



DATASHEET

PROFESSIONAL  
SERVICES

# Emulex I/O Performance and Availability Service

Maximize ROI with Emulex IPAS Baseline and IPAS Advanced, enhanced services for OneCommand™ Vision

## Established Leader in I/O Management

- Certified professionals deliver over 70 years of industry experience coupled with 35 years of I/O management experience
- World-class expertise in performance management, storage availability and business continuity
- Multi-vendor operating system and virtualization specialists, including VMware®, Microsoft Windows®, Linux and Oracle® Solaris
- Authority on I/O management best practices for enterprise environments

## Availability

- Emulex IPAS is available through select resellers, with services and support delivered by Emulex and Emulex-approved I/O management professionals. For more information, please visit [www.emulex.com](http://www.emulex.com) or contact an Emulex sales representative at **877-359-3263**.

## OneCommand Vision

Enhance your OneCommand Vision deployment with Emulex IPAS. The award-winning OneCommand Vision I/O management application provides detailed I/O related data which can be used to address, or even avert, I/O bottlenecks, helping data centers maintain the highest level of application performance and availability, while maximizing utilization of existing resources.

## Emulex IPAS Overview

Emulex IPAS maximizes your return on investment (ROI) by providing the next level of predictable application performance and availability, higher infrastructure utilization and lower operational costs. By engaging Emulex or partner professional services for an IPAS Baseline or IPAS Advanced service, you can characterize your existing performance, discover where your I/O performance is suffering and how to fix it.

Emulex IPAS includes the following, with each client engagement customized to meet specific needs:

- Pre-planning to review readiness, configuration and deliverables
- Installation and configuration of the OneCommand Vision software
- Training on basic and advanced tool usage
- Performance and availability baseline assessment
- Data analysis to identify potential performance and availability issues
- Correlation analysis to recommend areas to look when resolving issues
- Recommended alert definitions to proactively monitor the environment

Using the Emulex OneCommand Vision application on your physical and virtual servers and their connectivity devices, Emulex IPAS is ideal for heterogeneous data centers with 24x7 operations, delivered over traditional local area network (LAN)/ storage area network (SAN) environments or converged network environments using Fibre Channel over Ethernet (FCoE). Trust that your I/O performance across operating systems, adapters, network and the array end-points is the best it can be with OneCommand Vision and Emulex IPAS engagements.

## Reduce CapEx and OpEx

Increase your ROI by reducing capital expenditures (CapEx) and operational expenses (OpEx) through Emulex IPAS. Reduce OpEx with periodic IPAS Advanced, ensuring enhanced network performance and availability across the data center. Reduce CapEx by identifying underutilized I/O paths and devices, thereby maximizing your hardware utilization and avoiding unnecessary purchases.



## I/O Challenges

- Critical databases or applications require maximum performance and 24x7 availability
- Defining and meeting Service Level Agreements (SLAs) is increasingly difficult
- Early prediction of major performance issues requires proactive planning, historical performance metrics and manpower
- Application downtime and brownouts increase operational costs and impact revenues
- Flat capital budgets require maximizing performance out of existing infrastructure

## Emulex IPAS Benefits

- Receive I/O performance and availability status and obtain expert advice on I/O management best practices
- Reduce operational costs with periodic IPAS Advanced service for enhanced network performance and availability
- Satisfy SLA commitments by quickly identifying and resolving complex I/O performance and availability issues with the assistance of I/O management experts
- Reduce capital expenditures by identifying underutilized I/O paths and devices

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## IPAS Baseline

An initial IPAS Baseline includes a baseline review of important I/O metrics, including I/O latency, I/O volume, low level transport and SCSI I/O protocol events, and I/O infrastructure topology. A Baseline Evaluation Report is used to assess performance, availability and I/O infrastructure utilization and its potential risk to SLAs.

## IPAS Advanced

As part of IPAS Advanced, customers receive an I/O Advanced Report to review application performance and availability requirements and to assist administrators in proper planning their I/O infrastructure. IPAS Advanced includes:

- A summary report on the I/O performance and availability of the target production environment
- Detailed analysis of application latency and volume capacity trends since the previous IPAS Advanced or Baseline service
- Evaluation of administrator plans for new additions or changes to applications and I/O infrastructure
- Review of potential infrastructure updates and suggested best practices aimed at maximizing performance, availability and utilization of expensive SAN connections

IPAS Advanced is offered as a one-time or periodic service and is powered by OneCommand Vision, a tool that also provides continuous in-house I/O monitoring between IPAS services. This combination allows customers to self-manage and monitor performance, availability and network utilization while leveraging I/O experts periodically for improved optimization and enhanced diagnostic and resolution services.



## IPAS Diagnostic and Resolution Assistance

IPAS Diagnostic and Resolution Assistance helps administrators resolve complex performance or availability issues. I/O experts are available to assist administrators in correlating past I/O performance and availability data with current changes by reviewing historical and real-time latency, volume, I/O protocol events and I/O infrastructure to quickly diagnose and resolve underlying I/O infrastructure issues, including:

- Identifying oversubscribed I/O infrastructure components
- Correlating I/O events or trends across multiple applications and/or devices
- Isolating loss of storage connectivity issues, resulting in one or more application outages
- Providing guidance on tuning and changes that help to better balance I/O traffic across your infrastructure

## Powered by OneCommand Vision

Emulex OneCommand Vision provides a foundation for the Emulex IPAS, with the following key features:

- Powerful I/O performance and diagnostic tools provide an intuitive interface for local and remote I/O analysis
- I/O Latency presents real-time infrastructure latency information, specific to each I/O path
- I/O Profile presents I/O related information, such as I/O volume and fan-in ratio, specific to each I/O path
- I/O Analyzer presents crucial protocol event data, including low level transport and SCSI information
- Intelligent I/O Alerts provides customizable performance thresholds that trigger Alerts when met
- Executive Reports enable an environment view of metrics showing pertinent performance information such as size, availability and utilization
- Non-intrusive software-based architecture supports heterogeneous environments (applications, operating systems, servers, adapters, hardware and software virtualization, switches, and storage)
- Broad APIs provide upward integration into enterprise-class SAN, network management and service provider management applications

## Additional Resources

### What is I/O Management

[www.emulex.com/artifacts/ebefaf1f-b6d0-49e1-a213-351f883b76d0/elx-wp-IOMgmt.pdf](http://www.emulex.com/artifacts/ebefaf1f-b6d0-49e1-a213-351f883b76d0/elx-wp-IOMgmt.pdf)

### OneCommand Vision Advantages White Paper

[www.emulex.com/artifacts/f6772919-a5be-4c49-8bce-6fb34e5e8e2f/elx-wp-all-ocv-advantages.pdf](http://www.emulex.com/artifacts/f6772919-a5be-4c49-8bce-6fb34e5e8e2f/elx-wp-all-ocv-advantages.pdf)

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