# ° NETWORK SEGMENTATION

The

Segmentation isn't new, just misunderstood. And with the Internet of Things looming, it's more important than ever.

#### **\*\*\*** MYTH #1 Role-based authentication is segmentation.

Using "typical" authentication to provide users access to certain services is not enough. There are a number of ways to break authentication.

**Reality Check:** Even correctly implemented authentication may not be totally reliable. If attackers gain physical access, they might still exploit software flaws to bypass authentication weaknesses (like pass-the-hash). If you really want to limit access, you need to segment resources at a physical network level too, and not rely entirely on user authentication.

# Switches and VLANs provide adequate network segmentation.

Switches, routers and VLANs won't provide a big enough security bump between segments. Just having something on a separate network, doesn't mean you can apply the proper security policies to traffic between those two networks.

Reality Check: It's been possible to defeat switch-based VLANs for years. It's certainly a good practice, but by no means adequate by itself. But when all you have is a hammer (the switch vendors), everything looks like a nail.

#### **EXAMPLE 7** passed PCI-DSS, my segmentation

### I passed PCI-DSS, my segmentation must be adequate.

Recent major retail breaches have proven that once hackers get past the front door, they easily can penetrate the most private protected systems.

**Reality Check:** Configurations change daily and one error on how the network is configured or how the rules on either the VLANs or access control lists are configured, and you have a hole big enough to drive a truck through.

## **SMYTH #4**

#### Setting up many network segments is expensive, and requires multiple security devices/firewalls.

Though traditional firewalls only supported a limited three-pronged network (WAN/LAN/DMZ), and didn't offer extra security services, modern solutions now allow you to configure many secure network segments without breaking the bank and installing many appliances.

**Reality Check:** Today's next generation firewalls and UTM appliances offer many independent ports, which you can use to segment your network into multiple trust zones. They also provide a full suite of security services, allowing you to configure advanced security policies between each segment. You can now get truly secure segmentation at a great price.

### Network segmentation is just not a top business priority.

In a recent worldwide survey<sup>\*</sup>, **more than half** of respondents said that segmentation is just not a top priority on their security list.

Reality Check: Many don't perceive network segmentation as a priority since it doesn't seem to offer direct business benefits. Yet, they forget that not properly segmenting may result in huge business costs. The Target® breach is a great example — attackers transformed access to an external partner portal into full access to

Target's systems. True segmentation would have made it harder for attackers to jump from one network to another.

WatchGuard® Firebox M440 makes it easy to apply the right policies to the correct network segment – without complex configurations.

> Clear up the myths. Get the facts. Go to WatchGuard.com/FireboxM440



\*WatchGuard Worldwide Survey, September 2014