Foreword

We are beyond the revolution that can be called "networking." Most employees have become sophisticated in applications that deploy networking, and words that link actions with "i" or "e" are assumed to be tools that are done in conjunction with some type of Internet function. Those who ride on the wake of this movement as networking specialists are confronted with fine-tuning and, in some cases, reengineering network resources, with greater attention paid to security. Now that the networking industry has achieved tremendous popularity, we perceive security breaches as having the potential to impact huge numbers of users. The effort to secure networks now far outweighs any perceived trade-offs in networking efficiency. A networking person who possesses the in-depth knowledge and expertise to implement security practices is highly desirable.

It makes sense that the CCIE Program would follow suit and add a CCIE-level certification to help employers identify and qualify this type of expertise. However, the idea of a Security Track for CCIE is not new. Rather, it has been the opinion of the CCIE department that this direction is long overdue. We have many people inside and outside Cisco Systems to thank for helping us make this track a reality.

The CCIE Security Track started to emerge almost three years ago with the introduction of the CCIE Security written exam. The number of folks attempting this test has steadily grown to the point where it is second in popularity only to the Routing and Switching written exam. As with all CCIE labs, it took many months of careful watch, survey, and rewrites to position a lab that would take the practices most commonly deployed by industry experts and our TAC engineers and build a practical addition to the already-popular written test. It is important to remember that although the written exam is required to qualify a candidate for a CCIE lab, the lab tests for the skills required to build a lab infrastructure before deploying the more-security-specific functions. Because the CCIE program makes every attempt to meet what employers seek in an "internetworking expert," those pursuing a CCIE Security should bear this in mind in their preparation for the CCIE Security Track.

This book is geared toward networking professionals who intend to include practice in their study toward the CCIE Security. From my years as a proctor, I cannot emphasize enough the importance of mastering the concepts behind deploying functions in any network. It is never enough to prepare for a lab without the hands-on practice that helps you drill deep in pursuit of that level of understanding. The more scenarios a candidate can access, the more easily he or she can interpret lab problems. Working through lab activities and practicing with **show** and **debug** commands will better prepare the exam candidate to implement and troubleshoot solutions efficiently and successfully.

Anyone who can combine reading with hands-on practice has a very good chance of obtaining his or her CCIE certification. But it is important to remember that obtaining a CCIE certification should not be the only goal. The CCIE program strives to identify a level of expertise that is recognized by the networking industry. The ability to achieve expertise is marked not only by a badge from Cisco. Ultimately, it is the knowledge of the technology and the ability to perform successful secure network implementations by subscribing to a higher level of preparation and skill. That is the final reward for taking the road to CCIE Security lab preparation.

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