



RMF Magic

The Solution for Proactive Storage Performance Management

Reliable, fast access to mainframe storage data is essential to the performance of your applications. If you know what is happening inside the disk subsystem you can resolve problems before they affect performance.

you can optimize I/O throughput and solve performance trouble before it affects your end users. This way you spend less time on fire-fighting and can focus on proactive performance management.

RMF Magic creates profound insight into z/OS storage performance by applying intelligent algorithms to the available RMF or CMF data. It enables you to get better performance on less hardware with less time spent on resolving issues.

Today's mainframe storage architectures are more capable than ever. At the same time their increased complexity makes it more difficult than ever to manage I/O performance. The main performance bottlenecks have shifted from the host down to the internal components of the disk subsystem, and are not visible with the classic I/O performance metrics.

RMF Magic enables complete, easy, and effective disk subsystem performance management by using both graphical views and detailed reports. With RMF Magic

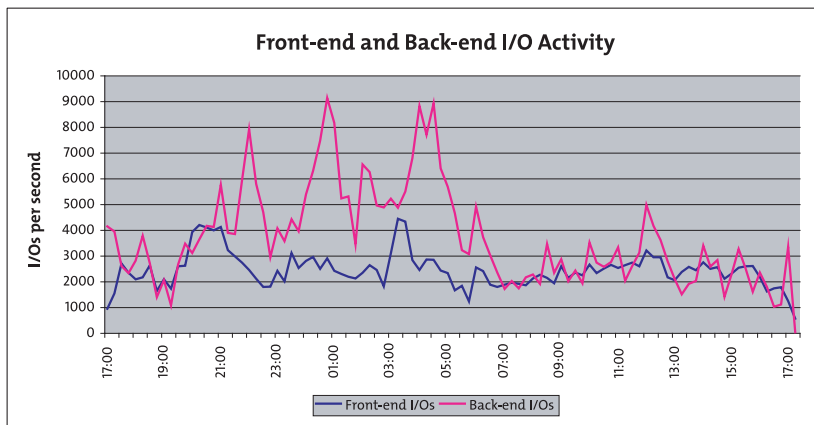
Our customers use RMF Magic to:

- ▶ Achieve more throughput on existing hardware
- ▶ Reduce storage hardware acquisition costs
- ▶ Simplify performance management of complex disk environments
- ▶ Improve I/O performance service levels
- ▶ Proactively manage storage performance
- ▶ Perform a health check in only minutes per day
- ▶ Accelerate the resolution of I/O performance issues
- ▶ Reduce dependency on hardware vendors
- ▶ Maximize replication session health while minimizing bandwidth costs
- ▶ Create predictive trend analytics

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◀ Achieve Better Balance

By seeing the workload on the different internal components of the disk subsystem, optimal balance can be achieved. Better balance means better performance and more throughput without the need to purchase additional storage.



RMF Magic Benefits

▶ Performs Daily Health Check

The RMF Magic daily dashboard allows you to recognize workload volumes, patterns, peaks and performance exceptions. It intelligently combines the capabilities of the disk subsystem hardware with the workload characteristics. This generates early warning of bottlenecks inside the disk hardware. Drill down options allow you to address issues proactively before application performance degrades.

▶ Optimizes I/O Throughput

With the daily monitoring capabilities you can identify opportunities to improve the lifetime of existing disk subsystems by rebalancing workloads to utilize the hardware more efficiently and optimize overall disk subsystem throughput in your environment.

▶ Validates Service Level Agreements

RMF Magic reports performance statistics by Storage Group or by customizable volume group, enabling you to report on performance and throughputs by storage user. This way Service Levels can be managed and instantly validated.

▶ Builds Historical Database

The RMF Magic historical performance database contains the averages as well as 95th percentiles to give an accurate assessment of workload growth and storage performance over a prolonged period of time. This can be used to identify trends and to report to management.

▶ Diagnoses I/O Performance Exceptions

Performance issues can be caused by many different components in the disk subsystem, such as the host links, the replication links, the cache and the back-end hard disks. RMF Magic provides performance information on all of these components inside each individual disk subsystem and adds a health assessment.

▶ Supports Storage Tiering

The Migration Advisor service tells you which volumes or storage groups can run safely on larger devices without a performance penalty and which volumes will benefit most from SSD technology. By tiering each workload can get the most cost-effective technology that meets its performance requirements, greatly reducing acquisition costs.

▶ Monitors Replication Environments

Disaster recovery replication environments are complex and expensive. RMF Magic provides functionality to help keep these environments running smoothly. It also has sizing features to optimize the lease of expensive bandwidth for asynchronous data replication like EMC SRDF/A, HP/Hitachi Universal Replicator, IBM Global Mirror and IBM Global Mirror for zSeries (XRC).

▶ Shows Back-end Drive Performance

RMF Magic processes the information from the disk subsystems on the back-end configuration and performance, giving you insight into the performance of the physical RAID arrays.

▶ Helps Plan EAVs

From a systems management perspective, extended address volumes (EAVs) are highly desirable, but it is not easy to determine which volumes can be merged together. RMF Magic provides insight, and the Migration Advisor service calculates recommendations at the volume level based on the activity of the individual devices involved.

▶ Reduces Dependency on Third Parties

It is not uncommon for problem diagnosis to take a week or two if the disk vendor has to be called in. With RMF Magic you can draw your own conclusions and solve your storage performance problems without having to bring in hardware vendors or external consultants.

RMF Magic Features

► Consolidated Performance Data

RMF Magic automatically processes RMF data from multiple z/OS servers to extract and consolidate configuration and I/O load data by physical disk subsystem. The result, regardless of the number of servers or Parallel Sysplexes, is a disk-centric view of disk subsystem I/O load and performance, which is necessary for problem determination in today's architectures.

► Complete Software Solution

RMF Magic requires no programming, is easy to use and keeps up to date with the new record formats and data sources. Since the product is based on existing SMF and RMF/CMF data sources it does not introduce additional overhead on the production systems. There is no need to purchase and learn multiple storage performance tools if you change or mix vendors since IntelliMagic products are applicable to storage from all vendors. Since RMF Magic is an out-of-the box solution, your time can be spent on diagnosing instead of programming.

► Automated Operation

RMF Magic runs as a batch job on z/OS or on a Windows PC. In the first steps of the analysis the SMF and RMF

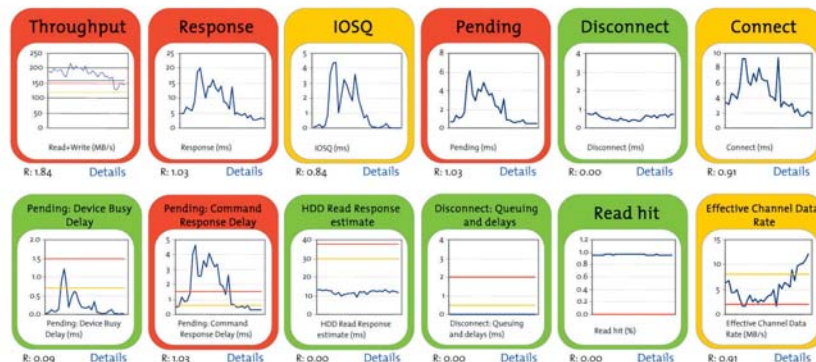
information is analyzed and enriched, and stored in a database. The database can be DB2 on z/OS, or it can be a local database on your PC. The analysis and database load process is fully automated. You can also choose which set of reports you would like to be generated automatically, such that every morning you will have a full report on the disk subsystem performance of the previous day available. By just pushing a button, all RMF Magic charts can be exported to PowerPoint.

► Multi-dimensional Drill Down Interface

RMF Magic provides visibility into current performance and provides a fast and easy click-through method to diagnose performance problems in the making, and to resolve application related problems.

► Works with Disk Magic & Migration Advisor

Two optional add-on offerings are available with RMF Magic. Disk Magic provides accurate modeling of future I/O performance on a variety of storage hardware and workload scenarios. The Migration Advisor service calculates optimal performance layouts in the migration of volumes to maximize balance on hardware resources.

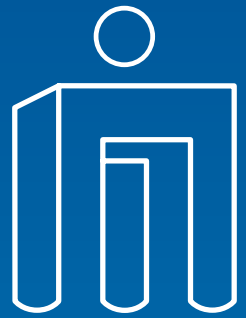


◀ Dashboard for Instant Insight

This daily dashboard is automatically generated.

The charts are color coded for an instant health check.

By clicking on a yellow or red chart, you can zoom into the detail data which enables you to diagnose why thresholds are being violated.



IntelliMagic

About IntelliMagic

IntelliMagic is known for its storage performance management expertise. Our products give clear insight in storage subsystem performance and capacity planning.

IntelliMagic enables you to use your hardware efficiently, save cost and increase end-user satisfaction.

IntelliMagic's products use advanced algorithms for data analysis and performance prediction, in combination with an effective, flexible and intuitive user interface. Users are guided safely through valid problem solution scenarios. It is this powerful combination that justifies the 'Magic' suffix in the name of each of our products.

Our goal is complete customer satisfaction. Responsiveness to customer questions and a customer-first mentality are very important to us.

We strive towards long-term relationships with our employees, customers, and suppliers.

Other products from IntelliMagic are:

▶ **Disk Magic**

Disk Magic is a Windows-based modeling product that shows current performance and evaluates upgrade scenarios for your Disk Subsystems. Using Disk Magic you can save money on hardware acquisition while at the same time improving performance, because you buy exactly the hardware and options that your workloads need.

▶ **Batch Magic**

Batch Magic is a powerful application for tape and batch window tuning and capacity planning. It enables you to understand all aspects of your z/OS tape workloads.

Contact us ▼

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