

Updating amavisd-new on Mac OS X Server 10.4.x

1. - Introduction
2. - What is installed as part of OS X Server
3. - Requirements
4. - Getting and installing the latest version of amavisd-new
5. - Additional information
6. - Caveats - READ this chapter!

DISCLAIMER: The author(s) claim(s) no responsibility for any damage that may occur from the use of any information found here or found on links followed from this document. The author(s) will take credit for the good stuff though.

All items and/or companies mentioned on this and other pages are or may be trademarks, registered trademarks, or service marks of the respective companies or individuals.

1. - Introduction

The purpose of this document is to provide instructions on how to update the version of amavisd-new included with Mac OS X 10.4.x Server. DO NOT USE this document to update amavisd-new on 10.5.x Leopard Server. You can download a separate tutorial available for 10.5.x.

This document will guide you through updating to the latest stable version of amavisd-new without breaking Server Admin functionality.

Although the Apple included version of amavisd-new is suitable for most users, there are situations where one might need to update. A common reason is to take advantage of the latest filtering techniques and security fixes.

This document will require you to use the command line. If you do not feel comfortable with using the command line, you should look for a ready made installer package or for somebody to assist you.

This document is written for Mac OS X Server 10.4.x. There is a version for Mac OS X Server \geq 10.5.3 available as well.

DISCLAIMER: Whatever you do based on this document, you do it at your own risk! Just in case you haven't understood: Whatever you do based on this document, you do it at your own risk!

This tutorial has been tested on a standard Mac OS X 10.4.x Server installation. If you have already tinkered with your system, be aware that things might differ. It is impossible for me to foresee all changes that one might have applied to a server.

This tutorial contains step-by-step instructions for the terminal. Although you could just type them line by line, it is recommended you have a basic understanding of the terminal.

2. - What is installed as part of OS X Server

In order to better understand the process it is useful to have a basic knowledge of the basic installation.

As of 10.4.x and the latest security updates, Apple includes amavisd-new 2.2.x with its server operating system. This can be safely updated to the latest stable version of amavisd-new 2.6.x

3. - Requirements

Before you get started, you need to make sure some basic requirements are met:

- You have made a backup of your system.
- You have the latest version of Apple's Developer Tools (Xcode 2.4 or higher for 10.4.x) installed.
Dev Tools are available on your Server DVD and as a free download from Apple's Developer Connection.
- You do have a backup
- You are running Mac OS X Server 10.4.x
- You have not manually updated anything related to amavisd-new so far (if you have, you must know how to adapt these instructions to the changes you made).
- Not a requirement, but it is recommended you subscribe to our newsletter(s) to be informed when updated versions of this tutorial become available:
<http://osx.topicdesk.com/newsletter/>

4. - Getting and installing the latest version of amavisd-new

This chapter will guide you through replacing your current version of amavisd-new with the latest stable version available. It will update amavisd-new to the latest content filtering functionality. It will also give you the peace of mind to have the latest version with the most recent security fixes. Please be aware that instructions apply only to the 2.6.x branch of amavisd-new. Although the instructions may work with earlier releases, you could run into certain compatibility issues with some Perl modules.

So let's get going:

Make sure you are logged in as root or can sudo.

Get and install the latest version of amavisd-new by issuing the following commands (*in oblique type*). Issue them one after the other making sure you do not miss any dots or slashes. Also note that the download URL given could change in the future. In that case just replace the URL in this document with the current one. The URL used at the time this document was written refers to amavisd-new 2.6.4. If you want to install a different version, adjust accordingly. Lines wrapping without line spacing are a single line command. Be careful and remove incorrect line breaks when copying/pasting.

10.4.x PPC only:

```
gcc_select 3.3
```

10.4.x Intel only:

```
gcc_select 4.0
```

```
mkdir -p /SourceCache
```

```
cd /SourceCache
```

```
sudo curl -O http://www.ijs.si/software/amavisd/amavisd-new-2.6.4.tar.gz
```

```
sudo tar xzf amavisd-new-2.6.4.tar.gz
```

```
cd /SourceCache/amavisd-new-2.6.4
```

```
sudo cp /usr/bin/amavisd /usr/bin/amavisd.original
```

```
sudo cp /etc/amavisd.conf /etc/amavisd.conf.original
```

This will make a copy of the original files, in case you need to fall back. Keep a copy of */etc/amavisd.conf.original* that we just created in a safe place for reference.

IMPORTANT NOTE for Mac OS X 10.4.x Server: The new version of amavisd-new you are about to install is INCOMPATIBLE with the old /etc/amavisd.conf configuration file. Thus, you MUST replace it and carry over the settings you had in the old file.

Now we need to choose and edit the new amavisd.conf file before copying it to the right place.

```
cd /SourceCache/amavisd-new-2.6.4
```

(Besides the default amavisd.conf, there are several other amavisd.conf files in this directory. If you are an experienced user, you might want to use amavisd.conf-sample and rename it to amavisd.conf. If not just use amavisd.conf)

Edit the following file (in your favorite text editor (not Word!)):

```
/SourceCache/amavisd-new-2.6.4/amavisd.conf
```

and carry over the settings from your old amavisd.conf file (remember we created a copy of the old file at */etc/amavisd.conf.original*).

For a list of the minimum required parameters to carry over see chapter "5. Additional information"

Now we need to make sure two needed directories exist.

```
sudo mkdir -p /var/amavis/db  
sudo mkdir -p /var/amavis/tmp
```

For 10.4.x:

```
sudo chown clamav:clamav /var/amavis/db  
sudo chown clamav:clamav /var/amavis/tmp
```

Now amavisd-new itself is ready to be installed. Before doing so we need to update a few of perl modules first.

NOTE: Updating the following Perl modules, may break your current amavisd-new installation. Only proceed if you intend to update amavisd-new.

The easiest way to install them is by using CPAN.

To do so issue:

```
sudo perl -MCPAN -e shell
```

If you have never used CPAN before you will be prompted to supply a few parameters. Just accept the default values. Once done, you should see the CPAN prompt (*cpan >*):

When at the CPAN prompt issue:

```
o conf prerequisites_policy ask
```

This will prompt you when a modules relies on other pre-requisites that have to be installed first. You should allow it to go ahead if asked.

Now you are ready to install/update the module(s). Some modules are already present on OS X Server, but seriously outdated.

At the CPAN prompt (*cpan >*) issue:

install Archive::Zip

install Compress::Zlib

install Convert::TNEF

force install Convert::UUlib

force install MIME::Base64

force install Convert::BinHex

install IO::File

install MIME::Parser

install Mail::Internet

force install Net::Server

install Digest::MD5

install IO::Stringy

install Time::HiRes

install Mail::DKIM

Now issue

exit

to exit CPAN.

NOTE: It is possible that some of the modules will not install. In that case use "*force install*" instead of "*install*" at the CPAN prompt.

NOTE: If you had previously tried to use CPAN without having the Developer Tools installed, you will need to make sure that Developer Tools are now correctly installed and you will also need to re-configure CPAN. To do so get to the CPAN prompt and issue:

```
o conf init
```

You will be prompted to supply a few parameters. Just accept the default values.

Now that the necessary perl modules have been updated/installed, we can proceed and install amavisd-new.

Issue:

```
cd /SourceCache/amavisd-new-2.6.4
```

```
sudo cp amavisd.conf /etc/amavisd.conf
```

```
sudo cp amavisd /usr/bin/amavisd
```

```
sudo chmod 755 /usr/bin/amavisd
```

If there are no errors, all we need to do now is to modify the launchd item for amavisd-new and restart amavisd-new.

Continue and issue the following:

```
cp /System/Library/LaunchDaemons/  
org.amavis.amavisd.plist /System/Library/LaunchDaemons/  
org.amavis.amavisd.plist.original
```

This will make a copy of the original launchd item for amavisd, in case you need to fall back. Keep a copy of */System/Library/LaunchDaemons/org.amavis.amavisd.plist.original* that we just created in a safe place for reference.

Now we need to edit `/System/Library/LaunchDaemons/org.amavis.amavisd.plist` with your favorite editor (pico, vi, etc.) and replace its content with the following content:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST
1.0//EN" "http://www.apple.com/DTDs/
PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
  <key>Label</key>
  <string>org.amavis.amavisd</string>
  <key>OnDemand</key>
  <false/>
  <key>Program</key>
  <string>/usr/bin/amavisd</string>
  <key>ProgramArguments</key>
  <array>
    <string>amavisd</string>
    <string>foreground</string>
  </array>
  <key>ServiceIPC</key>
  <false/>
  <key>UserName</key>
  <string>clamav</string>
</dict>
</plist>
```

(NOTE: `<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">` is a single line.)

All we need to do now is to restart amavisd-new.

To restart amavisd-new issue:

```
sudo /bin/launchctl unload /System/Library/
LaunchDaemons/org.amavis.amavisd.plist
```

```
sudo /bin/launchctl load /System/Library/LaunchDaemons/
org.amavis.amavisd.plist
```

You may see the following error:

"Workaround Bonjour: Unknown error: 0"

It's due to a bug introduced in 10.4.7 and safe to ignore.

Now you MUST reboot! (There are ways around it, but it is safer to reboot)

To check your amavisd-new version issue:

```
/usr/bin/amavisd -V
```

You should now be all set and have an "Apple compliant" version of amavisd-new on your server. Server Admin will still work as before.

5. - Additional information

This chapter contains some additional information that may come in handy.

a) The minimum set of settings you should carry over from your old amavisd.conf configuration file are (The values may of course be different on your system. Some may even not have been set. You may also choose not to carry over the settings and start from scratch.):

```
---
```

```
$mydomain = 'domain.tld';
```

```
$daemon_user = 'clamav'; # (no default; customary: vscan or amavis), -u  
$daemon_group = 'clamav'; # (no default; customary: vscan or amavis), -g
```

```
$QUARANTINEDIR = '/var/virusmails';
```

```
$banned_quarantine_to = 'banned-quarantine'; # local quarantine  
$bad_header_quarantine_to = 'bad-header-quarantine'; # local quarantine  
$spam_quarantine_to = 'spam-quarantine'; # local quarantine
```

```
$sa_quarantine_cutoff_level = 8;
```

```
$final_virus_destiny = D_DISCARD; # (defaults to D_BOUNCE)  
$final_banned_destiny = D_DISCARD; # (defaults to D_BOUNCE)  
$final_spam_destiny = D_DISCARD; # (defaults to D_REJECT)  
$final_bad_header_destiny = D_PASS; # (defaults to D_PASS)
```

```
$sa_mail_body_size_limit = 400*1024;
```

```
$sa_tag_level_deflt = -999; # add spam info headers if at, or above that level  
$sa_tag2_level_deflt = 3.0; # add 'spam detected' headers at that level  
$sa_kill_level_deflt = 6.0;
```

```
$sa_dsn_cutoff_level = 7.0;
```

```
---
```

6. - Caveats

DISCLAIMER: Whatever you do based on this document, you do it at your own risk! Just in case you haven't understood: Whatever you do based on this document, you do it at your own risk!

This tutorial has been tested on a standard Mac OS X 10.4.x Server installation. If you have already tinkered with your system, be aware that things might differ. It is impossible for me to foresee all changes that one might have applied to a server.

NOTE: amavisd-new relies heavily on Perl modules. During its installation you have updated/installed some of these modules. This in turn could break other software not compatible with newer modules. In that case you will need to update the broken modules as well. Normally, things go well, but there is always a risk of dependencies breaking other Perl software. No way around this.

That's all folks.
Hope this helps.
Have fun,
Alex

Revision 1.2.4, 14.07.2009
Athanasios Alexandrides
Lugano, Switzerland
tutorials -at- topicdesk.com
