



IoT Security Landscape and Vendor Recommendations 2015

Executive Summary

October 2015

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Security is one of the top inhibitors of growth of the Internet of Things (IoT). Businesses and governments invest tremendous time and money securing their traditional IT assets – PCs, desktops, servers, routers and switches. It is not surprising that these same organizations are reluctant to implement new IoT solutions unless they are comfortable with the high levels of security they can provide.

It is very difficult to create effective end-to-end security in a multi-vendor solution. And almost all IoT solutions sold to public and private sector organizations are multi-vendor. So what can an organization do to take advantage of the IoT while minimizing security risks?

In this report, MachNation presents 10 recommendations to help public and private sector organizations craft a holistically secure IoT solution. See Figure 1 on the following page.

Then MachNation discusses the ways that IoT solutions are likely to get compromised and the unique security challenges of IoT. While there are common characteristics between IT and IoT security, this report seeks to identify some of the challenges in IoT cyber and physical security.

Finally MachNation presents the IoT security approaches of 5 recommended vendors. These vendors – ARM, Bayshore Networks, Cisco, Intel and Wipro – fill different holes of the IoT security puzzle. In some cases their solutions are complementary, in other cases competitive with each other. However, each has a unique approach that is valuable as part of securing a complete IoT solution. We discuss these 5 recommended vendor in this document. All recommended vendors answered a detailed questionnaire provided to them by MachNation.

We also provide a more exhaustive list of vendors that offer IoT security solutions, but chose to not answer MachNation's IoT security questionnaire. We surmise that many of these non-participating vendors' approaches to IoT security are not as fully developed as the 5 recommended vendors we cover in more detail in this report.

RECOMMENDED IOT SECURITY VENDORS

ARM

Bayshore Networks

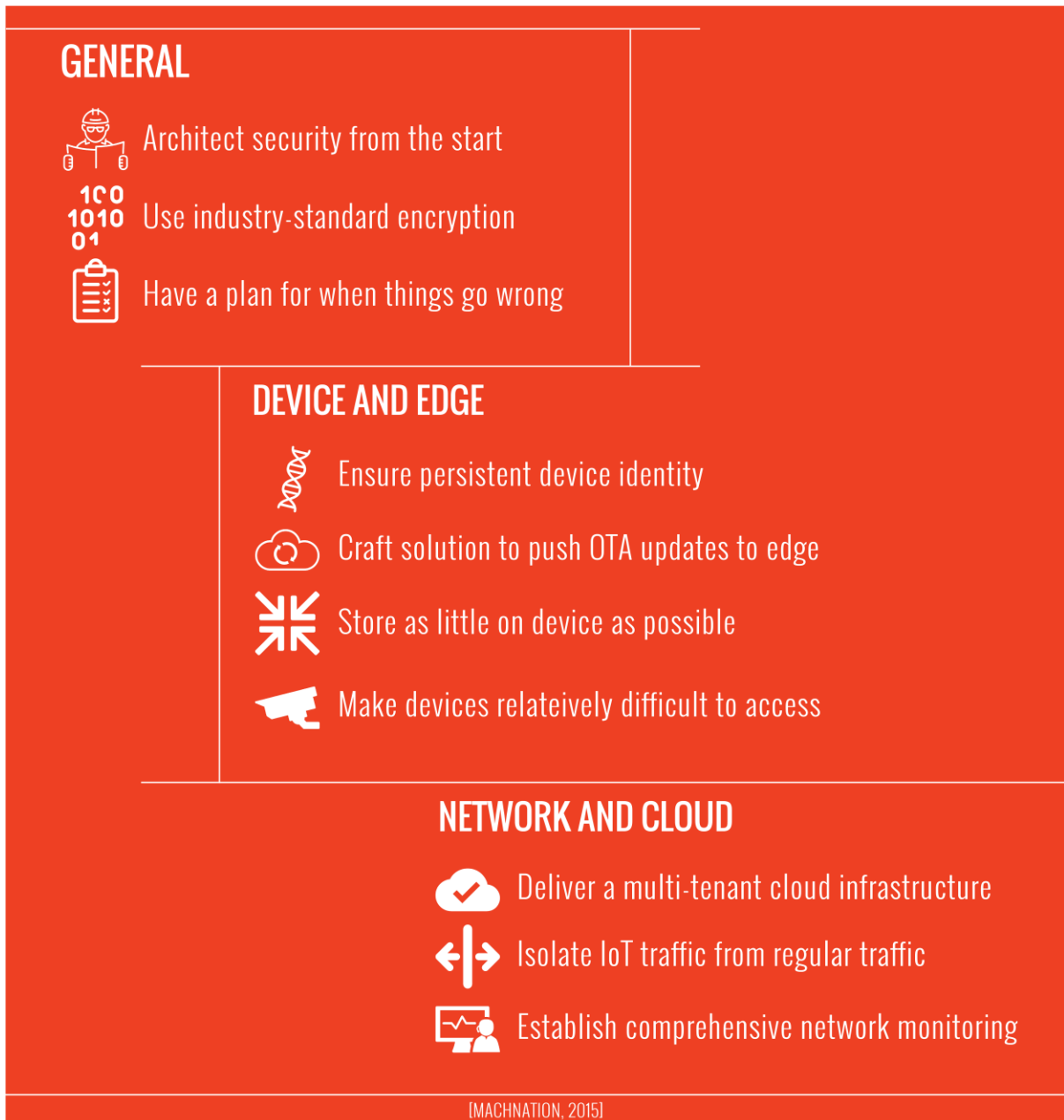
Cisco

Intel

Wipro

[MACHNATION, 2015]

FIGURE 1: TOP 10 IOT SECURITY RECOMMENDATIONS



MachNation is the only dedicated insight services and application development firm covering the future of the Internet of things (IoT), Internet of everything (IoE), connected device and machine-to-machine (M2M) ecosystems. MachNation specializes in understanding and predicting these technology sectors including developments in hardware, platforms, communication services and applications. MachNation specialists have provided guidance, consulting services and support to the majority of the world's leading IT and communications firms. MachNation serves on Cisco's prestigious IoT World Forum Steering Committee and co-chairs the Service Provider working group within the Steering Committee.