
FreeBSD MPS v3

Release Notes

First Edition
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Introduction

The FreeBSD Managed Private Server, version three (*MPS v3*) includes upgrades from MPS v2 for several core services and programs. This document provides general information about the MPS v3, including what's new, differences between MPS v3 and MPS v2, as well as known issues.

Important: Bugs, features, and considerations may be introduced after the publication of this document. MPS v3 customers and users should consult the product and support Web pages for updated information about MPS v3.

Document Contents

In the following three sections, this document describes new features, differences between MPS v3 and MPS v2, and issues related to this new release:

- “What’s New?” on page two.
- “What’s Different?” on page four.
- “What are the Known Issues” on page six.

What's New?

The MPS v3 offers a large amount of disk space and includes many improved features, including upgrades to the operating system and file system, improvements in core services, programs and available installations, and improved Java support. The MPS v3 is available in three levels, or plans: Basic, Pro, and Pro Plus.

Operating System

The introduction of MPS v3 upgrades the operating system controlling the server from FreeBSD 4.7 to FreeBSD 6.0. Advantages of FreeBSD 6.0 include the following:

- An improved system scheduler (based on ULE).
- Better threading support, allowing native threading for programs such as MySQL and freeing many system processes for other needs.
- Improved support for many applications, such as Apache 2 and the FreeBSD Ports Collection.
- Support for current Java implementations.
- Better support for the FreeBSD packages library.
- Better operating system support from the FreeBSD community.

File System

The file system of MPS v3 also moves from Unix File System 1 (UFS1) to Unix File System 2 (UFS2). This move increases speed, performance, and stability of the file system in general. Other advantages to UFS2 include the following:

- Support for variable-sized blocks.
- Extended flag fields.
- Extended attribute support.

Core Services

Noteworthy changes to and information about core services include the following:

- Apache 2.2.3 comes installed as the default Web server. Support for Apache 1.x continues through a `vinstall` utility, a custom tool provided for your server.
- Telnet is disabled by default.

Programs and Available Installations

Most programs currently available for installation on MPS v2 are available for MPS v3. Noteworthy changes and issues with programs and available installations include the following:

- PHP 5.1.5 is the default version of PHP.
- MySQL 5.0.24 is the default version of MySQL installed when you execute `vinstall mysql`.
- Perl 5.8.7 is the default Perl version supported. You may install other versions through the FreeBSD Ports Collection.
- The SoftCart shopping cart software is not available for MPS v3.
- The Urchin 3 Web analytics tool is not available. Urchin version 5 is supported.

Java

The MPS v3 includes support for the current Java Developer's Kit (`jdk`) and Java Runtime Engine (`jre`). These features are available as `vinstalls` (`java_jdk` and `java_jre`) on MPS v3 Pro Plus plans. The `vinstall` gives instructions for downloading the FreeBSD installation files from the FreeBSD Foundation Web site, and then uploading them to the MPS account.

The Tomcat Web application server is also available with the MPS v3. Available through a `vinstall`, the Tomcat server can support several different kinds of Java applications, including servlets and JSP pages. Tomcat requires the installation of the Java Runtime Engine or the Java Developer's Kit and is available on MPS v3 Pro Plus plans.

What's Different?

This section includes a brief list of differences between MPS v3 and MPS v2. It discusses the most used and popular elements of the MPS server, including the Apache Web server, PHP, MySQL, and vinstall library, including updates to the WordPress vinstall.

The MPS v3 is a significant upgrade to the MPS products. Because MPS v3 includes upgrades to the operating system and the file system, almost all programs and services on the server vary technically in some way from other MPS products. Accordingly, interaction with frequently used and common elements of the server may change.

However, the MPS v3 operating system and file system perform almost identically to MPS v2. This means your interaction with most wrappers, scripts, services, and programs on MPS v3 should not change. For example, your usage of command-line wrappers such as `vadduser` or `vaddhost` does not change.

Web Server

The MPS v3 comes with the Apache Web server version 2.2.3 installed by default. This new version performs faster and executes requests in a more optimized fashion than previous versions. The Apache 2 Web server also provides native support for the increasingly popular IPv6 protocol. For more information about changes in version 2.x, visit the following Web page:

http://httpd.apache.org/docs/2.0/en/new_features_2_0.html

For more information specifically about changes in version 2.2.x, visit the following Web page:

http://httpd.apache.org/docs/2.2/en/new_features_2_2.html

PHP 5.x

PHP (PHP: Hypertext Preprocessor) version 5.1.5 is compiled specifically for Apache 2 on MPS v3. PHP 4.4.4, available through a vinstall, is compiled specifically for Apache 1. Attempting to use either version of PHP with a different version of the Apache Web server may cause scripts and programs to function incorrectly.

PHP 5.x adds several new extensions and improved support for popular technologies such as XML, SOAP, MySQL, object oriented programming, and others. For more information about changes in PHP 5.x, visit the following Web page:

<http://www.php.net/ChangeLog-5.php>

MySQL 5.x

The new operating system of the MPS v3 permits the MySQL database server to use native threading, instead of FreeBSD threading as used with previous MPS implementations. MySQL for MPS v3 uses less (sometimes 30 or more) processes than MySQL on other MPS products!

MySQL 5.0.24 is the default version installed when executing `vinstall mysql` or `vinstall mysql5` from the command line. MySQL 4.1.21 is also available by executing `vinstall mysql4.1` from the command line.

MySQL 5.x includes many new controls, elements and features, improving performance and functionality. For more information about changes in MySQL 5.x, visit the following Web page:

<http://dev.mysql.com/doc/refman/5.0/en/mysql-5-0-nutshell.html>

Vinstall Library

The MPS v3 introduces several new vinstalls, such as Tomcat and java_jdk. Old or deprecated programs in the vinstall library are no longer offered. The vinstalls offered on MPS v2 that are not supported on MPS v3 include the following:

- cybozu
- mysql3-oldstyle
- mysql3
- mysql4.0
- perl5.6.1
- perl5.8.4
- perl5.8.6
- postgresql-oldstyle
- procmail (available with procmail-lda)

Installing WordPress

The vinstall for WordPress for MPS v3 installs a current WordPress version (2.0.4). The vinstall also provides additional command-line options when installing WordPress. To obtain a full list of these options, connect to your server through SSH and execute the following from the command prompt:

```
# vinstall wordpress --help
```

An example of these new options is you can specify the installation of a language pack for WordPress during the vinstall. For example, the following installs the Japanese language pack:

```
# vinstall wordpress --lang='ja'
```

What are the Known Issues?

This section includes information about backward compatibility of core services and the interaction of popular applications with the versions of those services available for MPS v3, and corresponding applications available for MPS v2. It also includes considerations when migrating from MPS v2 to MPS v3 and other existing issues.

Backward Compatibility

With the introduction of new versions of Apache, MySQL, and PHP, some elements of these new versions may not be compatible with previous versions available with other MPS products, such as MPS v2. Considerations for these services and programs follow.

Apache

With Apache 2, the module interface has completely changed. Because of this, modules used with Apache 2 differ from their Apache 1 counterparts. Scripts and programs written to interact with modules in Apache 1 may not function the same when interacting with the corresponding module for Apache 2. For example, Apache 2 includes support for `mod_perl2` instead of `mod_perl`, the default for previous MPS implementations. Compatibility modules may be available for a specific Apache 1 module. Consult the documentation for the module in question for further information about backwards compatibility of that module.

Apache 2 also introduces some configuration directives changes. For more information about directives changes, refer to the Web addresses mentioned in “Web Server” on page 4.

MySQL

All Structured Query Language (SQL) syntax used in 4.x should function correctly in MySQL 5.x. However, it is always best to perform a full database export (or *dump*) on the system running under 4.x and then import the information into the 5.x system to ensure data is not corrupted. Other considerations when moving between MySQL versions 4.x and 5.x include the following:

- The format of the standard `mysql` database (which keeps user and other essential information) has changed.
- Support for some old types of tables has been discontinued.
- Multi-byte support changed with 4.1x and may be significantly different.

For more information about changes in MySQL 5.x, refer to the Web address mentioned in “MySQL 5.x” on page four.

PHP

Most scripts and programs created for PHP 4.x should function with PHP 5.x. Verify that scripts and programs function correct when moving from a PHP 4.x environment to PHP 5.x.

The short tags configuration is disabled by default for PHP 5.x. This can be enabled in the `/usr/local/lib/php.ini` file.

Migration Considerations

Automated scripts to move sites or content from a different MPS product to the MPS v3 will be available at a later date. Customers interested in migrating their sites and content must create any such scripts or perform such activities themselves at this time.

Regarding CPX: Control Panel

For the CPX: Control Panel, on the Manage Services section of the System Administration module, the `httpd` service shows a status of stopped when the service is running.