Bringing agile IT to the point of sale

Network managers in the retail industry face some unique challenges. Highly decentralized operations with little or no local IT expertise coupled with stringent security and regulatory regimes such as PCI-DSS mean local outlet deployments typically follow a highly conservative "safety first" model leaving little room for flexibility. Introducing new services or supporting access for new devices is preceded by lengthy test and evaluation programs followed by equally lengthy (and costly) site-by-site upgrade programs.

The Mancala Network Controller supports a more agile, more responsive network infrastructure without compromising security.

1 Roaming access for a more mobile user population

In-store deployments are frequently highly inflexible, with restricted connectivity and static configurations. This facilitates security and support, important features in an environment with no IT specialists locally available should things go wrong. However, in an increasingly mobile world, it can be difficult, if not impossible, for visitors – temporary/transfer staff, visiting staff (auditors, for example), suppliers – to connect and work at optimum levels of productivity.

The Mancala Network Controller can identify and authenticate any device attempting to connect to the network, whether via switch ports or wireless access points. In a typical chain store environment, centralized device and user authentication make mobility transparent for the end user, while the logging features ensure traceability of any device connection at any point in the network. Unknown devices can be blocked or directed to specific VLANs for additional authentication measures, as can "pirate" connections – for example, a laptop attempting to use an Ethernet port inventoried as being a printer port.

2 Accelerate deployment of new services

More than in any other business sector, retailers rely on getting new products and services to their customers faster than their competitors. Today customers, staff and partners use mobile devices to stay informed, to inform others, and to boost productivity. Delivering innovative new services over the air accelerates sales, boosts productivity, and generates customer loyalty.

The Mancala Network Controller gives you the tools to manage and secure network access, filtering devices according to device characteristics and user authentication, maximizing agility and security. Depending on device characteristics and user authentication, traffic can be directed to VLANs connecting to appropriate services such as a captive in-store marketing portal for customers, secure corporate services for authorized staff, or internet access for partner services.

The Network Controller manages device and traffic discrimination and logs all connections, providing an audit trail ensuring security and compliance.

3 Boost operational efficiency

Network support is a key challenge. Given the highly distributed and decentralized model of retail operations, local support for every point of sale is unrealistic. Yet downtime on, for example, the payment terminals of a busy hypermarket has an instant, measurable financial impact.

The Mancala Network Controller maintains a real-time inventory of every device connected to the network, eliminating guesswork and confusion for the helpdesk operator trying to work with remote shop staff to identify a network or device problem. The real-time monitoring, mapping and device identification features of the Network Controller put the operations center in the driving seat, allowing support engineers to rapidly identify and resolve network issues at remote sites.

How does the Mancala Network Controller make your network more agile?

The Network Controller is installed in the local network as a natural complement to routers, switches and firewalls already in place. It interfaces with the network control services (DNS, DHCP, RADIUS, SIP). Easily integrated into existing network infrastructure and solutions, it detects connected devices and users in real-time, analyses their behavior and acts automatically to optimize network security. It brings an unequaled combination of visibility and control to enterprise network environments.

The Mancala Network Controller uses multiple techniques to detect and identify devices as they connect. It can recognize and discriminate classic office equipment (PCs, printers, laptops, servers), IP telephones, PDAs and smartphones, and industry-specific devices such as PoS scanners, card readers and payment terminals; digital display and marketing terminals; and mobile devices such as hardened PDAs and barcode scanners. The Network Controller can enforce differentiated access rights and authentication procedures, facilitating the roll-out of new devices for maximum agility.

The management platform gives the operator real-time oversight of connected devices. All connections are logged providing an audit trail of network activity.

Summary

The Mancala Network Controller facilitates a more agile, more responsive network infrastructure with improved security. Active detection and management of device connections means new services and systems can be deployed more rapidly, delivering faster RoI and a significant competitive edge in the fast-moving retail environment.

Mancala Network Controller - Enterprise network control and management solution

Built from a patented and award winning technology, the Network Controller's innovation lies in its capability to not only monitor network control flows, but to also leverage that information to increase network security and management flexibility.

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The Network Controller is available in a range of software editions adapted to the specific needs of each vertical market : Enterprises, Systems Integrators, and Managed Service Providers. Optionally, the software solution may be preloaded onto a range of physical appliances.