mirror of the hierarchy of files and subdirectories.

In general, your account's backup files are classified as read-only. However, during the backup process, the utility might change the mount to read-write. And, during that time, any user with root access to your account can inadvertently alter or delete the online backup files.

The utility replaces the backup files the following day when the utility runs again. However, once altered or deleted, the backup files are no longer accurate until the next time the utility runs. The remedy for this concern is to strictly limit the users you provide root access.

Documentation Updates

Note: Changes are to be recorded here for all revisions occurring after preliminary drafts are posted. However, for the first published edition (or *First Edition*) all documentation updates are to be removed and only errata notices for other Linux VPS 3.0 documents are to be published in this section.

Documents	Updates
FAQ	<ul style="list-style-type: none"> • (December 7, 2006) Corrected the following errors: <ul style="list-style-type: none"> – Hyperlink to “How do I use Linux VPS?” – Initial capitalization for answer to “What are highlights of private server technology?” – Removed errant letter <i>e</i> in answer to “What is the difference between the root and a standard user?”
Getting Started Guide	<ul style="list-style-type: none"> • (December 7, 2006) Corrected errors in the following sections: <ul style="list-style-type: none"> – Configuring Email – Virtual Mappings (Section title changed to “Virtual User Tables”) – Aliases – Configuring Subhosts
Release Notes (this document)	<ul style="list-style-type: none"> • (December 7, 2006) Added “Resume Logging and Access Log Files” on page 11. • (December 12, 2006) Removed references to ImageMagick, virtual links, and Zope. Added references to Open Webmail. • (December 14, 2006) Added “Linux VPS and Java Applications” on page 11. • (December 14, 2006) Added Ant to “What’s New?” on page 1.
User’s Guide	<ul style="list-style-type: none"> • (December 14, 2006) Corrected errors in the following sections: <ul style="list-style-type: none"> – “Connect to Your Private Server the First Time” on page 6. – “Access Your Private Server” on page 7. – “Provide Email for Virtual Sub Hosts” on pages 7-8. – “Manually Configuring Virtual Sub hosts” on pages 8-9. – “Creating and Editing User Accounts” on page 10. – “Configuring Virtual Sub Hosts” on page 11. – “Vaddhost Utility” on page 11. – “Accrisoft Freedom” on page 14. – “ClamAV” on page 16. – “FML” on page 20. – “Multiple IP Addresses” on page 21. – “Changing DNS Settings” on pages 23-24. – “MySQL” on page 25. – “Username/Password and Database” on page 26. – “Procmail” on page 31. – “Custom Digital Certificate” on page 35. • The following sections are removed: <ul style="list-style-type: none"> – “ImageMagick” on page 21. – “Order Additional IP Addresses” on pages 22-23.