

IoT readiness: 5 network and security necessities

WHAT YOU'LL LEARN

- ✓ IoT's impact on IT infrastructure
- ✓ Tools that decrease IoT complexity
- ✓ Must-have technologies

The Internet of Things (IoT) is introducing sensors into virtually every process and device, transforming product-focused companies into service-oriented digital partners. Take these examples for instance:

- Every step, machine, and supplier in the manufacturing process is becoming a shared data input, creating end-to-end digital supply chains crossing all parties involved.
- Smart tags and visual tracking are giving retailers detailed data about shopping behavior that powers sales and marketing efforts.
- Healthcare and financial services companies are using real-time data to monitor risk by the minute, creating more effective strategies for both healthcare and investments.

But how do CIOs and CISOs ensure their enterprise is ready for IoT? Taking a hard look at IT infrastructure is a good first step. Here are some necessities for IoT.



Network and security necessities for IoT

- **Network agility and ease of management:** IoT success is dependent upon the real-time delivery of data, which means your network must also have real-time agility. Modern, [software defined networks](#) are best for IoT because they enable network scalability, deployment, centralized control, and offer IT teams the tools they need to ensure real-time application delivery. Application-based routing is essential.
- **Unlimited network segmentation:** IoT security requires segmented networks, but these layered environments can cause IT complexity. Most rigid, legacy or carrier-grade infrastructures aren't fit for IoT and limitless network segmentation. If you're giving your network a refresh, be sure to ask your provider about segmentation agility and change management.
- **Deep network visibility:** As the list of your connected devices grows, enterprise network traffic increases exponentially. Monitoring that traffic is essential. Having real-time visibility and a complete history of all network activity that is both readily searchable and sortable in an easy-to-use console is the secret to deploying and managing IoT infrastructures while minimizing security risks. [Learn more about deep network visibility and full threat visibility.](#)
- **Security backed by machine learning and behavioral analytics:** As IT teams are tasked with monitoring an increasing amount of network traffic, machine learning and behavior analytics become a must. As these tools "become aware" of the normal IoT traffic, they fine tune their abilities to identify anomalies and lateral moves, accelerating your threat detection

Additional resources

- [The Truths and Lies of IoT Security](#)
- [Seven Criteria Your Network Needs to Increase Agility](#)
- [Friction in the IT Helix: How to Create Harmony between Network Design and Security](#)
- [The Managed Security Services Provider Survival Guide](#)
- [There's Help for CISOs Overwhelmed By Security Threats](#)

and response times. If your in-house team is unable to support the security tasks of IoT, turn to managed detection and response services.

- **Multi-flow data monitoring:** Segmented networks are required for IoT and your security strategy should take the same segmented approach as your network. This way, the network design and security operations work in sync. Match segmented virtual environments with multi-data-flow security monitoring (multi-VRF security). This allows enterprises granular visibility and the ability apply specific security rules and policies to each segmented network.

About Masergy

Masergy is the software-defined network and cloud platform for the digital enterprise. Recognized as the pioneer in software-defined networking, Masergy enables unrivaled application performance across the network and the cloud with Managed SD-WAN, UCaaS, CCaaS, and Managed Security solutions. Industry-leading SLAs coupled with an unparalleled customer experience enable global enterprises to achieve business outcomes with certainty.