Omnitrol Networks Application & Middleware Platform

Moving beyond all other edgeware and middleware combo solutions, the OMNITROL solution combines a next-generation multiprocessor edge network appliance with a highly sophisticated real-time application server. The all-in-one, multiprocessor, industrial-strength appliance replaces multiple rack mount servers, network edge integration devices, such as Wi-Fi access, Ethernet switches, serial-port concentrators and sensor interconnect devices with a cost-effective, scalable, and flexible single 19" rack-mountable 1U edge services appliance.

The OMNITROL application network appliance is pioneering the delivery of real-time operational visibility through the convergence of advanced sensor network technology with existing business processes on the shop-floor. It is available in two form factors (Omnitrol ‘A’ and Omnitrol ‘M’) to optimize economics, scale and potential growth for the entire enterprise market from small business to multi-location global enterprises.

Historically, middleware has been limited, required extensive customization - making it difficult for effective integration and timely use. The OMNITROL supports not only all types of wireless, barcode and RFID technologies, but also sensors and PLC systems simplifying integration with existing customers installed infrastructure while providing the flexibility to expand, improve and scale their business processes without incurring the high costs previously experienced.

EASE is a next-generation business services network platform for delivering distributed real-time sensor-based mission critical applications at the edge of the network. The EASE framework integrates a distributed real-time database infrastructure with a scalable complex-event processing engine for peer-to-peer event correlation generating business intelligent triggers. EASE simplifies the integration of sensor devices, such as passive and active RFID, barcode scanners and 2D barcode, real-time location using WiFi and ultra-wide band (UWB) technology, PLC controllers, wireless handhelds, environmental sensors, biometrics to enhance and optimize business processes.

The OMNITROL Network is the industry's first peer-to-peer application network that is delivering the collaborative supply-chain through an EPC-Global Track and Trace smart infrastructure. The diagram below shows the high-level functional components of the OMNITROL application network.

COMPLETE BUSINESS SOLUTIONS

Real-Time
Operational Visibility

Real-Time
Work-in Process Traceablity

Real-Time
Global Track & Trace

BACK-END INTEGRATION

ORACLE

SAP

INFOR

REAL-TIME EPCIS TRACEABLITY

OMNI TROL NETWORKS

UNIFIED DEVICE MANAGEMENT

MOBILE DASHBOARDS

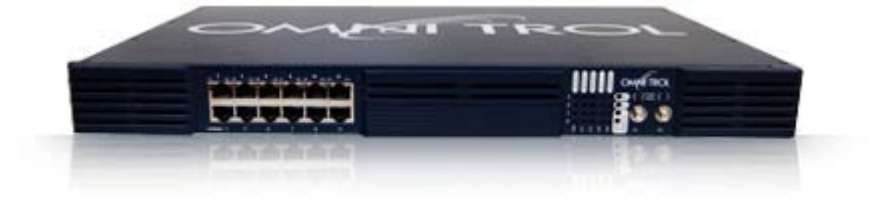
SERVICE CREATION

SERVICE EMULATION

OMNITROL-'A' Appliance - the industry's smallest middleware appliance for RFID and sensor networks which packs the same powerful EASE software as the OMNITROL 'M' Appliance, but suited for smaller RFID deployments requiring a limited number of readers or sensors.

A manufacturing company can have a complete OMNITROL-based track and trace solution up and running in less than 60 minutes, and need only maintain it when they add more sensors. The OMNITROL Nano is suitable for all industrial automation environments, includes serial interfaces, and is fanless with absolutely no moving parts. The appliance is about a third the size of 1U rack-mountable server, and consumes less than 30 Watts, which is equivalent to an energy saving light bulb.

OMNITROL-' M ' Appliance



Benefits of the OMNITROL Appliance include:

- Industrial strength networking and quad-processor modular server
- Integrated Ethernet (100/1GbE), Optical 1Gb SFP, Optical 10GbE XFP ports
- Integrated Serial and Multi-drop port concentrator
- Integrated L2 switching and L3 router with VLAN capabilities
- Integrated Wireless LAN controller with VLAN capabilities
- Integrated IPSec and SSL VPN security with hardware accelerated encryption
- Integrated SNMP and Web-based Sensor & Network Management and Control
- Integrated GPIO controls for internal and external device management
- Open, hardware upgradeable LINUX based server modules
- Integrated Edge Application and Services Engine (EASE)

Replaces multiple rack-mount servers, network edge controllers, Wi-Fi access, ethernet switches, serial-port concentrators and sensor interconnect devices with a cost-effective, scalable, and flexible single 19" rack-mountable 1U application network edge server.