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Intel® System Information Retrieval Utility (sysinfo)

User Guide

Sysinfo Version 12.0

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1 Introduction

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

Intel offered UEFI version, Windows version and Linux version Intel® System Information Retrieval Utility that the customers are able to collecting 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 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 un-installation process.

1.2 Overview

Intel® System Information Retrieval Utility dumps the following information either 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 varied between different versions, Please refer detailed information from specific sections.

1.3 Supported Operating System/Platforms

Intel offered 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 below table summarizes the list of Operating Systems and platforms supported.

Operating System	Supported Platforms
UEFI 2.0/2.1/2.3.1	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600
Windows Server 2008 R2 SP1* x64	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600
Windows Server 2008 SP2* x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600
Windows Server 2012*	S1200V3RP, S1400, S1600, S2400, S2600, and S4600
Windows 7* x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600 Workstation Server platforms
SuSE* Linux Enterprise Server 11 SP1	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600
SuSE* Linux Enterprise Server 11 SP2	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600
Red Hat* Enterprise Linux 6 update 1 x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600
Red Hat* Enterprise Linux 6 update 2 x64 and x32	S1200V3RP, S1200BT, S1400, S1600, S2400, S2600, and S4600

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 Un-install

This section provides some basic steps on how to install and un-install 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 system is running with the latest platform BIOS, BMC and FRUSDR.

For the latest System Firmware Update Package, please get 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 un-compressed ZIP file into your local directory (for example, fs0:\sysinfo)

2. GOTO UEFI folder

3. Run sysinfo.efi

4. sysinfo.efi logs system information in 3 different log files in a folder called "LogFiles" in the current directory:

    a. sysinfo_log.txt

    (Platform Firmware Inventory, 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 in which sysinfo.efi present.

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 to be installed. Otherwise, utility will not display RAID information.

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 folder

3. Go to "Windows\" folder

4. Install driver.

   For 32&64 bit Windows, go to folder "Drivers\x86" and run install.bat to install ipmi, smi and memory map drivers.

   For WinPE 64, go to folder "Drivers\EM64T" and run install.bat to install ipmi, smi and memory map drivers.

5. Go to "Binaries\" folder

6. Run sysinfo.exe

   For 32&64 bit windows, go to folder "x86\" and run "sysinfo.exe".

   For winPE 64, go to folder "EM64T\" and run "sysinfo.exe".

7. sysinfo.exe logs system information in 5 different log files in a folder called "LogFiles" 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 2 different log files in "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 Binaries\ folder in the main folder

2. Run uninstall.bat (for un-installing 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 or SuSE* Linux Enterprise Server 11.

2. All RAID drivers for the corresponding platform to be installed. Otherwise, utility will not display RAID information.

2.3.2 Installation

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

●   Regular Installation

1. Copy the un-compressed ZIP file into your local directory (for example, /root/sysinfo/)

2. GOTO Linux folder

3. Run './install.sh' command on the shell prompt, to install the sysinfo components.

4. In this folder, user can see a sysinfo executable. Upon running './sysinfo' on the shell prompt at the console, sysinfo logs system information in 4 different log files in a folder called "LogFiles" 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,).

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

c. PCI_Log.txt (PCI Bus info).

d. OSEvents_Log.txt (operating System Events).

● RPM Installation

1. Copy sysinfo rpm from Linux/RHEL or Linux/SLES (for RHEL or SLES respectively) to local folder.

2. Install sysinfo utility by using "rpm -Uvh sysinfo-Vxx.x-Bxx.ixxx.rpm". This will install the utility in "/usr/bin/sysinfo/"

3. On RHEL/SLES after installing the rpm close the terminal from which rpm was installed and then execute utility from a new terminal (example: "# sysinfo -ni").

2.3.3 Uninstallation

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

● Regular Un-Installation:

1. Run the './uninstall.sh' present in Linux/RHEL folder or Linux/SUSE folder depends on Linux distribution.

2. Remove the Linux folder.

● RPM Un-Installation:

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

3 Using Intel® System Information Retrieval Utility

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

3.1 Using UEFI version Intel® System Information Retrieval Utility

Command line Interface

      sysinfo.efi

    a.   To view the command-line help page:

        sysinfo.efi -h or -?

    b. sysinfo logs system information in 3 log files in a folder called "LogFiles" in the current directory (sysinfo_log.txt, RAID_NVRAMlog.txt, PCI_log.txt).

        sysinfo.efi

    c. sysinfo logs system information in 3 log files in a folder called "LogFiles" in the current directory (sysinfo_log.txt, RAID_NVRAMlog.txt, PCI_log.txt) in a non-interactive way.

        sysinfo.efi -ni.

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]

      o To view the command-line help page:

         ▪ sysinfo.exe -h or -?

      o sysinfo logs system information in 3 different log files in a folder called "LogFiles" in the current directory (sysinfo_log.txt, RAID_NVRAMlog.txt,

OS_Eventlog.txt).

- sysinfo.exe [followed by ENTER key]

- o sysinfo logs system information in 3 log files in a folder called "LogFiles" in the current directory (sysinfo_log.txt, RAID_NVRAMlog.txt, PCI_log.txt) in a non-interactive way.

  - sysinfo.exe –ni [followed by ENTER key]

- o sysinfo logs SATA and PCI bus information in 2 log files (SATA_log.txt, PCI_log.txt)

  - sysinfo.exe -sata -pci

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, user needs 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. install-imbdriver.bat is available in Binaries\ folder.

  b. To un-install Intel IMB driver

     run uninstall-imbdriver.bat on console. 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 logs system information in four log files in a folder called "LogFiles" in the current directory (sysinfo_log.txt, RAID_NVRAMlog.txt, PCI_log.txt, OSEvents_log.txt).

  ./sysinfo

- sysinfo logs system information in 4 log files in a folder called "LogFiles" in the current directory (sysinfo_log.txt, RAID_NVRAMlog.txt, PCI_log.txt, OSEvents_log.txt) in a non-interactive way.

    ./sysinfo -ni