Intel[®] Server Maintenance and Reference Training (SMaRT) Tool

Intel[®] SMaRT Tool Release 4.3 Install and Update Guide and New Features

Disclaimer

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. Intel products are not intended for use in medical, life saving, life sustaining applications.

Intel may make changes to specifications and product descriptions at any time, without notice.

Intel, Xeon, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

+ Other names and brands may be claimed as the property of others.

Copyright © 2004, Intel Corporation. All Rights Reserved.

Contents

INTRODUCTION	5
Welcome to Intel [®] SMaRT Tool Release 4.3!	5
Audience	
Technical Level	
Purpose	
Intel SMaRT Tool Architecture: A Quick Primer	
INSTALLING INTEL SMART TOOL 4.3	7
Recommendations	
System Requirements for Intel SMaRT Tool 4.3:	
Broadband Internet Connection	
Install a new copy of Intel SMaRT Tool Release 4.3	
Install Release 4.3:	
Upgrade an Existing Intel SMaRT Tool 4.0 Installation to 4.3	
Important Notes prior to Upgrading to Release 4.3: Upgrade to Release 4.3:	
KEEPING INTEL SMART TOOL 4.3 UP-TO-DATE	
General	
How to access the Update Server	
News file	
Express Method: Download a System Module	
Intel SMaRT Tool System Module Catalog	
New System Notification	
Download Size Notification Incomplete Download Notification & Resume	
System Module Download Process	
When the System Module is available on the Update Server	
When a System Module is not yet available on the Update Server	
NEW PRODUCT FEATURES	
What's new in Release 4.3?	28
Technical and Marketing Information	
Technical Information	
Marketing Information	
New System Modules	
New Parts & Spares Database	
General	
Combined Parts & Spares	
Data provided for all systems	
Reporting Features	
Print	
Export Sorting and Filtering	
Filtering	
Sorting	
User Interface Improvements	
Window is resizeable	
Adjustable column widths	
Scroll bars	
Launching the Parts & Spares Database	
XML converter	

Context-Sensitive Launch	
Menus & Help	
Select Part Menu	
Actions Menu	
Navigation buttons	
Systems button	
Support button	
Action Icons	
Diagnostics Icon	
Go to How-to-Replace Icon	
Home Icon	
Print Icon	
Product Guide Icon	
Screens	
Welcome Screen	
3.5.2 Data Grid Screen	
Data Grid: Sort and Filter capabilities	
Part Detail Screen	
Spares Kit Screen	
Parts & Spares Database: Reporting Requirements	
APPENDIX	
Acronyms and Abbreviations	42
Updates	
Language Considerations	
How Intel SMaRT Tool Handles Translations.	
Time Lapse between English and Translations in other Languages	
Known Issues	



Introduction

Welcome to Intel[®] SMaRT Tool Release 4.3!

Intel SMaRT Tool's Release 4.3 is the newest release of Intel SMaRT Tool. It offers a number of new features and System Modules supporting many of Intel's latest Server Products. This installation guide provides comprehensive installation and configuration instructions for setting up and using Intel SMaRT Tool Release 4.3.

Audience

This document should be used by technical personnel who will be configuring and distributing Intel SMaRT Tool Release 4.3.

Technical Level

This document assumes the following on your part:

Basic knowledge of program installation under the Windows* operating system.

Basic understanding of the Intel SMaRT Tool program.

Purpose

This guide is a single resource including all the procedures necessary to install Intel SMaRT Tool Release 4.3. Drawing from a number of sources, this guide:

Provides installation instructions.

Provides an overview of Intel SMaRT Tool Release 4.3.

Describes Release 4.3's new features and content.

Intel SMaRT Tool Architecture: A Quick Primer

Intel SMaRT Tool consists of the following:

- A software engine (Release 4.3) that includes a new, combined Parts & Spares Database.
- System Modules describing features, procedures, etc. associated with a particular Intel Server System.
 - There is one separate System Module for each Intel server system. Most Intel server systems have their own individual System Module in Intel SMaRT Tool. To date, approximately 60 System Modules exist, supporting current and legacy Intel Server Products.
 - System Modules are available through the following means:
 - The Intel SMaRT Tool CD (26 System Modules supporting many of Intel's newest Server Products are included in the Release 4.3 CD);
 - The Intel SMaRT Tool Update Server (a dedicated FTP site to which Intel SMaRT Tool connects via a custom interface):
 - The Update Server carries product and software updates (for instance, updated Server Parts and Spares lists, etc.). These are typically downloaded automatically at the time you initiate a visit to the Update Server;
 - The Update Server is also a repository for new and legacy System Modules:
 - New System Modules are posted to the Update Server as soon as they become available, which can predate the CD by weeks or even months (Intel SMaRT Tool CD releases usually occur twice a year);
 - Current System Modules are available on the Update Server including the latest changes and corrections;
 - Legacy System Modules remain available on the Update Server after they've been retired from CD releases.

Installing Intel SMaRT Tool 4.3

The installation procedures for Intel SMaRT Tool Release 4.3 are listed in this section. This section also includes instructions on how to download new System Modules from the Intel SMaRT Tool Update Server. A System Module is the sum of the contents relating to a particular Intel[®] server system.

You may:

Install a brand new copy of Intel SMaRT Tool Release 4.3, or

Upgrade an existing Intel SMaRT Tool 4.0, 4.1, or 4.2 installation to 4.3 (so that any already-installed System Modules are retained).

Note: You cannot upgrade Intel SMaRT Tool versions older than 4.0 with this CD. If you currently use a version of Intel SMaRT Tool older than 4.0, please uninstall it, then install Intel SMaRT Tool Release 4.3 and all desired System Modules using this CD.

Note: You may upgrade Intel SMaRT Tool version 4.0 and 4.1 with this CD. However, if you are planning on using Korean translations we recommend that you uninstall the older version, then install Intel SMaRT Tool Release 4.3 and all desired System Modules using this CD.

Recommendations

System Requirements for Intel SMaRT Tool 4.3:

Item	Minimum Configuration	Recommended Configuration
Processor	Intel® Pentium® III 400 MHz or faster	Intel® Pentium® 4, 2.0 GHz or faster
OS	Windows 2000 or XP	Windows 2000 or XP
RAM	256 MB	512 MB
CD-ROM drive	8x or faster	8x or faster
Display	16-bit color, 800 x 600	16-bit color, 1024 x 768
Internet connectivity	Necessary to get all product benefits	Broadband connection

Ensure that your hardware meets or exceeds the System Requirements above, and that a working Internet connection is available from the system on which you will be installing Intel SMaRT Tool. If that system is not connected to the Internet, you will not be able to update the contents of this CD, or to install new System Modules until a new CD is released.

- SMaRT Tool CD releases are scheduled approximately twice per year.
- If you will be using Intel SMaRT Tool in conjunction with Intel® Server Management, you may want to install Intel SMaRT Tool on the system on which you will be installing the Intel Server Management console.

Broadband Internet Connection

A broadband Internet connection is highly recommended. New System Modules' download size is typically about 15 MB.

Install a new copy of Intel SMaRT Tool Release 4.3

Insert CD

Insert the Intel SMaRT Tool 4.3 CD in your system's CD-ROM drive. The Setup program will be launched automatically. If not, navigate to the CD's root directory and launch the setup.exe program.

Welcome Screen

In the Setup program's Welcome screen (below), click Install.

🔀 Intel(R) SMaRT To	ol Setup	
Intel [®] SI Intel SMaRT Tool L	Mart Tool 4.3	int _e l.
	Welcome to Intel(R) SMaRT Tool Server Maintenance and Reference Training Tool	
	Install Select this option if you would like to install Intel SMa or if you would like to upgrade an existing installation Launch Select this option to run Intel SMaRT Tool from the C	

Note: Click **Launch** to run Intel SMaRT Tool from the CD without installing it on your system. You will not be able to update the contents of this CD, however, or to install new System Modules until a new CD is released. We recommend you install Intel SMaRT Tool on your system's hard drive.

Install Adobe* Reader (optional)

Intel SMaRT Tool will check if Adobe* Reader is installed on your system. Without Adobe* Reader, you cannot view Product Guides and other information. If Adobe* Reader is not detected on your system, the following screen will appear. To install Adobe* Reader, click on the language in which you will be primarily using Intel SMaRT Tool.

🐮 Intel(R) SMaRT Tool Setup
Adobe* Reader not installed
Setup has determined that Adobe* Reader is not currently installed on this computer. Adobe* Reader is needed to view the User's Guides associated with each system module. If you would like to install a localized version of this program, click the button below indicating the version of Adobe* Reader that you require.
EnglishFrenchSpanishItalianKoreanGermanChineseJapanesePortugueseRussian
If you do not wish to install Adobe* Reader at this time, you may click the Skip button to bypass the Adobe* installer and finish the Intel SMaRT Tool installation process.
Skip
Please note that a Russian localized version of Adobe* Reader is not currently available.

Note: As of this writing, Adobe* Reader is not available in Russian. If you will be primarily using Intel SMaRT Tool in Russian, please install the English version of Adobe* Reader.

Select New Installation

In the next screen (below), click New, then Next (If you are upgrading an existing Intel SMaRT Tool 4.0, 4.1 or 4.2 installation, refer to the section <u>Upgrade an Existing Intel SMaRT Tool 4.x Installation to 4.3</u> below).



Select an Installation Directory

In the Choose Installation Directory screen (below), accept the default installation directory (c:\smart), or select your own. To accept an installation directory, click Next.

🔀 Intel(R) SMaRT	Tool Setup	Z
	SMART Tool 4.3 ol Setup Program - New Installation	int _e l.
	Welcome to Intel® SMaRT Tool	
	Server Maintenance and Reference Training Too	il
	Please choose a destination directory for your new Intel SMaRT installation. A suggested directory is shown below. If you wish install to a different location, you may enter the destination direct below (in the form "C:\smart"), or you may click on Browse and choose your destination from the directory tree.	n to ctory
	Click on Next when you have chosen the directory you want.	
	C:\smart	Browse
	Previous Next	

Select an Installation Type

In the Select Installation Type screen (below), select Server or Standalone:



Standalone Mode

Standalone will install Intel SMaRT Tool onto a local or networked hard drive. In this mode, Intel SMaRT Tool runs as a local application (standard mode).

Server Mode

Server will install Intel SMaRT Tool on a Web server. In this mode, Intel SMaRT Tool is accessed over the Web via any browser equipped with the appropriate plug-in (downloadable from site).

Click Next to continue.

End User License Agreement

In the **End User License Agreement** screen (below), review the Agreement. To indicate your agreement, click **Accept**.

🔀 Intel(R) SMaRT	Tool Setup	_ 🗆 🛛
	SMART Tool 4.3 ol Setup Program - New Installation	int _e l.
	End User License Agreement	
	Please read carefully the End User License Agreement. It contains language which may affect your legal rights surrounding the use of this product. You must accept the terms of this agreement to install the software.	
	INTEL SOFTWARE LICENSE AGREEMENT (Intel SMaRT Tool, Single User) IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING. Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software. LICENSE: Subject to the restrictions below, Intel Corporation ("Intel") grants to you the following non-exclusive, non-assignable, royalty-free license under Intel's copyrights to the Software. The Previous Accept Decline	

Select Systems to Install

In the **Available Systems** (left) column of the **Select Systems to Install** screen (below), click on the System Modules you would like to install. The systems you selected will appear in the **Systems to Install** column (right). Click on **Next**. The system will check the destination drive for free space.

To install all the System Modules included on the Release 4.3 CD, click on Add all.

Select Systems to		
Select the server system mo	dules that you wish to install.	
Available systems	Systems to install	
SAI2 SC5100 * SE7500CW2 SC5200	S875WP1-E SC5250-E	
SE7500CW2 SC5200 SHG2 SC5200	SE7501CW2 SR1350-E SE7501CW2 SC5200	
SPSH4	SR870BH2	
SRSH4	SE7501HG2 SC5200	
SE7500WV2 SR1300		
SE7500WV2 SR2300 SE7501BR2 SC5200		
SR870BN4		
SE7505VB2 SC5250-E		
SE7501WV2 SR1300		
SE7501WV2 SR2300		
•		
Add All Remov		

Note: Older System Modules are not included on the 4.3 CD for space reasons, but they are still available from the Update Server. Also, new System Modules may have become available since the release of the CD. To get a System Module from the Update Server, proceed to the <u>Express Method</u>: <u>Download a System Module</u> section within this Guide.

The Setup program will check for available free space on the destination hard drive.

Install Legacy Interactive Overviews

If you selected older System Modules featuring legacy Interactive Overviews, the screen below will appear:



Click in the check box to install the legacy Interactive Overviews for the older System Modules you selected.

Note: Interactive Overviews were later replaced by Virtual System Tours. Virtual System Tours included with current System Modules are automatically installed.

Confirm Installation Parameters

In the Confirm Installation Parameters screen (below), review all parameters and click Previous to make changes. To accept parameters, click Finish. The Intel SMaRT Tool Release 4.3 engine will be installed on the destination drive. A progress bar will be displayed while files are being copied. The installation process may take several minutes, depending on how many System Modules were selected.

≋ Intel(R) SMaRT Intel [©] S		nt _e l.
Intel SMaRT Too	ol Setup Program - New Installation	
	Confirm Installation Parameters	
	Click Finish to confirm the installation parameters below, or click Previous to make corrections.	
	Destination directory: C:Ismart Estimated size of installation: 259.3 MB Space available on drive: 31,440.5 MB Type of installation: Standalone Number of system modules: 5 Legacy interactive overviews? No Systems to be installed:	
	Systems to be instanted. S875WP1-E SC5250-E SE7501CW2 SR1330-E SE7501CW2 SC5200 SR870BH2 SE7501HG2 SC5200 • Previous Finish	

Final Installation Steps

Intel recommends you update your new installation by visiting the Update Server. This will cause the latest updates to be automatically added to your new installation.

You may also download additional system modules not found on the CD at that time if desired.

Intel also recommends that, if your Intel® Server Product(s) support it, you install Intel® Server Management (found on a dedicated CD included in your Intel Server Product packaging) to complement your new Intel SMaRT Tool installation. To learn more about the benefits of installing both programs, click About Intel SMaRT Tool while in Intel SMaRT Tool's Welcome screen, and click on the link highlighted below.



Upgrade an Existing Intel SMaRT Tool 4.x Installation to 4.3

Important Notes prior to Upgrading to Release 4.3:

- If you have entered a custom Web link using the Customize Support Section feature of the Intel SMaRT Tool Administration Program, you will need to re-enter that link after you complete the upgrade.
- After upgrading, Intel SMaRT Tool will open in English the first time, regardless of your previous language selection.
- Select your primary language in the Language Selection Menu (available whenever translated contents are actually installed on your hard drive), and the next time you launch Intel SMaRT Tool from your hard drive it will open in the selected language.

Upgrade to Release 4.3:

Insert the Intel SMaRT Tool 4.3 CD in your system's CD-ROM drive. The Setup program will be launched automatically. If not, navigate to the CD's root directory and launch the setup.exe program.

In the Setup program's Welcome screen, click Install.

Note: You may click **Launch** to run Intel SMaRT Tool from the CD without installing it. In CD mode you will not be able to update the contents of this CD, or to install new System Modules until a new CD is released. We recommend you install Intel SMaRT Tool on a hard drive.

In the next screen (below), click Upgrade, then Next.

🗱 Intel(R) SMaRT Tool Setup	🛛
Intel® SMaRT Tool 4.3 Intel SMaRT Tool Setup Program	int _e l.
Welcome to the Intel SMaRT Tool Setup Program	
New This option will install a new copy of Intel SMaRT Tool.	
Upgrade This option will upgrade an existing Intel SMaRT Tool 4.x installation to Release 4.3. Warning: you must exit Intel SMaRT Tool before upgrading.	
You may click the door icon at lower right at any time to exit the Setup program.	
Please review the Intel SMaRT Tool Install Guide before proceeding.	
	I

Locate Intel SMaRT Tool Installation to Upgrade

In the **Locate Intel SMaRT Tool Installation** screen (below), enter the path to the Intel SMaRT Tool 4.0, 4.1 or 4.2 installation you wish to upgrade. Alternatively, click **Browse** and navigate to the directory; to accept a directory, click **OK**, then **Next**.



- You may only upgrade an Intel SMaRT Tool 4.0, 4.1, or 4.2 installation to Release 4.3 with this CD. If you currently use a version of Intel SMaRT Tool older than 4.0, please uninstall it, then reinstall the program and all desired System Modules using this CD.
- If you currently use version 4.1 of Intel SMaRT Tool and you are planning on using Korean translations, please uninstall it, then reinstall Intel SMaRT Tool 4.3 and all desired System Modules using this CD.
- Older System Modules that are not included on this CD may be obtained from the Update Server.

The rest of the Upgrade installation steps (End User License Agreement, Select Systems to Install, Confirm Installation Parameters) are identical to those in the previous section, <u>Install a new copy of Intel</u> <u>SMaRT Tool Release 4.3</u>.

Final Upgrade Steps

Intel recommends you update your newly upgraded installation by visiting the Update Server. This will cause the latest updates to be automatically added to your installation. You may also download additional system modules not found on the CD at that time if desired.

- If you had entered a custom Web link using the Customize Support Section feature of the Intel SMaRT Tool Administration Program, re-enter that link now.
- Select your primary language in the Language Selection Menu (available whenever translated contents are actually installed on your hard drive), and the next time you launch Intel SMaRT Tool from your hard drive it will open in the selected language.

Intel also recommends that, if your Intel® Server Product(s) support it, you install Intel® Server Management (found on a dedicated CD included in your Intel Server Product packaging) to complement your new Intel SMaRT Tool installation. To learn more about the benefits of installing both programs, click About Intel SMaRT Tool while in Intel SMaRT Tool's Welcome screen, and click on "Integration White Paper" under "Intel® Server Management Documentation".

Keeping Intel SMaRT Tool 4.3 up-to-date

General

Intel SMaRT Tool is kept up to date by means of a built-in interface to the Intel SMaRT Tool Update Server, a FTP server that hosts contents maintained and updated by Intel.

In Intel SMaRT Tool 4.3 as in previous versions, you need to initiate visits to the Update Server.

The program will remind you to update your installation every 30 or 60 days if you haven't done so in the interval.

The Intel SMaRT Tool Update Server makes the following kinds of updates available:

- New System Modules: They are posted on the Update Server as soon as they are available.
- Translations of new System Modules in nine languages are available on the Update Server as soon as they are completed. They usually trail the English, sometimes by several weeks.
- Updates to FRU and Spares lists.
- Minor content updates.

Intel SMaRT Tool downloads updates from the Update Server in one of two ways:

- Automatic: Minor updates are automatically downloaded and installed when you access the Update Server.
- User-initiated: New System Module downloads, due to their size (typically about 15 MB), require you to initiate the download.

How to access the Update Server

Intel SMaRT Tool Release 4.3 lets you access the Update Server using the following methods:

- 1. Express method: You can initiate individual System Module downloads right from the Select System menu in Intel SMaRT Tool's interface. For more details, read the "Express Method: Download a System Module" section of this manual.
- 2. In the About Intel SMaRT Tool page, click the Update Now (launch Intel SMaRT Tool Administrator) link, in the page's upper right section. The "Last Updated" date is displayed(see figure below).

ntel(R) SMaRT Tool 4.3				
Welcor	me to Int		MODII	iool 4.3
	(Display ReadMe file (in Engl aunch Intel SMaRT Tool Admin Last updated on: 12	ish only) listrator)
	Choose a language, then begin exploring Intel® SMaRT Tool.	20 (18	Virtual System Tours	Unpack/Pack Pedestal/Rad
Home	Choose among		How to Replace	Configuratio
	more than 45 server system modules, and explore.			
Systems		_	Technical Info	
	Locate worldwide support information via interactive	B.	Options:	-
	maps.	1 200	Intel® Server Manageme Documentation	Minter When invoked by Intel® Server Management
De materiere			Integration white paper	 Go to How to Replace

3. Anywhere in the Systems section, click Actions > Connect to Update Server (see figure below).



4. You can also launch the Intel SMaRT Tool Administrator as a standalone program by executing the program smartadm.exe in your Intel SMaRT Tool installation directory. **Note:** Use this method if you wish to remove systems from your installation, or to customize support URLs.

🔀 Intel(R) SMaRT Administrator Program 4.3 📃 🗆 🔀
intel [®] SMaRT Tool 4.3
Welcome to the Intel SMaRT Tool
Administration Program
Version 4.3
This program will modify the Intel SMaRT Tool installation at:
C:Ismart43rc6from42_2
e e e e e e e e e e e e e e e e e e e
Accept
Browse

News file

Whenever you access the Update Server, a file containing the latest Intel SMaRT Tool news will be displayed:

🔀 Intel(R) SMaRT Administrator	Program 4.3		
intel. Customize Suppo	ort Section	Remove System	Download Updates
Main Menu			
	Some features, such as	ED TO THE UPDATE SERVER: FRU and Spares updates, are dow r. Large downloads, such as new	
	listed.	ly contents newer than those on th	ne Intel SMaRT Tool 4.2 CD are
	download. (22) - SE7501CW2 SC5200 i download. (22)	E module translations. Click on Co module translations. Click on Cont nslations. Click on Continue > Fini	inue > Finish for automatic
	- SE7501CW2 SR1350- (16)	form module in English. Click Con E Server System module in Englis	
		E Server System module in English form module in English. Click Con	
	Done	Downloads	

Express Method: Download a System Module

System Modules for Intel SMaRT Tool are created for the latest Intel server systems. New System Modules may have become available since the release of the CD. Also, older System Modules are not included on the 4.3 CD for space reasons, but they are still available from the Update Server. All these System Modules can be accessed through the **Select System** Menu's Module Catalog.

Intel SMaRT Tool System Module Catalog

The entire catalogue of past, present, and upcoming Intel SMaRT Tool System Modules can be displayed in Intel SMaRT Tool's Select System menu at the user's request, by selecting <u>Show Installed and New Systems</u> in the Actions Menu.

- In Release 4.3, the Select System Menu acts like a catalog of <u>all</u> available System Modules, regardless of which Modules you have installed on your hard drive.
- A "New System Notification" mechanism proactively notifies you of new and upcoming modules and provides you with an up-to-date availability estimate of upcoming modules.
- In the Actions menu, a menu option lets you choose which System Modules you want displayed in your Select System menu:
 - When <u>Show All Systems</u> is selected, all Intel SMaRT Tool System Modules are displayed: legacy (old) Modules, current Modules, and even those new Modules still under development (read section below on New System Notification).
 - When <u>Show Installed and New Systems</u> is selected, only Intel SMaRT Tool System Modules already installed on your hard drive are displayed, as well as new System Modules (as per the New System Notification feature).
 - Visual menu attributes clearly indicate which System Modules are installed and which are not installed on the user's hard drive:
 - Installed systems are shown in normal type;
 - Non-installed systems are "greyed out."

In the example below, only the SAI2 SC5100 and SCB2 SR1200 System Modules have been installed on the local system. The other System Modules are available from the Intel SMaRT Tool Update Server.



To download a System Module right from the Select System menu, just click on any "greyed-out" system, follow the prompts, and the corresponding System Module will be downloaded from the Update Server.

New System Notification

This feature gives you advance notice of the latest Intel SMaRT Tool System Modules while they are still under development.

- New System notifications are automatically added to your Intel SMaRT Tool installation whenever you visit the Update Server.
- New and upcoming systems are then displayed in your Select System menu (in greyed-out mode), until you either:
 - Download the new System Module;
 - Or tell Intel SMaRT Tool to remove the new system from your menu.
- When you select a New System in your Select System menu (a greyed-out item), you will be connected to the Update Server.
 - If the upcoming System Module is not yet posted to the Update Server, a message will be displayed indicating the System Module's date of availability (See the <u>When a System Module is not yet available on the Update Server</u>)

subsection below). This messaging is updated by Intel to keep you up to date in the event availability dates change.

 If the new System Module is already posted to the Update Server, you will be prompted to initiate the download process (See "System Module Download Process" subsection below);

Download Size Notification

Lets you know the approximate size of a Intel SMaRT Tool System Module prior to download (see below).

F	laRT Administrator Program 4.3
int _e l.	
	Confirm new module installation
	AR450GX
	The above system module will be added to your SMaRT Tool installation.
	Total size: 11.1 MB
	Install Module Cancel
	a

If Intel SMaRT Tool is installed on a laptop computer, this gives you the choice to postpone the download until you are connected to a faster Internet connection.

Incomplete Download Notification & Resume

Lets you quickly and conveniently resume a System Module download that did not complete successfully.

 Any System Module(s) that have only partially downloaded will be displayed in your System Select menu preceded with an asterisk as shown below (here, SRCU31).

Select System		Actions	int
Servers			
RAID Controllers			
No. of Concession, name	Ultra 2 Controllers		
	Ultra 160 Controllers		
		SRCU31L	- 1
		*SRCU31	1

- Clicking on the system (SRCU31, above) in the menu lets you resume the download process where it left off.
- Only those files that failed to download previously will be downloaded. All other files have been saved to disk.
- This feature helps mitigate the inconvenience caused by an unreliable dial-up connection.

System Module Download Process

Follow these instructions to download a System Module from the Update Server:

- Launch Intel SMaRT Tool.
- In the Welcome screen, click **Systems**.
- Click Actions.
- Click Show All Systems.
- Click Select System.
- Click Servers (or RAID Controllers).
- Select a Processor or a RAID type.
- Click on the desired Server system or RAID controller.

Click **Yes** to install the selected System Module.

If the selected System Module is available on the CD, you will be given the choice to install from the CD rather than the Internet. If you have a slow Internet connection you may want to install from the CD. If you do, however, make sure you visit the Update Server when the installation is complete in order to automatically download any latest updates to the System Module you just installed. Otherwise:

Click **Continue** to be connected to the Internet.

Proceed to the applicable section below.

When the System Module is available on the Update Server

Intel SMaRT Tool notifies users of upcoming System Modules (for more details, please refer to the "New System Notification" section in Chapter 3). New Modules are typically still under development at the time of the notification. Once a Module is completed and available on the Update Server, the procedure is as follows:

A confirmation screen similar to the one below will display the download size. Click Install Module to continue.

禐 Intel(R) SI	MaRT Administrator Program 4.2	- 🗆 🗵
int _e l.		
	Confirm new module installation	
	SE7501WV2 SR2300	
	The above system module will be added to your SMaRT Tool installation.	
	Total size: 15.7 MB	
	Install Module Cancel	
		I

The download will initiate automatically after a few seconds. A progress box will be displayed:

You most recently checked for updates on: 2/17/2003
Opening FTP session
Connecting to FTP server
Downloading index of new files
Total number of new systems and updates to be added to your server:
Processing system/update download number: 1
Processing system update download number. I
,
_
Downloading file 555 of total files 588
Filename: smrtprgm/images/findimgs/A88355b.jpg
Thendric. Simply in an ages and inger accessibly g
Cancel
Calico

When the download is complete, Intel SMaRT Tool is reinitialized.

You are ready to use your new System Module.

When a System Module is not yet available on the Update Server

If you are one of the earliest users of a new Intel Server Product, the System Module for your Intel Server Product may not be available on the Update Server at the time you obtained the product. In this event, when you initiate the download according to the instructions above, you will see a message similar to the one displayed below:



The information contained in messages as shown above is kept up to date by Intel. You may use this feature as often as desired to get an updated estimate of upcoming System Modules' date of availability.

New Product Features

What's new in Release 4.3?

Intel SMaRT Tool Release 4.3 features:

- A brand new, integrated Parts and Spares Database with sorting and filtering capabilities;
- Brand new Marketing Information;
- New System Modules available on CD for the first time (see detail in the <u>New System</u> <u>Modules</u> subsection below);
- Customer-requested updates / enhancements.

New Parts & Spares Database

General

Intel® SMaRT Tool Release 4.3's Parts & Spares Database is new from the ground up.

Combined Parts & Spares

This Parts & Spares Database integrates the separate Parts and Spares lists found in releases Releases 4.2 and older of Intel SMaRT Tool, regrouping them into a common repository accessible in a single location and through a single interface. The Parts & Spares Database integrates both previously separate sets of data into a single set.

Parts data provided for all systems

This Parts & Spares Database includes data for all Intel® Server Products currently supported by Intel SMaRT Tool, i.e. approx. 60 Server Products. Support is provided for all products regardless of whether the corresponding System Modules are installed.

· Server Products for which the corresponding System Modules are installed will

PAGE 28

display text data and images of the parts for easy identification.

• Server Products for which the System Modules are not installed will display text data only.

Reporting Features

Print

You can now print parts reports, using pre-defined formats:

- Record list (all the records in the current query, and query arguments)
- Single record with photo
- Spares Kit

Export

As an alternative to printing a report, you have the option to export the report to a .csv file for export to Microsoft* Excel* or other software packages for further processing. There are two pre-defined export formats:

- List (all the records in the current query)
- Spares Kit

Sorting and Filtering

Filtering

You can now filter the database using convenient drop-down lists. The two-level filtering system allows you to refine your searches.

Sorting

You can now sort a parts list on any of the displayed fields, in ascending or descending order, by clicking on the corresponding column header.

User Interface Improvements

Window is resizeable

You can now adjust window size to take advantage of your screen real estate and display more data.

Adjustable column widths

You can now adjust column width with an easy drag-and-drop of the column header delimiter.

Scroll bars

Vertical and horizontal scroll bars allow more data to be displayed, even at minimum resolution.

Launching the Parts & Spares Database

The Parts & Spares Database is typically launched from Intel SMaRT Tool. Click on Parts in the Intel SMaRT Tool interface to launch the Parts & Spares Database.

XML converter

Whenever the Parts & Spares Database detects a change in its underlying data structure, the XML converter will be launched automatically to process the update. A progress bar will be displayed while the Converter is in operation. **Note:** In some cases, the operation of the XML converter can be slowed noticeably by certain anti-virus software.

Context-Sensitive Launch

When the Parts & Spares Database is launched from Intel SMaRT Tool, it takes you directly to the appropriate place depending on where you are working in Intel SMaRT Tool:

- If no system is selected in Intel SMaRT Tool, the Parts & Spares Database launches at the Welcome screen, allowing you to enter a query.
- If a system is selected in Intel SMaRT Tool and you click Parts in the Explore menu, the Parts & Spares Database automatically runs a query on the selected system, showing all the parts available for that system.
- If you are working on a replacement procedure in the How to Replace section and you click the Go to Parts button, the Parts & Spares Database automatically shows the data for the part being replaced.

Menus & Help

Menus & Help are found in the upper area of the Parts & Spares Database window.

Select Part Menu



Use the Select Part menu to search the Parts & Spares Database. Three options are available:

Search by Item

Click to display a drop-down list of part categories. Click on a category to display all parts related to the selected category, for all systems.

Search by System

Click to display a drop-down list of systems. Click on a system to display all parts related to the selected system, for all categories.

Find

Click to display the Find dialog box. Enter an alphanumeric argument in the "Search for" text field and click Search. The Parts & Spares Database will return all the parts related to the search argument you entered.

Note: The Parts & Spares Database will search all fields for the requested data.

Actions Menu



The Actions menu repeats the functionality of the Action Icons (read <u>Action Icons</u> below). In addition, three extra actions can be controlled from the Actions menu. Like Actions Icons, the Action Menu items are contextual (greyed out when they're not active):

Export Data

Click to export the current query (as a .csv file) to Microsoft* Excel* or other software packages for further processing. There are two pre-defined export formats:

- List (all the records in the current query, when in the Data Grid)
- Spares Kit (the contents of the selected Spares Kit, when in the Spares Kit Detail screen)

Resize Window

Click to display the Resize Window menu. In the Resize Window menu, select the desired window size.

Rollover Help Click to enable or disable the Rollover Help.

Navigation buttons

The Navigation buttons are found in the upper left corner of the Parts & Spares Database window. They let you navigate from the Parts & Spares Database to Intel SMaRT Tool.

Systems button



When activated, click the Systems button to go to the Systems section of Intel SMaRT Tool. If you were working in the Systems section before going to the Parts Database, you will be returned to the same place you left.

Support button



When activated, click the Support button to go to the Support section of Intel SMaRT Tool. If you were working in the Support section, you will be returned to the same place you left.

Action Icons

The Action Icons are clustered in the bottom left corner of the Parts & Spares Database window. They are activated as required by context. Deactivated icons are greyed out.

Diagnostics Icon



When activated, click the Diagnostics Icon to launch the Diagnostics for the selected part / system in Intel SMaRT Tool. Click Close to return to the Parts & Spares Database.

Note: This icon will only be activated when the corresponding System Module is installed in Intel SMaRT Tool.

Go to How-to-Replace Icon



When activated, click the Go to How-to-Replace Icon to launch the replacement procedure for the selected part / system in Intel SMaRT Tool's How to Replace section. Click the Go to Parts Action Icon in Intel SMaRT Tool to return to the Parts & Spares Database.

Note: This icon will only be activated when the corresponding System Module is installed in Intel SMaRT Tool.

PAGE 32

Home Icon



Click the Home Icon to go to Intel SMaRT Tool's Welcome screen.

Print Icon



Click the Print Icon to send a report to printer:

- If you are in the Data Grid and a query is displayed, clicking the Print Icon prints a listing of all the parts included in the query.
- If you are in the Parts Detail screen, clicking the Print Icon prints a report on the selected part including the image.
- If you are in the Spares Kit Detail screen, clicking the Print Icon prints a listing of the selected Spares Kit's contents.

Product Guide Icon



When activated, click the Product Guide Icon to automatically launch the Product Guide for the selected Server Product, at the page discussing the selected part / system.

Note: This icon will only be activated when the corresponding System Module is installed in Intel SMaRT Tool.

Screens

Welcome Screen



The Welcome Screen allows you to launch a query, as discussed in the <u>Select Part Menu</u> subsection above..

3.5.2 Data Grid Screen

Support		Result	s 1 - 50 of	F 50	Carlos and the second			
		Find Results: AU	J320SCSI	SCSI Adaj	oter board			
Item:			Available	e as:	Ordering Inform	ation:		
Where Used:	Description:	E	AWR:	Spare:	Product Code:	MM #:	Part #:	
SE7501CW2 SR1350	-E AU320SCSI S	SCSI Adapter bo	yes	yes	AU320SCSI	850832	C20155-001	
SE7501CW2 SR1350	-E SE7501CW2	Paseboard, 533	no		SE7501CW2	852945	C26740-201	
SE7501CW2 SR1350	-E SE7501CW2	Baseboard, 533	no		SE7501CW2	852945	C26740-301	
SE7501CW2 SR1350	-E SE7501CW2	Paseboard, 533	no		SE7501CW2	852945	C26740-302	
SE7501CW2 SR1350	-E SE7501CW2	Baseboard, 533	yes		SE7501CW2	852945	C26740-303	
SE7501CW2 SR1350	I-E PS adapter c	able, sub with F:	yes		(N/A)	(N/A)	34CB000408	
SE7501CW2 SR1350	-E Cable, COM2		yes		(N/A)	(N/A)	A66580-001	
SE7501CW2 SR1350	I-E Cable, Diske	te Drive, 25 in.	yes		(N/A)	(N/A)	A49275-002	
SE7501CW2 SR1350	I-E Cable, front	panel; Sub with	yes		(N/A)	(N/A)	34CB000398	
SE7501CW2 SR1350	HE Cable, IDE, 2	25 in.	yes		(N/A)	(N/A)	A49271-002	
SE7501CW2 SR1350	-E Cable, SCSI		yes		(N/A)	(N/A)	A66595-002	
SE7501CW2 SR1350	I-E CD-ROM cab	le; sub with AKC	yes		(N/A)	(N/A)	34CB000395	
SE7501CW2 SR1350	-E FDD cable; s	ub with AKCDFL(yes		(N/A)	(N/A)	34CB000394	
SE7501CW2 SR1350	I-E FDD to interf	ace board cable	yes		(N/A)	(N/A)	34S2100560	
SE7501CW2 SR1350	-E HDD Cable -	ATA, sub with FK	yes		(N/A)	(N/A)	34CB000396	
SE7501CW2 SR1350	I-E Intrusion swi	tch cable, Sub v	yes		(N/A)	(N/A)	34CB000399	
4								

The Data Grid Screen displays a query. Specific additional functionality is available from this screen:

Information Displayed in Data Grid

Important: Go to Appendix: Acronyms and Abbreviations for definitions.

For each single part record (unique part number used in a single system), the Data Grid displays:

- A thumbnail image (clickable) of the part associated with the selected record, (when the corresponding System Module is installed)
- The server system(s) in which any given part belongs ("Where Used" column).
- A text description of the part ("Description" column).
- A FRU's AWR status while the FRU is available under warranty from Intel ("AWR" column):
 - If a system is out of warranty, the associated FRUs' status will be indicated as eow* in the AWR column. Note that Intel SMaRT Tool supports systems after they've gone out of warranty as a convenience to our customers.
- Whether a part is available for purchase as a Spare, or is a Spare Kit ("Spare" column).

If a system is no longer sold by Intel, the system's associated Spares' status will be indicated as eol** in the Spares column.

Column Width Resizing

You can resize columns by clicking and dragging their right edge. When a column is resized, columns to its right move accordingly while retaining their width. If a column is resized to be so small that its header label cannot be displayed in its entirety, the label is simply cut off on the right side.

Image Display

The Parts & Spares Database displays product images whenever the corresponding System Module is installed. Existing data provides:

- Thumbnail image (displayed at grid level when record is selected)
- Zoomed1 image (displayed in part detail screen when record is double-clicked)
- Zoomed2 image (displayed when Zoomed1 is clicked Baseboards only)

Note: If a System Module is not installed, the thumbnail image frame does not appear (not clickable). The record cannot be double-clicked. The part detail screen is not available.

Export / Save Images

The Parts & Spares Database lets you save FRU shots (thumbnails or full-size) to a drive location of your choice, via a standard 'Save As' dialog interface:

A "Save Image" button appears next to both the thumbnail and the zoomed images. When it is clicked, a new dialog will appear showing both versions (thumbnail and zoomed) of the image, and allowing you to save either image to a location of your choice.

Data Grid: Sort and Filter capabilities

'Click'n'Filter'

The Parts & Spares Database lets you filter the table quickly by using drop-down lists in the "Where Used" and "Description" column headers. The drop-down lists feature all entries available in that field – those that were included in the Search by System and Search by Item menus (see <u>Select Part Menu</u> section). You can select a single search criterion from each list.

Examples:

If, under "Where Used", you select SRMK2, and under "Description" you select "Baseboard", the Parts & Spares Database will return all Baseboard items for system SRMK2.

- If you then leave SRMK2 selected in "Where Used" but reset "Description" to "all", all parts for SRMK2 are displayed regardless of category.
- Or, if you leave Baseboard selected in "Description" but reset "Where Used" to "all", all Baseboard parts are displayed regardless of system.
- If you reset both "Where Used" and "Description" to "all", all parts in the database are displayed.

- > Filters remain in effect until turned off, i.e. until they are reset to "all".
- > Filter lists are not currently localized (in English only).

Summary:

- Filtering on Where Used is same as selecting "Search by System" in the Select Part menu.
- Filtering on Description is same as selecting "Search by Item" in the Select Part menu.
- Filtering, however, allows you to combine both, i.e. search on one and refine the search on the other.

'Click'n'Sort'

The Parts & Spares Database lets you sort the table on any field simply by clicking on that field's column header.

- The sort order is alphabetical, unless specified otherwise.
- $1^{\text{st}} \operatorname{clk} = \operatorname{asc}, 2^{\operatorname{nd}} \operatorname{clk} = \operatorname{desc}$
- An "Up" or "Down" arrow on the column header of the sort field indicate (a) that that field is the sort field, and (b) whether the sort is ascending (▲) or descending (▼).
- The sort order of the AWR and Spares columns is as follows:
 - Spares (▲): Yes > Kit > EOL > No
 - Spares (▼): No > EOL > Kit > Yes
 - AWR (▲): Yes > EOW > No
 - AWR (▼): No > EOW > Yes

Part Detail Screen



You can access detailed information on a part by clicking on the part's thumbnail image, or by doubleclicking on the record. A larger image of the part is displayed. This screen is only available when the corresponding System Module is installed.

Spares Kit Screen



You can access detailed information on a Spares Kit by clicking on the hyperlinked word "Kit" in the Spares column. A detailed list of the Kit components is displayed. Tabs let you toggle between the Image screen and the Kit List screen.

Parts & Spares Database: Reporting Capabilities

Print function

The Print button prints a listing of all the records in the current query. The print function uses predefined report formats.

- There are three pre-defined print formats:
 - Record list (show query arguments)
 - Single record with photo
 - Spares Kit

Export function

As an alternative to printing a report, you have the option to export the report to a .csv file for export to MS Excel or other software packages for further processing.

• There are two pre-defined print formats: List and Spares Kit views.

Marketing Information

Release 4.3 offers selected brand new Marketing information on many of the newest Intel Server Products. Marketing Information includes:

- Links to Product Briefs on the Web;
- Links to Product Info on the Web;
- Product Brochures;
- Case Studies;
- 'Take the Lead' video;
- 'Real Server' Collateral;
- High-resolution posters.

Note: Not all the information above is available for all Server Products.



To access Marketing (and Technical) information in Release 4.3, select a System Module using the **Select System** menu, then click the appropriate **Explore** menu item (above, highlighted):

New System Modules

The Intel SMaRT Tool Release 4.3 CD includes new System Modules and Virtual System Tours for the following Intel Server Products:

- Intel[®] Server Platform SR870BN4 (in English only);
- Intel[®] Server Board SE7505VB2 integrated in the Intel[®] Server Chassis SC5250-E (in 10 languages);
- Intel® Server Platform SR870BH2 (in 10 languages);

- Intel® Server Board SE7501CW2 integrated in the Intel® Server Chassis SC5200 (in 10 languages);
- Intel® Server Board SE7501CW2 integrated in the Intel® Server Chassis SR1350-E (in 10 languages);
- Intel® Server Board S875WP1-E integrated in the Intel® Server Chassis SC5250-E (in 10 languages).

In addition, Intel SMaRT Tool will notify you in advance of planned System Modules and their availability dates.



Appendix

Acronyms and Abbreviations

Acronym	Definition
EOL	End Of Life = A system or its associated Spares are no longer available for purchase from Intel, but the system's parts may still be available for warranty replacement.
EOW	End Of Warranty = A system's parts are no longer available for warranty replacement from Intel. This means they are no longer available from Intel, period. Intel SMaRT Tool supports EOW systems as a convenience to our customers. EOW never occurs before EOL.
AWR	Advanced Warranty Replacement = an expedited warranty replacement program offered to Intel channel program members purchasing product exclusively through Intel Authorized distribution.
FRU	Field Replaceable Unit = A part available for warranty replacement from Intel (as long as system is not EOW). Some, but not all, FRUs are also Spares (see Spare under Definitions below).
System Modules	In all versions of Intel SMaRT Tool, System Modules are collections of content describing the features, procedures, etc. specific to particular Intel Server Systems.
Spare	A part available for purchase from Intel (as long as system is not EOL). Some, but not all, Spares are also FRUs.
Spares Kit	A pre-defined bundle of parts available for purchase from Intel (as long as system is not EOL). A Spares Kit is itself a Spare (i.e. orderable from Intel). Spares Kits are never FRUs.

Updates

Intel will periodically make changes to the underlying data files. Access the Update Server from Intel SMaRT Tool regularly, at least every 30 days, to ensure you receive the latest updates. The Parts & Spares Database detects changes and deletions in the underlying data files.

Language Considerations

How Intel SMaRT Tool Handles Translations

Intel SMaRT Tool System Modules are typically released in English only at first. Then, they are subsequently translated in nine languages: French, Italian, Spanish, Portuguese (Brazilian), German, Russian, Chinese (simplified), Japanese, and Korean.

Translations are posted to the Update Server as soon as they are available.

Note: Translations are automatically added to your installation when you visit the Update Server following the posting of the translated files. This is a much smaller download than an English-only System Module, because only text files are downloaded (images and other files are leveraged from the English download). You don't have to take any action to download Intel SMaRT Tool translations other than initiating a visit to the Update Server.

Intel SMaRT Tool always remembers your last language selection and will open in the last language selected when launched.

Time Lapse between English and Translations in other Languages

Because of the time lapse between the release of a new System Module and the release of its translations in nine languages, a new System Module may only exist in English for several weeks. In this case, the System Module will not be found in the Select System menu of any language other than English, even though you have successfully downloaded it from the Update Server. We apologize to our international users for any inconvenience this may cause.

Known Issues

Refer to the file **known_issues.txt** located in the root directory of your SMaRT Tool installation for information on any issues known at the time the CD is going to press.