



Intel® System Information Retrieval Utility (sysinfo)

User Guide

Sysinfo Version 13.1

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1 Introduction

The Intel® System Information Retrieval Utility (hereinafter referred to as sysinfo) is used for collecting system information.

Intel offers UEFI version, Windows version, and Linux version Intel® System Information Retrieval Utility that the customers are able to collect system information under these environments.

1.1 Document Scope

The purpose of this document is to help you install and use the Intel® System Information Retrieval Utility. It provides you detailed information on the features of the Intel® System Information Retrieval Utility and how to use them. It describes the software requirements, supported operating systems, and the supported platforms. It also explains the installation and uninstallation process.

1.2 Overview

The Intel® System Information Retrieval Utility dumps the following information each to a log file:

- Platform Firmware Inventory
- Sensors
- Sensor Data Records
- BMC SEL (IN HUMAN READABLE FORM)
- BMC SEL (IN HEX FORM)
- Baseboard FRU
- System BMC Boot Order
- BMC User Settings
- BMC LAN Channel Settings
- BMC SOL Channel Settings
- BMC Power Restore Policy Settings
- BMC channel settings
- SMBIOS Type 1, Type 2, Type 3
- Memory

- Processor
- SATA
- IDESCSI
- HARD Drive
- Operating System Information
- Device Manager Information (aka drivers)
- List of Software Installed
- Operating System Event Log
- PCI Bus Device Information
- RAID settings and RAID log
- BIOS Settings (per BIOS SETUP F2 Screen)

Note: Log information results maybe vary among different versions. Refer to the detailed information from specific sections.

1.3 Supported Operating System/Platforms

Intel offers UEFI version, Windows version, and Linux version Intel® System Information Retrieval Utility that the customers are able to run it and collect system information under these environments. The following table summarizes the list of Operating Systems and platforms supported.

Operating System	Supported Platforms
UEFI 2.3.1	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, S4600 and S2600 (Intel Xeon processor E5-2600 v3)
Windows Server 2008* R2 SP1 x64	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, S4600 and S2600 (Intel Xeon processor E5-2600 v3)
Windows Server 2008* SP2 x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, S4600 and S2600 (Intel Xeon processor E5-2600 v3)
Windows Server 2012* x64 and x32	S1200V3RP, S1400, S1600, S2400, S2600, and S4600 and S2600 (Intel Xeon processor E5-2600 v3)
Windows Serer 2012 R2 x64	S1200V3RP, S1400, S1600, S2400, S2600, and S4600 and S2600 (Intel Xeon processor E5-2600 v3)
Windows 7* x64 and x32	S2600 Workstations
Windows 8* x64 and x32	S2600 Workstations
WinPE* 3.x/4.x	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, S4600 and S2600 (Intel Xeon processor E5-2600 v3)
SuSE* Linux Enterprise Server 11 SP1/SP2/SP3 x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, S4600 and S2600 (Intel Xeon processor E5-2600 v3)

Operating System	Supported Platforms
Red Hat* Enterprise Linux 6 update 1/update 2/update 3/update 4/update 5 x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600 and S2600 (Intel Xeon processor E5-2600 v3)
CentOS* 6.x x64 and x32	S1200V3RP, S1400, S1600, S2400, S2600, and S4600 and S2600 (Intel Xeon processor E5-2600 v3)

1.4 Related Information

The following table lists the related information.

Document/Information	Source
Intel Support	http://support.intel.com

1.5 Terminology

The following table lists the terminology used in this document and the description.

Term	Description
SATA	Serial ATA. A computer bus technology for connecting hard disks and other devices.

2 Install and Uninstall

This section provides some basic steps on how to install and uninstall the Intel® System Information Retrieval Utility.

2.1 UEFI Version

2.1.1 Prerequisites

Download the latest System Firmware Update Package for the platform and install it. Ensure the system is running with the latest platform BIOS, BMC, and FRUSDR.

For the latest System Firmware Update Package, download it from <http://support.intel.com>.

2.1.2 Installation

This section explains the steps to install the Intel® System Information Retrieval Utility:

1. Copy the uncompressed ZIP file into your local directory (for example, `fs0:\sysinfo`).
2. Go to the `UEFI` folder.
3. Run `sysinfo.efi`.
4. `sysinfo.efi` logs system information in three different log files in the `LogFiles` folder in the current directory:

a. `sysinfo_log.txt`

(Platform Firmware Inventory, Sensors, Sensor Data Records, BMC SEL (IN HUMAN READABLE FORM), BMC SEL (IN HEX FORM), Base Board FRU, System BMC Boot Order, BMC User Settings, BMC LAN Channel Settings, BMC SOL Channel Settings, BMC Power Restore Policy Settings, BMC channel settings, SMBIOS Type 1, Type 2, Type 3, Processor, Memory, Operating System Information)

b. `RAID_NVRAMlog.txt` (RAID settings and RAID log)

c. `PCI_Log.txt` (PCI Bus info)

2.1.3 Uninstallation

Remove the folder where `sysinfo.efi` is located.

2.2 Windows Version

2.2.1 Prerequisites

Following are the prerequisites to install and use the Intel® System Information Retrieval Utility:

1. Boot to Windows 2003* R2 SP2 or Windows 2008* (32 bit or EM64T) with WMI enabled.
2. All RAID drivers for the corresponding platform must be installed. Otherwise, the utility will not display RAID information.
3. The system needs to be rebooted after installing memrw driver (run "memrwdinstall.bat") on Windows 2012.

2.2.2 Installation

This section explains the steps to install the Intel® System Information Retrieval Utility:

1. Copy the compressed ZIP file into your local directory (for example, `C:\sysinfo`).
2. Unzip the file.
3. Go to the `Windows` or `WinPE` folder.
4. Install the driver.

According to OS architecture, go to folder "`Drivers\x86`" or "`Driver\EM64T`" folder and run `install.bat` to install ipmi, smi, and memory map drivers.

5. Go to the `Binaries\` folder.
6. Run `sysinfo.exe`.

For 32&64 bit Windows, go to the `x86\` folder and run `sysinfo.exe`.

For WinPE 64, go to the `EM64T\` folder and run `sysinfo.exe`.

7. `sysinfo.exe` logs system information in five different log files in the `LogFiles` folder in the current directory.

- a. `sysinfo_log.txt`

(Platform Firmware Inventory, Sensors, Sensor Data Records, BMC SEL (IN HUMAN READABLE FORM), BMC SEL (IN HEX FORM), Base Board FRU, System BMC Boot Order, BMC User Settings, BMC LAN Channel Settings, BMC SOL Channel Settings, BMC Power Restore Policy Settings, BMC channel settings, SMBIOS Type 1, Type 2, Type 3, Memory, Processor, SATA, IDESCSI, HARD Drive, Operating System Information, Device Manager Information (aka

drivers), List of Software Installed, BIOS Settings (per BIOS SETUP F2 Screen))

- b. RAID_NVRAMlog.txt (RAID settings and RAID log)
- c. OS_Eventlog.txt (Operating System Event Log)

Sysinfo.exe also logs SATA and PCI information in two different log files in the LogFiles folder.

- d. SATA_log.txt (SATA information)
- e. PCI_log.txt (PCI Bus information)

2.2.3 Uninstallation

This section explains the steps to uninstall the Intel® System Information Retrieval Utility:

1. Go to Windows or WinPE folder in the main folder.
2. According to OS architecture, go to folder "Drivers\x86" or "Drivers\EM64T".
3. Run uninstall.bat (for uninstalling sysinfo).

2.3 Linux Version

2.3.1 Prerequisites

Following are the prerequisites to install and use the Intel® System Information Retrieval Utility:

1. Boot to Red Hat* Enterprise Linux 6, SuSE* Linux Enterprise Server 11 or CentOS* 6.
2. All RAID drivers for the corresponding platform must be installed. Otherwise, the utility will not display RAID information.
3. On RHEL* 6.4 (or above), CentOS* 6.x, UEFI-aware Linux, there might be a driver confliction between internal driver and kernel. User has to start up OpenIPMI driver and make sure "/dev/ipmi0" device is existed.

2.3.2 Installation

This section explains the steps to install the Intel® System Information Retrieval Utility:

Regular Installation

1. Copy the uncompressed ZIP file into your local directory (for example, /root/sysinfo/).
2. Go to the `Linux` folder and use "chmod 755" to change executable and script.
3. Run `./install.sh` command on the shell prompt, to install the sysinfo components.
4. Close the terminal from which `install.sh` was executed and run `sysinfo` from a new terminal, `sysinfo` logs system information in four different log files in the `LogFiles` folder in the current directory.
 - a. `sysinfo_log.txt`
(Platform Firmware Inventory, Sensor information, Sensor Data Records, BMC SEL (IN HUMAN READABLE FORM), BMC SEL (IN HEX FORM), Base Board FRU, System BMC Boot Order, BMC User Settings, BMC LAN Channel Settings, BMC SOL Channel Settings, BMC Power Restore Policy Settings, BMC channel settings, SMBIOS Type 1, Type 2, Type 3, Processor, Memory, Operating System Information, Device drivers installed, List of S/W installed, BIOS Settings (per BIOS SETUP F2 Screen))
 - b. `RAID_NVRAMlog.txt` (RAID settings and RAID log)
 - c. `PCI_Log.txt` (PCI Bus info).
 - d. `OS_Eventlog.txt` (operating System Events)

RPM Installation

1. Copy sysinfo rpm from `Linux/RHEL` or `Linux/SLES` (for RHEL or SLES respectively) to a local folder.
2. Install sysinfo utility by using `rpm -Uvh sysinfoxxx.rpm`. This will install the utility in `/usr/bin/sysinfo/` folder.
3. In `RHEL/SLES` after installing the rpm, close the terminal from which rpm was installed and then execute the utility from a new terminal (for example, `# sysinfo -ni`).

2.3.3 Uninstallation

This section explains the steps to uninstall the Intel® System Information Retrieval Utility.

Regular Uninstallation:

1. Run the `./uninstall.sh` in `Linux` folder (depends on Linux distribution).
2. Remove the `Linux` folder.

RPM Uninstallation:

1. To uninstall the utility, use `rpm -e sysinfo` command.

3 Using the Intel® System Information Retrieval Utility

This section provides information on how to use the Intel® System Information Retrieval Utility under different OS environments.

3.1 Using UEFI-version Intel® System Information Retrieval Utility

This section details how to use the Intel® System Information Retrieval Utility on UEFI.

Command Line Interface

`sysinfo.efi`

- To view the command-line help page:

```
sysinfo.efi -h
```

Or:

```
sysinfo.efi -?
```

- `sysinfo` logs system information in two log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `PCI_log.txt`):

```
sysinfo.efi
```

- `sysinfo` logs system information in two log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `PCI_log.txt`) in a non-interactive way:

```
sysinfo.efi -ni
```

- `sysinfo` logs system information in three log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `RAID_NVRAMlog.txt`, `PCI_log.txt`).

```
sysinfo.efi -raid
```

3.2 Using Windows-version Intel® System Information Retrieval Utility

This section details how to use the Intel® System Information Retrieval Utility on Windows.

Command Line Interface

`sysinfo.exe [Options]`

- To view the command-line help page:

`sysinfo.exe -h`

Or:

`sysinfo.exe -?`

- `sysinfo` logs system information in two log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `OS_Eventlog.txt`).

`sysinfo.exe`

- `sysinfo` logs system information in two log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `OS_Eventlog.txt`) in a non-interactive way.

`sysinfo.exe -ni`

- `sysinfo` logs SATA and PCI bus information in two log files (`SATA_log.txt`, `PCI_log.txt`).

`sysinfo.exe -sata -pci`

- `sysinfo` logs system information in three log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `RAID_NVRAMlog.txt`, `OS_Eventlog.txt`).

`sysinfo.exe -raid`

Important Notes:

- `sysinfo` does not log HDD information if backplane is installed.
- To collect PCI/SATA info, SIT uses `memrwd.sys` driver. This driver is not WHQL certified.
- To display sensor information, you need to install Intel IMB driver (if only Microsoft IPMI driver is installed on the system).

- a. To install Intel IMB driver:

Run `install-imbdriver.bat` on console. The `install-imbdriver.bat` is available in `Binaries\` folder.

- b. To uninstall Intel IMB driver:

Run `uninstall-imbdriver.bat` on console. The `uninstall-imbdriver.bat` is available in `Binaries\` folder.

3.3 Using Linux-version Intel® System Information Retrieval Utility

This section details how to use the Intel® System Information Retrieval Utility on Linux.

Command Line Interface

`./sysinfo`

- To view the command-line help page:

`./sysinfo -h`

Or:

`./sysinfo "-?"`

- `sysinfo` logs system information in three log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `PCI_log.txt`, `OS_Eventlog.txt`).

`./sysinfo`

- `sysinfo` logs system information in three log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `PCI_log.txt`, `OS_Eventlog.txt`) in a non-interactive way.

`./sysinfo -ni`

- `sysinfo` logs system information in four log files in the `LogFiles` folder in the current directory (`sysinfo_log.txt`, `RAID_NVRAMlog.txt`, `PCI_log.txt`, `OS_Eventlog.txt`).

`./sysinfo -raid`

- `sysinfo` logs system information in three log files to the specified output folder (`sysinfo_log.txt`, `PCI_log.txt`, `OS_Eventlog.txt`).

`./sysinfo [Directory name]`

Appendix A: BIOS Setup Limitation Item List

The following items in BIOS setup menu (enter by pressing F2) are not supported by sysinfo

1. "System Date/System Time"
2. "UEFI Option ROM Control"
3. "Set Administrator Password/Set User Password"
4. "BMC LAN Configuration"
5. "Boot Manager/Error Manager/Exit"