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<b>Document Name:</b> PES of Acer BIOS Setting Tool (NB)	<b>Doc. No.:</b> 20190514-0001	<b>Revision:</b> 1.15
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# PRODUCT EXTERNAL SPECIFICATION of Acer BIOS Setting Tool (NB) v1.15

**Version:** 1.15  
**Create Date:** January 10, 2017  
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**Author:** Alex Hsieh

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## Version History

Revision	Personnel	Date	Contents
1.0	Jackie Lai	2017/01/10	First Release
1.1	Jason cs Wang	2018/06/20	Update to WMI spec 2.62
1.2	Melissa Wu	2019/01/07	Update to WMI spec 2.63, 2.64, 2.65, 2.68 generic changes
1.3	Melissa Wu	2019/01/18	Update TPM command line and 'Set' result information
1.3	Melissa Wu	2019/02/20	Update „ “ to „ „, “ “ ” to " "
1.3	Melissa Wu	2019/03/18	Update WMI version in details
1.4	Melissa Wu	2019/04/18	Add new commands in chapter 9.1 (/export-raw-settings, /import-raw-settings, / export-custom-settings, / import-custom-settings)
1.5	Melissa Wu	2019/05/14	Update the below spec in chapter 9.2 (Clear TPM, Set Supervisor Password, Set User Password)
1.6	Jason Chiu	2019/10/02	Update to WMI spec 2.73 for ABST structure
1.7	Ivan Wang	2020/03/20	Add tool version 1.4.3004
1.8	Jason Chiu Ivan Wang	2020/05/25	Update to WMI spec 2.74 and 2.75 for ABST structure
1.9	Ivan Wang	2020/08/31	<ol style="list-style-type: none"> <li>1. Update for WMI spec v2.77</li> <li>2. Correct the example command of set supervisor password</li> <li>3. Correct the example command of set user password</li> <li>4. Correct media key return value of function key behavior</li> <li>5. Add AutoTest function for ABST</li> </ol>
1.10	Ivan Wang	2021/02/01	<ol style="list-style-type: none"> <li>1. Remove “commercial” wording in Introduction chapter</li> <li>2. Update for WMI spec v2.78 <ul style="list-style-type: none"> <li>➤ Remove “Real time clock reset” item</li> </ul> </li> <li>3. Update for WMI spec v2.79 <ul style="list-style-type: none"> <li>➤ Add German and Italian in display language</li> <li>➤ Separate “HDDx password” and “HDDx(OPAL) password” command</li> </ul> </li> <li>4. Update for WMI spec 2.82 <ul style="list-style-type: none"> <li>➤ Rename “USB filter” item to “USB Device Filter”</li> <li>➤ Add “MAC Address Pass Through” item</li> <li>➤ Add “Thunderbolt Controller” item</li> </ul> </li> </ol>

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			<ul style="list-style-type: none"> <li>➤ Add “World-Facing LED” item</li> <li>➤ Add “Wake on LAN from Dock” item</li> </ul>
1.11	Ivan Wang	2021/04/08	Add tool version 2.2.82.200
1.12	Ivan Wang	2021/06/18	Add tool version 2.2.82.300
1.13	Ivan Wang & Alex Hsieh	2022/07/20	<ol style="list-style-type: none"> <li>1. Update for WMI spec 2.85 <ul style="list-style-type: none"> <li>➤ Add “Above 4G decoding” item</li> <li>➤ Add “Re-Size BAR Support” item</li> <li>➤ Update options in “MAC Address Pass Through” item</li> <li>➤ Add “Customized MAC Address” item</li> <li>➤ Add “Privacy Screen” item</li> <li>➤ Add “NVMe RAID mode” item</li> </ul> </li> <li>2. Add “Set HDDx(OPAL) Password” items</li> <li>3. Update examples of “Set HDDx password” to prevent misunderstanding.</li> <li>4. Add “Touchpad” item</li> <li>5. Update for WMI spec 2.86 <ul style="list-style-type: none"> <li>➤ Add “VMD Controller” item</li> <li>➤ Add “Display mode” item</li> </ul> </li> <li>6. Update for WMI spec 2.87 <ul style="list-style-type: none"> <li>➤ Add “Trusted Execution Technology” item</li> <li>➤ Add “Tpm Detection Selection” item</li> <li>➤ Add “Authorized Signatures” item</li> </ul> </li> </ol>
1.14	Alex Hsieh	2023/03/13	<ol style="list-style-type: none"> <li>1. Update for WMI spec 2.88 <ul style="list-style-type: none"> <li>➤ Add command “/get-default”</li> <li>➤ Add command “/set-default”</li> <li>➤ Add command “/load-factory-default”</li> <li>➤ Add command “/load-user-default”</li> </ul> </li> <li>2. Modify some option to “Not support” in Display Language <ul style="list-style-type: none"> <li>➤ Japanese</li> <li>➤ Simplified Chinese</li> <li>➤ Thai</li> <li>➤ Finnish</li> </ul> </li> <li>3. Update for WMI spec 2.89</li> </ol>

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			<ul style="list-style-type: none"> <li>➤ Add “Asset Tag Number”</li> <li>➤ Add “Ownership Tag Number”</li> </ul>
1.15	Alex Hsieh	2023/10/11	<ol style="list-style-type: none"> <li>1. Modify “MAC Address Pass Through” option description “Enable” to “System MAC address”</li> <li>2. Modify some option to “Not support” in Display Language <ul style="list-style-type: none"> <li>➤ Japanese</li> <li>➤ Simplified Chinese</li> <li>➤ Thai</li> <li>➤ Finnish</li> </ul> </li> <li>3. Update for WMI spec 2.90 <ul style="list-style-type: none"> <li>➤ Add “Display Mode” item</li> <li>➤ Add “Active Efficient Cores” item</li> <li>➤ Add “eMMC Port” item</li> <li>➤ Add “UFS Port” item</li> <li>➤ Add “GNA Device” item</li> <li>➤ Add “TPM Device Selection” item</li> </ul> </li> <li>4. Update for WMI spec 2.91 <ul style="list-style-type: none"> <li>➤ Add return code “D2h - Control method not support, DFCI is controlling.”</li> </ul> </li> </ol>

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## 1. Introduction

Acer BIOS configuration tool is developed for customers who need it to batch/remote change PC BIOS settings. With it user can get/set current BIOS settings or default BIOS settings.

## 2. Key Features

- ◆ Get/Set current BIOS settings
- ◆ Export/Import BIOS settings

## 3. OS and Platform Support

- ◆ OS Support: Windows PE, Windows 7, and Windows 10 x86/x64
- ◆ Project support: Projects which implement WMI Spec. v2.90~v2.91

ABST tool version	Add WMI in tool
1.00.2000	v2.53
1.00.3000	v2.53
1.00.3001	v2.56~v2.62
1.00.3002	v2.56~v2.62
1.02.3000	v2.63~v2.68
1.03.3000	v2.63~v2.68
1.04.3000	v2.69
1.04.3001	v2.70~v2.73
1.04.3003	v2.70~v2.73
1.04.3004	v2.70~v2.73
2.2.75.100	V2.74~v2.75
2.2.77.100	V2.76~v2.77
2.2.82.100	V2.78~v2.82
2.2.82.200	V2.78~v2.82
2.2.82.300	V2.78~v2.82
2.2.85.2	v2.83~v2.85
2.2.86.1	V2.86
2.2.87.1	V2.87
2.2.89.100	v2,88~v2.89
2.2.91.100	v2,90~v2.91

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## 4. Multi-Brand Support

Acer brand only

## 5. Language Support

Support English only

## 6. DPI-Awareness Support

Acer BIOS configuration tool is a console mode app , it's not a DPI aware app .

## 7. User Account Support

Acer BIOS configuration tool requires to run with administrator privilege.

## 8. App Naming

Abst32.exe for 32 bit OS

Abst64.exe for 64 bit OS

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## 9. Syntax of BIOS setting tool

This chapter gives you an overview of the Acer BIOS Setting Tool syntax. It explains how to use the setting tool and details BIOS items which used to get/set BIOS settings for client systems.

### 9.1 Parameters

Parameter	Description	Example
N/A	List all available parameters and options	Abst64.exe
/?	List all available parameters and options	Abst64.exe /?
/h	List all available parameters and options	Abst64.exe /h
/password "%pwd%"	Input a correct BIOS admin password to get access permission for BIOS settings	Abst64.exe /password "1234"
/get	Get BIOS setting	Abst64.exe /password "1234" /get "Time" (Get current Time)
/set	Set BIOS setting	Abst64.exe /password "1234" /set "Time=12, 05, 00" (Set time as 12:05:00)
/get-default	Get BIOS user default setting	Abst64.exe /password "1234" /get-default "Intel VTD" (Get default setting of System Health Indicator)
/set-default	Set BIOS user default setting	Abst64.exe /password "1234" /set-default "Intel VTD"="1" (Set default setting of System Health Indicator as enable)
/load-factory-default	Load factory default settings System "Date/Time", "Language", and "Supervisor/User Password" will not change after load default.	Abst64.exe /password "1234" /load-factory-default
/load-user-default	Load user default settings System "Date/Time", "Language", and "Supervisor/User Password" will not change after load default.	Abst64.exe /password "1234" /load-user-default
/export-raw-settings	Export all settings to a .bin file. (Data in the .bin file is not readable and supervisor password is not contained in .bin file)	Abst64.exe /password "1234" /export-raw-settings "bios.bin"



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<b>/import-raw-settings</b>	Import settings from a given .bin file (non-readable format) to other devices which is same model as the target device	Abst64.exe /password "1234" /import-raw-settings "bios.bin"
<b>/ export-custom-settings</b>	Export BIOS settings to XML (Data in the .xml file, which can change current or default BIOS setting)	Abst64.exe /password "1234" /export-custom-settings "BiosConfig.xml"
<b>/ import-custom-settings</b>	Import BIOS settings from XML to other devices which is same model as the target device and generate Result.txt (Refer to chapter 9.4)	Abst64.exe /password "1234" /import-custom-settings "BiosConfig2.xml"

**Details for export-raw-settings, import-raw-settings, export-custom-settings, import-custom-settings. The new parameters are defined based on the requirements from SAP tender case (Confirmed by SWPM):**

1. Customer can export all settings to a .bin file by ABST tool. (.bin file is not readable and supervisor password is not contained in .bin file)

■ **New command:** ABST64.exe /password "XXXX" /export-raw-settings "bios.bin"

2. Customer can import this .bin file to other devices which is same model as the target device by ABST tool.

■ **New command:** ABST64.exe /password "XXXX" /import-raw-settings "bios.bin"

■ Tool does not support remote deploy function. Customer IT have to adopt their own deploy mechanism

3. Customer can configure BIOS settings on Acer NB device they purchased (Device A) by ABST tool and then they can export it as an external file stored on that device

■ **New command:** ABST64.exe /password "XXXX" /export-custom-settings "BiosConfig.xml"

■ The exported file will be stored on local folder. Please note we will set store path to local folder of ABST.exe and it cannot changed. File name is defined as a parameter of command.

■ The exported file will be an xml file and customer can manually configure the settings in xml file exported by ABST tool.

4. Once customer complete the configuration, customer can import this setting file to target Acer NB device (Device B, same model with Device A) they purchased

■ **New command:** ABST64.exe /password "XXXX" /import-custom-settings "BiosConfig2.xml"

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- The imported file needs to be located in local folder of ABST64.exe
  - Customer need to manage the import target device, tool do not check device compatibility
  - Tool does not support remote deploy function. Customer have to adopt their own deploy mechanism
5. Tool need to output a log file on desktop which contains:
- Device information: Device serial number, Model name, Asset tag
  - Test result: Result.txt
    - ◆ Overall result (Pass, Fail): If any item is failed, incorrect password or password retry count exceeded, then overall result is failed. Otherwise, pass.
    - ◆ Each item (Pass, Fail, Not support, Incorrect password, Password retry count exceeded) - Based on WMI return code

## 9.2 BIOS Item

This section list all available BIOS options which supported by Acer BIOS Setting tool. By input correct BIOS option and setting, it can get or change current or default BIOS setting.

### System Function

Item	Description	Option
Intel VTX	Get/Set Intel VTX, if WMI version >= 2.73	0: Disabled 1: Enabled 255: Not Supported  Example : Abst64.exe /password 0 /get "Intel VTX"  Abst64.exe /password "1234" /set "Intel VTX=1"
Intel VTD	Get/Set Intel VTD, if WMI version >= 2.73	0: Disabled 1: Enabled 255: Not Supported  Example : Abst64.exe /password 0 /get "Intel VTD"

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Abst64.exe /password "1234" /set "Intel VTD=1"

## Trust Execution Technology

Get/Set Trust Execution Technology, if WMI version >= 2.87

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get " Trust Execution Technology "

Abst64.exe /password "1234" /set " Trust Execution Technology =1"

## AMD-IOMMU

Get/Set AMD IOMMU, if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "AMD-IOMMU"

Abst64.exe /password "1234" /set "AMD-IOMMU=1"

## AMD-SVM

Get/Set AMD SVM, if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "AMD-SVM"

Abst64.exe /password "1234" /set "AMD-SVM=1"

## ASF support

Get/Set ASF, if WMI version >= 2.56

0: Disabled

1: Enabled

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255: Not Supported

Example :

Abst64.exe /password 0 /get "ASF support"

Abst64.exe /password "1234" /set "ASF support=1"

## ASF Configuration

Get/Set ASF configuration, if WMI version  
>= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "ASF Configuration"

Abst64.exe /password "1234" /set "ASF Configuration=1"

## Above 4G decoding

Get/Set Above 4G decoding, if WMI version  
>= 2.85

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Above 4G decoding"

Abst64.exe /password "1234" /set "Above 4G decoding =1"

## Re-Size BAR Support

Get/Set Re-Size BAR Support, if WMI  
version >= 2.85

0: Disabled

1: Enabled

255: Not Supported

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Example :

Abst64.exe /password 0 /get "Re-Size BAR Support"

Abst64.exe /password "1234" /set "Re-Size BAR Support=1"

## VMD Controller

Get/Set VMD Controller, if WMI version >= 2.86

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "VMD Controller"

Abst64.exe /password "1234" /set "VMD Controller=1"

## Active Efficient Cores

Get/Set Active Efficient Cores, if WMI version >= 2.90

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Active Efficient Cores"

Abst64.exe /password "1234" /set "Active Efficient Cores=1"

## GNA Device

Get/Set GNA Device, if WMI version >= 2.90

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "GNA Device"

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Abst64.exe /password "1234" /set "GNA  
Device=1"

## Device Control

Item	Description	Option
Touchpad	Get/Set Touchpad, if WMI version >= 2.74	0: I2C
		1: PS/2
		255: Not Supported
		Example :
		Abst64.exe /password 0 /get "Touchpad"
		Abst64.exe /password "1234" /set "Touchpad=1"
Audio	Get/Set Audio Controller (commercial only) , if WMI version >= 2.56	0: Disabled
		1: Enabled
		255: Not Supported
		Example :
		Abst64.exe /password 0 /get "Audio"
		Abst64.exe /password "1234" /set "Audio=1"
Wired LAN	Get/Set wired LAN (commercial only) , if WMI version >= 2.56	0: Disabled
		1: Enabled
		255: Not Supported
		Example :
		Abst64.exe /password 0 /get "Wired LAN"
		Abst64.exe /password "1234" /set "Wired LAN=1"

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## Wi-Fi

Get/Set Wi-Fi Module

0: Disabled

(commercial only) , if WMI version >= 2.56

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Wi-Fi"

Abst64.exe /password "1234" /set "Wi-Fi=1"

## WiGig

Get/Set WiGig

0: Disabled

(commercial only) , if WMI version >= 2.56

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "WiGig"

Abst64.exe /password "1234" /set "WiGig=1"

## Bluetooth

Get/Set Bluetooth Module

0: Disabled

(commercial only) , if WMI version >= 2.56

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Bluetooth"

Abst64.exe /password "1234" /set "Bluetooth=1"

## 3G/LTE

Get/Set 3G/LTE Module

0: Disabled

(commercial only) , if WMI version >= 2.56

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "3G/LTE"

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## Card Reader

Get/Set card reader

(commercial only) , if WMI version >= 2.56

Abst64.exe /password "1234" /set "3G/LTE=1"

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Card Reader"

Abst64.exe /password "1234" /set "Card Reader=1"

## Camera

Get/Set camera

(commercial only) , if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Camera"

Abst64.exe /password "1234" /set "Camera=1"

## Fingerprint

Get/Set fingerprint

(commercial only) , if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Fingerprint"

Abst64.exe /password "1234" /set "Fingerprint=1"

## xHCI Support

Get/Set xHCI, if WMI version >= 2.56

0: Disabled xHCI and enable eHCI

1: Enabled xHCI

255: Not Supported



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Example :

Abst64.exe /password 0 /get "xHCI Support"

Abst64.exe /password "1234" /set "xHCI Support=1"

## TBT Detection Gain

Get/Set TBT Detection Gain, if WMI version  
>= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "TBT Detection Gain"

Abst64.exe /password "1234" /set "TBT Detection Gain=1"

## Optical Drive

Get/Set Optical Drive, if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Optical Drive"

Abst64.exe /password "1234" /set "Optical Drive=1"

## Speaker & Headphone

Get/Set Speaker & Headphone, if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Speaker & Headphone"

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Abst64.exe /password "1234" /set "Speaker & Headphone=1"

## Microphone

Get/Set Microphone, if WMI version >= 2.56

0: Disabled Microphone  
1: Enabled Microphone  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Microphone "

Abst64.exe /password "1234" /set "Microphone =1"

## SATA Mode

Get/Set SATA Mode, if WMI version >= 2.56

0: AHCI  
1: Optane with RAID  
2: Optane without RAID  
3: RAID  
255: Not Supported

Example :

Abst64.exe /password 0 /get "SATA Mode"

Abst64.exe /password "1234" /set "SATA Mode=1"

## USB Device Filter

Get/Set USB Device Filter, if WMI version >= 2.77

0: All Allowed  
1: Keyboard/Mouse Only  
2: USB Storage Read-Only  
255: Not supported

Example :

Abst64.exe /password 0 /get "USB Device Filter"

Abst64.exe /password "1234" /set "USB Device Filter=1"

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## CNVi WLAN/BT

Get/Set CNVi WLAN/BT, if WMI version >= 2.75

0: Disable  
1: Enable  
255: Not supported

Example :

Abst64.exe /password 0 /get "CNVi WLAN/BT "

Abst64.exe /password "1234" /set "CNVi WLAN/BT=1"

## MAC Address Pass Through

Get/Set MAC address Pass Through, if WMI version >= 2.82

0: Disable  
1: **System MAC address**  
2: Customized MAC address  
255: Not supported

Example :

Abst64.exe /password 0 /get "MAC Address Pass Through"

Abst64.exe /password "1234" /set "MAC Address Pass Through=1"

## Thunderbolt Controller

Get/Set Thunderbolt Controller, if WMI version >= 2.82

0: Disable  
1: Enable  
255: Not supported

Example :

Abst64.exe /password 0 /get "Thunderbolt Controller"

Abst64.exe /password "1234" /set "Thunderbolt Controller=1"

## World-Facing LED

Get/Set World-Facing LED, if WMI version >= 2.82

0: Disable  
1: S3/S4/S5 only  
16: Enabled  
255: Not supported

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Example :

Abst64.exe /password 0 /get "World-Facing LED"

Abst64.exe /password "1234" /set "World-Facing LED=1"

## Customized Address

### MAC

Get/Set Customized MAC Address, if WMI version >= 2.85

Follow the format of MAC address.

0xFFFFFFFFFFFF: Not Supported

Example :

Abst64.exe /password 0 /get "Customized MAC Address"

Abst64.exe /password "1234" /set "Customized MAC Address=12-34-56-78-90-AB"

## Privacy Screen

Get/Set Privacy Screen, if WMI version >= 2.85

0: Disable

1: Enabled

255: Not supported

Example :

Abst64.exe /password 0 /get "Privacy Screen"

Abst64.exe /password "1234" /set "Privacy Screen=1"

## NVMe RAID mode

Get/Set NVMe RAID mode, if WMI version >= 2.85

0: Disable

1: Enabled

255: Not supported

Example :

Abst64.exe /password 0 /get "NVMe RAID mode"

Abst64.exe /password "1234" /set "NVMe RAID mode=1"

## Display mode

Get/Set Display mode, if WMI version >=

1: Auto Select

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2.86

2: Optimus

3: nVidia GPU only

4: Int Graphics (IGD)

5: Ext Graphics (PEG)

255: Not Supported

Example :

Abst64.exe /password 0 /get "Display mode"

Abst64.exe /password "1234" /set "Display mode=1"

## IO Ports

Item	Description	Option
USB Ports	Get/Set USB Ports	0: Disabled
	(commercial only) , if WMI version >= 2.56	1: Enabled
		255: Not Supported
		Example :
		Abst64.exe /password 0 /get "USB Ports"
		Abst64.exe /password "1234" /set "USB Ports=1"

## Type C

Get/Set Type C Ports

(commercial only) , if WMI version &gt;= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Type C"

Abst64.exe /password "1234" /set "Type C=1"

<b>HDD0</b>	<b>Port/HDD0</b>	Get/Set	HDD0	Port/HDD0(OPAL)	Port	0: Disabled
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## (OPAL) Port

(OPAL) Port, if WMI version >= 2.73

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get " HDD0

Port/HDD0(OPAL) Port "

Abst64.exe /password "1234" /set " HDD0

Port/HDD0(OPAL) Port =1"

## HDD1

### Port/HDD1

Get/Set HDD1 Port/HDD1(OPAL) Port

0: Disabled

## (OPAL) Port

(OPAL) Port, if WMI version >= 2.73

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get " HDD1

Port/HDD1(OPAL) Port "

Abst64.exe /password "1234" /set " HDD1

Port/HDD1(OPAL) Port =1"

## HDD2

### Port/HDD2

Get/Set HDD2 Port/HDD2(OPAL) Port

0: Disabled

## (OPAL) Port

(OPAL) Port, if WMI version >= 2.73

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get " HDD2

Port/HDD2(OPAL) Port "

Abst64.exe /password "1234" /set " HDD2

Port/HDD2(OPAL) Port =1"

## HDD3

### Port/HDD3

Get/Set HDD3 Port/HDD3(OPAL) Port

0: Disabled

## (OPAL) Port

(OPAL) Port, if WMI version >= 2.73

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get " HDD3

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Port/HDD3(OPAL) Port "

Abst64.exe /password "1234" /set " HDD3

Port/HDD3(OPAL) Port =1"

<b>HDD4</b>	<b>Port/HDD4</b>	Get/Set	HDD4	Port/HDD4	0: Disabled
<b>(OPAL) Port</b>		(OPAL) Port, if WMI version >= 2.73			1: Enabled
					255: Not Supported

Example :

Abst64.exe /password 0 /get " HDD4

Port/HDD4(OPAL) Port "

Abst64.exe /password "1234" /set " HDD4

Port/HDD4(OPAL) Port =1""

<b>HDD5</b>	<b>Port/HDD5</b>	Get/Set	HDD5	Port/HDD5	0: Disabled
<b>(OPAL) Port</b>		(OPAL) Port, if WMI version >= 2.73			1: Enabled
					255: Not Supported

Example :

Abst64.exe /password 0 /get " HDD5

Port/HDD5(OPAL) Port "

Abst64.exe /password "1234" /set " HDD5

Port/HDD5(OPAL) Port =1"

<b>eMMC Port</b>	Get/Set eMMC Port, if WMI version >= 2.90	0: Disabled
		1: Enabled
		255: Not Supported

Example :

Abst64.exe /password 0 /get "eMMC Port"

Abst64.exe /password "1234" /set "eMMC  
Port=1"

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## UFS Port

Get/Set UFS Port, if WMI version >= 2.90

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "UFS Port"

Abst64.exe /password "1234" /set "UFS Port=1"

## Power and Event Control

Item	Description	Option
<b>Network Boot</b>	Get/Set network boot, if WMI version >= 2.56	0: Disabled 1: Enabled 255: Not Supported  Example : Abst64.exe /password 0 /get "Network Boot"  Abst64.exe /password "1234" /set "Network Boot=1"
<b>Wake on LAN</b>	Get/Set wake on LAN, if WMI version >= 2.56	0: Disabled 1: Enabled 255: Not Supported  Example : Abst64.exe /password 0 /get "Wake on LAN"  Abst64.exe /password "1234" /set "Wake on LAN=1"
<b>Lid Open Resume</b>	Get/Set lid open resume, if WMI version >= 2.56	0: Disabled 1: Enabled



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255: Not Supported

Example :

Abst64.exe /password 0 /get "Lid Open Resume"

Abst64.exe /password "1234" /set "Lid Open Resume=1"

## Wake on WLAN

Get/Set wake on WLAN

(commercial only) , if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "Wake on WLAN"

Abst64.exe /password "1234" /set "Wake on WLAN=1"

## Power-off USB Charge

Get/Set Power off USB

(commercial only) , if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "power-off USB Charge"

Abst64.exe /password "1234" /set "Power-off USB Charge=1"

## Battery Threshold

Get/Set Battery Threshold

(commercial only) , if WMI version >= 2.56

not support when 'Power-off USB Charge'

is set to 'Disabled'

1: 10%

2: 20%

3: 30%

255: Not Supported

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Example :

Abst64.exe /password 0 /get "Battery Threshold"

Abst64.exe /password "1234" /set "Battery Threshold=2"

## USB Boot

Get/Set USB Boot, if WMI version >= 2.56

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "USB Boot"

Abst64.exe /password "1234" /set "USB Boot=1"

## TBT Wake

Get/Set TBT Wake, if WMI version >= 2.56

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "TBT Wake"

Abst64.exe /password "1234" /set "TBT Wake=1"

## Wake on USB while lid closed

Get/Set Wake on USB while lid closed, if WMI version >= 2.56

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Wake on USB while lid closed"

Abst64.exe /password "1234" /set "Wake on USB while lid closed=1"

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**Power On by RTC Alarm** Get/Set Power On by RTC Alarm, if WMI version >= 2.73

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get " Power On by RTC Alarm "

Abst64.exe /password "1234" /set " Power On by RTC Alarm =1"

**Hour** Get/Set Hour, if WMI version >= 2.56

0~23: hour  
255: Not Supported

Example :

Abst64.exe /password 0 /get " Hour "

Abst64.exe /password "1234" /set " Hour =1"

**Minute** Get/Set Minute, if WMI version >= 2.56

0~59: minute  
255: Not Supported

Example :

Abst64.exe /password 0 /get " Minute "

Abst64.exe /password "1234" /set " Minute =1"

**Second** Get/Set Second, if WMI version >= 2.56

0~59: second  
255: Not Supported

Example :

Abst64.exe /password 0 /get " Second "

Abst64.exe /password "1234" /set " Second =1"

**TBT Wake from S4 Support** Get/Set TBT Wake from S4 Support, if WMI version >= 2.61

0: Disabled  
1: Enabled  
255: Not Supported

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Example :

Abst64.exe /password 0 /get "TBT Wake from S4 Support "

Abst64.exe /password "1234" /set "TBT Wake from S4 Support =1"

## USB Wake from S4 Support

Get/Set USB Wake from S4 Support, if WMI version >= 2.61

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "USB Wake from S4 Support "

Abst64.exe /password "1234" /set "USB Wake from S4 Support =1"

## Wake on LAN from Dock

Get/Set wake on LAN from dock, if WMI version >= 2.82

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Wake on LAN from Dock"

Abst64.exe /password "1234" /set "Wake on LAN from Dock=1"

## Security

Item	Description	Option
<b>Current TPM (TCM) State (For TPM 1.2)</b>	Get TPM(TCM) state	0: Disabled & Deactive
	TPM 1.2 only, if WMI version >= 2.56	1: Enabled & Active

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255: Not Supported

Example :

Abst64.exe /password "1234" /get "Current  
TPM 1.2 State"

## Current TPM (TCM) State (For TPM 2.0)

Get TPM(TCM) state

TPM 2.0 and later, if WMI version >= 2.56

0: Not Installed

1: Installed

255: Not Supported

Example :

Abst64.exe /password "1234" /get "Current  
TPM 2.0 State"

## Change TPM (TCM) State (For TPM 1.2)

Set TPM(TCM) state

TPM 1.2 only, if WMI version >= 2.56

0: Disabled & Deactive

1: Enabled & Active

2: No Change

255: Not Supported

Example :

Abst64.exe /password "1234" /set "Change  
TPM 1.2 State=1"

## Change TPM (TCM) State (For TPM 2.0)

Set TPM(TCM) state

TPM 2.0 and later, if WMI version >= 2.56

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password "1234" /set "Change  
TPM 2.0 State=1"

## Clear TPM (TCM)

Clear TPM(TCM) , if WMI version >= 2.56

0: Do nothing

1: Clear

254: Function Supported

255: Not Supported

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Example :

Abst64.exe /password "1234" /set "Clear  
TPM(TCM)=1"

**Supervisor Password is (Status)**      Get Supervisor Password status, if WMI version >= 2.56

0: Clear  
1: Set  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Supervisor  
Password is Status"

**User Password is (Status)**      Get User Password status, if WMI version >= 2.56

0: Clear  
1: Set  
255: Not Supported

Example :

Abst64.exe /password 0 /get "User Password  
is Status"

**Absolute Persistence Module**      Get/Set Absolute Persistence Module status, if WMI version >= 2.77

0: Disabled  
1: Enabled  
2: Permanently Disabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Absolute  
Persistence Module"

Abst64.exe /password "1234" /set "Absolute  
Persistence Module =1"

**Set Supervisor Password**      Set Supervisor Password, if WMI version >= 2.73

Byte[0]: current  
password length

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Clear password, if WMI version >= 2.71

Byte[16:1]: current  
password context in UTF-  
8 (16 bytes)  
Byte[17]: new password  
length  
Byte[33:18]: new  
password context in UTF-  
8 (16 bytes)  
Empty: Clear password

Example :

Clear password

Abst64.exe /password "1234" /set "current  
password=1234,Set Supervisor Password="

From clear to set password

Abst64.exe /password 0 /set "current  
password= ,Set Supervisor Password=1234"

Change password

Abst64.exe /password "1234" /set "current  
password=1234,Set Supervisor  
Password=5678"

## Set User Password

Set User Password, if WMI version >= 2.73

Clear password, if WMI version >= 2.71

Byte[0]: current  
password length  
Byte[16:1]: current  
password context in UTF-  
8 (16 bytes)  
Byte[17]: new password  
length  
Byte[33:18]: new  
password context in UTF-  
8 (16 bytes)  
Empty: Clear password

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Example :

**Clear password**

Abst64.exe /password "1234" /set "current password=1111,Set User Password="

**From clear to set password**

Abst64.exe /password "1234" /set "current password= ,Set User Password=1111"

**Change password**

Abst64.exe /password "1234" /set "current password=1111,Set User Password=2222"

## Password on Boot

Get/Set Password on boot, if WMI version >= 2.56

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Password on Boot"

Abst64.exe /password "1234" /set "Password on Boot=1"

## Secure Boot

Get/Set Secure Boot status, if WMI version >= 2.56

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Secure Boot"

Abst64.exe /password "1234" /set "Secure Boot=1"

## HDD0/HDD0(OPAL)Password

Get HDD0/HDD0(OPAL)Password

0: Disabled



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**Is(Status)** Is(Status), if WMI version >= 2.73  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get  
" hdd0/hdd0(opal) password is status "

**HDD1/HDD1(OPAL)Password** Get HDD1/HDD1(OPAL)Password  
**Is(Status)** Is(Status), if WMI version >= 2.73  
0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get  
" hdd1/hdd1(opal) password is status "

**HDD2/HDD2(OPAL)Password** Get HDD2/HDD2(OPAL)Password  
**Is(Status)** Is(Status), if WMI version >= 2.73  
0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get  
" hdd2/hdd2(opal) password is status "

**HDD3/HDD3(OPAL)Password** Get HDD3/HDD3(OPAL)Password  
**Is(Status)** Is(Status), if WMI version >= 2.73  
0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get  
" hdd3/hdd3(opal) password is status "

**HDD4/HDD4(OPAL)Password** Get HDD4/HDD4(OPAL)Password  
**Is(Status)** Is(Status), if WMI version >= 2.73  
0: Disabled  
1: Enabled  
255: Not Supported

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Example :

Abst64.exe /password 0 /get

" hdd4/hdd4(opal) password is status "

## HDD5/HDD5(OPAL)Password

Get

HDD5/HDD5(OPAL)Password

0: Disabled

## Is(Status)

Is(Status), if WMI version >= 2.73

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get

" hdd5/hdd5(opal) password is status "

## TPM Detection Selection

Get/Set TPM Detection Selection, if  
WMI version >= 2.87

1: dTPM

2: fTPM/PTT

255: Not Supported

Example :

Abst64.exe /password 0 /get

"TPM Detection Selection"

Abst64.exe /password "1234" /set "Tpm  
Detection Selection=1"

## Authorized Signatures

Get/Set Authorized Signatures, if WMI  
version >= 2.87

0: Disabled

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get

"Authorized Signatures"

Abst64.exe /password "1234" /set  
"Authorized Signatures=1"

## TPM Device Selection

Get/Set TPM Device Selection, if WMI  
version >= 2.90

0: iPTT

1: dTPM

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2: PSP fTPM  
3: Pluton fTPM  
255: Not Supported

Example :  
Abst64.exe /password 0 /get "TPM Device Selection"  
  
Abst64.exe /password "1234" /set "TPM Device Selection=3"

## Post Behaviors

Item	Description	Option
<b>F12 Boot Menu</b>	Get/Set Boot Menu setting, if WMI version >= 2.56	0: Disabled 1: Enabled 255: Not Supported  Example : Abst64.exe /password 0 /get "F12 Boot Menu"  Abst64.exe /password "1234" /set "F12 Boot Menu=1"
<b>Function key behavior</b>	Get/Set Function key, if WMI version >= 2.56	0: Function Key 2: Media Key 255: Not Supported  Example : Abst64.exe /password 0 /get "Function key behavior"  Abst64.exe /password "1234" /set "Function key behavior=1"
<b>D2D Recovery</b>	Get/Set D2D Recovery setting, if WMI	0: Disabled

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version >= 2.56

1: Enabled

255: Not Supported

Example :

Abst64.exe /password 0 /get "D2D Recovery"

Abst64.exe /password "1234" /set "D2D Recovery=1"

## Boot Mode

Get/Set Boot Mode, if WMI version >= 2.56

0: Legacy

1: UEFI

255: Not Supported

Example :

Abst64.exe /password 0 /get "Boot Mode"

Abst64.exe /password "1234" /set "Boot Mode=1"

## Display Language

Get/Set Display Language, if WMI version >= 2.73

0: English

1: Danish

2: Spanish

3: Portuguese

4: Norwegian

5: Swedish

6: Dutch

7: Japanese (Not support)

8: Traditional Chinese

9: French

10: Simplified Chinese (Not support)

11: Thai (Not support)

12: Russian

13: Finnish (Not support)

14: German

15: Italian

255: Not Supported

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Example :

Abst64.exe /password 0 /get "Display Language"

Abst64.exe /password "1234" /set " Display Language=1"

## Keyboard backlight timeout

Get/Set Keyboard backlight timeout, if WMI version >= 2.73

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Keyboard backlight timeout "

Abst64.exe /password "1234" /set "Keyboard backlight timeout =1"

## Internal KB Numpad

Get/Set Internal KB Numpad, if WMI version >= 2.73

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Internal KB Numpad"

Abst64.exe /password "1234" /set "Internal KB Numpad =1"

## Fast Boot

Get/Set Fast Boot, if WMI version >= 2.73

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Fast Boot"

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Abst64.exe /password "1234" /set "Fast Boot  
=1"

## Lock BIOS version

Get/Set Lock BIOS version, if WMI version  
>= 2.73

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Lock BIOS  
version"

Abst64.exe /password "1234" /set "Lock BIOS  
version=1"

## Rollback Version

### Old BIOS

Get/Set Rollback Old BIOS Version, if WMI  
version >= 2.73

0: Unsupported  
1: Supported  
255: Function Not Supported

Example :

Abst64.exe /password 0 /get "Rollback Old  
BIOS Version "

Abst64.exe /password "1234" /set "Rollback  
Old BIOS Version =1"

## Boot Priority Order

Get/Set Boot Priority Order  
Follow 'Boot Device Table' , if WMI version  
>= 2.56

Byte[0]: 1st priority  
Byte[1]: 2nd priority  
Byte[2]: 3rd priority  
...  
Byte[16]: 16th priority  
255: terminate

Example :

Abst64.exe /password 0 /get "Boot Priority

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Order"

Abst64.exe /password "1234" /set "Boot  
Priority Order=1,2,16,17,255"

**POST Animation & Sound** Get/Set D2D POST Animation & Sound, if WMI version >= 2.56

0: Disabled  
1: Enabled  
255: Not Supported

Example :

Abst64.exe /password 0 /get "POST Animation  
& Sound"

Abst64.exe /password "1234" /set "POST  
Animation & Sound=1"

**Sound** Get/Set Sound, if WMI version >= 2.73

0: Mute  
1: Unmute  
255: Not Supported

Example :

Abst64.exe /password 0 /get "Sound"

Abst64.exe /password "1234" /set "Sound=1"

**Save Settings to User Setup Defaults** Set Save Settings to User Setup Defaults, if WMI version >= 2.77

0: Do Nothing  
1: Save  
255: Not Supported

Example :

Abst64.exe /password "1234" /set "Save  
Settings to User Setup Defaults=1"

## Expansion

Item	Description	Option
<b>Set HDD0 Password</b>	Set HDD0 Password, if WMI version >=	Byte[0]: current

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2.73

Clear password, if WMI version &gt;= 2.71

password length

Byte[16:1]: current

password context in UTF-

8 (16 bytes)

Byte[17]: new password

length

Byte[33:18]: new

password context in UTF-

8 (16 bytes)

Empty: Clear password

Example :

Clear password

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD0 Password="

From clear to set password

Abst64.exe /password 0 /set "current  
password= ,Set HDD0 Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD0 Password=2222"

## Set HDD1 Password

Set HDD1 Password, if WMI version &gt;=

2.73

Clear password, if WMI version &gt;= 2.71

Byte[0]: current

password length

Byte[16:1]: current

password context in UTF-

8 (16 bytes)

Byte[17]: new password

length

Byte[33:18]: new

password context in UTF-

8 (16 bytes)

Empty: Clear password



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Example :

**Clear password**

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD1 Password="

**From clear to set password**

Abst64.exe /password 0 /set "current  
password= ,Set HDD1 Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD1 Password=2222"

## Set HDD2 Password

Set HDD2 Password, if WMI version >= 2.73  
Clear password, if WMI version >= 2.71

Byte[0]: current  
password length  
Byte[16:1]: current  
password context in UTF-  
8 (16 bytes)  
Byte[17]: new password  
length  
Byte[33:18]: new  
password context in UTF-  
8 (16 bytes)  
Empty: Clear password

Example :

**Clear password**

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD2 Password="

**From clear to set password**

Abst64.exe /password 0 /set "current  
password= ,Set HDD2 Password=2222"

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Abst64.exe /password "1234" /set "current  
password=1111,Set HDD2 Password=2222"

## Set HDD3 Password

Set HDD3 Password, if WMI version >= 2.73

Clear password, if WMI version >= 2.71

Byte[0]: current  
password length  
Byte[16:1]: current  
password context in UTF-  
8 (16 bytes)  
Byte[17]: new password  
length  
Byte[33:18]: new  
password context in UTF-  
8 (16 bytes)  
Empty: Clear password

Example :

Clear password

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD3 Password="

From clear to set password

Abst64.exe /password 0 /set "current  
password= ,Set HDD3 Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD3 Password=2222"

## Set HDD4 Password

Set HDD4 Password, if WMI version >= 2.73

Clear password, if WMI version >= 2.71

Byte[0]: current  
password length  
Byte[16:1]: current  
password context in UTF-  
8 (16 bytes)  
Byte[17]: new password  
length

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Byte[33:18]: new  
password context in UTF-  
8 (16 bytes)  
Empty: Clear password

Example :

Clear password

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD4 Password="

From clear to set password

Abst64.exe /password 0 /set "current  
password=,Set HDD4 Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD4 Password=2222"

## Set HDD5 Password

Set HDD5 Password, if WMI version >= 2.73  
Clear password, if WMI version >= 2.71

Byte[0]: current  
password length  
Byte[16:1]: current  
password context in UTF-  
8 (16 bytes)  
Byte[17]: new password  
length  
Byte[33:18]: new  
password context in UTF-  
8 (16 bytes)  
Empty: Clear password

Example :

Clear password

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD5 Password="

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## From clear to set password

Abst64.exe /password 0 /set "current  
password= ,Set HDD5 Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD5 Password=2222"

**Revert Device** **HDD0(OPAL)** Set HDD0(OPAL) Device, if WMI version  
>=2.74

Byte[31:0]: PSID

Example :

Abst64.exe /password "1234" /set "Revert  
HDD0(OPAL)

Device=11112222333344445555666677778888"

**Revert Device** **HDD1(OPAL)** Set HDD1(OPAL) Device, if WMI version  
>=2.74

Byte[31:0]: PSID

Example :

Abst64.exe /password "1234" /set "Revert  
HDD1(OPAL)

Device=11112222333344445555666677778888"

**Revert Device** **HDD2(OPAL)** Set HDD2(OPAL) Device, if WMI version  
>=2.74

Byte[31:0]: PSID

Example :

Abst64.exe /password "1234" /set "Revert  
HDD2(OPAL)

Device=11112222333344445555666677778888"

**Revert Device** **HDD3(OPAL)** Set HDD3(OPAL) Device, if WMI version  
>=2.74

Byte[31:0]: PSID

Example :

Abst64.exe /password "1234" /set "Revert  
HDD3(OPAL)

Device=11112222333344445555666677778888"

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**Revert HDD4(OPAL) Device** Set HDD4(OPAL) Device, if WMI version Byte[31:0]: PSID  
>=2.74

Example :

Abst64.exe /password "1234" /set "Revert  
HDD4(OPAL)

Device=11112222333344445555666677778888"

**Revert HDD5(OPAL) Device** Set HDD5(OPAL) Device, if WMI version Byte[31:0]: PSID  
>=2.74

Example :

Abst64.exe /password "1234" /set "Revert  
HDD5(OPAL)

Device=11112222333344445555666677778888"

**Set HDD0(OPAL) Password** Set HDD0(OPAL) Password, if WMI version Byte[0]: current password length  
>= 2.79

Byte[32:1]: current password context in UTF-8  
(32 bytes)

Byte[33]: new password length

Byte[65:34]: new password context in UTF-  
8 (32 bytes)

Empty: [Clear password](#)

Example :

**Clear password**

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD0(OPAL) Password="

**From clear to set password**

Abst64.exe /password 0 /set "current  
password= ,Set HDD0(OPAL) Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD0(OPAL)  
Password=2222"

**Set HDD1(OPAL)** Set HDD1(OPAL) Password, if WMI version Byte[0]: current password length

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**Password**                      >= 2.79

Byte[32:1]: current password context in UTF-8 (32 bytes)

Byte[33]: new password length

Byte[65:34]: new password context in UTF-8 (32 bytes)

[Empty: Clear password](#)

Example :

**Clear password**

Abst64.exe /password "1234" /set "current password=1111,Set HDD1(OPAL) Password="

**From clear to set password**

Abst64.exe /password 0 /set "current password= ,Set HDD1(OPAL) Password=1111"

Abst64.exe /password "1234" /set "current password=1111,Set                      HDD1(OPAL) Password=2222"

**Set                      HDD2(OPAL)**    Set HDD2(OPAL) Password, if WMI version

**Password**                      >= 2.79

Byte[0]: current password length

Byte[32:1]: current password context in UTF-8 (32 bytes)

Byte[33]: new password length

Byte[65:34]: new password context in UTF-8 (32 bytes)

[Empty: Clear password](#)

Example :

**Clear password**

Abst64.exe /password "1234" /set "current password=1111,Set HDD2(OPAL) Password="

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## From clear to set password

```
Abst64.exe /password 0 /set "current
password=,Set HDD2(OPAL) Password=1111"
```

```
Abst64.exe /password "1234" /set "current
password=1111,Set HDD2(OPAL)
Password=2222"
```

<b>Set Password</b>	<b>HDD3(OPAL)</b>	Set HDD3(OPAL) Password, if WMI version >= 2.79	Byte[0]: current password length Byte[32:1]: current password context in UTF-8 (32 bytes) Byte[33]: new password length Byte[65:34]: new password context in UTF-8 (32 bytes)
			Empty: Clear password

Example :

## Clear password

```
Abst64.exe /password "1234" /set "current
password=1111,Set HDD3(OPAL) Password="
```

## From clear to set password

```
Abst64.exe /password 0 /set "current
password=,Set HDD3(OPAL) Password=1111"
```

```
Abst64.exe /password "1234" /set "current
password=1111,Set HDD3(OPAL)
Password=2222"
```

<b>Set Password</b>	<b>HDD4(OPAL)</b>	Set HDD4(OPAL) Password, if WMI version >= 2.79	Byte[0]: current password length Byte[32:1]: current password context in UTF-8 (32 bytes) Byte[33]: new password length Byte[65:34]: new password context in UTF-8

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8 (32 bytes)

[Empty: Clear password](#)

Example :

**Clear password**

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD4(OPAL) Password="

**From clear to set password**

Abst64.exe /password 0 /set "current  
password= ,Set HDD4(OPAL) Password=1111"

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD4(OPAL)  
Password=2222"

**Set HDD5(OPAL) Password** Set HDD5(OPAL) Password, if WMI version  
>= 2.79

Byte[0]: current password length  
Byte[32:1]: current password context in UTF-8  
(32 bytes)  
Byte[33]: new password length  
Byte[65:34]: new password context in UTF-  
8 (32 bytes)  
[Empty: Clear password](#)

Example :

**Clear password**

Abst64.exe /password "1234" /set "current  
password=1111,Set HDD5(OAPL) Password="

**From clear to set password**

Abst64.exe /password 0 /set "current  
password= ,Set HDD5(OAPL) Password=1111"



# Product External Specification



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Abst64.exe /password "1234" /set "current  
password=1111,Set HDD5(OPAL)  
Password=2222"

## AutoTest

The AutoTest function will be supported  
on ABST tool if WMI version >= 2.76

Example:

Abst64.exe /password "1" /get "autotest"

## SMBIOS Information

Item	Description	Option
<b>Asset Tag Number</b>	Get/Set Asset Tag Number, if WMI version >= 2.89	Up to 22 characters, alphabet, or digit only.
	Same with SMBIOS Type 3 offset 08h	Example : Abst64.exe /password 0 /get "Asset Tag Number"
		Abst64.exe /password "1234" /set "Asset Tag Number=1234567890123456789012"

## Ownership Tag Number

Get/Set Ownership Tag Number, if WMI  
version >= 2.89  
Same with SMBIOS Type 11 string 02h

Up to 50 characters, alphabet, or digit only.

Example :

Abst64.exe /password 0 /get "Ownership Tag  
Number"

Abst64.exe /password "1234" /set "Ownership  
Tag Number=12345678901234567890121234  
56789012345678901234567890"

Boot device table

Value	Meaning
1	1st HDD
2	CD/DVD Drive
3	SCSI
4	D2D recovery
5	(Reserved)
6	PCMCIA

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7	Network
8	(Reserved)
9	1394 CD-ROM
10	USB HDD
11	USB CD-ROM
12	USB Floppy
13	USB Key
14	2 <sup>nd</sup> HDD
16	USB Other Devices
17	USB To Go (UEFI boot)
18	IPV6 (UEFI boot)
19	Windows Boot Manager (UEFI boot)
20	Other Bootable Devices

## Date and Time

Item	Description	Option
<b>System Date</b> <b>(MM/DD/YY)</b>	Get/Set System Date, if WMI version >= 2.56	<p>Byte[0]: Date Byte[1]: Month Byte[2]: Year i.g. Byte[2]= 0x10 for 2016 238: Do not need to update at this time 255: Not Supported</p> <p>Example : Abst64.exe /password 0 /get "Date"</p> <p>Abst64.exe /password "1234" /set "Date"="YYYY","M","D" Abst64.exe /password "1234" /set "Date=2017,1,18"</p>
<b>System Time</b> <b>(HH:MM:SS)</b>	Get/Set System Time 24 hour format, if WMI version >= 2.56	<p>Byte[0]: Second (0~59) Byte[1]: Minute (0~59) Byte[2]: Hour (0~23)</p>

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238: Do not need to update at this time

255: Not Supported

Example :

Abst64.exe /password 0 /get "Time"

Abst64.exe /password "1234" /set  
"Time=01:56:00"

Abst64.exe /password "1234" /set  
"Time=13,20,50"

## 9.3 Return Code

Code	Description
0	Success
1	Not support
2	Incorrect Password
3	Invalid Parameter
7	Password retry count exceeded
8	Set BIOS default options success and reboot required to make function works
D1	Incompatible Data Structure. BIOS Setup Data is unexpected
D2	Control method not support, DFCI is controlling

## 9.4 AutoTest

The Auto test function could automatically test all ABST items. It will generate resulted report "ABST\_AutoTestResult.html " after finishing auto run.

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```
Offset : 260
Size : 34
end : 294
set user password:
Offset : 235
Size : 1
end : 236
flag for setting : 2
Enter Current password :
1
Enter Changed password :
11
```

Note 1: Supervisor password and User password need to be pre-setting if would like to run AutoTest.

Note 2: The supported version need to be more than WMI version 2.76 for AutoTest function

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## 9.5 Result.txt

Result format

Model name : TravelMate P614-51G

Serial number : 1234567890123456789012

Asset tag number :

Overall result : Pass

=====Result of each settings=====

3g/lte: Pass

audio: Pass