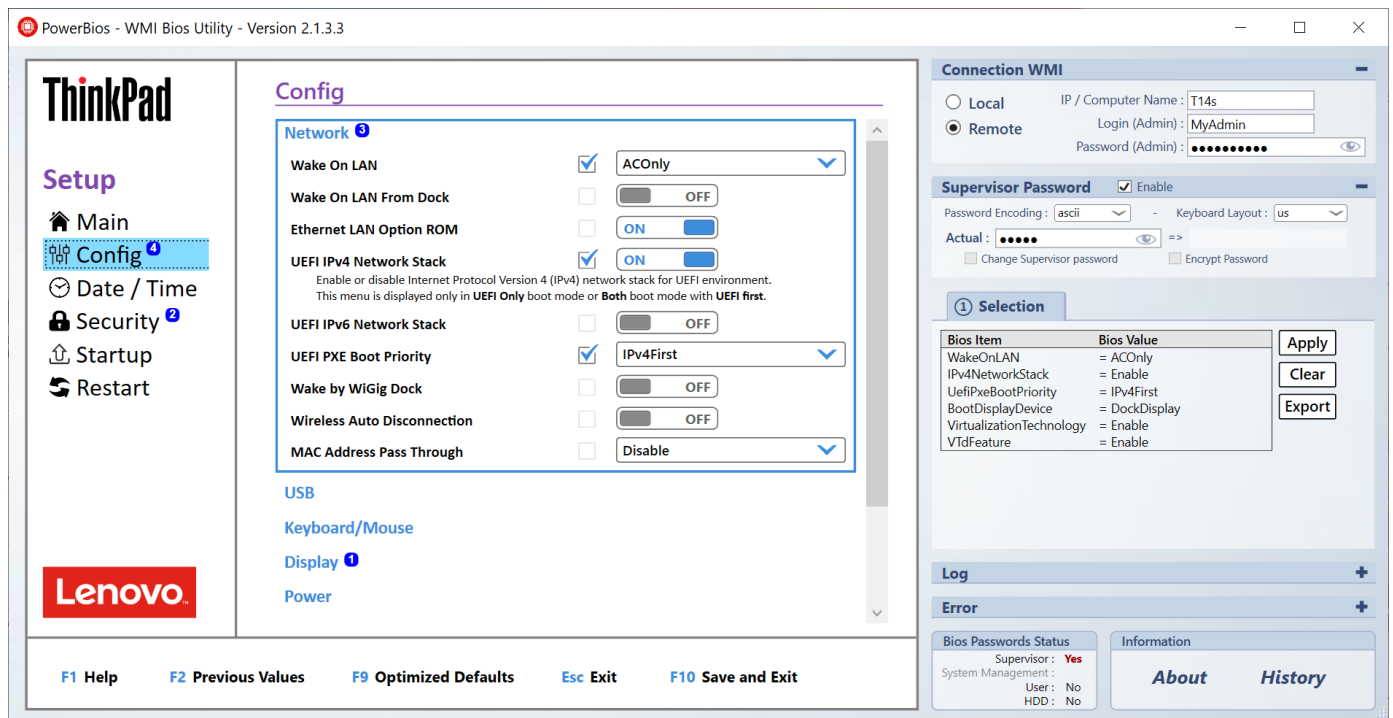


Name : **PowerBios**
Version : **2.1.5.12**
Date : 2024/02/29

1. OVERVIEW

PowerBios is a utility helping customer to **apply Bios settings** on **Lenovo** Professional **ThinkPad**, **ThinkStation** and **ThinkCentre** products, and create scripts that can be used in deployment scenario.



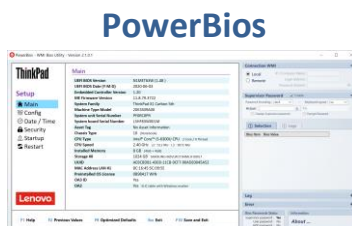
PowerBios provide graphic interface to :

- Read or Write Local WMI Bios settings.
- Read or Write Remote WMI Bios settings.
- Display Help for each item.
- Export list of selected item and value.
- generate **VBScript** file to apply Bios settings + logs
- generate **PowerShell** command lines to apply Bios settings
- Change Supervisor Password / Use Encrypted Supervisor Password

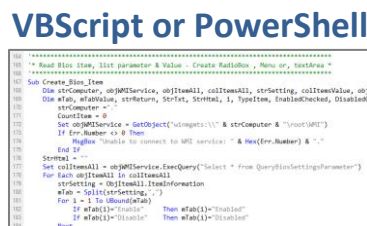
(Under development)

(Under development)

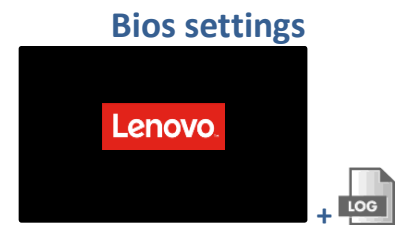
(Under development)



PowerBios



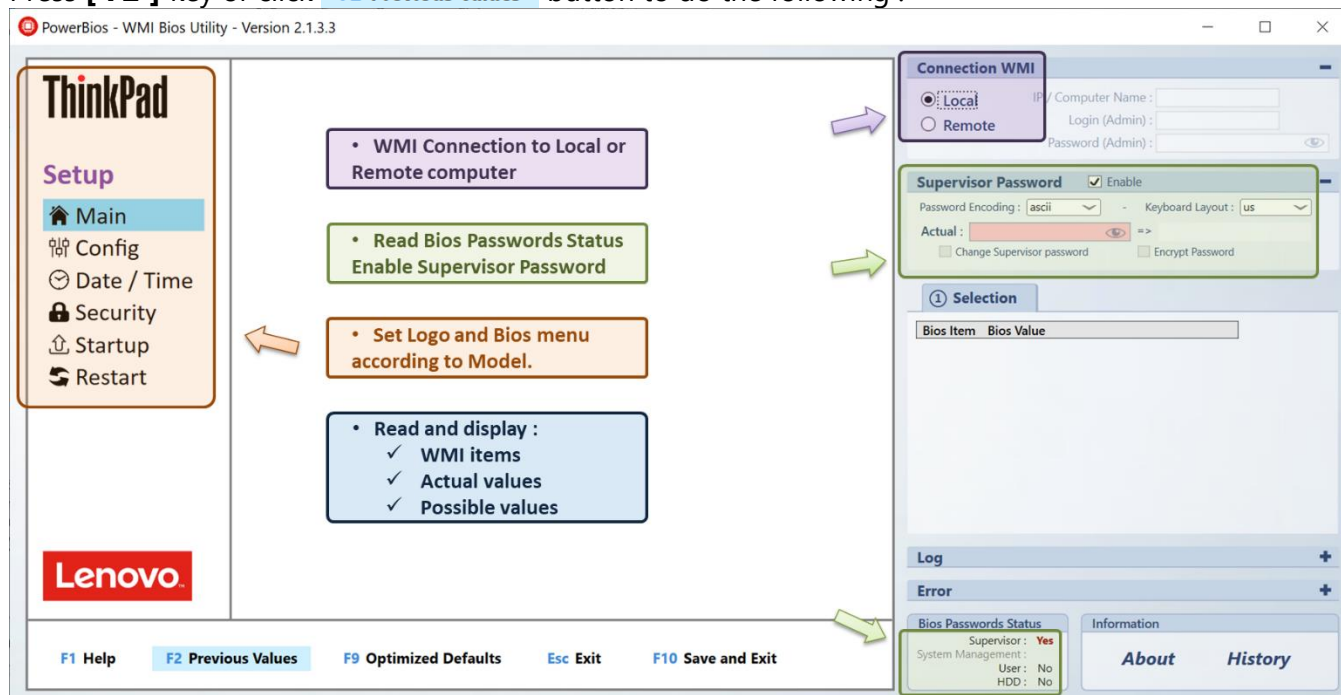
VBScript or PowerShell



Bios settings

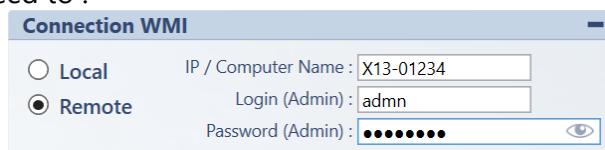
2. INTERFACE

Press [F2] key or click **F2 Previous Values** button to do the following :



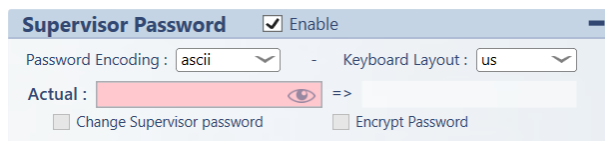
To read or write **WMI settings on a Remote computer** you need to :

- ✓ Use a local administrator of the remote computer.
- ✓ Enable WMI Remote Access on this computer :
 - Set actual Network to Private
 - Set file & Print Sharing Enabled
 - Set Firewall WMI Enabled
 - Disable TokenFilterPolicy

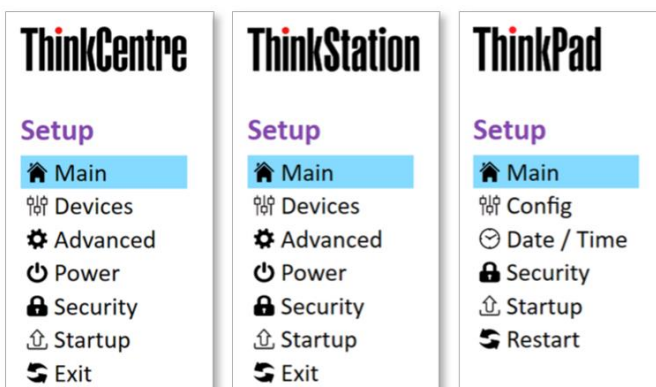


Script and documentation to [.../enable-remote-wmi/](https://sometools.eu/powerbios/)

When a **Bios Supervisor Password** exist in the target computer, **Supervisor Password** area is enabled automatically in the interface and you must provide this **Supervisor Password**.



Logo and Bios Menu match to the selected target model.



3. FEATURES

3.1. DISPLAY "MAIN" PAGE

The "Main" page provides a few more information's than Bios one :

- "ME Firmware Version" (if present)
- "System Family"
- "Chassis Type" (N° and definition)
- "CPU" (Core, L2 and L3 cache)
- "Memory" (Number of Mem Modules)
- "Storage". (Size and Model)

Main

UEFI BIOS Version	R1AET32W (1.08)
UEFI BIOS Date (Y-M-D)	2020-08-14
Embedded Controller Version	1.8
System Family	ThinkPad E15 Gen 2
Machine Type Model	20T90003FR
System unit Serial Number	PF28847
System board Serial Number	L1HF0760002
Asset Tag	No Asset Information
Chassis Type	10 (Notebook)
CPU Type	AMD Ryzen 3 4300U with Radeon Graphics
CPU Core	4 Core / 4 Thread
CPU Speed	2.7 GHz L2 : 2048 Mo - L3 : 4096 Mo
Installed Memory	8 GB (8GB)
Storage #0	256 GB KBG40ZNT256G TOSHIBA MEMORY
UUID	90CA864C-0000-0000-0000-00000000427A
Preinstalled OS License	Not Defined
OA3 ID	Yes
OA2	No No SLIC Table

3.2. DISPLAY/MODIFY WMI ITEMS

- To change values, select items Values ON and press the **Apply** Button.

The screenshot shows the BIOS WMI configuration interface. On the left, the 'Config' panel is visible, showing various network and USB settings. On the right, the 'Selection' panel shows a list of BIOS items and their values, with an 'Apply' button. Below the 'Selection' panel, a 'Log' section shows the results of the changes, indicating 'Success with 0 error'.

Bios Item	Bios Value	Result
WakeOnLAN	= ACOOnly	Success
EthernetLANOptionROM	= Enable	Success
IPv6NetworkStack	= Disable	Success
AlwaysOnUSB	= Enable	Success

Global save result : **Success with 0 error**

- Click item name to display associated help :

The screenshot shows the help text for the 'Wake On LAN' setting. The text explains that the network administrator can turn on a computer from a management console by using the Wake on LAN feature. It also provides details about the 'AC Only' and 'AC and Battery' options, and notes that the 'AC Only S3 Enabled' option works only when the computer is in sleep mode with ac power connected.

Wake On LAN ACOOnly

The network administrator can turn on a computer from a management console by using the **Wake on LAN feature**.
AC Only Wake on LAN feature is enabled only when the ac power adapter is attached.
AC and Battery Wake on LAN feature is enabled with any power sources.
AC Only S3 Enabled Wake On LAN feature works only when your computer is in sleep mode with ac power connected.

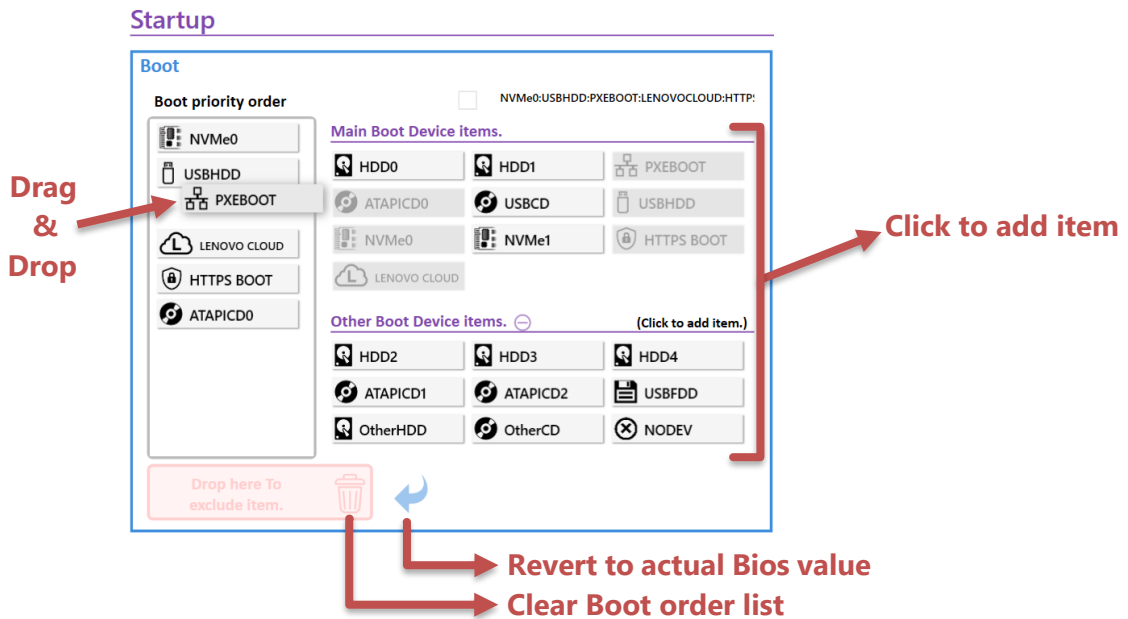
Wake On LAN From Dock OFF

Enable or disable the Wake On LAN from Dock feature when the ThinkPad USB-C Dock or ThinkPad Thunderbolt 3 Dock is attached.

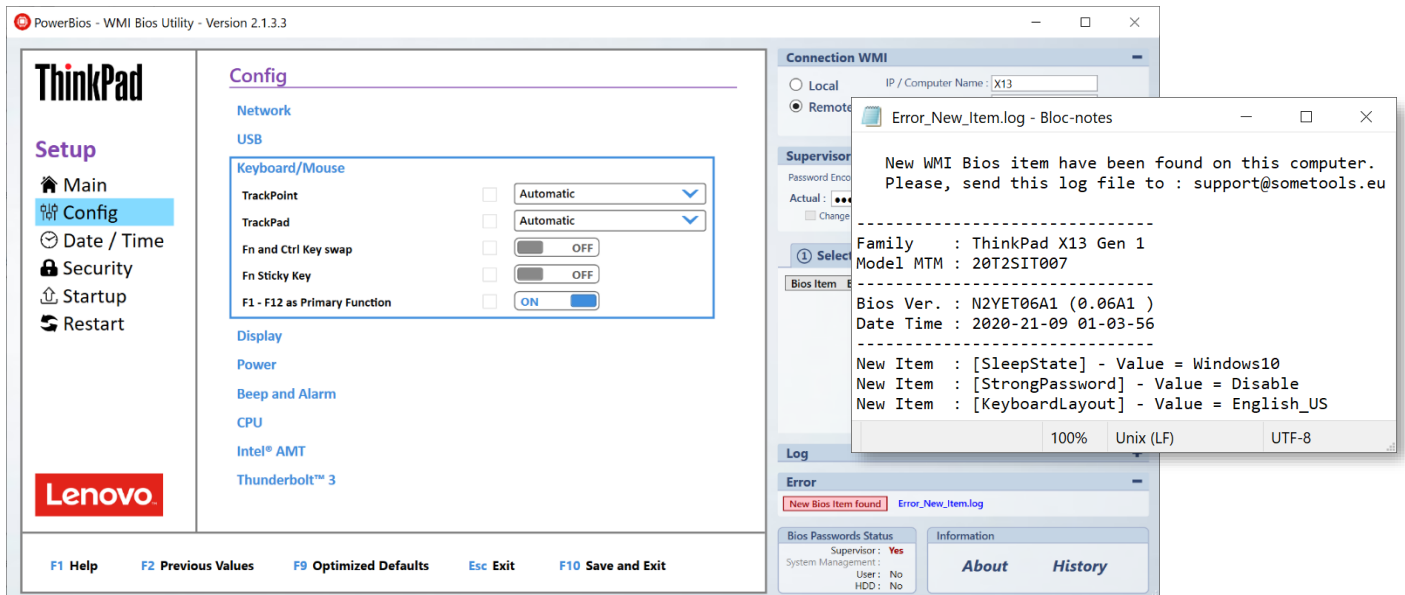
Ethernet LAN Option ROM ON

The Ethernet LAN Option ROM enables the startup from an integrated network device.
 This menu is displayed only in **Legacy Only** boot mode or **Both** boot mode with **Legacy first**.

- Items in **Boot priority order** can be dragged and dropped to reorder devices :



- If a very new items is present in Bios :
 - ✓ An alert **New Bios Item found** is displayed.
 - ✓ A txt file is created with Bios version, New Bios Item and value.
- Error_New_Item.log** file can be found in Logs folder, near **PowerBios.exe**
 This file should be sent to support@somertools.eu



3.3. EXPORT ITEM LIST AND VALUE

- The list of selected items () and their values can be **Export**

The screenshot illustrates the process of exporting BIOS settings. On the left, the 'Config' window shows various settings under 'Network' and 'USB'. A red arrow points from the 'Wake On LAN' setting to the 'Selection' dialog box. The 'Selection' dialog box lists the selected items and their values, with an 'Export' button. Another red arrow points from the 'Export' button to the 'Bios Test Plan' output window, which displays the system information and the list of BIOS modifications from default.

Config

Network

- Wake On LAN: AOnly
- Wake On LAN From Dock: ON
- Ethernet LAN Option ROM: ON
- UEFI IPv4 Network Stack: ON
- UEFI IPv6 Network Stack: OFF
- UEFI PXE Boot Priority: IPv4First
- Wireless Auto Disconnection: ON
- MAC Address Pass Through: Enable
- UEFI Wi-Fi Network Boot: OFF
- Lenovo Cloud Services: ON

USB

- Always On USB: ON
- Charge In Battery Mode: OFF

Selection

Bios Item	Bios Value
WakeOnLAN	= AOnly
IPv4NetworkStack	= Enable
IPv6NetworkStack	= Disable
WirelessAutoDisconnection	= Enable
AlwaysOnUSB	= Enable
EnhancedWindowsBiometricSecurity	= Disable
MemoryCardSlotAccess	= Disable
SmartCardSlotAccess	= Disable
NfcAccess	= Disable
BootOrder	= NVMe0:USBHDD

Bios Test Plan - 20S1.txt

```

Model :
-----
System Family : ThinkPad T14 Gen 1
System MTM : 20S1 - (20S1001HFR)
Serial Number : PF280VT0
Bios Version : N2XET23W (1.13 )
Bios Date : 2020-08-26 (YYYY-MM-DD)
-----

BIOS Modifications from Default :
-----
Config > Network > Wake On LAN : AOnly
Config > Network > UEFI IPv6 Network Stack : Disable
Config > Network > Wireless Auto Disconnection : Enable
Config > USB > Always On USB : Enable
Security > Virtualization > Enhanced Windows Biometric Security : Disable
Security > I/O Port Access > Memory Card Slot : Disable
Security > I/O Port Access > Smart Card Slot : Disable
Security > I/O Port Access > NFC device : Disable
Startup > Boot > Boot priority order : NVMe0:USBHDD:PXEBOOT:LENOVOCLOUD
-----

Actual Date Time : 2020-10-04 19:03:44 (YYYY-MM-DD HH:MM:SS)
    
```

4. DOWNLOAD

Last version for PowerBios utility and this documentation can be download here :

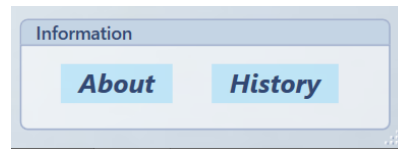
Some Tools <https://sometools.eu/powerbios/>

Permanent links :

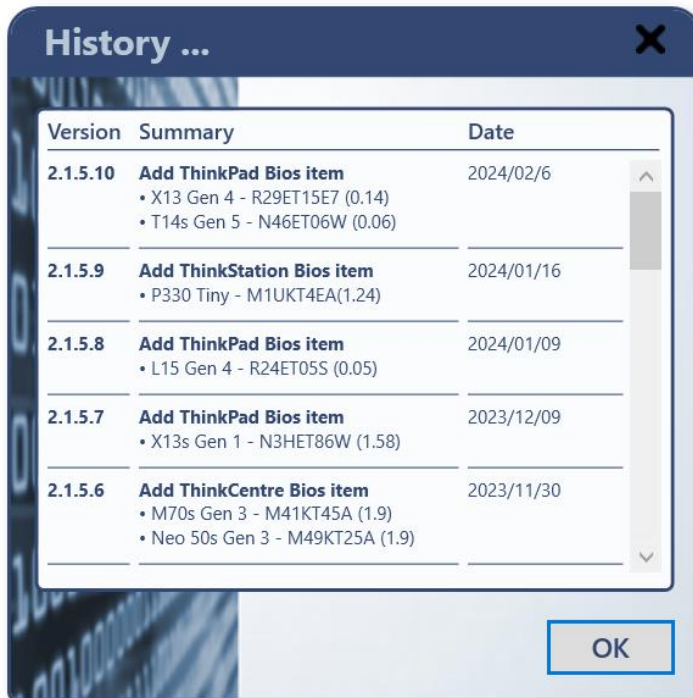
Download	Version	Size	Date
PowerBios.zip	2.1.5.12	401 Ko	2024/05/07
Doc_PowerBios.pdf	2.1.5.12	1,57 Mo	2024/05/07

5. INFORMATION

Version History and Contact for support are available in PowerBios interface :



5.1. VERSION HISTORY



5.2. CONTACT

Feel free to contact Support for Bug report, Help, ideas for improvement or additional features.



support@somertools.eu



Claude Boucher



<http://somertools.eu>

<https://fr.linkedin.com/in/claude-boucher>