

# Epilogue

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*It is better to know some of the questions than all of the answers.*

— James Thurber (1894–1961)

**W**e trust that this book provided you with enough details about platform management in general and Intel® Active Management Technology (Intel AMT) in particular to get you started using modern management practices. Since we probably left you with a few questions as well, please go to this book's companion Web page at <http://www.intel.com/intelpress/iamt> for live reference links, a digital edition of the book, and links to the authors' blogs.

*In the initial chapters of the book we described the general manageability concepts and reviewed various solutions and technologies from a historical perspective. We also defined the basic components that make a computer a manageable one.*

*We reviewed various standards and technologies both from a historical perspective as well as current state of the art management technologies, such as CIM and WS-Management.*

*These standards are used by Intel Active Management Technology, which is a capability of platforms with Intel® vPro™ technology. Computers with Intel vPro Technology provide manageability, security, and energy efficiency using technologies such as Intel AMT, Intel® Virtualization Technology (Intel VT), and Intel® Trusted Execution Technology (Intel TXT). A number of*

*ingredients in the platforms, such as CPU, chipset, LAN, and BIOS, work together to provide a computing platform geared to enterprise and small business usages.*

*For a major part of the book we focused on Intel AMT and the ingredients that are specifically used in delivering this capability.*

*We looked at how Intel AMT provides a number of capabilities that allow discovery, healing, and protection of the platform and resources. These capabilities can be accessed using local or network interfaces in a secure manner. We reviewed how these capabilities are used to solve end user problems.*

*In Chapter 7, we drilled down into the components that make up Intel AMT. This included the hardware components such as the Intel Management Engine (Intel ME) inside the chipset, the nonvolatile storage, memory, network controller, and so on. Then we described the firmware components such as the Intel ME kernel, common services, and firmware applications. We also discussed some details of the software components that reside on the host OS of the computer that has Intel AMT, as well as components that reside on management consoles on computers remotely located over the network.*

*Chapter 8–10 discussed in detail the Discover, Heal, and Protect pillars of Intel AMT functionality. In Chapter 8, “Discovery of Platforms and Information,” we discussed how to scan for Intel AMT computers on the network, connect, and gather inventory and discovery data from the Intel AMT computer. In Chapter 9, “Healing the Platforms,” we covered IDE redirection and Serial-over-LAN, two of the most powerful features of Intel AMT and two features that allow an administrator to take action over a remote computer to diagnose and fix problems. Chapter 10, “Protecting the Platforms,” covered the System Defense and heuristic filters that can be used without the need of any specialized software running on each computer. Agent presence support can be added to mission critical software to help monitor their correct operation and make sure to take appropriate action if it is not the case.*

*In order to realize the full potential of out-of-band manageability, it is important to look at different mechanism to reach an Intel AMT system. Connectivity to Intel AMT is as easy as connecting to any normal web server on the Internet. As with any web server, security considerations are very important. Intel AMT provides very robust authentication and privacy, along with an extra layer of protection when the computer is connected on a foreign network.*

*Intel® Fast Call for Help allows access from outside the firewall and makes Intel AMT not only a great hardware-based manageability solution but is sometimes the only one that can be deployed and that will truly work.*

*In Chapter 13, we got hands-on experience with Intel AMT covering two of the main features of Intel AMT: Serial-over-LAN and Intel System Defense. The Manageability Developer Tool Kit (DTK) was introduced, which is a good starting point for people experimenting with Intel AMT for the first time or wanting to check the state of Intel AMT in the field. Users are encouraged to play around with Commander and Outpost. An extended user's guide and many tutorial videos are available on the Manageability Developer Tool Kit Web site, the links for which can be found in the References section.*

*In Chapters 14–16, we discussed in detail the security and privacy protection mechanisms that are available in Intel AMT.*

*In Chapter 17 we discussed the various scenarios that are supported for configuring Intel AMT, the various mechanisms and protocols available for configuration of Intel AMT, and we outlined the various options and parameters that can be adjusted to make the tradeoffs between security, cost, and convenience.*

*Chapter 18 gets into some advanced usages and development of applications using the Developer Toolkit.*

*We finished the book by circling back in Chapter 19 to standards and discussing the standard interfaces and profiles supported by Intel AMT.*

*We hope you enjoyed the book and benefited from it.*

—Arvind, Purushottam, and Ylian

