



# ZebOS: Complete Solution to Help Build Network Devices For Future-proof Networks

ZebOS is the world's most comprehensive standards-based Layer 2, Layer 3, and MPLS/MPLS/TP network platform that enables network equipment manufacturers (NEMs) to accelerate the development of SDN-based architectures for next generation mobile backhaul, Carrier Ethernet, and data center/cloud networks.

The modular design enables NEMs to select and integrate the protocols they need for their specific market requirements.

ZebOS supports more than 200 network protocols that conform to leading IEEE, IETF and MEF industry-specific standards and implementation agreements.

Protocols include Layer 2, Layer3, MPLS/TP, GMPLS, Carrier Ethernet (Metro Ethernet), Data Center Ethernet, and an Integrated Management Software.

ZebOS has over 300 customers worldwide.

## Greater Network Scalability, Routing Support, High Availability

With the explosion of data, network managers are challenged to re-invent their data centers and networks to be more cost efficient and bring new services to market faster. The rich, comprehensive feature set of the ZebOS-XP network platform addresses the high demands of mission critical networks. The latest release of ZebOS, ZebOS-XP gives network managers greater scalability, bandwidth scaling, and redundancy in mobile backhaul, carrier transport and data networks.

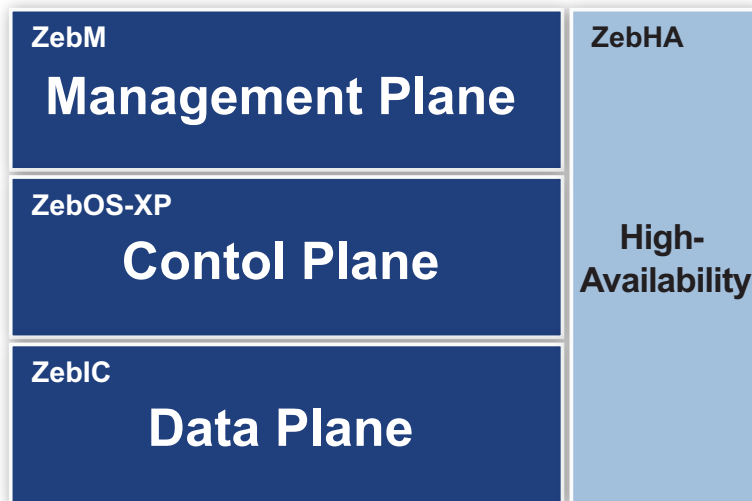
ZebOS-XP has its roots in the original ZebOS operating system used worldwide in business-critical networks. This next generation network platform is a complete hardware-software-service solution. The ZebOS-XP platform infrastructure was created from the ground up to address these high demands of scale and performance in mission critical mobile backhaul, carrier transport, and data center networks.

Performance and feature scalability is an integral part of ZebOS-XP. It's designed to support current and future multiprocessor hardware platforms, helping ensure scalability well into the future. With its modular building-block approach, IP Infusion ZebOS-XP allows quick and easy integration of new technology innovations. Customers can be assured of strong investment protection because of the modular flexibility of the IP Infusion ZebOS-XP design.

## ZebM: Flexible Network Management

With the ZebM software framework, network device vendors can quickly and inexpensively deliver world-class management functionality for their products. ZebM's data model-driven design philosophy provides automatic rendering of northbound interfaces (NETCONF, CLI, SNMP, and REST). It has been designed to meet the primary need of providing a comprehensive solution which addresses all aspects relating to operations administration and maintenance of a networking element.

ZebM provides a framework and APIs for building management systems for a switch or router. It offers two different sets of programmatic APIs, Transactional API also called CML API and Non transactional API (CLI Equivalent programmatic APIs) also called SMI API. The APIs can be easily integrated with any third party management application. Management of a third party southbound application can also be integrated with ZebM using its framework.



ZebM Framework provides a set of tools for automatically generating most of the backend code for the management APIs. This reduces the effort involved in programming the APIs.

### ZebIC: Ready-made Integration For Diverse COTS Silicon

IP Infusion's ZebIC Data plane Integration Software is the first solution to provide a scalable, hardware-independent architecture that enables you to efficiently incorporate networking capabilities into your products. ZebIC features clear APIs that provides OEM customers the ability to develop portable, control plane software. The control plane can be developed in an independent manner to provide new and innovative network services across a wide range of silicon.

### Business Agility and Competitive Advantage

- Integrated reference designs with proven development and verification tools
- Flexibility to move quickly to higher price/performance chipsets. Abstraction of control plane from hardware provides portability of software across chipsets spanning multiple product lines

- Modular, interchangeable, extensible component architecture, enabling the addition of features for new markets using the same tested platform
- Develop once, then port to new hardware
- Finish design ahead of schedule with comprehensive training and professional services
- Support for select Broadcom, Marvell, and PMC chipsets

### Reduced Development Risks

- Tested ZebOS-XP platform integrated on standard OSs and popular chipset Software Development Kits (SDKs)
- ZebOS-XP platform that has been in production networks for more than a decade in five-9s environments
- Minimal need to rewrite software to port to new chipsets
- Seamless migration path to newer technologies

- Over 20,000 test cases in a wide-range of market segments, including mobile backhaul/access, carrier transport/Carrier Ethernet, and data center
- Industry testing for interoperability, including UNH, IPv6 readiness, as well as in-house MEF testing

### Improved ROI

- Reduced in-house development costs to bring up new hardware and software
- Reduced costs through system integration with domain optimized protocol modules
- Increased profitability and margins



#### About IP Infusion

IP Infusion, the leader in disaggregated networking solutions, delivers the best network OS for white box and network virtualization. IP Infusion offers network operating systems for both physical and virtual networks to carriers, service providers and enterprises to achieve the disaggregated networking model. With the OcNOS™ and VirNOS™ network operating systems, IP Infusion offers a single, unified physical and virtual software solution to deploy new services quickly at reduced cost and with greater flexibility. Over 300 customers worldwide, including major networking equipment manufacturers, use IP Infusion's respected ZebOS platform to build networks to address the evolving needs of cloud, carrier and mobile networking. IP Infusion is headquartered in Santa Clara, Calif., and is a wholly owned and independently operated subsidiary of ACCESS CO., LTD. Additional information can be found at <http://www.ipinfusion.com>.

Phone: +1 877-MYZEBOS  
Email: [sales@ipinfusion.com](mailto:sales@ipinfusion.com)  
Web: [www.ipinfusion.com](http://www.ipinfusion.com)

U.S. (Santa Clara), +1 408-400-1912  
Japan (Tokyo), +81 03-5259-3771  
Korea (Seoul) +82 (2) 3153-5224

India (Bangalore), +91 (80) 6728 7000  
China (Shanghai), +86 186 1658-6466  
EMEA (Stockholm), +46 8 566 300 00

IP Infusion  
An ACCESS Company  
(408) 400-3000  
[www.ipinfusion.com](http://www.ipinfusion.com)  
3965 Freedom Circle, Suite 200  
Santa Clara, CA 95054