MacPatch – Server Install Guide

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# MacPatch System Requirements

Server Requirements:

* Mac OS X or Mac OS X Server 10.7 or higher
* Using Intel Hardware, PPC is not supported
* 4 GB of RAM, 8 GB is recommended
* Java v1.6 or higher
* MySQL version 5.1 or higher, MySQL 5.5 is recommended.
* Xcode 4.3 or higher

Server Ports Used:

* Default
  + 80, 443, 2600, 2601, 2602
* Configurable
  + 2600, 2601, 2602

# MacPatch System Tuning

In order to get the most out of Mac OS X Client/Server operating system some of it’s default limits need to be increased. Please run the following commands via Terminal application. Note, a reboot is recommended after applying these changes.

* echo 'kern.maxfiles=20480' | sudo tee -a /etc/sysctl.conf
* echo -e 'limit maxfiles 8192 20480\nlimit maxproc 1000 2500' | sudo tee -a /etc/launchd.conf
* echo 'ulimit -n 4096' | sudo tee -a /etc/profile

Suggested Links:

* <http://support.apple.com/kb/HT4022>
* http://support.apple.com/kb/HT3854

# MacPatch Database

The MacPatch environment requires a MySQL database to function. It is recommended that you install the database software prior to installing the MacPatch server software.

It is recommended that MySQL version 5.5.x Enterprise edition be used but the community edition will also work. It is also recommended that the MySQL server be dedicated to the MacPatch server(s).

###### Create the Database

Login as **root**

* mysql -u root -p

Run the following MySQL commands

* CREATE USER ‘mpdbadm’@'%' IDENTIFIED BY '**{Password}**';
* CREATE DATABASE MacPatchDB;
* GRANT ALL ON MacPatchDB.\* TO ‘mpdbadm’@% IDENTIFIED BY ‘**{Password}**’;
* GRANT ALL PRIVILEGES ON MacPatchDB.\* TO 'mpdbadm'@'localhost' IDENTIFIED BY '{**Password}**';
* SET GLOBAL log\_bin\_trust\_function\_creators = 1;
* FLUSH PRIVILEGES;

Load Database Schema

Run the following MySQL commands from the Terminal.

* % mysql MacPatchDB -u mpdbadm -p < /Library/MacPatch/Server/conf/Database/MacPatchDB\_tables.sql
* % mysql MacPatchDB -u mpdbadm -p < /Library/MacPatch/Server/conf/Database/MacPatchDB\_views.sql

# Install the Server Software

## Install the base Server

Installing the base server software is very simple process. Simply unzip or untar the server archive and create a few directories.

1. Run the following commands via the Terminal
   1. Un-compress
      1. Tarball
         1. cd /Library tar –xvf /PATH/TO/MPServer.tar
      2. ZIP
         1. cd /Library unzip /PATH/TO/MPServer.zip
   2. mkdir -p /Library/MacPatch
   3. mkdir -p /Library/MacPatch/Content
   4. mkdir -p /Library/MacPatch/Content/Web
   5. mkdir -p /Library/MacPatch/Content/Web/clients
   6. mkdir -p /Library/MacPatch/Content/Web/patches
   7. mkdir -p /Library/MacPatch/Content/Web/sav
   8. mkdir -p /Library/MacPatch/Content/Web/sw
   9. ln -s /Library/MacPatch/Server/conf/Content/Doc /Library/MacPatch/Content/Doc
   10. chown -R root:admin /Library/MacPatch/Server
   11. chmod 0775 /Library/MacPatch/Server
   12. chown -R 79:70 /Library/MacPatch/Server/jetty-mpsite
   13. chown -R 79:70 /Library/MacPatch/Server/jetty-mpwsl

## Download and Configure Apache 2

This step requires that you have installed Xcode 4 in /Applications. The Xcode software is available via the “App Store” application, as a free application.

1. Open the Terminal application
2. Run the script /Library/MacPatch/Server/conf/scripts/MPHttpServerBuild.sh
3. Once complete you will see an Apache2 directory in “/Library/MacPatch/Server”

## MacPatch Server Setup

Run the following shell scripts in order to configure

1. **DataBaseLDAPSetup.sh** (Required)
   1. The database setup is required for MacPatch to function
   2. The LDAP/AD External Web Admin Authentication is optional, see note below about certificates.
2. **SoftwareUpdateServerSetup.sh**
   1. MacPatch supports using a local Apple Software Update server as part of its services. This option is a convenience for setting it up. Note, this requires that “Server.app” be installed.
3. **PatchLoaderSetup.sh** (Required)
   1. MacPatch requires gathering all of Apple Software updates from an Apple Software Update server. So that Apple patches can be assigned to a patch group for patching.
4. **SymantecAntivirusSetup.sh** (Optional)
   1. MacPatch supports patching Symantec Antivirus definitions. Not all sites use SAV/SEP so this step is optional.
5. **WebAdminSetup.sh**
   1. The MacPatch admin web console is required to use MacPatch. This section is an option for those who wish to setup additional servers for large environments.
6. **StartServices.sh**
   1. Depending on your choices this script will start all MacPatch services.

#### Add Remote Certificates

If you have configured MacPatch to do user authentication via Active Directory/LDAP, which uses SSL to communicate, you might need to add the remote certificate to a list of trusted certificates. If a major certificate authority issued your certificate for your LDAP environment you can most likely skip this step.

* Open a new Terminal window
* Run the following command
  + sudo /Library/MacPatch/Server/conf/scripts/addRemoteCert.sh –c “server.name.com 3269/636”
* Now close the window and continue with starting the MacPatch server services.

# MacPatch Web Admin Setup

While all of the MacPatch server software is now installed a few configuration steps need to be completed before you may begin to roll out the agent to your clients.

The default user name is “**mpadmin**” and the password is “**mpadmin**”

1. Master Server Configuration
2. Proxy Server Configuration
3. Default Agent Configuration
4. Upload Client Agent
5. SoftwareUpdate Servers
6. Patch Groups
7. Software Distribution Groups
8. Configure MacPatch Server Info
   1. Go to Menu “Admin > Server > MacPatch Servers”
   2. Click the “+” icon and add a new record.  
      Note: If it’s the first server it will automatically set it as master.
9. Create New Agent Configuration
   1. Go to Menu “Admin > Client Agents > Configure”
   2. Click the “Create New Agent Config” button
   3. Name the first configuration “Default”
   4. Set the following 3 properties to be enforced
      1. MPServerAddress
      2. MPServerPort
      3. MPServerSSL
   5. Click the save button.
   6. Click the icon in the “Default” column for the default configuration. (***Important Step***)
10. Upload Client Agent
    1. Go to Menu “Admin > Client Agents > Upload and Deploy”
    2. In the “New Agent Upload” section click “Choose File”
       1. **Base Agent PATH**
    3. Click the in the “Active” column for the “MPUpdateClient.pkg” row and change it to “Yes” and hit the enter key.
    4. Click the in the “Active” column for the “MPBaseClient.pkg” row and change it to “Yes” and hit the enter key.
11. Create New Patch Group
    1. Go to Menu “Patches > Patch Group(s)> Build”
    2. Name the group “RecommendedPatches”
    3. Set group type to “Production”
    4. Click the “Create Group” button.

# Backup

Backup in MacPatch is very simple process. There are only two parts that need to be backed up. The two components are the files on the “Master” server and the database.

## Backing Up The File System

For quick recovery Apple’s Time Machine software is a great solution. If your using a third party backup solution the main directory “/Library/MacPatch” is the only directory which **needs** to be backed up. The same directory needs to be backed up on additional distribution and proxy server.

## Backing Up The Database

The MacPatch database backup procedure is a very simple one. Only the tables and their data need to be backed up.

#### Requirements

* MySQL Workbench software, installed in “/Applications”  
  (<http://www.mysql.com/downloads/workbench/>)

##### MySQL Workbench Setup

* Open Terminal, run the following commands

ln -s /Applications/MySQLWorkbench.app/Contents/MacOS/mysql /usr/bin/mysql

ln -s /Applications/MySQLWorkbench.app/Contents/MacOS/mysqldump /usr/bin/mysqldump

#### Backup Command

Script is located at:

/Library/MacPatch/Server/conf/scripts

Command:

php MPDBBackup.php <dbserver> <port> <Database> <user> <password> <dumpFileDirectory>

Example:  
 php MPDBBackup.php MyDBServer.com 3306 MacPatchDB mpdbadm MyPass /private/tmp