

Intel[®] Management and Security Status Application

User's Guide

August 2012

Document Revision Version: 0.8 Firmware version: 9.0



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Intel[®] Active Management Technology requires activation and a system with a corporate network connection, an Intel[®] AMTenabled chipset, network hardware and software. For notebooks, Intel AMT may be unavailable or limited over a host OS-based VPN, when connecting wirelessly, on battery power, sleeping, hibernating or powered off. Results are dependent upon hardware, setup and configuration. For more information, visit http://www.intel.com/technology/platform-technology/intel-amt.

Client Initiated Remote Access may not be available in public hot spots or "click to accept" locations. For more information on CIRA, visit <u>http://software.intel.com/en-us/articles/fast-call-for-help-overview</u>

KVM Remote Control (Keyboard, Video, Mouse) is only available with Inte[®] Core™ i5 vPro and Core™ i7 vPro processors with Intel[®] Active Management technology activated and configured and with integrated graphics active. Discrete graphics are not supported.

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Contents

1	Introduction
2	System Requirements7
3	Using the Intel [®] Management and Security Status Application and Icon
	3.4 Intel [®] Standard Manageability Tab 17 3.4.1 Support Session Status Section 18 3.4.2 System Defense 18
	3.5 Intel [®] Anti-Theft Technology Tab 18 3.5.1 Intel [®] AT State 19 3.5.2 Intel [®] AT Registration 20
	3.6 Advanced Tab
4	Troubleshooting Intel [®] Management and Security Status Application
5	Intel® Management and Security Status Application Error Codes

Figures

Figure 3-1	9
Figure 3-2	
Figure 3-3	
Figure 3-4	
Figure 3-5	
Figure 3-6	
Figure 3-7	21
Figure 3-8	
Figure 3-9	
Figure 3-10	



Figure 3-11	
Figure 4-1	



1 Introduction

This *User's Guide* describes how to use the Intel[®] Management and Security Status application. The application's component tabs—detailed in this document—display information about a platform's support for the following technologies: Intel[®] Active Management Technology (Intel[®] AMT), Intel[®] Small Business Technology (Intel[®] SBT), Intel[®] Standard Manageability and Intel[®] Anti-Theft Technology (Intel[®] AT). All of these technologies are built upon the Intel[®] Management Engine (Intel[®] ME), a feature provided within the platform hardware.

The Intel[®] Management and Security Status icon indicates whether Intel[®] Active Management Technology, Intel[®] Small Business Technology, Intel[®] Standard Manageability and Intel[®] Anti-Theft Technology are running on the platform. The icon is located in the notification area. By default, each time Windows^{*} starts, Intel[®] Management and Security Status application starts and the notification icon is displayed.

The Intel[®] Management and Security Status application has a separate version per every Intel[®] AMT generation (6.x, 7.x, 8.x, 9.x etc.). The installer for 9.x also supports the 8.x generation. If the Intel[®] Management and Security Status application starts automatically as a result of the user logging on to Windows*, the icon will be loaded to the notification area only if a supported combination of the following technologies is present on the platform: Intel[®] Active Management Technology, Intel[®] Standard Management and Security Status application is started manually (via the Start menu), the icon is loaded even if none of these technologies are enabled.

Note: The information displayed in the Intel[®] Management and Security Status application is not shown in real time. The data is refreshed at predefined intervals.



2 System Requirements

The $\ensuremath{\mathsf{Intel}}^{\ensuremath{\texttt{\$}}}$ Management and Security Status application has the following requirements:

• OS

•

- Windows* 2003 Standard Edition R2
- Windows* 2003 x64 EditionWindows* XP Pro with latest SP
- Windows* XP x64 with latest SP
- Windows* 7 Ultimate 32 bit with latest SP
- Windows* 7 Enterprise 32 bit with latest SP
- Windows* 7 Professional 32 bit with latest SP
- Windows* 7 Ultimate 64 bit with latest SP
- Windows* 7 Enterprise 64 bit with latest SP
- Windows* 7 Professional 64 bit with latest SP
- Windows* 7 Premium 64-bit with latest SP
- Windows* 7 Home Premium 32 bit with latest SP
- Windows* 7 Home Basic 32 bit with latest SP
- Windows* 8
- Windows Server *2008 x86 with latest SP
- Windows Server *2008 x64 with latest SP
- Windows Server* 2012
- Platform running Intel[®] Management Engine firmware
- Intel[®] Management Engine software installed

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3 Using the Intel[®] Management and Security Status Application and Icon

Whenever either Intel[®] Active Management Technology, Intel[®] Small Business Technology or Intel[®] Standard Manageability is enabled, Intel[®] Management and Security Status icon is loaded into the notification area when Windows* starts. It can also be started by clicking **Start> All Programs\Intel\Intel[®] Management and Security Status\ Intel[®] Management and Security Status.**

While the Intel[®] Management and Security Status application is running, the Intel[®] Management and Security Status icon is visible in the notification area. This icon will appear blue if any one of the aforementioned technologies is enabled on the computer. In any other case, the icon will appear gray.

Note: The icon will also be gray if the Intel[®] Management and Security Application User Notification Service is not running or the Intel[®] Management Engine Interface (Intel[®] MEI) driver is disabled or unavailable.

To view the Intel[®] Management and Security Status application:

- Double-click the Intel[®] Management and Security Status icon, or
- Right-click or left-click the icon and choose **Open**, or
- Click Start>All Programs>Intel>Intel[®] Management and Security Status> Intel[®] Management and Security Status.

Note: If your computer is set to Classic Start Menu, the path will start with 'Programs' instead of 'All Programs'.

The following sections describe the information available in the application's tabs. Information about the application is available also by clicking either the "Learn more" button 2 or link.

Note: The application dynamically hides tabs that are not relevant. For example, on platforms that do not support $Intel^{\mbox{\tiny (B)}}$ AT, the $Intel^{\mbox{\tiny (B)}}$ AT tab is hidden.



3.1 General Tab

The **General** tab provides status information about the Intel AMT, Intel SBT, Intel[®] Standard Manageability, and Intel AT status, and events related to these technologies.

Figure 3-1.

Intel® Mana	gement and Secu	urity Status	_	_	
General	Intel® AMT	Intel® AT	Advanced		
	e status of manage ent Engine (Intel® I			rovided by Intel® gine Interface (Intel®	(intel)
_Service S	tatus				
Intel® Activ	ve Management Te	chnology (Intel®	AMT):		Enabled
Intel® Anti-	Theft Technology	(Intel® AT):			Enabled
Event Hist	ory				
Comment	Applica	tion Even	t	Time	▼ ^
New	Intel® N	IE Intel®	ME User Conser	nt langua 7/4/201	1 6:02:28 PM
Reviewed	Intel® N	IE Config	ured	7/3/201	1 11:00:31 AM
Reviewed	Intel® N	IE Uncor	nfigured	7/3/201	1 10:53:12 AM
Reviewed	Intel® A	MT Enable	ed	7/3/201	1 10:53:12 AM
Reviewed	Intel® N	IE Config	ured	6/30/20	11 9:32:54 AM 👻
V Enable	action is required or user notification Management and S	-	-	ove events. next time I log on to	Windows*



Events and some of their details are displayed in the **Event History** section. These can be sorted by clicking on the relevant column header.

The status of Intel[®] Active Management Technology, Intel[®] Small Business Technology, Intel[®] Standard Manageability or Intel[®] Anti-Theft Technology is displayed in the **Service Status** section depending on which technology is operational on the system. The tab displays information for Intel[®] Active Management Technology, Intel[®] Small Business Technology, or Intel[®] Standard Manageability. The status can be one of the following:

- Intel[®] AMT: Enabled / Disabled / Information unavailable
 - When Intel[®] AMT status presents Enabled it means that the Intel[®] AMT is supported on the system. Intel[®] ME status (in the Advanced Tab) will give the user information on whether the Intel[®] ME is configured (hence Intel[®] AMT is functional and operating).

• When Intel[®] AMT status presents Disabled it means that the Intel[®] AMT is either not enabled on the system or has been disabled by the IT administrator.

• Information unavailable: It is not known whether Intel[®] AMT is supported on the system. No Intel[®] AMT information is available. This can be for one of the following reasons: LMS service has stopped, or the Intel[®] Management Engine Interface (Intel[®] MEI) driver is disabled.

• Intel[®] SBT: Enabled / Disabled / Information unavailable

• When Intel[®] SBT status presents Enabled it means that the Intel[®] SBT is supported on the system. Intel[®] ME status (in the Advanced Tab) will give the user information on whether the Intel[®] ME is configured (hence Intel[®] SBT is functional and operating).

• When Intel[®] SBT status presents Disabled it means that the Intel[®] SBT is either not enabled on the system or has been disabled by the IT administrator.

• Information unavailable: It is not known whether Intel[®] SBT is supported on the system. No Intel[®] SBT information is available. This can be for one of the following reasons: LMS service has stopped, or the Intel MEI driver is disabled.

• Intel[®] Standard Manageability: Enabled / Disabled / Information unavailable

• When Intel[®] Standard Manageability status presents Enabled it means that the Intel[®] Standard Manageability technology is supported on the system. Intel[®] ME status (in the Advanced Tab) will give the user information on whether the Intel[®] ME is configured (hence Intel[®] Standard Manageability is functional and operating).

• When Intel[®] Standard Manageability status presents Disabled it means that the Intel[®] Standard Manageability technology is either not enabled on the system or has been disabled by the IT administrator.



• Information unavailable: It is not known whether Intel[®] Standard Manageability technology is supported on the system. No Intel[®] Standard Manageability information is available. This can be for one of the following reasons: LMS service has stopped, or the Intel MEI driver is disabled.

• **Intel[®] Anti-Theft Technology**: Enabled. This means that the Intel[®] Anti-Theft Technology feature is supported on the platform. If Intel[®] Anti-Theft Technology is not supported on the platform; no reference to it is displayed. The feature becomes activated only after the platform has been enrolled with an Intel[®] Anti-Theft Technology service provider and all required configurations have been applied.

Note: The information in this field shows the state of the platform at the last platform boot.

Enable user notification: Checking this box allows the user to enable or disable the Intel[®] Management and Security Status icon from displaying important notifications in the notification area (for instance, notification will be sent when one of the technologies is enabled or disabled). Checking or unchecking the checkbox affects the Intel[®] Management and Security Status application setting for the current user account only.

On Windows* 8 platforms, IMSS user notifications are also displayed as Windows* 8 UI 'Toast' notifications, visible to users working with the Windows* 8 UI. These notifications will only be displayed as long as a Windows* 8 UI Start Menu shortcut (Windows* 8 UI 'tile') is present.

Intel[®] Management and Security Status application will be available next time I log on to Windows*: Checking this box causes the Intel[®] Management and Security Status application to be invoked, and the icon to be displayed, whenever you log on to Windows*. Checking or unchecking the checkbox affects Intel[®] Management and Security Status application's behavior for the current user account only.

Note: The application does not load automatically with Windows* log-on if none of the technologies it displays (Intel[®] Active Management Technology, Intel[®] Small Business Technology or Intel[®] Standard Manageability) are supported on the platform. Intel[®] Management and Security Status application will load automatically even if all of the technologies are disabled, so long as they are supported. Intel[®] Management and Security Status application will not load if these technologies are not supported in the platform.



3.2 Intel[®] Active Management Technology Tab

Note: This tab is displayed only if the platform supports $Intel^{\ensuremath{\mathbb{R}}}$ AMT.

Click the **Intel[®] AMT** tab to display Intel[®] AMT information.

Figure 3-2.

	Intel® AMT	Intel® AT Advanced	
What is In	itel® AMT?		
	ive Management T ur networked comp	echnology allows IT professionals outer.	to remotely discover, heal and
Fast Call	for Help		
Connection	n Status:	Connected	Disconnect
Click to dis	connect. (You are	connected to your organization's i	network.)
Cupped a	anaion atatus		
Support s	ession status		
ם 🚹	o not change your	wireless connection until the remo	te support session completes.
KVM Rem	ote Control Connect	tion: 🔮 Disconnected	
Media Rec	lirection:	😤 Disconnected	
	nd Keyboard Redire	ection: 🔮 Disconnected	
Terminal a		Hot key: Ctrl+M	Change
Terminal a Stop Ses	sions		
Stop Ses		😤 Not activated	
Stop Ses System D		😤 Not activated	
Stop Ses System D		😤 Not activated	



3.2.1 Fast Call for Help

The Fast Call for Help section provides Client Initiated Local Access (CILA) or Client Initiated Remote Access (CIRA) capabilities depending on whether the system is connected to the corporate network or not, respectively. The Fast Call for Help section will be available for the CIRA/CILA use-cases, providing the proper configuration for CIRA/CILA has been done, as well as for a case in which the user's system did not receive an IP address while the wireless network is available for a support session to take place. Otherwise, the Fast Call for Help section will be grayed out.

CIRA allows a user to connect the Intel[®] AMT system to the company's Information Technology network from an external internet connection. Click the "Get Technical Help" button to connect to your Information Technology network for system diagnostics and maintenance. The current connection status is displayed in this section as well.

CILA (Client Initiated Local Access) feature allows a user connected to the internal corporate network to send a support request to the IT administrator.

Note: In order for CIRA/CILA to work, the machine needs to be configured correctly, and support this technology. Such settings are typically done by management software. (Configuration details appear in the Intel[®] AMT SDK Implementation and Reference Guide).

Note: The information displayed in the Intel[®] Management and Security Status application, including the Fast Call for Help section, is not shown in real time. The data is refreshed every time an event has arrived.

Note: When the user is connected as Guest account (in Windows*) the "Fast Call For Help" section will be grayed out. This was designed to prevent users outside of the organization to influence the organization network.

3.2.2 Support Session Status

The following information is provided:

• KVM Remote Control Connection

Indicates whether KVM (Keyboard, Video & Mouse) Remote Control session is open. Possible values: Connected/ Disconnected/ Information unavailable. The "KVM Remote Control Connection" section will be grayed out if the KVM Remote Control feature is disabled on the system.

Media Redirection

Indicates whether there are any open IDE redirection sessions. Possible values: Connected/ Disconnected/ Information unavailable.

• Terminal and Keyboard Redirection

Indicates whether there are any open terminal/keyboard redirection sessions. Possible values: Connected/ Disconnected/ Information unavailable.



Stop Sessions

Click the "Stop Sessions" button to close any open KVM Remote Control, media redirection, or terminal/keyboard redirection sessions. In cases when user consent is required for such a session, re-establishing the session will require renewal of user consent after clicking this button.

• Hot Key

Indicates the hot key which could be used to close any open KVM Remote Control, media redirection, or terminal/keyboard redirection sessions (same effect as "Stop Sessions" button).

Click on the "Change" button to choose a different hot key for terminating an open session.

Prevent Access

This button will appear in cases where user consent is required for a remote support session to occur. In such cases, after the user will provide the required approval to the remote administrator and as long as the healing session hasn't begun, the user will see the "Prevent Access" button. This button enables the user to change his/her mind, as clicking on it will cancel user consent and disable the ability of the IT administrator to begin the remote session. During this time, the Hot Key will also serve as a means to cancel user consent. Once a remote support session has begun, the "Prevent Access" button will no longer be visible, and the "Stop Sessions" button will appear instead.

Note: User Consent, when required, will be granted to the administrator per session, by the user giving the administrator a one-time pass code which will appear on the Secure Output Window presented on the user's screen. See more about Secure Output Window and User Consent Policy under <u>Advanced Tab - Secure Output Window Settings</u>.

Note: During a Support Session conducted over the wireless interface, a notice will be displayed with a warning triangle. The message will say: "Do not change your wireless connection until the remote support session completes".

$\ensuremath{\mathsf{Intel}}^{\ensuremath{\mathbb{S}}}$ Management and Security Status Application Icon during support session

- The notification area tray icon appears animated as long as user consent or support session is active.
- Stop Sessions/ Prevent Access are available also thru clicking on the tray icon.

Intel[®] AMT tab view with "Prevent Access" button enabled:



Figure 3-3.

What is Intel® AMT?	Technology allows IT professionals to rem	otely discover, heal and
protect your networked com	puter.	860 P.C.
Fast Call for Help		Courses in a course
Connection Status:	🔮 Disconnected	Get Technical Help
Click this button to request h	elp.(You are not connected to your organ	ization's network.)
Support session status		
KVM Remote Control Conne	ction: 🔮 Disconnected	
Media Redirection:	😤 Disconnected	
Terminal and Keyboard Redi	rection: 🔮 Disconnected	
Prevent Access	Hot key: Shift+Escape	Change
	can temporarily access your computer with	nout additional consent. To
prevent access, click	the "Prevent Access" button	
System Defense		
Status:	🔮 Not activated	

3.2.3 System Defense

• System Defense Status

Indicates whether System Defense policies are currently active. Possible values: Activated/Not activated/ Information unavailable.



Note: This tab is displayed only if the platform supports $Intel^{(B)}$ Small Business Technology (Intel^(B) SBT).

Click the **Intel[®] SBT** tab to display Intel[®] SBT information.

Figure 3-4.

S I	íntel® Mana	gement and Seco	urity Status				
	General	Intel® SBT	Intel® AT	Advanced			
	Intel® Sma	tel® SBT?	ology provides s	mall businesses v	vith security and	d productivity	
		s to help keep thei e for more details or					
(2 Learn	more			ок	Close	Apply

Clicking the link in the **What is Intel[®] SBT** section connects you to an Intel site that provides you with information about $Intel^{®}$ Small Business Technology.



3.4 Intel[®] Standard Manageability Tab

Note: This tab is displayed only if the platform supports Intel[®] Standard Manageability.

Click the **Intel[®] Std Mgt** tab to display Intel[®] Standard Manageability information.

Figure 3-5.

S Intel® Management and Security Statu	s
General Intel®Std Mgt Inte	al® AT Advanced
What is Intel® Std Mgt?]
Intel [®] Standard Manageability allows IT networked computing assets.	professionals to remotely discover, heal and protect
Support session status	
Media Redirection:	Disconnected
Terminal and Keyboard Redirection:	Disconnected
Stop Sessions H	ot key: Shift+Escape Change
_System Defense	
Status:	Not activated
2 Learn more	OK Close Apply



3.4.1 Support Session Status Section

The following information is provided:

Media Redirection

Indicates whether there are any open IDE redirection sessions. Possible values: Connected/ Disconnected/ Information unavailable

• Terminal and Keyboard Redirection

Indicates whether there are any open terminal/keyboard redirection sessions. Possible values: Connected/ Disconnected/ Information unavailable.

3.4.2 System Defense

• System Defense Status

Indicates whether System Defense policies are currently active. Possible values: Activated/Not activated/ Information unavailable.

3.5 Intel[®] Anti-Theft Technology Tab

Note: This tab is displayed only if the platform supports Intel[®] AT.

Click the Intel[®] AT tab to view Intel[®] Anti-Theft Technology information.

Note: The information in this tab shows the state of the platform when it was last booted.



Figure 3-6.

🖒 Intel® Ma	nagement and Sec	urity Status				-X -
General	Intel® AMT	Intel® AT	Advanced			
What is	Intel® AT?]
feature the han the ope	w computer's hardwa that can help protect lware may detect a the rating system is re-ins on service.	your computer f	from theft. If the fe d can prevent the	eature is enable operating syste	d, local intelliger em from booting,	nce in , even if
Click	ere for more infor	mation about l	Intel® Anti-The	t Technology		
_Intel®/	T State					
Status a	s of last system boot:	🔮 Not enrol	led			
Intel®	T Registration					
	n enjoy the benefits a provider and enrolling				ontacting an aut	horized
Click h	ere for a list of Intel	® AT service p	providers			
🔽 Ena	ole prompt to enroll v	vith Intel® Anti-	Theft Service			
	rn more			ок	Close	Apply

Clicking the link in the **What is Intel[®] AT** section connects you to an Intel site that provides you with information about $Intel^{®}$ Anti-Theft technology.

3.5.1 Intel[®] AT State

Provides the following information:

Enrolled: The platform has been enrolled with a service provider that is providing $Intel^{\$}$ Anti-Theft Technology protection for it.



Not Enrolled: The platform has not been enrolled with a service provider that is providing $Intel^{(R)}$ Anti-Theft Technology protection.

3.5.2 Intel[®] AT Registration

Note: This section is displayed only if the platform has not been enrolled with a service provider that is providing Intel[®] Anti-Theft Technology protection.

Clicking the link in this section displays a list of Intel[®] AT service providers in your area and allows you to enroll with their Intel[®] AT service.

Enable prompt to enroll with Intel[®] Anti-Theft Technology Service: If this box is checked, a balloon displaying an invitation to enroll with Intel[®] AT service is displayed every 5th time that the Intel[®] Management and Security Status application is started. If the platform has been enrolled with Intel[®] AT service, the balloon is not displyed.

3.6 Advanced Tab

Click the **Advanced** tab to view additional information.

Note: The image below includes all buttons and information that may be displayed by Advanced Tab. However, not everything will be displayed at all times, as this depends on the specific technologies which are enabled and active on the platform (Intel[®] Active Management Technology (Intel[®] AMT), Intel[®] Small Business Technology (Intel[®] SBT) or Intel[®] Standard Manageability).





	Intel® AMT	Intel® AT	Advanced		
What is In	tel® Management	Engine?		6 ¹	
		s an <mark>additional co</mark>	omponent that e	enables mana	gement and security
teatures of	n your computer.				
Intel® Ma	nagement Engine				
Status:		Configured	1/17/2012	1:39:42 PM	
Control Mo	de:	Client			
Secure O	utput Window Sett	tings			
The secure user.	e output service is	intended to displa	ay messages fro	om the Intel®	Management Engine to the
Message L	anguage	English		•]	
Message S	ăze	Regular		•	
User Conse	ent Po <mark>lic</mark> y:	User cons	ent required for	all remote se	ssions.
View detai	ls per <mark>N</mark> etwork Cor	nnection		(Network Information
View more	details related to t	he Intel® Manage	ement Engine	(Extended System Details.
	ccess Monitor log	for the current pla	atform	(Access Monitor
View the A					
View the A					

3.6.1 Intel[®] Management Engine

The following information is provided:

• Status

The operational status of Intel[®] ME Possible values: Configured / Unconfigured / Information unavailable. In case status is Configured, the configuration date and time will be displayed.



Control Mode

There are two configuration modes for Intel[®] ME – Client Control Mode and Admin Control Mode. If status is Configured, the relevant Control Mode will be shown.

3.6.2 Secure Output Window Settings

The following information is provided for the Secure Output feature, implemented in KVM (keyboard/video/mouse) redirection. If the machine was configured in Client Control Mode this is provided in IDE redirection and remote power operations as well.

• Message Language

Specifies the language used by the Secure Output feature for user consent. Choose one of the listed languages.

Upon installation of the Intel[®] Management and Security Status application, the consent language will be set according to the Windows* System Locale language (note that this may be different than the Windows* Display language). Selecting a different Message Language on the Advanced Tab will override this initial setting. Selecting "Windows Default Language" will revert to the Windows* System Locale language.

Note: On Windows* XP, Chinese characters may appear as rectangles and Hebrew and Arabic may appear reversed, if the relevant language packs have not been installed. Windows* XP does not include all language packs by default. They can be added through the "Control Panel." Open "Regional and Language Options," then click the languages tab. Under "Supplemental Language Support" select the extra languages you wish to install, and follow the instructions.

Message Size

Specifies the window size of messages displayed by the Secure Output Feature. Choose one of the following: **Regular** or **Large**. **User Consent Policy**

Specifies the policy for when the user's approval will be required in order to establish a remote support session by an IT administrator. User Consent will be granted to the administrator per session, by the user giving the administrator a one-time pass code which will appear on the Secure Output Window presented on the user's screen.

• Possible Policies are:

User consent not required for any remote session

User consent required for KVM session only

User consent required for all remote sessions (i.e., KVM, IDE redirection, and remote power operation)



3.6.3 WLAN Control

On Intel ME 8.0 systems only, the WLAN control section appears when there is an active support session in which the remote IT administrator is connecting to the user's machine via wireless network.

This section is not shown on platforms from Intel ME 8.1 onwards.

Restore Connection button

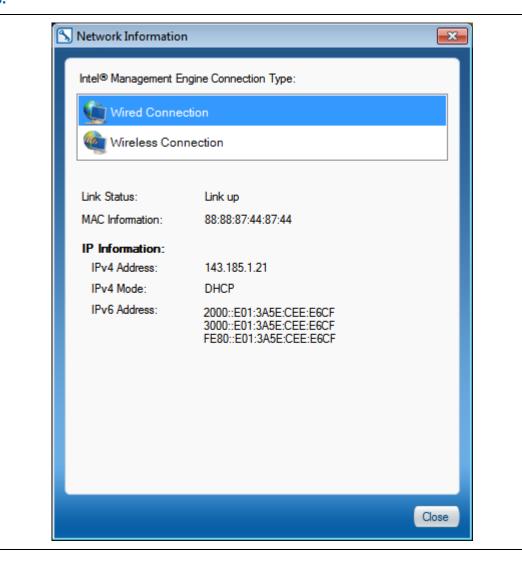
On Intel ME 8.0 systems only, if the remote administrator begins a support session using the wireless network, there is temporarily no wireless network available to the user's Operating System. The Restore Connection button enables the user to return control of the wireless network to the OS. However, if this button is clicked while the remote support session is still active, the session will be terminated.

This button is not shown on platforms from Intel ME 8.1 onwards.

3.6.4 Network Information

Click the "Network Information" button to display network details regarding Intel $^{\mbox{\scriptsize B}}$ ME wireless and wired connectivity.





In the **Connection Type** section, click either **Wireless Connection** or **Wired Connection** to display information on the following items for the selected interface:

• Link Status

Whether the link is currently active. Possible values are: Link up/Link down/Information unavailable

• MAC Information

XX:XX:XX:XX:XX:XX - e.g. 88:88:0A:88:87



• IPv4 Address

XXX.XXX.XXX.XXX - e.g. 208.77.188.166

• IPv4 Mode

Possible values: Static/ DHCP/ Information unavailable.

• IPv6 address

If IPv6 addressing is enabled for the Intel ME, the Intel[®] Management and Security Status application displays up to 6 IPv6 IP addresses configured for an Intel ME network interface for wired connection, and up to 5 IPv6 IP addresses for wireless connection.

Figure 3-9.

Wired Conne	ction	
Wireless Con	nection	
Link Status:	Link up	
MAC Information:	A0:88:B4:B4:CB:84	
IP Information:		
IPv4 Address:	0.0.0 <mark>.</mark> 0	
IPv4 Mode:	DHCP	
IPv6 Address:		
Configured for Wireles	s: Wireless enabled	



Data which appears only for Wireless Connection

• Configured for Wireless

Possible values are: Wireless enabled/ Wireless disabled/ Information unavailable.

WLAN control

On Intel ME 8.0 systems only, the WLAN control indicates whether the wireless network is available to the user's computer operating system (i.e. regular usage) or whether it is in control of the Intel[®] Management Engine for the purpose of remote support by an IT administrator. Possible values are: HOST / Intel[®] ME. This control is not shown on platforms from Intel ME 8.1 onwards.

WLAN preference

On Intel ME 8.0 systems only, WLAN preference indicates whether the wireless network should preferably be in control of the operating system or the Intel[®] Management Engine (Intel[®] ME). Expected behavior is for WLAN control to be the same as WLAN preference. However, if for some reason the operating system fails to take control over the wireless network (e.g. the wireless driver is dysfunctional), the user will witness WLAN preference given to the operating system while WLAN control is with Intel[®] ME (even if the Return Control button was clicked). Possible values are: Operating System/ Intel[®] ME. This control is not shown on platforms from Intel ME 8.1 onwards.

3.6.5 Extended System Details

When clicking Extended System Details, a Windows* System Information window will open, providing an extensive report about system components and configuration.

The report includes both general information regarding the system ("Host Information") and specific Intel[®] Management Engine Information ("Intel[®] ME Information").

It is possible to save the system report to a file by clicking File->Export on the System Information Window.

Below are explanations for some of the details displayed under Intel[®] ME Information:

Host information:

- Operating System Name The Windows* operating system that the application is running on.
- Operating System Version The version of the operating system.
- System Manufacturer The hardware manufacturer.
- System Name The computer name as recognized by the operating system.
- System Model The hardware platform name.
- Processor The processor full brand name.



- BIOS Version The BIOS manufacturer name and BIOS version number.
- LAN Driver The version number of the LAN device driver.
- LAN DeviceID The PCI Device ID for the LAN device.
- WLAN Driver The version number of the Wireless LAN device driver.
- WLAN DeviceID The PCI Device ID for the Wireless LAN device.

Intel[®] ME Information:

- Intel ME Control Mode The configuration mode (Client Control or Admin Control).
- Provisioning Mode State of Intel ME configuration (Pre/In/Post).
- BIOS boot The BIOS boot state (expected to be Post Boot).
- Last Intel ME reset reason The reason that the Intel[®] ME was last reset (Global System/ FW reset / Power Up/ Unknown cause/ Information unavailable).
- System UUID The Universal Unique Identifier of the computer. Standard System UUID presentation, such as: 03000200-0400-0500-0006-000700080009.
- Local FWUpdate The local firmware update policy (Enabled/Disabled).
- Power Policy The power modes in which Intel[®] ME is available (ON in S0 or Intel ME ON in S0/S4/S5/DC). Note: S0 = Power is on, S4 = Hibernate, S5 = System is shut down though power cable is connected, DC = Battery Power.
- Cryptography Support The Intel[®] ME capability to work in TLS/SSL mode (Enabled/Disabled).

FW Capabilities:

Indicates whether the following technologies are present on the platform and enabled:

 $\rm Intel^{\it R}$ Active Management Technology / $\rm Intel^{\it R}$ Standard Manageability \rm / $\rm Intel^{\it R}$ Small Business Technology

Intel[®] Anti-Theft Technology PC Protection

Intel Capability Licensing Service

Intel[®] ME Dynamic Application Loader

Protect Audio Video Path

Intel[®] Active Management Technology / Intel[®] Standard Manageability / Intel[®] Small Business Technology

Technology State (Enabled or Disabled).

Technology Status (Configured/Not Configured).



CIRA Connection Status – Client Initiated Remote Access Connected/Disconnected (not available for Intel[®] Standard Manageability and Intel[®] Small Business Technology).

Intel[®] AT

Intel[®] AT State (Enabled or Disabled).

Intel[®] AT Status (Enrolled or Not Enrolled).

Components Information

Presents versions for the following components:

- MEBx Version Intel[®] ME BIOS Extension version.
- FW Version Firmware version.
- LMS Version Local Management Service software version.
- Intel MEI Driver Version Intel[®] Management Engine Interface driver version.
- Intel MEI DeviceID Intel[®] Management Engine Interface PCI Device identification.
- SOL Driver Version Serial Over LAN driver version.
- SOL DeviceID Serial Over LAN PCI Device identification.

Network Information:

- LAN MAC Address The Media Access Control address for the LAN device.
- LAN Configuration state DHCP or static mode for LAN.
- LAN Link Status LAN link up or down.
- LAN IPv4 Address The IPv4 address assigned to LAN.
- LAN IPv6 Enablement IPv6 enabled or disabled for LAN.
- WLAN MAC Address The Media Access Control address for the Wireless LAN device.
- WLAN Configuration state only DHCP mode supported for Wireless LAN.
- WLAN Link Status Wireless LAN link up or down.
- WLAN IPv4 Address The IPv4 address assigned to Wireless LAN.
- WLAN IPv6 Enablement IPv6 enabled or disabled for Wireless LAN.

Note: When the user is connected as Guest account (in Windows*), some of the system information will not be available. In such a case, all Host Information and some of the Intel[®] ME Information (such as Software Versions) will appear as "NA".



3.6.6 Access Monitor

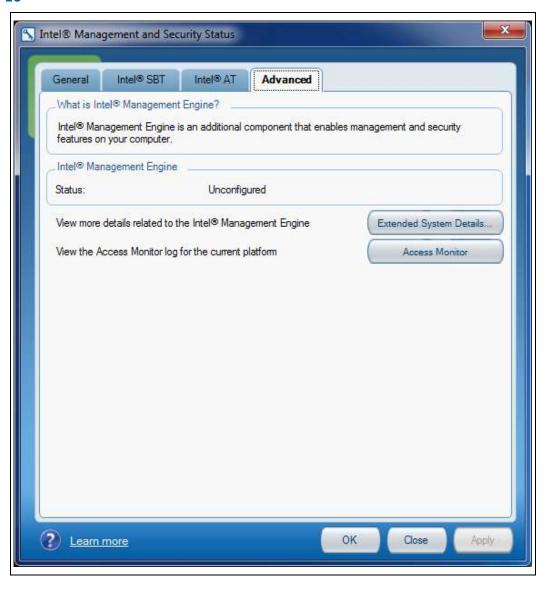
If the Access Monitor feature is enabled on the platform, then by clicking the "Access Monitor" button, the relevant content will be presented through a Windows* System Information window which will then open. Access Monitor content includes description of events which occurred on the system and may be of interest to the user from a privacy and security perspective, such as Network Administration, Storage Administration, Remote control Operations and more.

Note: Events that occurred before first provisioning of $Intel^{\$}$ AMT or $Intel^{\$}$ SBT will appear with irrelevant time/date.

3.6.7 Advanced Tab with Intel[®] SBT

Intel[®] Small Business Technology does not support remote management, therefore in the case of an Intel[®] SBT system, the Advanced Tab will be limited to the following:





3.7 Exiting the Application

To exit the application, right click or left click on the Intel[®] Management and Security Status application icon in the notification area and select **Exit**.

The following window is displayed.



Figure 3-11



- Click Yes to automatically start the Intel[®] Management and Security Status application when you next log on. (Note: this change affects Intel[®] Management and Security Status application behavior for the current user account only).
- Click No to not start the Intel[®] Management and Security Status application when you next log on. (Note: this change affects Intel[®] Management and Security Status application behavior for the current user account only).

Note: This user selection will affect the "Intel[®] Management and Security Status application will be available next time I log on to Windows*" checkbox on General Tab.

3.8 Windows* 8

When the application is installed on a Windows* 8 operating system, a Windows* 8 UI tile is placed on the Windows* 8 start screen. This allows the application to send Toast* notifications to the Windows* 8 UI. If the tile is deleted, no Toast* notifications can be posted.

The application will re-create the Windows* 8 UI tile (if missing) if Intel[®] Active Management Technology is provisioned on the system.





4 Troubleshooting Intel[®] Management and Security Status Application

4.1 Error message appears upon application load

.NET applications fail when executed in an environment that has no Microsoft* .NET Framework installed. Microsoft* does not provide a safeguard mechanism in such conditions.

The Intel[®] Management and Security Status application will display the following error message if no Microsoft* .NET Framework is present in the system:

Figure 4-1.



Please install Microsoft* .NET Framework version 3.5 or above and then re-open the application.

The Intel[®] Management and Security Status application will not get installed if Microsoft* .NET Framework version lower than 2.0 or no Microsoft* .NET Framework version at all is installed on the system.



5 Intel[®] Management and Security Status Application Error Codes

5.1 Partial Firmware Update Failures

Intel ME Wireless LAN updates, and User Consent language updates both utilize the 'Partial Firmware Update' feature of IMSS. In the event that Partial Firmware Update failed, the user will be notified via a balloon that the update failed. The Windows* Event Log will include an error code, signifying the cause of the failure. The possible causes are listed below:

Code	Meaning
8193	Intel [®] ME Interface : Cannot locate Intel ME device driver
8703	PLEASE REBOOT YOUR SYSTEM. Firmware update cannot be initiated without a reboot
8704	Firmware update operation not initiated due to a SKU mismatch
8705	Firmware update not initiated due to version mismatch
8706	Firmware update not initiated due to integrity failure or invalid FW image
8707	Firmware update failed due to an internal error
8708	Firmware Update operation not initiated because a firmware update is already in progress
8710	Firmware update tool failed due to insufficient memory
8713	Firmware update not initiated due to an invalid FW image or header
8714	Firmware update not initiated due to file open or read failure
8716	Invalid usage
8718	Update operation timed-out; cannot determine if the operation succeeded



Code	Meaning
8719	Firmware update cannot be initiated because Local Firmware update is disabled
8722	Intel [®] ME Interface : Unsupported message type
8723	No Firmware update is happening.
8724	Platform did not respond to update request.
8725	Failed to receive last update status from the firmware.
8727	Firmware update tool failed to get the firmware parameters.
8728	This version of the ${\rm Intel}^{\circledast}$ FW Update Tool is not compatible with the current platform.
8741	FW Update Failed.
8744	OEM ID verification failed.
8745	Firmware update cannot be initiated because the OEM ID provided is incorrect.
8746	Firmware update not initiated due to invalid image length.
8747	Firmware update not initiated due to an unavailable global buffer.
8748	Firmware update not initiated due to invalid firmware parameters.
8754	Encountered error writing to file.
8757	Display FW Version failed.
8758	The image provided is not supported by the platform.
8759	Internal Error.
8760	Update downgrade vetoed.
8761	Firmware write file failure.
8762	Firmware read file failure.
8763	Firmware delete file failure.



Code	Meaning
8764	Partition layout NOT compatible.
8765	Downgrade NOT allowed, data mismatched.
8766	Password did not match.
8768	Password Not provided when required.
8769	Polling for FW Update Failed.
8771	Invalid File.
8772	Invalid usage, -allows v switch required to update the same version firmware.
8776	Get Partition Attribute Failure.
8777	Update Info Status Failure.
8778	Unable to read FW version from file. Please verify the update image used.
8780	Buffer Copy Failure.
8787	Password exceeded maximum number of retries.
8793	FW Update/Downgrade is not allowed to the supplied FW image.
8794	FW downgrade is not allowed due to SVN restriction.

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