EMC M&R (WATCH4NET)
Cross-Domain Performance, Capacity and SLA Management

Ensure high service quality to users
The data center infrastructure is a rapidly-evolving environment containing hundreds or thousands of devices from a wide range of vendors. Each piece of equipment must be understood and analyzed proactively and in real time.

The core EMC Watch4net technology platform that provides functionality across the ASD portfolio of products is called EMC M&R. EMC M&R (Watch4net) core technology software delivers enterprise and carrier-class cross-domain performance and service level management which transforms data into actionable information, helping assure the delivery of business services. It provides real-time, historical, and projected visibility into the performance of networks, systems and storage environments. EMC M&R’s flexible architecture and expansive library of out-of-the-box reports and data collectors give OSS and IT professionals the power to enable business change for competitive advantage—whether it is capacity planning for private cloud deployments, reporting on the customer experience in mobile wireless networks, or other similar strategic objectives.

FULL VISIBILITY INTO INFRASTRUCTURE PERFORMANCE
With comprehensive Web dashboards and targeted reports, users see, in real-time, the status of the managed infrastructure and business services, which allows them to troubleshoot problems faster, understand trends, and verify compliance of service level agreements (SLAs).

Views are categorized by key topics such as inventory, performance, capacity, situations to watch, top reports, service levels, trending, and forecasting. Dashboards include all the technical graphs and tables, strategic reports, key performance indicators (KPIs), and preconfigured analytics needed to diagnose health, assess performance, and plan future growth of your infrastructure. All reports display the latest-available data (real-time). Historical data is also available for analysis. EMC M&R provides multiple ways to access reports quickly and efficiently via a navigation tree, a search engine, global views, and drill-down facilities.

SERVICE LEVEL MONITORING
By consolidating business and technology metrics, EMC M&R allows contractual SLA measurement and reporting. The product’s flexibility can define most complex SLA formulas, exclude maintenance periods, track, in real time, the compliance for every SLA indicator, as well as publish SLA reports for customers.

ESSENTIALS
Scalability and Breadth
- Provides end-to-end performance monitoring of network, compute, and storage resources from a single vantage point

Adaptability
- Enables business transformation by rapidly accommodating new technologies

Efficiency
- Lowers costs by making it easier to create and maintain reports, improve workflow, and enhance IT staff productivity with proactive alerting

Accessibility
- Delivers concise, targeted reports to C-level executives and business unit managers to support planning, while providing detailed KPI dashboards to help IT improve troubleshooting and fine tune system and network performance
ANALYTICS AND ALERTING
As performance data is collected, EMC M&R continuously analyzes, in real-time, thousands of metrics across the entire infrastructure, including system and application components. Any suspicious activity is reported and documented in a global "situations to watch" reports. Alerts are sent as soon as a potential problem (current or projected) is detected, using either fixed thresholds or adaptive thresholds based on baseline deviation. This enables operations staff to react to performance issues before they impact service levels.

SECURE WEB PORTAL WITH ROLE/PROFILE ACCESS CONTROL
EMC M&R features a role-based, multi-tenant, Unified Presentation Layer. Roles and profiles ensure restricted access through the portal. Dashboards are fully configurable. Each user profile can be presented with its own targeted information about service level and performance summaries:

- Operators and engineers get real-time and historical visibility for troubleshooting and capacity-trending purposes
- Executives have access to clear and concise summary reports
- Customers get service levels and performance summaries for their specific sites

WIDE TECHNOLOGY COVERAGE AND FLEXIBLE REPORTING
EMC M&R is packaged with an extensive set of predefined and ready-to-use reports, providing your business with real value from day one. Users can customize or create reports tailored to specific needs. EMC M&R features all the capabilities necessary to customize reports and create new ones from the ground up. These tools include a graphical, wizard-driven report builder and a formula editor—both of which use mathematical and Boolean operators to define custom KPIs.
Scalable, Carrier-Class Architecture
EMC M&R's modular architecture lets you respond rapidly to changing technology, and roll out new services faster to gain or maintain a competitive edge. A single EMC M&R server can manage thousands of devices and process millions of indicators, and is designed to scale smoothly as you grow.

COLLECTORS
Collectors are used to retrieve raw data from multiple sources such as SNMP, SSH devices, Network Management Systems (NMSs), Element Management Systems (EMSs), Cisco NetFlow, VoIP equipment, and enterprise data (i.e., SQL databases, files, and home-grown tools). Collectors can easily be scaled and deployed as the business grows.

SOLUTIONPACKS
SolutionPacks are integrated packages providing a list of reports, pre-configured alerts, and automation required for EMC M&R module dependencies to effectively monitor the performance of the managed infrastructure. SolutionPacks provide the differentiation that determines the end user feature functionality tied to any ASD product portfolio offering. The SolutionPack Center makes updating a SolutionPack or changing a configuration (example: device credentials) as simple as picking applications from within an "application store".

BACK-END AND DATABASE
The back-end module receives, normalizes, and consolidates the collected data. Data aggregation is performed for report acceleration and data retention is managed for storage optimization.

New in EMC M&R (Watch4net) Release 6.5
- Free geo-map views support enabling users to create location based visualizations.
- Automated approach to performing all SolutionPack upgrades via a single click of a button to update all components.
- Improved EMC M&R platform upgrade via one automated CLI command.
- Improved device Discovery Center functionality enabling the management of credentials for groups of devices.
- Simplified customization of columns within tabular reports directly from within the Browse mode.
- Backup of customized files when upgrading modules and/or Solution Packs ensuring information is retained post upgrade to a new release.
- A new and simple to use LDAP configuration UI.
- Ability to create personal reports and dashboards, as well as, report customization capabilities for LDAP authorized users.
- Visual improvements in the exporting of PDF files for reports.
- Sectorized cell view enabling a more detailed visualization of cell sites for users of the Mobile Edition of the Service Assurance Suite.
- New and updated Solution Packs made available via the Solution Pack Center.
WEB PORTAL
A secure Web Portal displays performance and SLA reports to operations, engineering and customers. Advanced features include a graphical report builder, a formula editor to compute complex KPIs, an outage editor to exclude and document maintenance periods, LDAP authentication support, profile-based security, a centralized management GUI, and console integration with NMS/EMS applications.

Supporting EMC’s Portfolio of Service Assurance Suite, ViPR SRM and ViPR Products
Service Assurance Suite
The EMC Service Assurance Suite is designed to manage virtualized environments, cloud environments, and the new Software-Defined Data Center (SDDC), the EMC Service Assurance Suite helps enterprises and service providers maximize availability, improve performance, and increase efficiency by visualizing, analyzing, and optimizing their compute, network and storage infrastructure. EMC M&R plays an integral role in this offering, making it possible to:

- Visualize cross-domain monitoring and management through a unified presentation layer.
- Analyze and identify performance-related degradation issues before business processes are impacted.
- Optimize service levels and resource utilization through SLA monitoring and historical performance reporting.

ViPR SRM
The EMC ViPR SRM product enables you to identify and manage the impact that storage resources have on the performance and availability of your applications. You can assure storage services through end-to-end analysis—from the application to the host and down to the storage array. With improved insight, your storage resources will be optimized, resulting in better cost control even while data grows at record rates.

EMC M&R is a keystone and embedded technology within the software as it provides:

- Real-time updates through dynamic reporting and analysis spanning applications, servers, network and storage.
- The primary presentation layer enabling users to understand application performance and availability and correlate its relationship with the supporting storage infrastructure.

ViPR
EMC ViPR is a software-only product that transforms existing storage into a simple, extensible and open platform. By delivering fully automated storage services, it enables the full potential of the software-defined data center (SDDC). EMC M&R enables administrators to maximize utilization of their EMC ViPR SDDC platform with the SolutionPack for ViPR.
Achieve Your Business Goals Today and Tomorrow

EMC M&R delivers powerful, predictive analytics that are easy to retrieve, display and understand. It provides information and tools to operate more efficiently and to adapt quickly to changing technologies and future business requirements.

REDUCE COSTS

- Reduce operating expenses, optimize capital expenditures, and increase ROI through rapid integration and automation.
- Improve IT productivity by correlating performance across system, application, and network performance to isolate problems more quickly.

ASSURE OPTIMAL SERVICE

- Reduce downtime with proactive alerting using “situations to watch” and other report views.
- Proactively address performance issues before they impact service levels.
- Consolidate business and technology metrics to facilitate contractual SLA measurement and reporting.

IMPROVE ACCURACY/EFFICIENCY OF BUSINESS PLANNING

- Use trend reports to predict future requirements and plan capital expenditures more accurately.
- Track and predict usage across compute, network, and storage to support provisioning infrastructure as a service (IaaS) in private cloud deployments.

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller, visit www.emc.com, or explore and compare products in the EMC Store.