TA-Series NTP Network Time Server

Updating TA-Series Firmware

Models Covered: TA110, TA210, TA310, TA610

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The latest version of this guide can be obtained from TimeToolsLtd.com

Updating TA-Series NTP Server Firmware

Updating TA series firmware is very straightforward. The update can be performed remotely over an Ethernet network. User configuration settings are maintained during the update.

The TA-Series firmware update is provided as a file that patches the file system.

This article describes how to apply a firmware update to the TA-Series NTP server. It covers TA110, TA210, TA310 and TA610 models.

Prerequisites

- Windows 10 or later PC configured to be in the same network segment as TA-Series NTP server.
- IP address (or domain name) of TA-Series NTP Server.
- Password assigned to TA-Series NTP Server (Default: admin).
- TA-Series firmware update file.

Preparation

1. Confirm Network Connection Between PC and TA-Series NTP Server.

Confirm network connection exists between the PC and NTP server by pinging the IP address of the NTP server or by contacting using a web browser.

2. Download Binary Image From TimeToolsLtd.com.

Download the required binary update file from:

https://timetoolsltd.com/support/download/ta-series-firmware-updates/

Ensure that the downloaded firmware is later than the current firmware version of your NTP server. Rollbacks to older firmware versions cannot be performed using the update patch.

e.g. File ***TA0103.bin*** - indicates firmware version 1.03.

INFORMATION:

Only an update file later than the current firmware version will be accepted by the TA-Series NTP server.

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3. Upload The Update File To the TA-Series NTP Server.

From a Windows command prompt, change the current directory to the location of the downloaded update file.

Connect to the NTP server using SFTP and the NTP servers IP address.

Use the SFTP 'put' command to upload the update file to the NTP server. The SFTP 'dir' command can be used to list the remote NTP server directory. Exit SFTP by issuing the 'exit' command.

Example:

```
C:\> cd C:\Users\xxxx\Downloads                { Location of update file
C:\>
C:\> sftp admin@192.168.3.222                  { TA-Series IP address
admin@192.168.3.222's password: xxxxxx         { TA-Series password
Connected to 192.168.3.222.

sftp>
sftp> put TA0103.bin                           { Filename of update file
Uploading TA0103.bin to /tmp/admin/TA0103.bin
TA0103.bin
100%   48MB  20.9MB/s   00:02

sftp>
sftp> dir
ntpstats    TA0103.bin

sftp> exit
C:\>
```

4. Install The Update File

From a Windows command prompt, connect to the NTP server using SSH and the NTP servers IP address.

Use the md5sum command to check the integrity of the uploaded file. **Do not attempt to update the file system with files that do not match the published checksum – they may be corrupt !**

WARNING:

Check the MD5 checksum matches the published checksum for the update file !

Updating the file system with a corrupt file may damage the file system.

Use the 'ttupdate' command to install the update file. It should take 2-3 minutes to complete.

WARNING:

DO NOT power-off the unit when it is updating.

Wait until it has finished!

Example:

```
C:\>
C:\> ssh admin@192.168.3.222                { TA-Series IP address
admin@192.168.3.222's password: xxxxxx      { TA-Series password

.-------------------------------------------------------.
|                                                       |
| TimeTools TA-Series Network Time Server Console Session |
|                                                       |
.-------------------------------------------------------.
…

admin@NTP001:~$
admin@NTP001:~$ md5sum TA0103.bin           { Filename of update file

0930abb990cd19f2c4b0199134d1324e  TA0103.bin

admin@NTP001:~$
admin@NTP001:~$ ttupdate TA0103.bin         { Filename of update file

Updating file system... DO NOT POWER OFF !!!
...
...
Update Complete. Restarting...
```

After a successful update, the NTP server will automatically restart.

All configuration settings will be maintained after the update.

5. Check NTP Server Firmware Version

After the NTP server has restarted, use a web browser or SSH session to check the firmware version.

The update is now complete.

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