
Intel® Server Maintenance and Reference Training (SMaRT) Tool

SMaRT Tool Release 4.0A

Install Guide & New Features

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Introduction

Welcome to Intel® SMaRT Tool Release 4.0A!

SMaRT Tool's Release 4.0A is an intermediate release of SMaRT Tool designed to facilitate the interface between SMaRT Tool and Intel® Server Management, and to make content download from the Internet easier. This installation guide provides comprehensive installation and configuration instructions for setting up and using SMaRT Tool Release 4.0A.

Audience

This document should be used by technical personnel who will be configuring and distributing SMaRT Tool Release 4.0A.

Technical Level

This document assumes the following on your part:

- Basic knowledge of program installation under the Windows* operating system.
- Basic understanding of the SMaRT Tool program.

Purpose

This deployment guide collates into a single resource all the procedures necessary to deploy a SMaRT Tool Release 4.0A installation. Drawing from a number of sources, this guide:

- Provides installation instructions.
- Provides an overview of SMaRT Tool Release 4.0A.
- Outlines the differences between Releases 4.0 and 4.0A.

Installing SMaRT Tool 4.0A

The installation procedures for SMaRT Tool Release 4.0A are listed in this section. This section also includes instructions on how to download new System Modules from the SMaRT Tool Update Server, such as the SE7500VW2 SR1300 or SE7500VW2 SR2300 System Modules.

You may:

- Install a brand new copy of SMaRT Tool Release 4.0A, or
- Upgrade an existing SMaRT Tool 4.0 installation to 4.0A (already-installed System Modules will be retained).

You may not:

- You may not upgrade SMaRT Tool versions older than 4.0.
- You may not install or upgrade Release 4.0A in Web Server mode. Release 4.0A is intended for use as a Standalone product. The upcoming Release 4.1 will support Web Server mode.

Recommendations

System Requirements for SMaRT Tool:

- Intel® Pentium II processor at 233 MHz or faster
- Windows* 98, ME or 2000; Windows NT 4.0
- 64 MB RAM (128 MB is recommended)
- 8x or faster CD-ROM drive
- 16-bit color, 800 x 600 display
- A working Internet connection is necessary to download SMaRT Tool contents (System Modules) from the SMaRT Tool Update Server.

A broadband Internet connection is highly recommended.

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 SMaRT Tool.

If you will be using SMaRT Tool in conjunction with Intel® Server Management, you may

want to install SMaRT Tool on the system on which you will be installing the Server Management console.

Install a new copy of SMaRT Tool Release 4.0A

Install Release 4.0A

- Insert the Resource CD found in your Intel Server Product packaging in your system's CD-ROM drive. The CD will autorun.
- Click **Intel® SMaRT Tool** in the left navigation bar.
- Click the green **Make a Selection** menu. The menu will open.
- Click **Install SMaRT Tool**.
- Click the **run installer** icon.
- Depending on your browser settings, a safety dialog box may appear. Click **Run this program from its current location**, then click **OK**.
- In SMaRT Tool's Setup program's Welcome screen (below), click **New**.



- Accept the default installation directory, or select your own. To accept an installation directory, click **Next**.
- Review the End User License Agreement. To indicate your agreement, click **Accept**.
- In the Confirm Installation Parameters screen, click **Finish**.
- The SMaRT Tool Release 4.0A engine will be installed on your hard drive. When installation is complete, proceed to the Download a System Module for your Product section of this Guide, below.
- Intel recommends you also install Intel Server Management, found on a dedicated CD included in your Intel Server Product packaging, in addition to your new SMaRT Tool installation. Read the "What's new in Release 4.0A?" section of Chapter 2 for an overview of the benefits of installing both programs.

Upgrade an existing SMaRT Tool 4.0 installation to 4.0A

Important Notes prior to Upgrading to Release 4.0A.

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

Upgrade to Release 4.0A.

- Insert the Resource CD found in your Intel Server Product packaging in your system's CD-ROM drive. The CD will autorun.
- Click **Intel® SMaRT Tool** in the left navigation bar.
- Click the green **Make a Selection** menu. The menu will expand.
- Click **Install SMaRT Tool**.
- Click the **run installer** icon.
- Depending on your browser settings, a safety dialog box may appear. Click **Run this program from its current location**, then click **OK**.
- In SMaRT Tool's Setup program's Welcome screen (below), click **Update**.



- Click **Browse** and navigate to the SMaRT Tool installation directory you wish to upgrade. To accept an installation directory, click **OK** then click **Next**.
 - You may only upgrade a SMaRT Tool 4.0 installation to Release 4.0A.
 - You may not upgrade a Web Server installation.

- Review the End User License Agreement. To indicate your agreement, click **Accept**.
- The SMaRT Tool 4.0 installation you specified will be upgraded to SMaRT Tool Release 4.0A. Any already-installed System Modules will be retained. When installation is complete, proceed to the Download a System Module for your Product section of this Guide, below.
- Intel recommends you also install Intel Server Management, found on a dedicated CD included in your Intel Server Product packaging, in addition to your new SMaRT Tool installation. Read the “What’s new in Release 4.0A?” section of Chapter 2 for an overview of the benefits of installing both programs.

Download a System Module for your Product

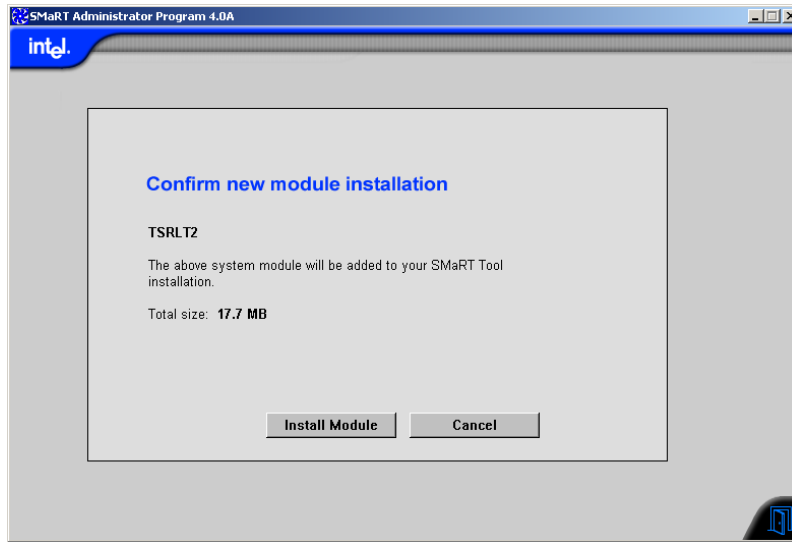
SMaRT Tool 4.0A when shipped on the Resource CD does not include System Modules. Follow these instructions to download System Module(s) from the Update Server:

- Launch SMaRT Tool.
- In the Welcome screen, click **Systems**.
- Click **Select System**.
- Click **Servers**.
- Click **Xeon™**.
- Click **SE7500VW2 SR1300** or **SE7500VW2 SR2300**.
- Click **Yes** to connect to the Update Server.
- Click **Continue** to be connected to the Internet.
- Proceed to the applicable section below.

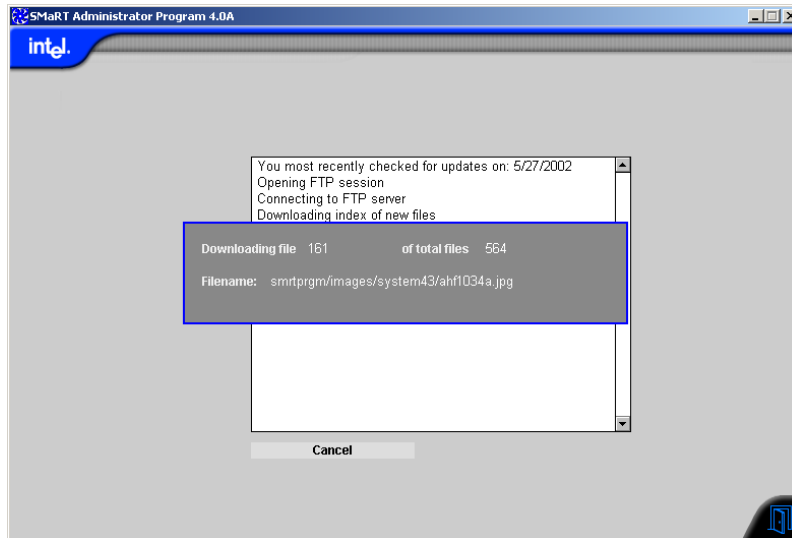
When the System Module is available on the Update Server

All but the earliest users will be able to download the System Module for their product from the Update Server.

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



- The download will initiate automatically after a few moments. A progress box will be displayed.



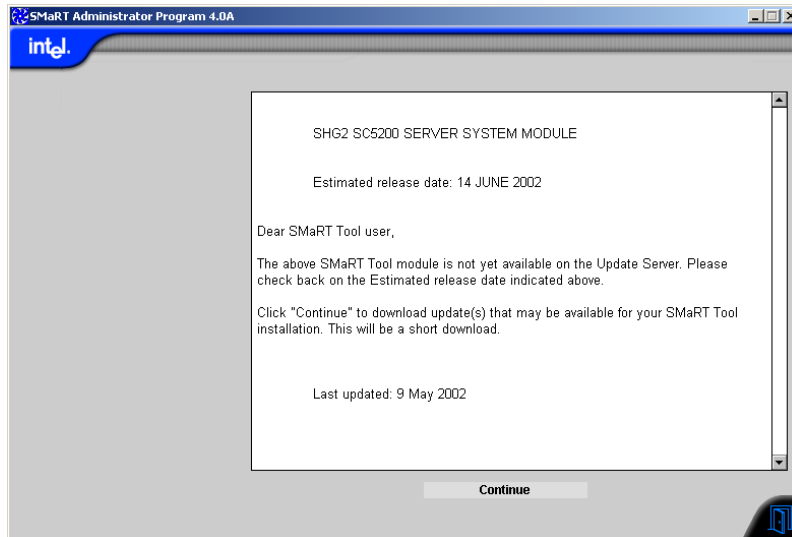
- When the download is complete, click **OK** to reinitialize SMaRT Tool.



- You are ready to use your new System Module.

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

If you are an early user, you may not be able to download the System Module for your Intel Server Product from 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 this message is kept up to date by Intel. You may use this feature often to get an updated estimate of upcoming System Modules' date of availability.

New Product Features

SMaRT Tool Architecture: A Quick Primer

SMaRT Tool consists of the following:

- A software engine (Release 4.0A)
- 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 SMaRT Tool. At this time, more than 30 System Modules exist to support as many Intel® Server Systems.
 - System Modules are available through the following means:
 - On the SMaRT Tool CD;
 - On the SMaRT Tool Update Server (a dedicated FTP site to which SMaRT Tool connects via a proprietary interface):
 - The Update Server carries product and software updates (for instance, updated Server Parts and Spares lists; etc.). These are typically downloaded automatically, whenever you initiate a visit to the Update Server;
 - The Update Server is also a repository for all System Modules:
 - New System Modules are posted to the Update Server as soon as they are made available, which can predate the CD by weeks or even months (SMaRT Tool CD releases are usually two a year);
 - Current System Modules are available on the Update Server including the latest changes and corrections;
 - All legacy System Modules remain available on the Update Server although they've been retired from the CD.

What's new in Release 4.0A?

SMaRT Tool Release 4.0A was designed with two main goals in mind:

- Facilitate the interface between Intel SMarT Tool and Intel Server Management;
- Make content download from the Internet easier.

SMaRT Tool now available on Intel® Server Board Resource CDs

Contrary to general releases of the SMarT Tool engine that are published on a dedicated CD (the latest such general release is SMarT Tool 4.0), Release 4.0A is available on a specific Intel Server Board's Resource CD.

New Modules Easier to Obtain

General releases of the SMarT Tool engine are accompanied by current System Modules on a dedicated CD, however, Release 4.0A is offered without a System Module on the CD. System module(s) are available through the Internet from the SMarT Tool Update Server.

- This is done so that the SMarT Tool engine can be included in time for the initial release of a Server Board. System Modules typically become available at a later time.
- Release 4.0A incorporates new features that make it easy and intuitive for you to:
 - Download System Modules from the Update Server and install them on your hard drive;
 - Be notified in advance of which System Modules are planned, and on what date they will be available.

Intel®SMaRT Tool now works with Intel® Server Management

Intel Server Management and Intel SMarT Tool now join forces to give you a considerable competitive advantage in keeping servers up and running without interruption. While servers based on Intel® server building blocks are already some of the most reliable in the industry, this integration provides efficient and proactive identification of failing components, parts replacement, and improved mean-time-to-repair.

- To learn more on this exciting new feature and the benefits it brings you, read the "Integration with SMarT Tool" white paper located in the SMarT Tool pages of the Resource CD:
 - In the green **Make a Selection** menu, click on **SMaRT Tool and Server Management**;
 - Then, click on **Intel SMarT Tool and Server Management Integration**. You will need Adobe* Acrobat* Reader (provided on the Resource CD).
- To enable the interface between Intel Server Management and Intel SMarT Tool, you need to install SMarT Tool 4.0 or higher and Server Management 5.0 or higher. For best results, we recommend using SMarT Tool 4.0A (or higher).

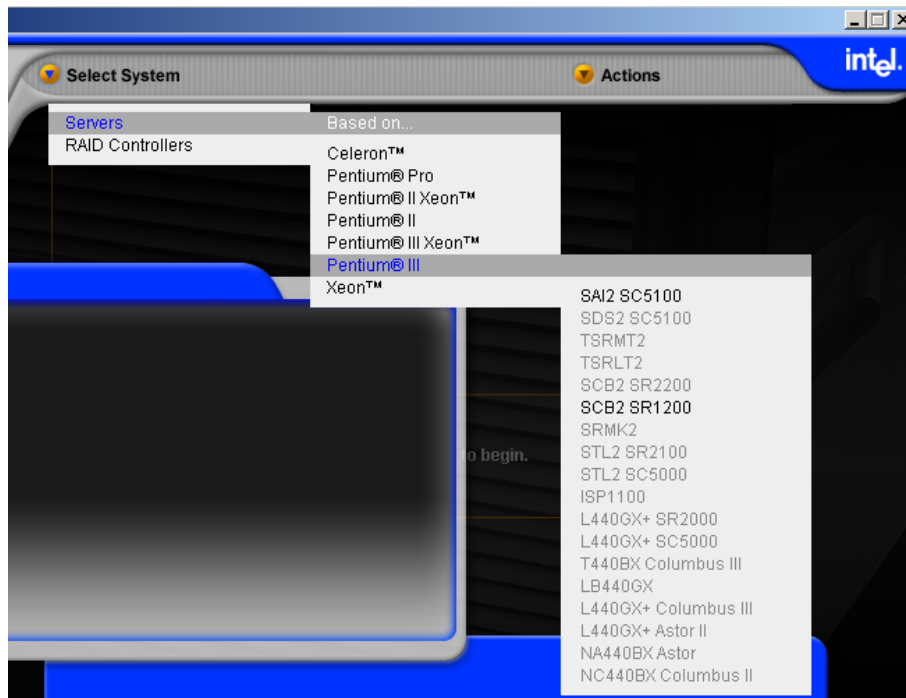
SMaRT Tool System Module Catalog

The whole catalogue of past, present and upcoming SMarT Tool System Modules can now be displayed in SMarT Tool's Select System menu, at the user's choice.

- In the past, SMarT Tool's Select System menu displayed only those systems for which a System Module had been installed on your hard disk. You had to go and

search the Update Server to find out about new modules that might have become available.

- Starting with Release 4.0A, the Select System Menu acts like a catalog of all available System Modules, regardless of which Modules are actually installed locally.
- A “New System Notification” mechanism proactively notifies you of new and upcoming modules and provides you with an always-up-to-date estimated date of availability for upcoming modules.
- In the Actions menu, a new menu option lets you choose which System Modules you want displayed in your Select System menu:
 - When Show All Systems is selected, all SMaRT Tool System Modules are displayed: legacy (old) Modules, current Modules, and even those Modules still under development.
 - When Show Installed and New Systems is selected, only those SMaRT Tool System Modules that are installed on your hard drive are displayed, as well as new System Modules that become available (as per the New System Notification feature described below).
 - 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 SMaRT Tool Update Server.



- An intuitive mechanism allows downloading of System Modules right from the Select System menu: Just click on the desired system in the menu, and the corresponding System Module will be downloaded from the Update Server.

New System Notification

This new feature lets you know about new and upcoming SMaRT Tool System Modules.

- New System notifications are automatically added to your SMaRT Tool installation whenever you initiate a visit to the Update Server.
 - New and upcoming systems will then be displayed in your Select System menu (they will be displayed in greyed-out mode), until you:
 - Either download the new System Module;
 - Or, tell SMaRT Tool to remove the new system from your menu.
 - When you select a New System Module in your Select System menu, you will automatically be connected to the Update Server.
 - If the new System Module is already posted to the Update Server, you will be prompted to initiate the download process;
 - 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. This messaging is constantly updated by Intel to keep you up to date in the event availability dates change.

Download Size Notification

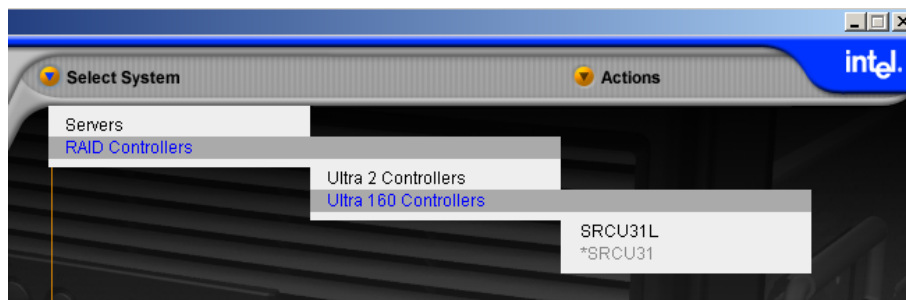
Lets you know the approximate size of a SMaRT Tool System Module prior to download.

- Gives you the choice to postpone the download until you are connected to a faster Internet connection.
 - Note that the size indicated is the size on disk, assuming the largest cluster size available under Windows* operating systems. Therefore, actual download size will be less.

Incomplete Download Notification & Resume

Lets you quickly and conveniently resume a SMaRT Tool System Module(s) 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).



- 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. The rest has been saved to disk.

- This feature is designed to help mitigate the downside of using a dial-up connection.

Parts Database: Search by System option

- A “Search by System” option was added to the Select Part drop-down menu. Selecting this option will display all FRUs associated with a particular system.

Dynamic Language Selection Menu

- Learn about this new feature under “Important Language Considerations” below.

Important Language Considerations

How SMaRT Tool Handles Translations

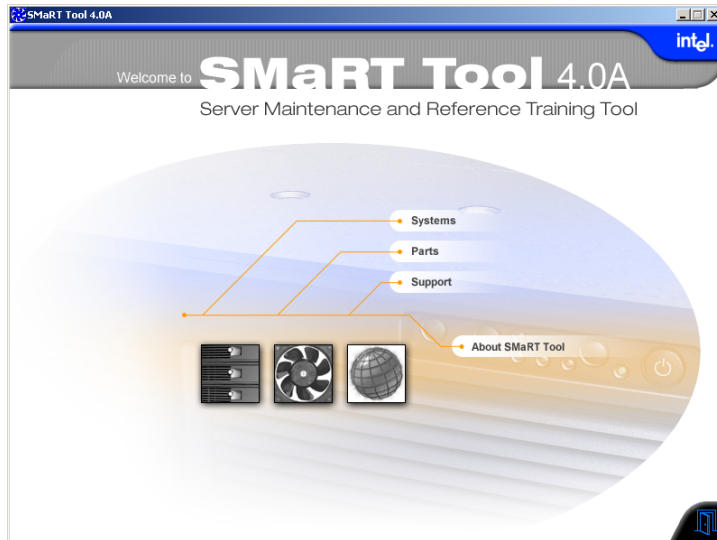
SMaRT Tool System Modules are typically released in English only at first. Then, they are subsequently translated in eight languages: French, Italian, Spanish, Portuguese (Brazilian), German, Russian, Chinese (simplified), and Japanese.

- Translations are posted to the Update Server as soon as they are available. **Note** that this may be several weeks after the English module became available. They are automatically added to your SMaRT Tool installation upon your first visit to 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).
- Korean will soon be added to the SMaRT Tool language set. Look for 20 System Modules translated in Korean in the upcoming SMaRT Tool Release 4.1.
- SMaRT Tool always remembers your last language selection and will open in the last language selected when launched.

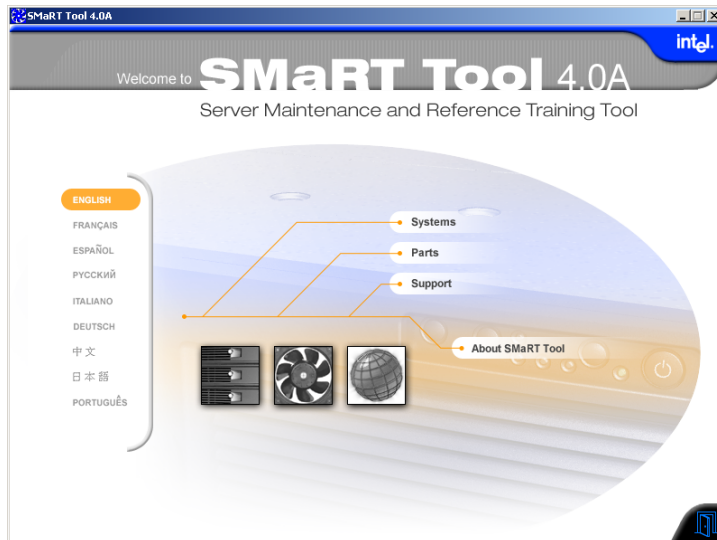
Dynamic Language Selection Menu

This new feature automatically configures the Language Selection menu on SMaRT Tool’s Welcome Page, based on the translation status of installed System Modules.

- In the past, the Language Selection menu was always available regardless of whether translated contents actually existed on your hard drive.
- In Release 4.0A, if no translated System Module(s) is installed on your hard drive, the Language Selection menu is not necessary and therefore does not appear (English is default).



- If at a later time you add a translated System Module, the languages in which that module was translated will be added to the Language Selection menu.



Translation considerations regarding Release 4.0A User Interface

Because of the accelerated development schedule of Release 4.0A, some late GUI additions could not be translated and you may see some English GUI elements (captions, etc.) among translated sections of SMaRT Tool. We apologize to our international users for any inconvenience this may cause.

- Existing contents are unaffected (i.e., previously translated System Modules).
- All GUI elements will be translated in SMaRT Tool's next major release, 4.1.