Application Note: Configuration Upgrades via Scripts

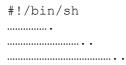
This provides steps for performing CTM device configuration upgrades via scripts using the **cmd confupgrade** command available on the CTM devices.

When several CTM commands need to be configured on a unit, it may be more efficient to create a script that contains these commands and execute **cmd confupgrade** on the unit. The command **cmd confupgrade** retrieves the script from an http or ftp server and executes it on the CTM device.

Script files are text documents created typically in a Linux operating environment. They can be created locally on the CTM or created remotely and executed on the CTM using **cmd confupgrade**. For ease of scripting it is typically easier to write a shell script using a text editor.

The CTM-200 supports the busybox ash shell. This shell is a lightweight version of the Bourne shell (bash).

All shell script files must have the shell header of:



If a script is written on a Windows desktop, the file must be converted to respect the Unix line endings format using the "dos2unix" utility before uploading to an http or ftp server. Also, **cmd confupgrade** requires the script to have a corresponding MD5 checksum file, created using an MD5 checksum utility, to be stored in the same directory as the script.

Example

For Windows, a free **dos2unix** command-line utility is available online from http://sourceforge.net/projects/dos2unix/ and a free MD5 checksum utility, **WinMD5Free**, is available online from http://www.winmd5.com.

1. In Windows Notepad or another Windows text editor enter the following CTM-200 command (ensure there is a carriage return after the last line):

```
#!/bin/sh
cmd gpsremip 1 1.2.3.4
```

In Notepad, select the Save As Type of All Files (*.*) and save the file with the filename test.sh.



2. Using the free dos2unix command-line utility, convert the script to use Unix line endings:

dos2unix test.sh

dos2unix: converting file test.sh to Unix format ...

3. Using the WinMD5Free utility, generate the MD5 checksum for **test.sh**. Copy the value under **Current file MD5 checksum value**.

Using Notepad, paste this value into a new file called **test.sh.md5**, add two spaces, and then add the script's filename (ensure there is a carriage return after the last line):

d48c719773349d94509cddfdeed05334 test.sh

4. Using the free dos2unix command-line utility, convert the checksum file to use Unix line endings:

dos2unix test.sh.md5

dos2unix: converting file test.sh.md5 to Unix format ...

- 5. Copy **test.sh** and **test.sh.md5** to your HTTP or FTP server using an FTP client.
- 6. When the script is stored on an HTTP server, execute the following command on the CTM device

cmd confupgrade test.sh http://1.2.3.4/testfolder

Replace http://1.2.3.4/testfolder with the actual IP and folder of your HTTP server hosting the script and checksum files.

7. When the script is stored on an FTP server, use the command instead:

cmd confupgrade test.sh 1.2.3.4 guest guestpw,*XX[0x0D][0x0A]

Replace 1.2.3.4, guest, and guestpw with the actual IP, username, and password to access your FTP server.

8. Verify that the device's ID has changed per the commands in the test.sh script.

Technical Support

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