

# Monolith Architecture Concepts



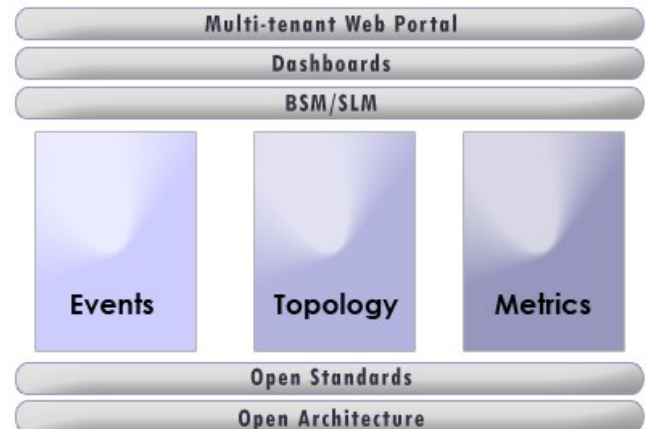
Monolith – Delivering Next Generation Monitoring for Operations

## Built to Meet Operational Demands

Monolith Software's next generation solution provides event management, metrics management and consolidated dashboard views offering you real-time insight into the health, performance and availability of mission critical systems and applications. Service providers and enterprise IT operations groups responsible for network operation centers (NOCs) can expect to increase operational efficiency and drive down costs while maintaining 99.999 percent uptime and availability.

Monolith Software's modern, Web 2.0 architecture is built for the speed of modern business and is scalable to the most demanding enterprise environment, while offering a low total cost of ownership and rapid return on investment.

## Technology Management Solution



## Key Technology Features and Benefits

### Features

- 100% Web-based and Plug-In Free
- Built on open standards with an open API
- Multi-tenant web portal for customer or divisional views
- Correlation/display by technology or business logic
- Secure, external authentication
- Numerous out of the box rule sets
- Powerful and configurable dashboard display with deep drill down
- Centralized configuration and administration
- Platform, vendor and technology agnostic
- Global fail-over/fail-back redundancy

### Benefits

- Provides a real-time window into the health, performance & availability of business critical systems
- Drive down costs & boost operational efficiency
- Ensures adherence to service level agreements
- Supports ITIL & compliance requirements
- Scales to fit any environment
- Fast user interface – no painful wait times
- Simple to administer & deploy – 1/3 the time of competitors
- Vastly improved operational efficiency with correlation/display
- Amazing Time-to-Value / rapid ROI / low cost of ownership

## Low TCO and Rapid ROI

In this challenging economy, time to market, reliability and total cost of ownership are key goals for service providers and large enterprises. Huge, complex management frameworks are hard to maintain, costly to administer, and have lengthy deployment time frames. A decision to build in-house may consume a large project team and take years (three to five) to develop.

Monolith Software's management and monitoring solution is incredibly cost effective and quick to deploy. Our software is pre-bundled, installs via our installation package, and comes pre-configured with common functionality while coming in at one-third of the licensing cost of competitive offerings. This translates to quick deployment, a short learning curve for NOC staff, and up to 80 percent lower ongoing maintenance costs. The ultimate benefit to you is quick time to value. With Monolith Software you'll have improved reliability and system performance in days/weeks versus months/years; lower headcount and administration costs; dramatically lower maintenance costs, and a much shorter payback period. We are proud to claim the quickest return on investment and time to value in the market today.

## Adaptable and Configurable

Monolith's software architecture is highly adaptable and easily configured into any technology environment through its Open API. We are vendor, technology, and platform agnostic. Unlike our competitors, who can only offer you a replacement strategy that dictates a wholesale migration of your current operations processes, Monolith Software recognizes that service providers and IT organizations have existing investments in enterprise technology management (ETM) tools. Our software is uniquely architected to augment, enhance, or consolidate your current ETM tools and adapt to and mirror your existing processes and procedures -- driving down your costs, removing barriers to adoption, and maximizing your operational efficiency.

# Unified Dashboards, Consolidated Views & Real Time Displays

Monolith Software has been designed to play a unique role in the technology management marketplace. Monolith can leverage existing data sources and fill information gaps where data is currently not being collected to deliver real-time, consolidated, completely customizable views and dashboards of your organizations key performance-related metrics. Monolith differentiates itself from our competitors by delivering upon the promise of consolidated views without requiring the 'rip and replace' strategy necessitated by other vendors in the industry.

Our solution presents a truly unified user experience throughout all of our modules, revealing dynamic views of your network topology, service relationships, logical and physical distribution, and real time metrics on server health and network connectivity.

While larger software vendors have had to acquire and attempt to integrate varying code sets and technologies to craft a comprehensive solution, only Monolith has remained devoted to the idea of developing a secure, single code-set, design-integrated, multi-tenant based solution.

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## Simple to Administer & Deploy

Administrators work from Monolith Software's centralized administration console to reach out and draw information from multiple systems and servers. From this one point of control, you can manage all operations, change configurations, run jobs, review logs, and start/stop processes.

Rules-based discovery allows for better categorization and manipulation of information making Monolith virtually self-maintaining. Auto-configuration and auto-administration capabilities are based upon established business policies to greatly reduce the administration burden.

Compared to competitive solutions, who demand three to four full time administrators, Monolith Software typically only requires one-half a person for most environments.

## Fast, Modern & Open

Exceedingly fast, Monolith's architecture is modern and based on open standards such as Apache, MySQL, Perl, PHP and SOAP. It leverages AJAX and Web 2.0 technology to provide lightening speed screen and information loads. There are no painful wait times or time lags in information display for the user. Information and events of any format can be aggregated and normalized for greater efficiency allowing Monolith Software's full functionality to work on any system. And we have designed our future-proof monitoring system to be resilient and adaptive to technology changes in the IT environment.

Using vertical scaling (layering) Monolith can separate data storage, collection and presentation functions to maximize scalability. This eliminates the risk of components competing for resources at the same time.

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## Scales to Fit any Environment

Service providers and large enterprises need a technology management and monitoring system that supports today's reality -- but also scales to tomorrow's needs, tolerances and demands. Monolith Software is built to scale to immense proportions. Our core architecture is based on open and modern technology that is purposely designed for scale; capable of managing the torrent of information flowing through the modern, large-scale MSP, ASP or IT enterprise.

The scalability of our architecture reaches well beyond the range of leading competitors with capacity to scale to 1,000,000s of events a day, 1,000s of events and metrics per second, and to more than 100,000 devices.

Horizontal scaling (also called distributed monitoring) gives Monolith the ability to have multiple polling and aggregation components distribute the load. In addition, vertical scaling (layering) Monolith can separate data storage, collection and presentation functions to maximize scalability. This eliminates the risk of components competing for resources at the same time.

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## Hardware Requirements

### Historical Database Server

2x Quad Core, 16GB RAM  
RAID 10/SAN 15K Drives (300GB — 1.5TB)  
Physical Server Redundancy Recommended

### Presentation Server

2x Quad Core, 16GB RAM  
RAID 10 4x73GB 15K Drives  
Double Count for Redundancy

### Collection Server

2x Quad Core, 16GB RAM  
RAID 10 4x73GB 15K Drives  
Double Count for Redundancy

### Additional Notes

VM capable for presentation/collection  
Recommended hardware —  
•Dell PE2950, IBM x3450, HP DL360

The above recommendation is applicable for large infrastructures running Monolith's mSuite ITM Bundle (ITM Core, Event Manager, Action Manger, Event Reporter, Metric Manager, Topology Manager, SLM Engine & Dashboard Engine). Monolith can run on as little as a single dual-processor server with 4GB of RAM.

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## About Monolith Software

Monolith Software is the industry's first, and only, unified IT infrastructure management software. Monolith offers a comprehensive, fully integrated solution that provides one consistent rules engine for data acquisition, one unified data warehouse allowing unprecedented access to decision-enabling data, and one, consolidated multi-tenant interface for expanding access to deeper business intelligence. Accessible through real-time dashboarding, this unique, unified approach streamlines and enhances fault, availability, performance, correlation, discovery and topology mapping. The result is a simplified process for SLA management and capturing network KPIs. Comprehensive granular visibility, never before available by using disparate legacy tools, increases operational efficiency and allows for enhanced customer intimacy.