Packet Solutions

MRV EMPOWERS THE OPTICAL EDGE. WE DELIVER PACKET AND OPTICAL SOLUTIONS ORCHESTRATED WITH INTELLIGENT SOFTWARE TO MAKE SERVICE PROVIDER NETWORKS SMARTER.
MRV’S OPTISWITCH® - CE 2.0 SERVICE DEMARCATION AND PRE-AGGREGATION

OptiSwitch is MRV’s portfolio of packet solutions for access networks. They are an award-winning line of compact Carrier Ethernet 2.0 service demarcation and high-density pre-aggregation platforms that are trusted by the world’s most prominent Tier 1 networks. The OptiSwitch platform enables CSPs to transform their metro networks for a complete range of next-generation services from LTE mobile backhaul to business and wholesale Ethernet as well as cloud access services.

The OptiSwitch portfolio includes a range of powerful L2 and L3 service demarcations devices with Master-OS™, a unified Linux-based operating system, that powers the platforms and Pro-Vision® service delivery and provisioning software. These three components reduce total cost of ownership (TCO) and enable the transition to a converged next generation network with application-driven services, resulting in significant differentiation and enhanced revenue opportunities.

Master-OS is the industry leading foundation for all OptiSwitch functions that enables ease of operation and management of MRV products and applications throughout the network. By using Linux as the core of its Master-OS operating system, open-source applications can be seamlessly integrated to enhance the basic product functionality. Moreover, the cycle of introducing new features is significantly lower since open-source applications stability, security and maturity is superior to proprietary software packages.

The innovative OptiSwitch system design is also ideal for a seamless integration in future SDN networks. Applications can either run on the local Linux-based Master-OS or be shifted to the cloud and run on top of an SDN controller, using a standards-based open interface to control the OptiSwitch hardware with per-flow granularity.

Coupled with Pro-Vision, MRV’s powerful and intelligent service delivery and provisioning solution, the OptiSwitch portfolio enables lower TCO, unprecedented time-to-market and improved network visibility for communications service providers (CSP) networks of any size.

APPLICATIONS

**Business Ethernet**

The latest developments in standardization, scalability, reliability, quality-of-service and service management have made carrier Ethernet, and specifically business Ethernet services, today’s fastest growing connectivity offering for CSPs worldwide.

MRV has more than a decade of experience supplying carrier Ethernet equipment to service providers with the OptiSwitch MEF CE 2.0 certified line of service demarcation and pre-aggregation devices. The OptiSwitch line is purpose-built to meet the evolving needs of CSPs and delivers robust features and unsurpassed value for creating and delivering business Ethernet services.
**Packet Mobile Backhaul**

MRV’s intelligent carrier Ethernet cell-site demarcation and pre-aggregation devices feature state-of-the-art capabilities to enable mobile operators and wholesale transport providers to address skyrocketing subscriber growth while ensuring high and consistent quality-of-experience.

MRV’s OptiSwitch was specifically designed to meet the challenges of LTE deployment including multipoint connectivity between micro and small cell sites, advanced QoS, per flow performance monitoring, and precise timing and synchronization.

**Wholesale Ethernet**

Wholesale Ethernet is the delivery of Ethernet services to out-of-footprint locations. It is emerging as a major market due to exponential growth in bandwidth and enhanced service management features, flexibility, scalability, ubiquity, and economics.

MRV’s OptiSwitch series along with Pro-Vision service delivery & provisioning software streamlines the creation, delivery and management of carrier Ethernet services across multiple service providers and enable wholesale providers experience simplified delivery and management of carrier Ethernet services.

**Access to Cloud Services**

The advent of cloud computing and carrier Ethernet provide CSPs the tools to increase revenue and margins while differentiating their service offerings.

OptiSwitch series enables the delivery of carrier Ethernet-based cloud services to SOHO and SMB users via a rich set of features including bandwidth-on-demand, differentiated services based on application requirements, SLA & performance monitoring, zero-touch provisioning, and security.
DELIVERING VALUE ADDED SERVICES WITH CONVERGED L2 MEF CE2.0 AND L3 ACCESS DEVICE

The OptiSwitch portfolio provides CSPs the opportunity to introduce a wide range of new CE2.0 L2 and L3 services via a single access device. This translates into significant operational simplification and corresponding OpEx savings. OptiSwitch enables both Internet access and enterprise connectivity while eliminating the need to install a separate dedicated router.

Converging L2 and L3 business, residential and mobile services portfolios on a single device enables CSPs to gain competitive advantage and address customer demand for faster, more cost effective connectivity. Service convergence can shorten time-to-market through common service provisioning and management, OAM, troubleshooting and SLA verification. Using OptiSwitch with its Master-OS means testing, certification, and training can be done for all services simultaneously on a single access device, eliminating the need for conducting multiple tests on separate access equipment.

L3 VPN Services

OptiSwitch Series enables CSPs to establish private VPN and deploy business services and managed L3 services coupled with IP SLA for medium and large enterprises with offices distributed across several geographical locations (headquarters and branch offices). OptiSwitch series L3 VPN enabling technologies include IPv4/4 static & dynamic routing, and VRF-Lite.
Application-awareness enables CSPs to understand the traffic flowing on their networks so they can optimize network resources and better monetize service offerings. MRV enables a seamless evolution to application awareness with the OptiSwitch architecture. It includes the following components.

1. OptiSwitch series: a portfolio of software programmable multi-layer access & pre-aggregation devices
2. Master-OS: a field-proven Linux-based operating system common to all the OptiSwitch devices
3. Pro-Vision: service orchestration software that enables provisioning, monitoring and reporting of service flows

**PRO-VISION® SERVICE DELIVERY AND PROVISIONING**

Pro-Vision provides automated configuration, management and reporting of converged network elements. It automates a vast array of tasks that simplify the orchestration of packet and optical services. Pro-Vision supports a software defined networking framework that enables application awareness, service control and network intelligence through the combination of open API’s and MRV’s powerful Master-OS operating system software.

Pro-Vision is deployed worldwide by Tier 1 service providers for large-scale, zero-touch solutions that simplify operations and reduce operational expense.
ABOUT MRV COMMUNICATIONS

MRV Communications is a global leader in converged packet and optical solutions that empower the optical edge. For more than two decades, the most demanding service providers, Fortune 1000 companies and governments worldwide have trusted MRV® to provide best-in-class solutions and services for their mission-critical networks. We help our customers overcome the challenge of orchestrating the ever-increasing need for capacity while improving service delivery and lowering network costs for critical applications such as cloud connectivity, high-capacity business services, mobile backhaul and data center connectivity.

MRV operates Worldwide sales and service offices across four continents.

MRV Communications

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