Foreword

In the past 20 years, networks moved from archane (ARPANET) to everywhere (wireless hotspots), and with that adoption came its use in health care systems, airplanes, commerce, video communications, telephony, storage, and interactive sports just to name a few.

Networking went from the data center, to the service provider, to our neighborhoods, to our homes. To say that network security is an "important topic" is such an understatement, to me, because it fails to call out the disparity between host security—where many dollars are spent—to network security—where little is spent. How is that possible given how vital networks are today, and why is this happening?

Instead of answering that question here, embrace for a moment that network security is essential because networks are now essential. To that end, the knowledge about what threats and attacks against network devices already exist, required configuration techniques for networking devices to best counter those threats and attacks, and real-life examples on how this increases resilency in your network are included here from which to learn.

The bulk of Gregg's and David's book splits its time between data, management, and services plane security—explaining the what, then the why, and then the how for each traffic plane. Securing all four traffic planes are necessary to secure a network device and, therefore, a network built with many such devices. Focusing on all four, which are considerably different from one another, is the only way to do it right.

If you do nothing else as a result, after reading this book ask yourself—when protecting data, have I protected my increasingly data-rich, services-rich, and capability-rich network which I now rely upon? Experience has taught each one of us that defense-in-depth and defense-in-breadth are both the strongest techniques. Your network is multi-device, multi-layer deep, and nearly ubiqutious in its reach—it already plays the key role in protecting your network. Make sure it is successful; after all...

...we're all connected.

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