



# HP TPM Configuration Tool

User Guide

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# HP TPM Configuration Utility

**Version:** 2.0.4.1

## Purpose

HP TPM Configuration Utility (when used with an appropriate TPM firmware (FW) BIN file) allows one to:

- Upgrade from an older TPM 1.2 FW to a newer TPM 1.2 FW
- Upgrade from an older TPM 2.0 FW to a newer TPM 2.0 FW
- Convert from TPM 1.2 to TPM 2.0
- Convert from TPM 2.0 to TPM 1.2

## Contents

This SoftPak contains the following:

- HP TPM Configuration Utility
  1. TPMConfig.exe for 32-bit OS
  2. TPMConfig64.exe for 64-bit OS
  3. HpqPswd.exe
  4. HpqPswd64.exe
- Common Criteria (CC) certified TPM FW BIN files
  1. TPM12\_4.40.119.0\_to\_TPM12\_4.43.257.0.BIN
  2. TPM12\_4.40.119.0\_to\_TPM20\_5.62.3126.0.BIN
  3. TPM12\_4.42.132.0\_to\_TPM12\_4.43.257.0.BIN
  4. TPM12\_4.42.132.0\_to\_TPM20\_5.62.3126.0.BIN
  5. TPM12\_4.43.257.0\_to\_TPM20\_5.62.3126.0.BIN
  6. TPM12\_6.40.190.0\_to\_TPM12\_6.43.245.0.BIN
  7. TPM12\_6.40.190.0\_to\_TPM20\_7.63.3353.0.BIN
  8. TPM12\_6.41.197.0\_to\_TPM12\_6.43.245.0.BIN
  9. TPM12\_6.41.197.0\_to\_TPM20\_7.63.3353.0.BIN
  10. TPM12\_6.41.198.0\_to\_TPM12\_6.43.245.0.BIN
  11. TPM12\_6.41.198.0\_to\_TPM20\_7.63.3353.0.BIN
  12. TPM12\_6.43.243.0\_to\_TPM12\_6.43.245.0.BIN
  13. TPM12\_6.43.243.0\_to\_TPM20\_7.63.3353.0.BIN
  14. TPM12\_6.43.244.0\_to\_TPM12\_6.43.245.0.BIN
  15. TPM12\_6.43.244.0\_to\_TPM20\_7.63.3353.0.BIN
  16. TPM12\_6.43.245.0\_to\_TPM20\_7.63.3353.0.BIN
  17. TPM20\_5.51.2098.0\_to\_TPM12\_4.43.257.0.BIN
  18. TPM20\_5.51.2098.0\_to\_TPM20\_5.62.3126.0.BIN
  19. TPM20\_5.60.2677.0\_to\_TPM12\_4.43.257.0.BIN
  20. TPM20\_5.60.2677.0\_to\_TPM20\_5.62.3126.0.BIN
  21. TPM20\_5.61.2785.0\_to\_TPM12\_4.43.257.0.BIN
  22. TPM20\_5.61.2785.0\_to\_TPM20\_5.62.3126.0.BIN
  23. TPM20\_5.61.2789.0\_to\_TPM12\_4.43.257.0.BIN

24. TPM20\_5.61.2789.0\_to\_TPM20\_5.62.3126.0.BIN
25. TPM20\_5.62.3126.0\_to\_TPM12\_4.43.257.0.BIN
26. TPM20\_7.40.2098.0\_to\_TPM12\_6.43.245.0.BIN
27. TPM20\_7.40.2098.0\_to\_TPM20\_7.63.3353.0.BIN
28. TPM20\_7.41.2375.0\_to\_TPM12\_6.43.245.0.BIN
29. TPM20\_7.41.2375.0\_to\_TPM20\_7.63.3353.0.BIN
30. TPM20\_7.60.2677.0\_to\_TPM12\_6.43.245.0.BIN
31. TPM20\_7.60.2677.0\_to\_TPM20\_7.63.3353.0.BIN
32. TPM20\_7.61.2785.0\_to\_TPM12\_6.43.245.0.BIN
33. TPM20\_7.61.2785.0\_to\_TPM20\_7.63.3353.0.BIN
34. TPM20\_7.62.3126.0\_to\_TPM12\_6.43.245.0.BIN
35. TPM20\_7.62.3126.0\_to\_TPM20\_7.63.3353.0.BIN
36. TPM20\_7.63.3144.0\_to\_TPM12\_6.43.245.0.BIN
37. TPM20\_7.63.3144.0\_to\_TPM20\_7.63.3353.0.BIN
38. TPM20\_7.63.3353.0\_to\_TPM12\_6.43.245.0.BIN

### **Warning**

This upgrade tool will clear ownership of the TPM. All protected crypto keys will be erased. User needs to backup or decrypt any data using the TPM. These include, but are not limited, to Microsoft BitLocker, HP Drive Encryption, WinMagic SecureDoc, Client Security Manager Virtual Card, HP Sure Run, and HP Sure Recover. This utility does not detect other software using the TPM.

### **Scope**

1. This SoftPaq supersedes SP81900 and SP82147.
2. It is supported on 2015, 2016, and 2017 Commercial platforms that have Infineon SLB9670 TPM chip and the latest Commercial BIOS. For details, refer to the List of Supported Platforms at the end of this document.
3. TPM Configuration Utility 2.0 supports the automatic selection of the bin file.
4. The TPM firmware BIN files must be in the same level with TPM Configuration Utility to support automatic selection of the appropriate bin file.
5. Windows 7 will only work with TPM 1.2. TPM 2.0 is not supported on HP platforms with Windows 7.
6. Windows 8.x and Windows 10 can support either TPM 1.2 or TPM 2.0.
7. TPM can be converted between TPM 1.2 and TPM 2.0 up to a maximum of 64 times.
8. The utility can only be run in Windows 7, Windows 8.x, or Windows 10. It does not support Windows PE.
9. Physical presence is required.
10. TPM Config Utility 2.0.2.1 and beyond, by default create 100 MB HP\_TOOLS partition, and supports the command line parameter to create HP\_TOOLS partition with a specific size (in MB) for customer flexibility: -c100  
-c<size for HP\_TOOLS partition in megabytes>

## Instructions

- Run SoftPaq to extract files. By default it will extract the files in C:\SWSETUP\SP87753 folder.
- Open CMD Prompt in Administrator mode and run TPM.MSC to determine the TPM Manufacturer Information.
  - Manufacturer Name: IFX
  - For TPM 1.2, Manufacturer Version: Either 6.40 or 6.41 or 6.43
  - For TPM 2.0, Manufacturer Version: Either 7.40 or 7.41 or 7.60 or 7.61 or 7.62 or 7.63
  - Specification version: Either 1.2 or 2.0
- The utility supports
  - Graphical User Interface (GUI) for step-by-step execution
  - Command line mode (including silent execution)
- Run MSINFO32 to determine 32-bit or 64-bit OS. Examine System Type (will show either “x64-based PC” or “32-based PC”).
- Run the appropriate utility (TPMConfig.exe for 32-bit OS or TPMConfig64.exe for 64-bit OS) as an Administrator from the folder where the utility and TPM FW BIN file are located.

## Dependencies

### Password file

- An encrypted password file generated by the HpqPswd.exe utility and supplied with the -p command line option to provide the Setup Password, if set.
- The file will be renamed as “TPM.pwd” and will be copied to the EFI partition along with the TPM image file, and read by the BIOS. If incorrect, the update will fail. If not provided, the BIOS will prompt for the password.
- AES 256 encryption: as of version 1.0.12.1, if a password file with improved encryption is supplied, it will be converted to legacy encryption for BIOS compatibility when copied to the EFI partition.
- Online flash: Not support. The user will not be prompted.

### TPM firmware binary

- TPM firmware binary to be updated, by default, is expecting to be located on the same folder with the tool; unless command line switch “f” is using to specify the firmware to be updated.

## Additional Notes

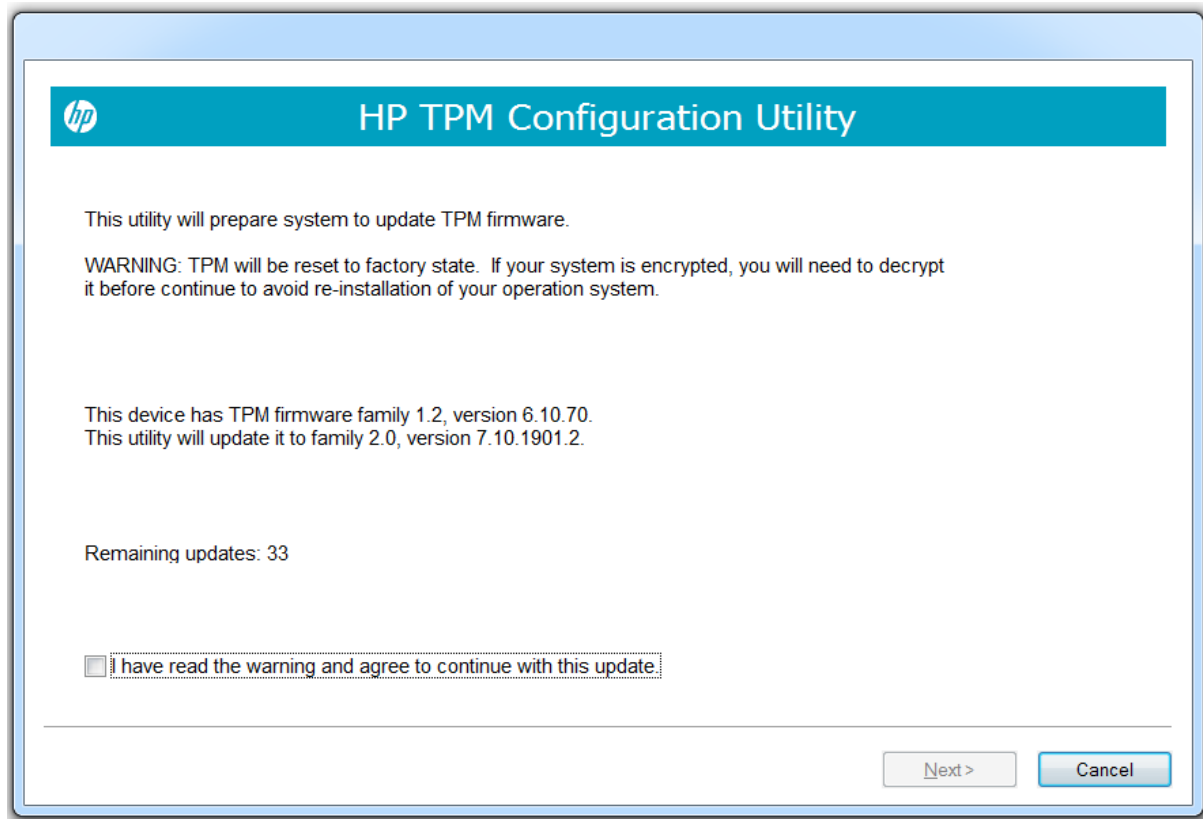
- On Windows 7, TPM 1.2 must be activated in BIOS (Check TPM state in BIOS).
- On Windows 8.x or Windows 10, the OS will automatically take ownership of TPM.
- Windows 8.x and Windows 10 require GPT partition style when using TPM 2.0. The BIOS setting for boot mode should be set to native UEFI (recommended) or UEFI with CSM.
- Windows 7-64, Windows 8.x, and Windows 10 will work with MBR or GPT partition style when using TPM 1.2.

## Required Supported Files

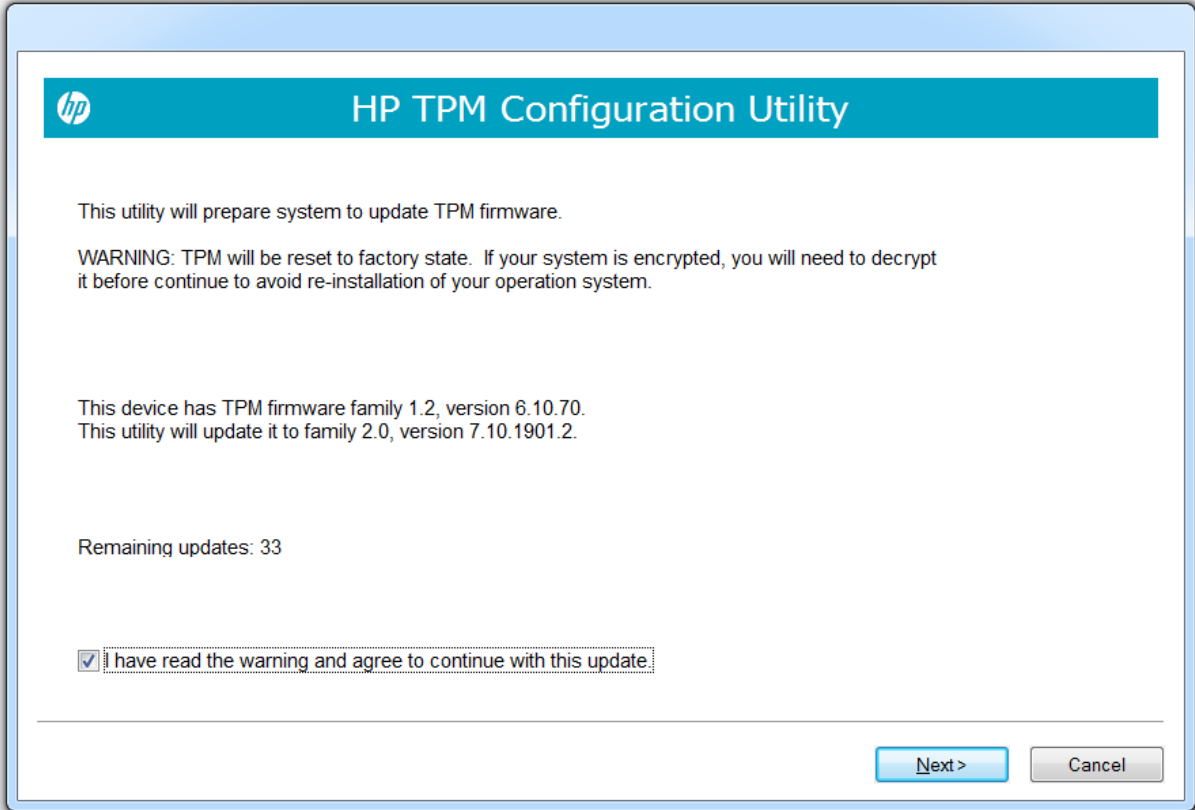
- Currently supported SoftPaqs containing the firmware binary files: SP81900 and SP82417

## User Interface screenshots

Welcome screen: switch from 1.2 to 2.0 (upgrade)



After user has acknowledged the warnings from previous screen (check box is checked)



The image shows a screenshot of the 'HP TPM Configuration Utility' window. The window has a blue header bar with the HP logo on the left and the title 'HP TPM Configuration Utility' on the right. Below the header, the text reads: 'This utility will prepare system to update TPM firmware.' followed by a warning: 'WARNING: TPM will be reset to factory state. If your system is encrypted, you will need to decrypt it before continue to avoid re-installation of your operation system.' Below the warning, it states: 'This device has TPM firmware family 1.2, version 6.10.70. This utility will update it to family 2.0, version 7.10.1901.2.' Further down, it says 'Remaining updates: 33'. At the bottom, there is a checkbox that is checked, with the text 'I have read the warning and agree to continue with this update.' To the right of the checkbox area are two buttons: 'Next >' and 'Cancel'.

hp HP TPM Configuration Utility

This utility will prepare system to update TPM firmware.

WARNING: TPM will be reset to factory state. If your system is encrypted, you will need to decrypt it before continue to avoid re-installation of your operation system.

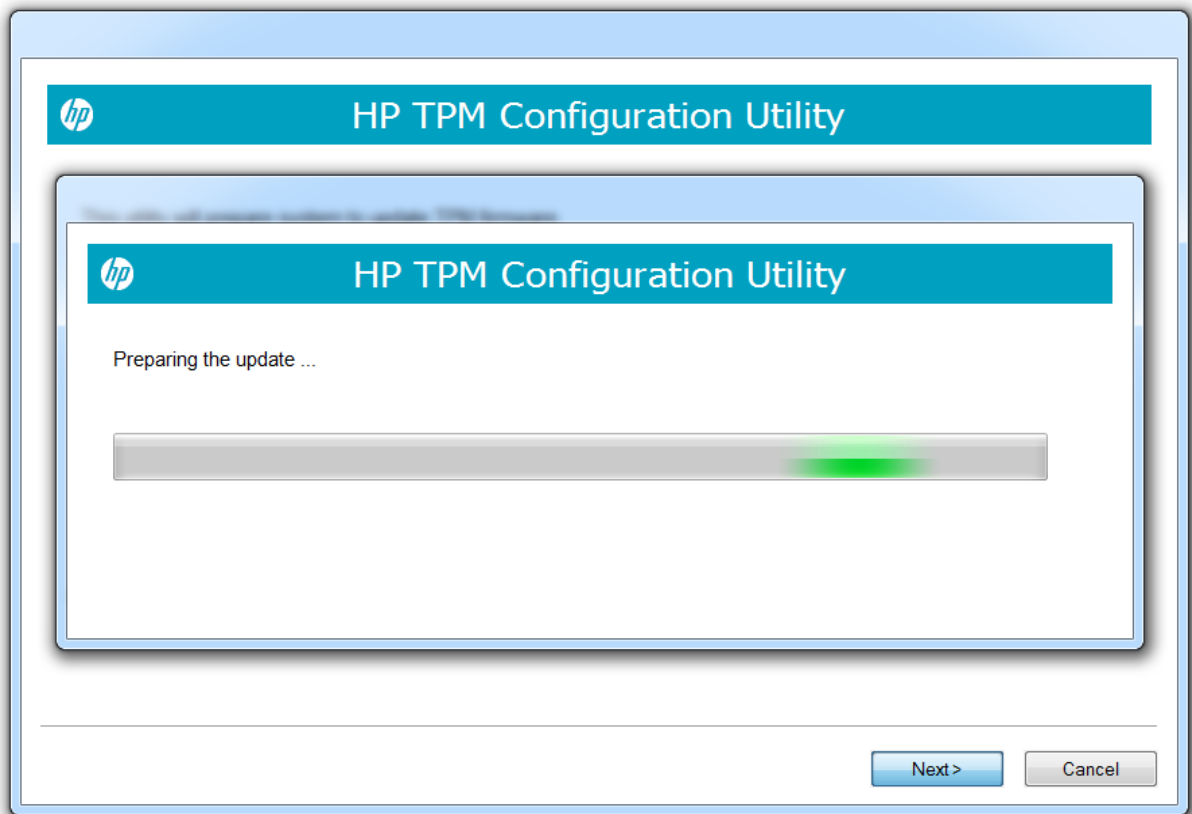
This device has TPM firmware family 1.2, version 6.10.70.  
This utility will update it to family 2.0, version 7.10.1901.2.

Remaining updates: 33

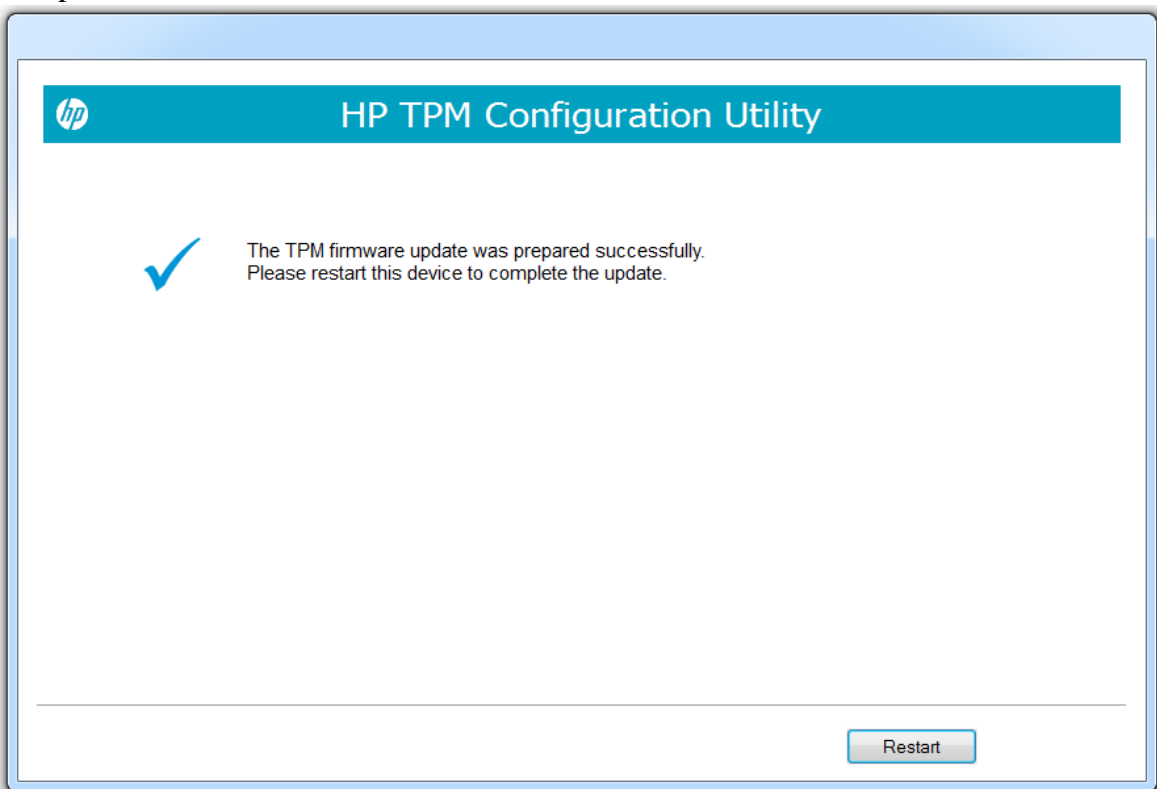
☒ I have read the warning and agree to continue with this update.

Next > Cancel

Copy update image in progress, this might be removed in the future if the firmware image binary is small.




Complete, success





## Welcome screen, switch from 2.0 to 1.2 (down grade)

Down grade from 2.0 to 1.2 warning icon is showed




# HP TPM Configuration Utility

This utility will prepare the computer to update the Trusted Platform Module (TPM) firmware.

**WARNING:** An encrypted drive could use the TPM to back up the encryption keys that protect user data. Updating the TPM firmware while the drive is encrypted will result in data loss.

To prevent the loss of encrypted user data, cancel this update, decrypt drive encryption, and restart the update.



This computer has TPM firmware family 2.0, version 7.40.2098.0.  
This utility will replace the TPM firmware with an older version, family 1.2, version 6.43.243.0.

Options

☐ Upgrade to Specification 2.0      ☒ Downgrade to Specification 1.2 (not recommended)

Remaining updates: 64

☐ I have read the warning and agree to continue with the update.

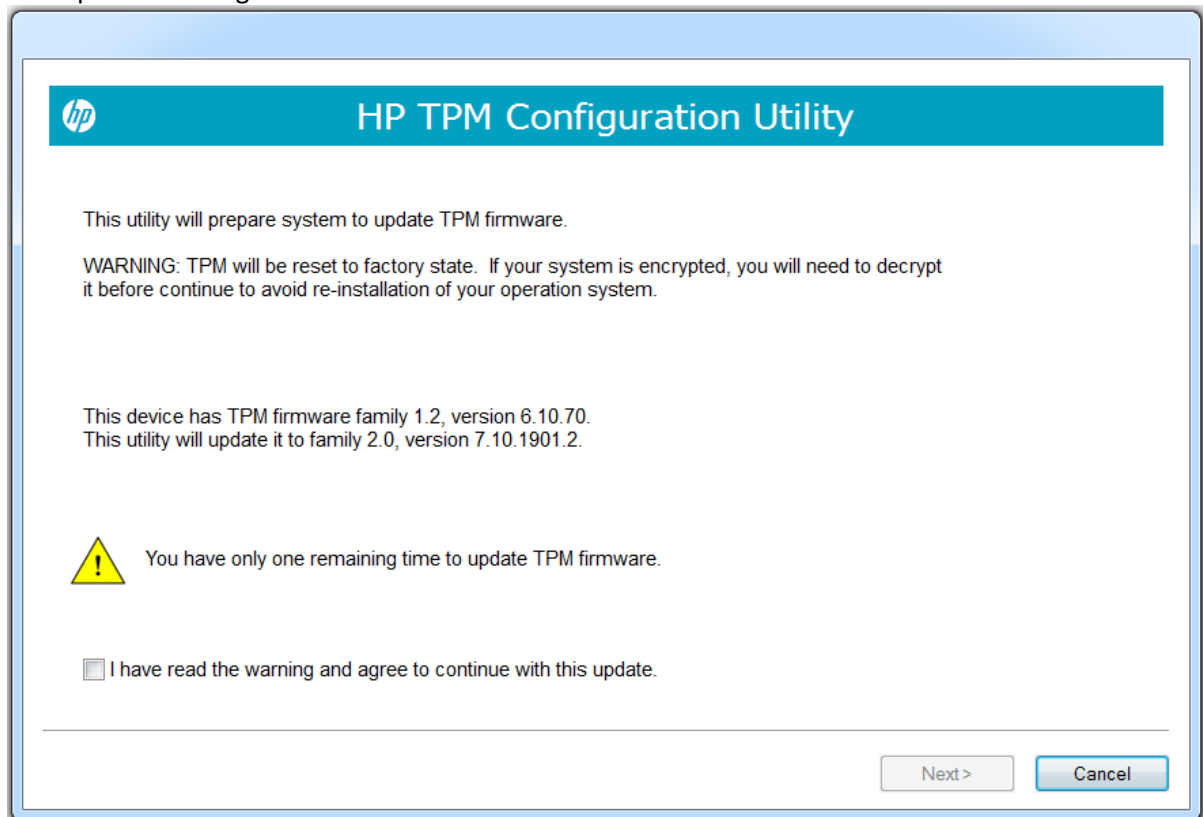
Next >

Cancel

## Welcome, last chance to update TPM firmware

Remaining updates = 1

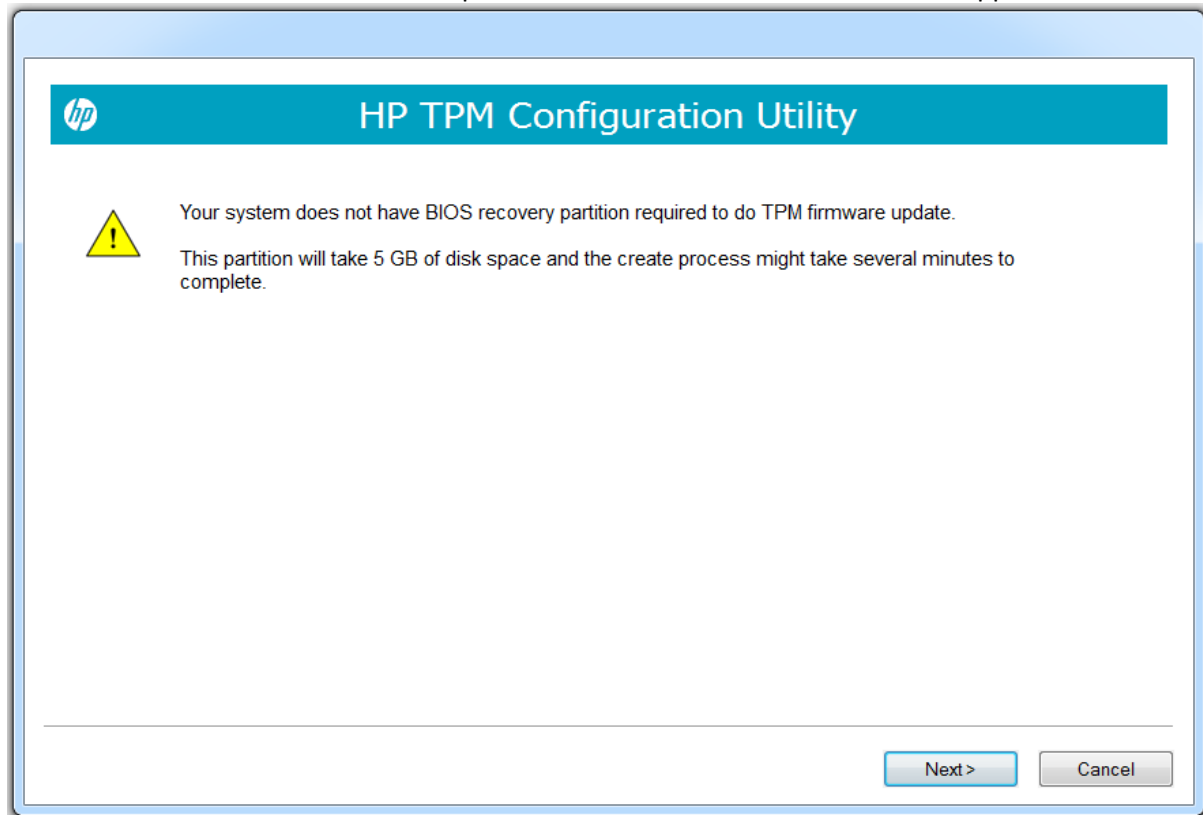
Last update warning icon is showed.



### No HP\_TOOLS partition

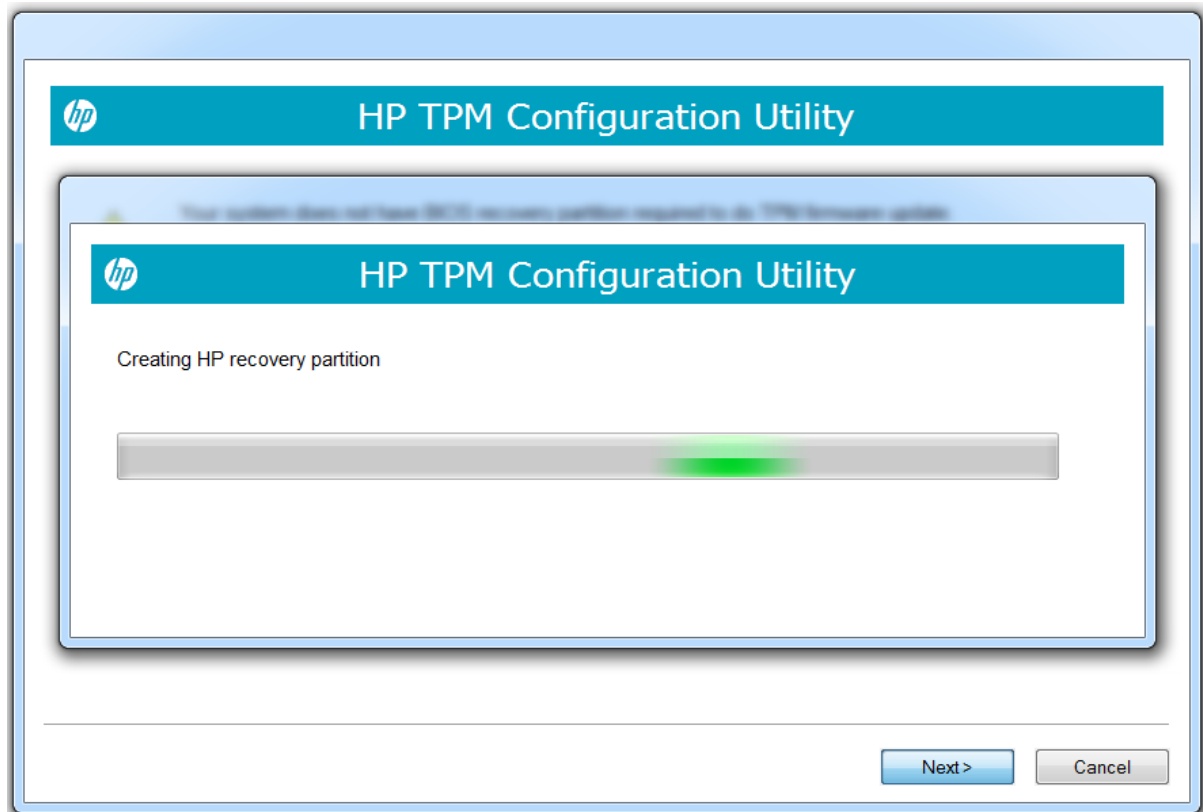
Inform user HP\_TOOLS (or EFI) partition are not found and is required.

User can either select "Next" to allow partition to be created or "Cancel" to exit application.

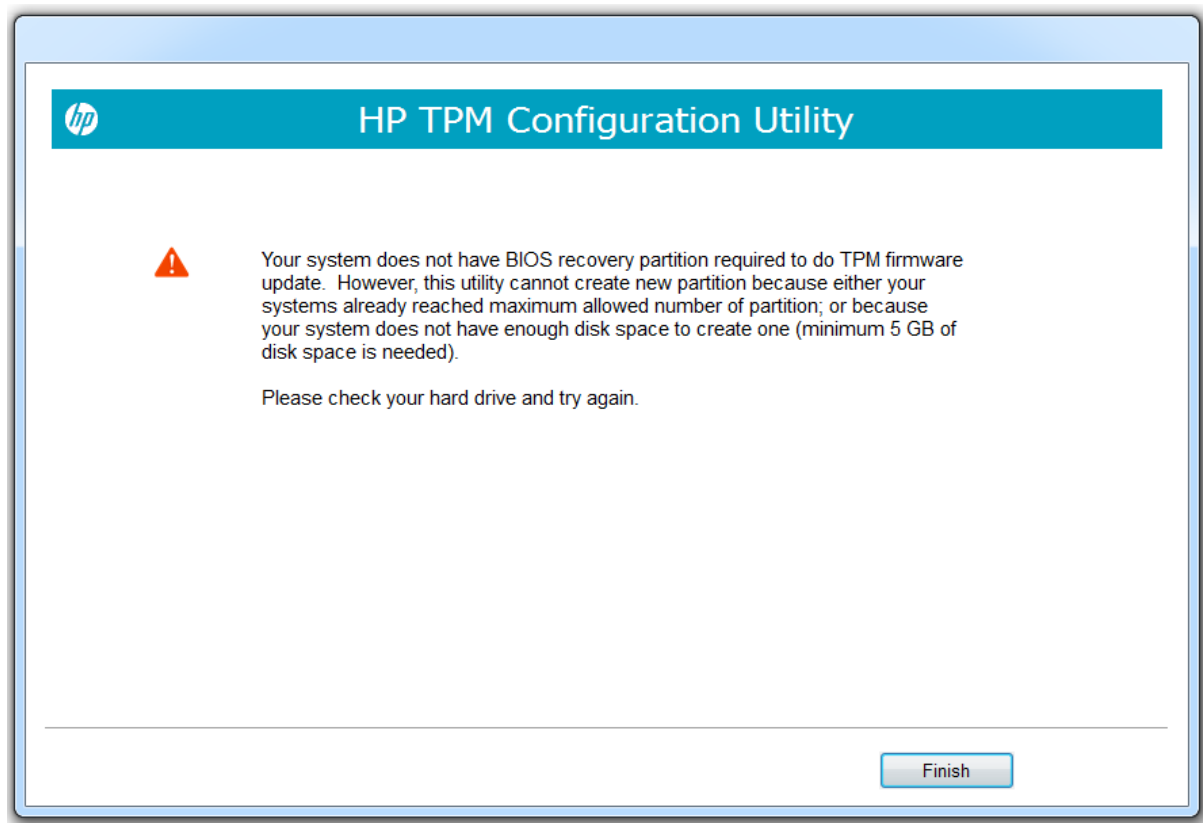


### Create partition in progress

User has selected "Next" on previous screen.

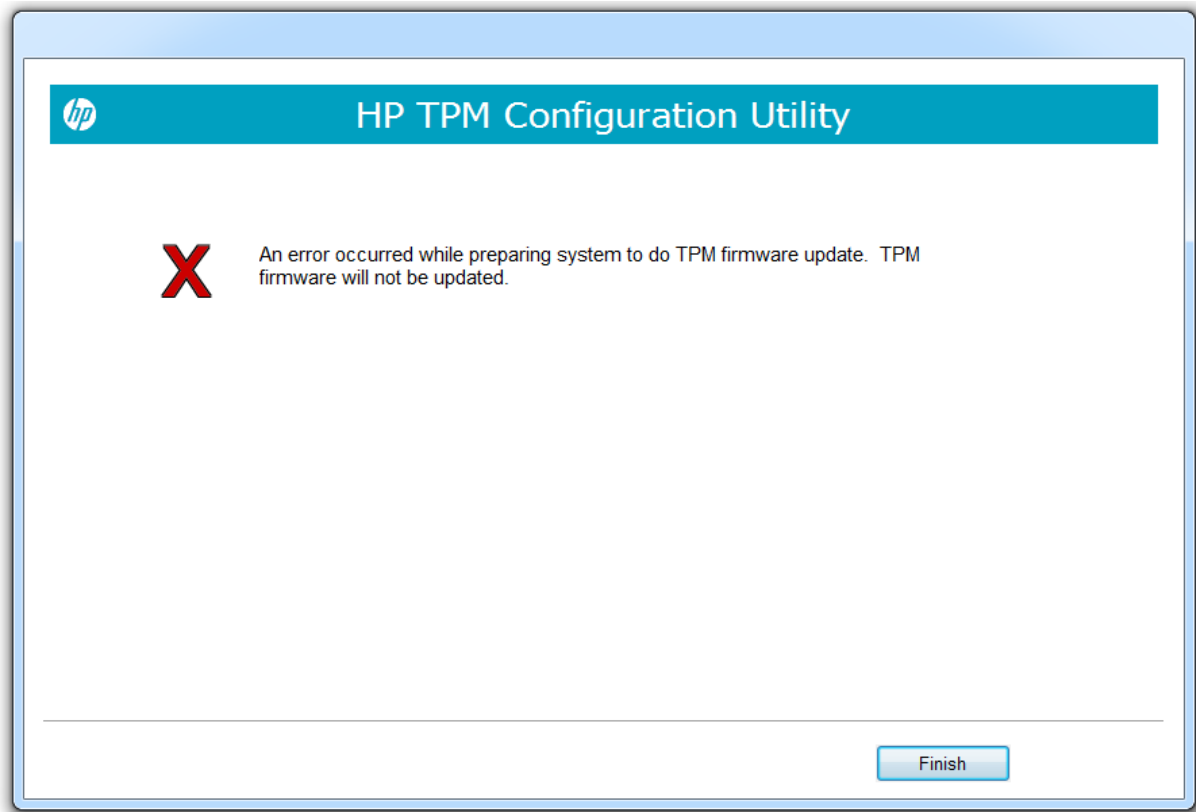


## Failed to create HP\_TOOLS partition

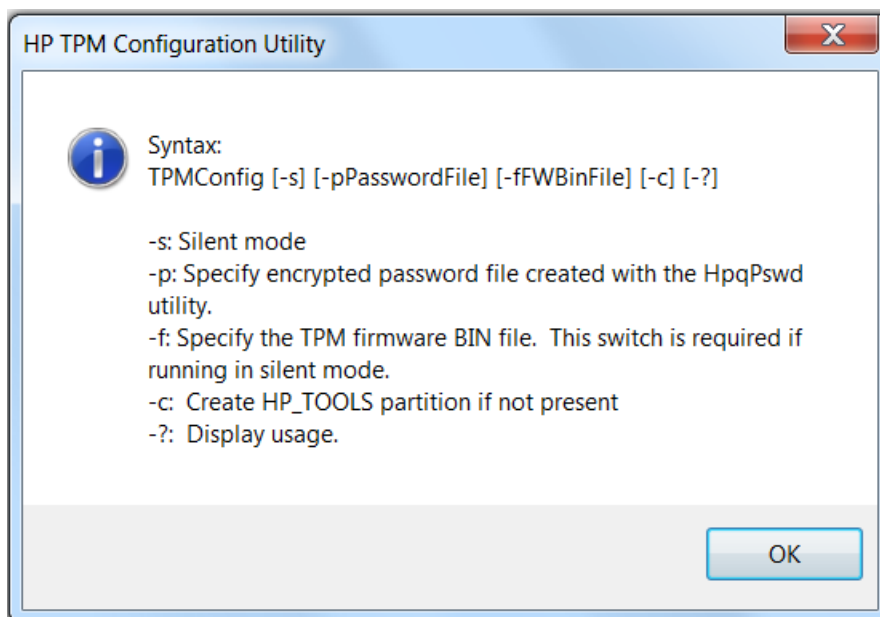


## Failed to prepare update


When an error occurred during prepare process.



## Command line usage dialog (display when the tool is running with "-?" switch)



## Welcome screen, upgrade from 1.2 to 1.2

 **HP TPM Configuration Utility**

This utility will prepare the computer to update the Trusted Platform Module (TPM) firmware.

**WARNING:** An encrypted drive could use the TPM to back up the encryption keys that protect user data. Updating the TPM firmware while the drive is encrypted will result in data loss.

To prevent the loss of encrypted user data, cancel this update, decrypt drive encryption, and restart the update.

This computer has TPM firmware family 1.2, version 6.40.190.0.

**Options**

☒ Update to Specification 1.2, version 6.43.245.0


Remaining updates: 64


☐ I have read the warning and agree to continue with the update.

Next >

Cancel

## Complete, success

 **HP TPM Configuration Utility**




The TPM firmware update was prepared successfully.

Select "Restart" to complete the firmware update.

Restart

## Welcome screen, upgrade from 2.0 to 2.0

 **HP TPM Configuration Utility**

This utility will prepare the computer to update the Trusted Platform Module (TPM) firmware.

**WARNING:** An encrypted drive could use the TPM to back up the encryption keys that protect user data. Updating the TPM firmware while the drive is encrypted will result in data loss.

To prevent the loss of encrypted user data, cancel this update, decrypt drive encryption, and restart the update.

This computer has TPM firmware family 2.0, version 7.62.3126.0.

Options

☒ Update to Specification 2.0, version 7.83.3358.0


Remaining updates: 63


☒ I have read the warning and agree to continue with the update.

Next >

Cancel

Complete, success

 **HP TPM Configuration Utility**



The TPM firmware update was prepared successfully.

Select "Restart" to complete the firmware update.

Restart



## Command Line Options

Below is the list of parameters supported by TPM Config Utility.

Option	Comments
<b>-f</b> <i>BIN-file</i>	Specifies the TPM firmware .BIN image file. Default is *.BIN in the executable folder. Note: there is no space between -f and filename.
<b>-p</b> <i>password-file</i>	Specify encrypted password file created with the HpqpSwd utility. This file is required if there is a BIOS Setup password set. Note: there is no space between -p and filename.
<b>-s</b>	Silent mode.
<b>-c</b>	Create HP_TOOLS partition if not present. On a GPT formatted system with native UEFI boot, this option is ignored. On MBR, the partition is not created if it already exists. If unable to create partition, exits with error code.
<b>-t</b>	Executes all tests to identify if the TPM can be updated or not. It generates a "TestResults.txt" file in the executable folder containing the TPM version and the error codes, if any, from the tests.
<b>-a</b> <i>TPM-Spec-Version</i>	Auto select only compatible image files that have the specified TPM spec version. This option must be used with '-t' or '-s'. Note: There is no space between -a and TPM spec version. Possible spec version values: 1.2 2.0
<b>-x</b> <i>VTx</i>	Do not check whether the virtualization setting in BIOS has been disabled prior to TPM firmware upgrade. By default, TPM Config Utility 2.0 and later requires this setting disabled.
<b>-?</b>	Show the same usage dialog that appears if an invalid command line is detected. This option overrides all other options, including -s.

## Silent mode command line options

- Silent mode:

```
TpmConfig -s -fFirmwareFileName
```

- Silent mode, create EFI/HP\_TOOLS partition if not existed:

```
TpmConfig -s -fFirmwareFileName -c
```

- Silent mode, password file is provided:

```
TpmConfig -s -fFirmwareFileName -pBiosPasswordFile
```

- Silent mode, with automatic firmware selection, with a specific spec version:

```
TpmConfig -s -aTPMSpecVersion
```

- Silent mode, with automatic firmware selection:

```
TpmConfig -s
```

## Command line examples

1. If your system currently has TPM firmware from 1.2 (version 6.40.190.0), and you want to run silently and update TPM firmware to 2.0 (version 7.20.1971.2), use this command:

```
Tpmconfig -s -fTPM6.40.190.0_to_TPM20_7.20.1971.2.BIN
```

“-s” is to run silent mode, “-f” is to use specified file,

“TPM6.40.190.0\_to\_TPM20\_7.20.1971.2.BIN” is the TPM firmware filename.

2. If your system currently has TPM firmware from 2.0 (version 7.20.1971.2), and you want to run silently and update TPM firmware to 1.2 (version 6.40.180.2), use this command:

```
Tpmconfig -s -fTPM20_7.20.1971.2_to_TPM6.40.180.2.BIN
```

3. If your system currently has TPM firmware from 2.0 (version 7.10.10.2), and you want to run silently and update TPM firmware to 2.0 (version 7.20.1971.2), use this command:

```
Tpmconfig -s -fTPM20_7.10.10.2_to_TPM7.20.1971.2.BIN
```

4. If your system currently has TPM firmware from 1.2 (version 6.10.10.2), and you want to run silently and update TPM firmware to 1.2 (version 6.20.1.1), use this command:

```
Tpmconfig -s -fTPM6.10.10.2_to_TPM6.20.1.1.BIN
```

5. If you want to run silently and update TPM firmware to a compatible 1.2 image, use this command:

```
Tpmconfig -s -a1.2
```

6. If you want to run silently and update TPM firmware to a compatible 2.0 image, use this command:

```
Tpmconfig -s -a2.0
```

7. If you want to apply any compatible update or downgrade, use this command:

```
Tpmconfig -s
```

#### Notes

- Run a command from an elevated (run as admin) command line Window, and go to the location where the TPM Config Utility tool is located. Assume the tools and TPM firmware binary are in the same folder.
- TPM firmware filenames can be makeup (not existed).
- Not all TPM firmware update paths are supported. You need to check the release notes of the SoftPak containing the firmware binary files to know what paths are supported.
- Automatic firmware selection with specified spec version looks for compatible firmware files matching the spec version on the same folder as the program.
- Automatic firmware selection looks for compatible firmware files on the same folder as the program, and in case of matching both downgrade and upgrade it will choose to upgrade.

#### Log File

By default a log file is created in the same folder with the executable, filename is TPMConfig.log.

The default level of log data is “Information” and logging type is logged to “File”.

Logging Type: Only support “File” type.

Logging Level:

TPMConfig Utility supports several different log levels.

The levels are described in the table below, from “lowest” to “highest”.

Level	Meaning / Usage
TraceIn	Entering a function
TraceOut	Leaving a function
Verbose	Informational, but verbose
Information	Basic information (this is the default)
Warning	May be a problem
Error	Error condition.
Diag	Temporary developer diagnostic for troubleshooting -- should not be checked in to released version.
Never	Turn off all logging

The default logging level can be overridden by setting the above registry entry to one of the levels from the above table.

**Key:** HKLM\Software\Policies\Hewlett-Packard\ TPMUpdate

**Value Name:** MinLogLevel (REG\_SZ)

**Value:** entry from table above

If there is no registry entry, or the registry entry exists, but the value is one other than those listed above, the default logging level remains in effect.

#### Log File Size

The maximum size of the log output for File logging is 2MB by default. The maximum file size value can be overridden in the registry, by the following value, *expressed in KB*:

**Key:** HKLM\Software\Policies\Hewlett-Packard\ TPMUpdate

**Value Name:** MaxLogSize (REG\_DWORD)

**Value:** size expressed in KB (e.g., 1024 = 1MB limit)

This value is optional and only needs to be specified to change the default log size.

The size of the log file for a given component is checked each time the component begins execution and periodically thereafter. If the size of the log file is greater than the max size, it will be moved to a uniquely-named sequentially-numbered file. Logging will then continue in the originally named file. File size limit checking is not done on every write, so the actual size of the log files may exceed the limit by a small amount.

A total of 10 log files are persisted: the current log (*component-name.log*), and up to nine (9) archives (*component-name\_00n.log*).

## Returned Codes

Below is the list of possible returned code.

Return code	Hex	Description
0	0x0000	Success
128	0x0080	Invalid command line option(s)
256	0x0100	No BIOS support
257	0x0101	No TPM firmware bin file
258	0x0102	Failed to create HP_TOOLS partition
259	0x0103	Failed to flash the firmware
260	0x0104	No EFI partition (for GPT)
261	0x0105	Bad EFI partition
262	0x0106	Cannot create HP_TOOLS partition (because the maximum number of partitions has been reached)
263	0x0107	Not enough space partition (when the size of the firmware binary file is greater than the free space of EFI or HP_TOOLS partition)
264	0x0108	Unsupported operating system
265	0x0109	Elevated (administrator) privileges are required
273	0x0111	Not supported chipset
274	0x0112	No more firmware upgrade is allowed.
275	0x0113	Invalid firmware binary file
290	0x0122	BitLocker is currently enabled.
291	0x0123	Unknown BitLocker status
292	0x0124	WinMagic encryption is currently enabled.
293	0x0125	WinMagic SecureDoc is currently enabled.
296	0x0128	No system information
305	0x0131	Intel TXT is currently enabled.
306	0x0132	VTx is currently enabled.
307	0x0133	SGX is currently enabled.
1602	0x0642	User cancelled the operation.
3010	0x0BC2	Success reboot required
3011	0x0BC3	Success rollback

<b>3012</b>	0x0BC4	Failed rollback
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### **Supported Systems**

HP Elite x2 1012 G2  
 HP EliteBook 1040 G4 Notebook PC  
 HP ZBook 14u G4 Mobile Workstation  
 HP ZBook 15u G4 Mobile Workstation  
 HP EliteBook x360 1030 G2 Notebook PC  
 HP ProBook 430 G4 Notebook PC  
 HP Pro x2 612 G2  
 HP Pro x2 612 G2 Tablet with Collaboration Keyboard  
 HP ProBook 640 G3 Notebook PC  
 HP ProBook 650 G3 Notebook PC  
 HP ProBook 645 G3 Notebook PC  
 HP ProBook 655 G3 Notebook PC  
 HP EliteBook 725 G4 Notebook PC  
 HP EliteBook 745 G4 Notebook PC  
 HP EliteBook 755 G4 Notebook PC  
 HP EliteBook 840 G4 Notebook PC  
 HP EliteBook 848 G4 Notebook PC  
 HP EliteBook 850 G4 Notebook PC  
 HP EliteBook 820 G4 Notebook PC  
 HP EliteBook 828 G4 Notebook PC  
 HP mt42 Mobile Thin Client  
 HP ZBook 17 G3 Mobile Workstation  
 HP ZBook 17 G5 Mobile Workstation  
 HP 406 Microtower Business PC  
 HP EliteBook Folio 1040 G3 Notebook PC  
 HP EliteDesk 705 SFF  
 HP EliteOne 705 AiO  
 HP EliteDesk 705 DM  
 HP EliteDesk 705 G3 MT  
 HP EliteDesk 705 G3 SFF  
 HP EliteDesk 705 G3 DM  
 HP EliteBook 1030 G1 Notebook PC  
 HP EliteBook 840 G3 Notebook PC  
 HP EliteBook 848 G3 Notebook PC  
 HP EliteBook 850 G3 Notebook PC  
 HP ZBook 15u G3 Mobile Workstation  
 HP ProBook 640 G4 Notebook PC  
 HP ProBook 650 G4 Notebook PC  
 HP ProBook 640 G2 Notebook PC  
 HP ProBook 650 G2 Notebook PC  
 HP ProDesk 480 SFF  
 HP ProDesk 490 SFF  
 HP ProDesk 498 SFF  
 HP EliteOne 800 AiO  
 HP ProDesk 400 SFF  
 HP ProOne 600 PC

HP EliteDesk 600 DM  
HP ProDesk 600 SFF  
HP EliteDesk 800G2  
HP MP9G2 Retail System  
HP EliteDesk 800 SFF  
HP EliteDesk 600 SFF  
HP EliteBook 840 G5 Notebook PC  
HP EliteBook 846 G5 Notebook PC  
HP EliteBook 850 G5 Notebook PC  
HP ZBook 14u G5 Mobile Workstation  
HP ZBook 15u G5 Mobile Workstation  
HP EliteDesk 800 G3 TWR  
HP EliteDesk 880 G3 TWR  
HP EliteDesk 800 G3 SFF  
HP ProDesk 600 G3 SFF  
HP ProDesk 600 G3 MT  
HP ProDesk 680 G3 MT  
HP ProDesk 400 G4 MT  
HP ProDesk 480 G4 MT  
HP ProDesk 400 G4 SFF  
HP EliteOne 800 G3 AiO  
HP ProOne 600 G3 AiO  
HP EliteOne 800 G3 GPU AiO  
HP ProOne 400 G3 AiO  
HP EliteOne 1000 G1 AiO  
HP EliteDesk 800 G3 DM  
HP ProDesk 600 G3 DM  
HP ProDesk 400 G3 DM  
HP EliteBook 840r G4 Notebook PC  
HP EliteBook 846r G4 Notebook PC  
HP ZBook x2 G4 Detachable Workstation  
HP EliteBook x360 1020 G2 Notebook PC  
HP EliteBook Folio G1 Notebook PC  
HP EliteBook 840 G5 Healthcare Edition Notebook PC  
HP EliteBook 846 G5 Healthcare Edition Notebook PC  
HP 260 G3  
HP 280 G2 Microtower Business PC  
HP EliteBook 735 G5 Notebook PC  
HP Elite x2 1012 G1 Advanced Keyboard  
HP Elite x2 1012 G1 Tablet  
HP Elite x2 1012 G1 with Travel Keyboard  
HP ProDesk 600 G4 MT  
HP ProDesk 680 G4 MT  
HP ProDesk 600 G4 SFF  
HP ProOne 400 G4 AiO  
HP ProOne 440 G4 AiO  
HP EliteDesk 800 G4 DM  
HP EliteOne 800 G4 GPU AiO  
HP ProDesk 600 G4 DM  
HP ProDesk 400 G4 DM

HP EliteOne 1000 G2 AiO  
HP ProOne 600 G4 AiO  
HP EliteOne 800 G4 AiO  
HP ProDesk 400 G5 SFF  
HP ProDesk 400 G5 MT  
HP ProDesk 480 G5 MT  
HP EliteDesk 800 G4 SFF  
HP EliteDesk 800 G4 TWR  
HP EliteDesk 880 G4 TWR  
HP ElitePOS G1 Retail System  
HP ProBook 455 G5 Notebook PC  
HP ZHAN 66 Pro G1 Notebook PC  
HP mt20 Mobile Thin Client  
HP ProBook 440 G5 Notebook PC  
HP ProBook 470 G5 Notebook PC  
HP ProBook 450 G3 Notebook PC  
HP ProBook 440 G3 Notebook PC  
HP ProBook 446 G3 Notebook PC  
HP ProBook 430 G5 Notebook PC  
HP ProBook 450 G5 Notebook PC  
HP ProBook 430 G3 Notebook PC  
HP mt21 Mobile Thin Client  
HP ProBook x360 440 G1 Notebook PC  
HP EliteBook 820 G3 Notebook PC  
HP EliteBook 828 G3 Notebook PC  
HP EliteBook 830 G5 Notebook PC  
HP EliteBook 836 G5 Notebook PC  
HP Elite Slice  
HP EliteDesk 705 G4 MT  
HP EliteDesk 705 G4 DM  
HP EliteDesk 705 G4 SFF  
HP RP9 G1 Retail System  
HP mt44 Mobile Thin Client  
HP Engage Flex Pro Retail System  
HP mt43 Mobile Thin Client  
HP ProBook 645 G4 Notebook PC  
HP t630 Thin Client  
HP EliteBook 745 G5 Notebook PC  
HP EliteBook 755 G5 Notebook PC  
HP ZBook 15 G3 Mobile Workstation  
HP ZBook 15 G5 Mobile Workstation  
HP ProBook x360 11 G1 Education Edition  
HP ProBook x360 11 G2 Education Edition  
HP t530 Thin Client  
HP EliteBook 1050 G1 Notebook PC  
HP ZBook 17 G4 Mobile Workstation  
HP ZBook 15 G4 Mobile Workstation  
HP ZBook Studio G4 Mobile Workstation  
HP ZBook Studio G5 Convertible Workstation  
HP ZBook Studio G5 Mobile Workstation



HP ZBook Studio G3 Mobile Workstation  
HP 260 G2 DM  
HP 280 G1 MT  
HP 280 Pro G1 MT  
HP 260 G2 DM Business PC  
HP 285 G2 MT Business PC  
HP 285 Pro G2 MT Business PC  
HP EliteOne 705 G2 23-in Non-Touch All-in-One PC  
HP EliteOne 705 G2 23-in Touch All-in-One PC  
HP ProDesk 400 G1 DM Business PC  
HP Desktop PC  
HP 285 Pro G1 MT Business PC  
HP 280 Pro G1 Business PC  
HP ProOne 400 G1 23-inch Non-Touch AiO  
HP 300 G1 MT  
HP 406 G1 MT Business PC  
HP ProDesk 705 G1  
HP ProDesk 605 G1 MT Business PC  
HP ProDesk 605 G1 SFF Business PC  
HP EliteOne 800 G1 21.5-inch Non-Touch AiO PC  
HP ProDesk 400 G2 SFF Business PC  
HP EliteOne 800 G1 Touch Retail System AiO 23-inch  
HP ProDesk 480 G1 MT Business PC  
HP ProDesk 480 G2 MT Business PC  
HP ProDesk 490 G2 MT Business PC  
HP ProDesk 498 G2 MT Business PC  
HP ProDesk 400 G2 MT Business PC  
HP EliteDesk 700 G1 SFF Business PC  
HP EliteDesk 700 G1 MT Business PC  
HP EliteDesk 705 G1 MT Business PC  
HP EliteDesk 885 G1 MT Business PC  
HP EliteDesk 705 G1 SFF Business PC  
HP EliteOne 705 G1 23-inch Non-Touch AiO PC  
HP EliteDesk 705 G1 DM Business PC  
HP EliteDesk 800 G1 DM Business PC  
HP ProDesk 600 G1 DM Business PC  
HP 280 G1 Business PC  
HP MP9 Model 9000 Digital Signage Player  
HP 260 G1 DM Business PC  
HP ProOne 400 G1 AiO Business PC (21.5" Touch)  
HP ProOne 400 G1 AiO Business PC (19.5" NT)  
HP 20" ProOne 400 G1 AiO Business PC  
HP ProDesk 400 G1 SFF Business PC  
HP Compaq Pro 4400 TWR Business PC  
HP EliteDesk 800 G1 USDT Business PC  
HP ProDesk 600 G1 SFF Business PC  
HP ProDesk 600 G1 TWR Business PC  
HP ProDesk 680 G1 TWR Business PC  
HP EliteOne 800 G1 AiO Business PC  
HP EliteOne 800 G1 Touch AiO Business PC

HP ProDesk 408 G1 MT Business PC  
HP ProOne 600 G1 AiO Business PC  
HP ProDesk 490 G1 MT Business PC  
HP ProDesk 498 G1 MT Business PC  
HP Compaq Pro 4700 TWR Business PC  
HP EliteDesk 800 G1 TWR Business PC  
HP EliteDesk 880 G1 TWR Business PC  
HP ProDesk 400 G1 MT Business PC  
HP EliteDesk 800 G1 SFF Business PC  
HP ProDesk 405 G1 MT Business PC  
HP ProDesk 485 G1 MT Business PC  
HP Z240 SFF Workstation Long Life  
HP Z238 MT Workstation  
HP Z238 Microtower Workstation  
HP Z238 Workstation  
HP Z440 Workstation Long Life  
HP Z1 G3 24in AiO Non-Touch Workstation  
HP Z1 G3 24in AiO Touch Workstation  
HP Z240 Tower BR Workstation  
HP Z240 Tower Workstation  
HP IDS Z240 Workstation NMIC Tower  
HP Z240 WorkstationTower  
HP Z240 SFF BR Workstation  
HP IDS Z240 Workstation NMIC SFF  
HP Z240 Workstation SFF  
HP Z440 Workstation LL  
HP Z640 Brazilian Workstation  
HP Z640 Workstation  
HP Z840 Workstation  
HP Z840 Brazilian Workstation  
HP Z440 Brazilian Workstation  
HP t730 Thin Client  
HP ElitePad 1000 G2  
HP t620 PLUS Quad Core TC  
HP t620 Dual Core TC  
HP t620 PLUS Dual Core TC  
HP t620 Quad Core TC  
Assy, Riser Card, PCIe t620 PLUS  
HP EliteBook 745 G2  
HP mt41 Mobile Thin Client  
HP mt41 Mobile Thin Client w/Camera  
HP t820 Flexible Thin Client

**Supported Operating System(s)**

Microsoft Windows 10 All Editions (32-bit)

Microsoft Windows 10 All Editions (64-bit)

Microsoft Windows 7 32-bit

Microsoft Windows 7 64-bit

Microsoft Windows 7 Enterprise 32 Edition

Microsoft Windows 7 Enterprise 64 Edition

Microsoft Windows 7 Home Basic 32 Edition

Microsoft Windows 7 Home Basic 64 Edition

Microsoft Windows 7 Home Premium 32 Edition

Microsoft Windows 7 Home Premium 64 Edition

Microsoft Windows 7 Professional 32 Edition

Microsoft Windows 7 Professional 64 Edition

Microsoft Windows 7 Ultimate 32 Edition

Microsoft Windows 7 Ultimate 64 Edition

Microsoft Windows 8 32 Edition

Microsoft Windows 8 64 Edition

Microsoft Windows 8.1 32 Bit

Microsoft Windows 8.1 64 Bit