Updating SpamAssassin on Mac OS X 10.5.x/10.4.x

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1. - Introduction

The purpose of this document is to provide instructions on how to update the version of SpamAssassin included with OS X 10.5.x/10.4.x Server.

It will guide you through updating to the latest stable version of SpamAssassin without breaking Server Admin functionality.

Although the Apple included version of SpamAssassin is suitable for most users, there are situations where one might need to update. A common reason is to take advantage of the latest spam 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 10.5.x/10.4.x.

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This tutorial has been tested on a standard Mac OS X 10.5.x/10.4.x or greater 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.

With 10.4.x, Apple includes SpamAssassin 3.0.x with its server operating system. This can be safely updated to the latest stable version of SpamAssassin 3.2.x

With the introduction of Mac OS X 10.5.x Server, Apple includes SpamAssassin 3.2.1.

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 and XCode 3.0 or higher for 10.5.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 10.5.x or 10.4.x
- Although not mandatory, for Mac OS X 10.4.x it is STRONGLY (very STRONGLY) recommended you first update amavisd-new. Some of the Perl modules necessary, may conflict with older versions of amavisd-new. Instructions for updating amavisd-new on OS X 10.4.x/10.5.x server can be downloaded from http://osx.topicdesk.com/
- You have not manually updated anything related to SpamAssassin so far (if you have, you must know how to adapt these instructions to the changes you made).

4. - Getting and installing the latest version of SpamAssassin

This chapter will guide you through replacing your current version of SpamAssassin with the latest stable version available. It will update SpamAssassin to the latest spam 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 3.2.x branch of SpamAssassin onwards. Although the instructions will work with earlier releases, you could run into certain compatibility issues with some Perl modules.

NOTE: Although not mandatory, for Mac OS X 10.4.x it is strongly recommended you first update amavisd-new. This is not necessary for Mac OS X 10.5.x. Some of the Perl modules necessary, may conflict with older versions of amavisd-new. Instructions for updating amavisd-new on OS X 10.4.x server can be downloaded from http://osx.topicdesk.com/

So let's get going: Make sure you are logged in as root or can sudo.

Get and install the latest version of SpamAssassin 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 SpamAssassin 3.2.5. 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

10.5.x: no need to select anything
```

mkdir -p /SourceCache

cd /SourceCache

sudo curl -O http://www.eu.apache.org/dist/spamassassin/ source/Mail-SpamAssassin-3.2.5.tar.gz

sudo tar xzf Mail-SpamAssassin-3.2.5.tar.gz

cd /SourceCache/Mail-SpamAssassin-3.2.5

sudo perl Makefile.PL

If asked for input accept default values.

IMPORTANT: You will now see a Makefile being created. Check the output before proceeding. It will tell you if you have any required perl modules missing. This is important, because if required modules are missing, you will need to install them first.

You could see lines similar to these: optional module missing: Mail::DomainKeys required module missing: Digest::SHA1

You can safely ignore the "optional module missing" (unless you know what it is and want that particular functionality).

You MUST however act upon the "required module missing". To do so you can use CPAN for simplicity (or download and install them separately). I will only illustrate the CPAN method. The modules missing will vary from server to server (depending on many factors and software installed by yourselves), so it is impossible to include non-CPAN instructions for every module.

IMPORTANT: If it lists any "required module missing", see chapter 5 "Installing missing and required Perl modules" first. Once you have added the missing modules, run "sudo perl Makefile.PL" again. If something is still missing, go back to CPAN. If it doesn't complain about required modules anymore, continue with the following instructions:

cd /SourceCache/Mail-SpamAssassin-3.2.5

sudo make

sudo make install

If everything went well, you have just installed an updated version of SpamAssassin.

Now you want to verify your installation. To do so issue:

For 10.4.x:

sudo su clamav -c "spamassassin --lint"

For 10.5.x:

sudo -H -u amavisd spamassassin --lint

If above statement doesn't produce any output then all is well. If it does, read what it says. The default installation of OS X Server has some harmless configuration errors, which could be safely ignored. Chances are you will see the following lines:

warn: config: failed to parse line, skipping: auto_learn 1
warn: config: failed to parse line, skipping: safe_reporting 0
warn: config: failed to parse line, skipping: use_terse_report 0
warn: config: failed to parse line, skipping: subject_tag ***
Warning: Junk Mail ***

warn: config: failed to parse line, skipping: rewrite_subject 0

If you do see the above errors, download "spamtrainer" from the same place you got this tutorial. This is not necessary for 10.5.x as this is only cosmetic.

Install spamtrainer and issue:

sudo spamtrainer -f

This will fix the default installation's configuration errors. When done, run the check once more:

For 10.4.x:

sudo su clamav -c "spamassassin --lint"

For 10.5.x:

sudo -H -u amavisd spamassassin --lint

If you still see errors, you most likely missed installing a required module. You will need to go back and fix it.

If there are no more errors, all we need to do now is to restart amavisd-new. To do so 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.

To check your SpamAssassin version issue:

/usr/bin/spamassassin -V

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

5. - Installing missing and required Perl modules

If you are reading this chapter, then it is because SpamAssassin told you it is requiring missing modules.

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 prerequisites that have to be installed first. You should allow it to go ahead if asked.

Now you are ready to install the missing module(s). Assuming you were for example missing "Digest::SHA1" you would now issue:

install Digest::SHA1

This will install the module and bring you back to the CPAN prompt. Now you can either install the next missing module, or issue "exit" to exit CPAN.

When you have installed all required missing modules, continue with the SpamAssassin installation you left in chapter 4.

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.

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/10.5.3 or greater 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: SpamAssassin relies heavily on Perl modules. During its installation you may 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

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