CA Nimsoft® Unified Management Portal

DMZ Guide

7.5

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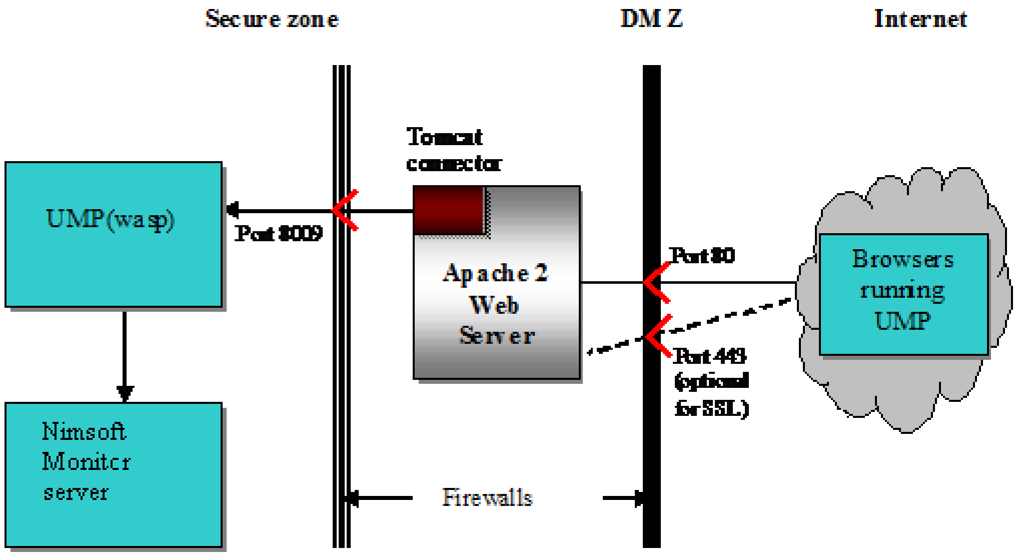
Chapter 1: Introduction

Using a demilitarized zone (DMZ) is the recommended way to set up the Unified Management Portal (UMP) in a firewalled environment. You can install and configure the Apache Web Server as a light-weight proxy server and enable SSL on the Apache server.

The following graphic shows a UMP implementation with a DMZ.



For additional information on using CA Nimsoft products with a DMZ, see the section on installing in a firewalled environment in the *Nimsoft Monitor Server Installation Guide*.

Chapter 2: Setting up a DMZ

This section describes how to set up a DMZ for use with UMP.

Follow these steps:

1. If you have not already installed Apache and the Apache Tomcat connector, download and install them on the server in the DMZ.

   If you have already installed Apache and the Apache Tomcat connector, continue to the next step.

2. Open the Apache configuration file, httpd.conf, for editing.

3. Uncomment the following line:

   ```
   LoadModule proxy_module modules/mod_proxy.so
   ```

4. Uncomment the following line:

   ```
   LoadModule proxy_ajp_module modules/mod_proxy_ajp.so
   ```

5. Locate the following line:

   ```
   #ServerName www.example.com
   ```

6. Remove the pound or hash sign (#) and change the line to the following:

   ```
   ServerName <your_server_name>.<domain>.com
   ```

7. Add the following lines to the end of the httpd.conf file before the line ProxyRequests Off:

   ```
   ProxyPass / ajp://<ump server>:8009/
   ProxyPass /c/portal ajp://<ump server>:8009/c/portal
   ProxyPass /web/guest ajp://<ump server>:8009/web/guest
   ```

   Example

   ```
   ProxyRequests Off
   <Proxy *>
               Order deny,allow
               Allow from all
   </Proxy>
   ProxyPass / ajp://<ump server>:8009/
   ProxyPass /c/portal ajp://<ump server>:8009/c/portal
   ProxyPass /web/guest ajp://<ump server>:8009/web/guest
   ProxyRequests Off
   ```

8. Open port 8009 on the inside firewall and port 80 on the outside firewall. If you are using SSL, also open port 443 (or an alternative port) on the inside firewall.

   The DMZ is now set up for use with UMP.

Chapter 3: Configuring Secure Communications

To access UMP via HTTPS, you must configure SSL support on the Apache server.

Note: Using secure communication adds overhead to the communication between Apache and UMP.

Follow these steps:

1. Open the httpd.conf file for editing:
   - Uncomment the following line:

     ```
     LoadModule ssl_module modules/mod_ssl.so.
     ```

   - Uncomment the following line:

     ```
     Include conf/extra/httpd-ssl.conf.
     ```

2. Open the file conf/extra/http-ssl.conf:
   - Change the Listen port number as required. If using 443, make sure there are no other applications using it, particularly IIS.
   - Change the SSLSessionCache path to point to the correct location.
   - Change <VirtualHost> to point to the port number specified above.
   - Change the DocumentRoot path to point to the correct location.
   - Change ServerName to the correct value, including port number.
   - Change the ServerAdmin email address as required.
   - Change the ErrorLog path to point to the correct location.
   - Change the TransferLog path to point to the correct location.
   - Change the SSLCertificateFile path to point to the PEM encoded certificate. (If you do not have a certificate, follow the instructions in step 3 to generate a self-signed certificate.)
   - Change the SSLCertificateKeyFile path to point to the private key if it is not already combined with the certificate. (If you do not have a certificate, follow the instructions in step 3 to generate a self-signed certificate.)
   - Change CustomLog to point to the correct location.

3. If you do not have a certificate, use the following steps to generate a self-signed certificate:

   a. Open a Windows Command prompt and change directories to C:\Program Files\Apache\conf.

b. Run the following command to generate a private key:

   ```
   ..\bin\openssl genrsa -des3 -out server.key 1024
   ```

c. Run the following command to generate a CSR (Certificate Signing Request):

   ```
   ..\bin\openssl req -config ..\conf\openssl.cnf
   -new -key server.key -out server.csr
   ```

d. Run the following commands, depending on your OS, to remove the passphrase from the key :

   ```
   Linux/UNIX: cp server.key server.key.org
   ```

   ```
   Windows: copy server.key server.key.org
   ```

   followed by

   ```
   ..\bin\openssl rsa -in server.key.org -out server.key
   ```

e. Run the following command to generate a self-signed certificate:

   ```
   ..\bin\openssl x509 -req -days 365 -in server.csr -signkey
   server.key -out server.crt
   ```

f. Update SSLCertificateFile and SSLCertificateKeyFile in http-ssl.conf file to point to the newly generated certificate and private key files.

4. Restart the Apache web server.

   The Apache server is now configured for SSL support.