Simplifying Infrastructure
Management Complexity
with Realtime
Analytics

# Hybrid Infrastructure Monitoring

Globalization of businesses with potentially different security and compliance requirements necessitates multiple data centers across geographies. It is not uncommon for an enterprise of today to orchestrate multiple data centers across time zones. These data centers continue to be monitored and managed independently despite their impact worldwide. In addition, varying workloads require a combination of fixed and elastic resources optimally delivered by a hybrid cloud infrastructure to minimize total cost.

MARS Fabric is the only solution which delivers a universal management of all the federated resources within an enterprise – whether they are data centers, private cloud, or public cloud as a combination.
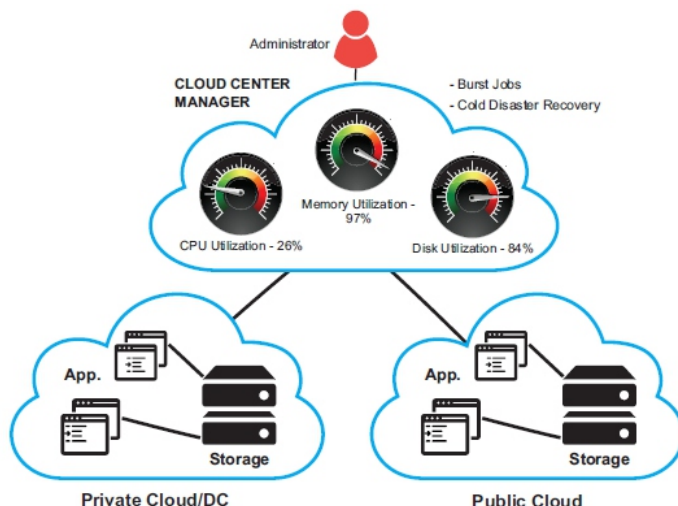


# Heterogeneous Storage Performance

MARS's approach to collecting, storing and analyzing data has always been one of integrating a variety of heterogeneous components of a storage fabric.

Data collection is done in a virtualized collection schema that is protocol independent which when coupled with view normalization provides a universal lens across ALL storage components.

From a deployment perspective, MARS is the only solution which delivers universal management of all the federated resources within an enterprise – whether they are data centers, private cloud, or public cloud as a combination.
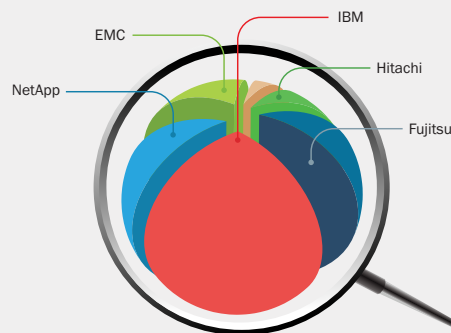


# Intuitive UI and Out-of-the box deployment with Petabyte Scalability

MARS's hierarchical tree structure UI enables easy and intuitive drill-down from a high-level subsystem to the most granular performance data with a few clicks. This coupled with simple configuration and deployment steps comprising simply of obtaining Server IP address with access credentials, followed by a validation phase, allows a System Administrator to get up and running and be productive almost instantaneously.

The scalability and footprint of performance data collected by MARS spans multiple data centers across time zones. Globalization of businesses with potentially different security and compliance requirements necessitates multiple data centers across geographies. In addition, varying workloads require a combination of fixed and elastic resources optimally delivered by a hybrid cloud infrastructure to minimize total cost.

MARS is the only solution which delivers a universal management of all the federated resources within an enterprise – whether they are data centers, private cloud, or public cloud as a combination.

### Unique Key-Value Store

The underlying key-value store within the MARS platform is built for time-series analytics with ad-hoc querying capabilities. MARS Collect probes the entire infrastructure stack without any invasive hardware and stores this at an unprecedented granularity.
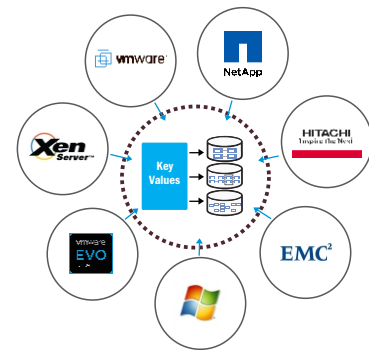
### Time Data Travel

The analytics engine built on MARS Collect stores fine grained performance data in a compressed format and allows queries on compressed data. Such historical information combined with the flexible query enables the creation of baselines capturing operational intelligence from prior months or even quarters.

### Complex Correlations across Subsystems

A hyper-converged infrastructure tightly integrates storage, compute, networking and server virtualization resources in the same box.

MARS Correlate collects and correlates data across all infrastructure subsystems: Compute, Memory, Storage, Network and I/O.

MARS does this in near real-time without resorting to post priori ONLY log file analysis, while integrating exception based log reports as necessary. MARS performs complex correlations between disparate data sources and compare it to the benchmarked baselines. This allows MARS Correlate to proactively alert operators to possible cascading impacts in a hyper-converged environment.
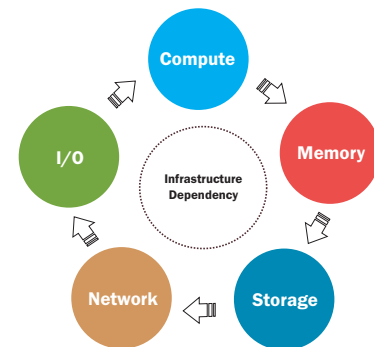
## Performance with Pinpoint Accuracy

MARS Correlate provides a wide range of reports - from baseline and inventory reports to storage environments Infrastructure Assessment and Storage Assessment reports. It even provides a Capacity Planning Report for incremental scaling.
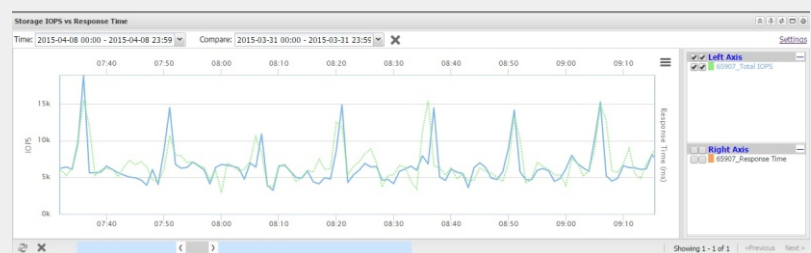
## Proven Deployments

**206**
Worldwide Installations
**Across Verticals:**
Financial Services,
ITES/Software, Healthcare,
Education, Telecom,
Insurance, Energy

**10,089**
Servers Processed

**161,541**
VMs Processed

**11,500**
VMs in the largest
datacenter processed

## Platform Specifications

### VIRTUALIZATION ENVIRONMENTS

**VMware**

| | |
|---|---|
| ● ESX/ESXi Server | 4.0 or above |
| ● vCenter | 4.1.0 and above |
| Hyper-V | 2008 R2, 2012, 2012 R2 |
| XenServer | 5.5 and above |

### STORAGE SYSTEMS

| | |
|---|---|
| NetApp | FAS Storage Systems |
| EMC | Symmetrix, VMAX Series |
| IBM | XIV |

### INSTALLATION ENVIRONMENT

| | |
|---|---|
| VMware vSphere | 4.0 or above; OR |
| Windows | Windows 2008 R2 or Windows 2012 R2, with Hyper-V |
| Storage | 150GB |
| Memory | 4GB |
| Cloud service | "Secure FTP" |