Rocket® MultiValue Performance Experience

Understand and Enhance Rocket® UniVerse Performance

For a Rocket® UniVerse database administrator, it can be difficult to pinpoint what adjustments will best improve the performance of Rocket UniVerse. And it's impossible to predict future performance bottlenecks. But when your system's running slowly, you need to know whether the issue is with Rocket UniVerse, the operating system, the hardware, or some combination among them. Performance is also vital when planning to lift and shift your application to a new OS, hardware platform, or to the Cloud. After all, any Rocket UniVerse performance challenges could have a negative impact on your users or customers.

The Rocket® MultiValue Performance Experience (MVX: Performance) is a system monitoring tool for Rocket UniVerse that enables you to understand and enhance Rocket UniVerse performance. MVX: Performance helps you identify and escalate performance-impacting events specific to Rocket UniVerse. Escalated events also include guidance on possible resolutions along with data snapshots, allowing you to easily track and address the source of an issue. In addition to an Events monitoring tile, the MVX: Performance user interface (UI) includes other monitoring tiles that actively monitor issues with Sessions, Locks, and Host CPU/Memory. The MVX: Performance UI also allows you to dive deeply into specific Process IDs (PIDs).

Product Benefits

- Quickly pinpoint and address Rocket UniVerse performance issues

- Gain insight to help prevent future bottlenecks

- Maximize Rocket UniVerse availability

Quickly Pinpoint and Address Rocket UniVerse Performance Issues

MVX: Performance looks at several data sources to help database administrators (DBAs) identify and evaluate issues, including complex and sometimes hidden ones, and then provides resolution guidance. Rather than hearing from a user or a customer after the fact, DBAs are notified of database events as they occur and can react quickly.

MVX: Performance monitors Rocket UniVerse metrics as well as operating system metrics, and the dashboard provides a single view into event flow. This makes report generation a breeze and equips DBAs to nimbly delve into an issue. The dashboard is designed for usability for both beginners and advanced Rocket UniVerse DBAs.

The dashboard currently consists of four tiles: Events, Sessions, Locks, and Host CPU/Memory. For a registered instance of Rocket UniVerse, the Events tile monitors more than 20 events (with more to come) that could impact performance. You can configure the Events tile according to the usage profile of your server. The current list of events is specific to Rocket UniVerse and inaccessible to third-party monitoring tools.

Figure 1:

The MVX: Performance Events tile and table display the performance-impacting event affecting the UniVerse server. Selecting the events gives you detailed insights into possible resolution and the data snapshot to assist with root cause analysis. The event can be converted into tasks for DBAs to address later or to assign to others on the team.
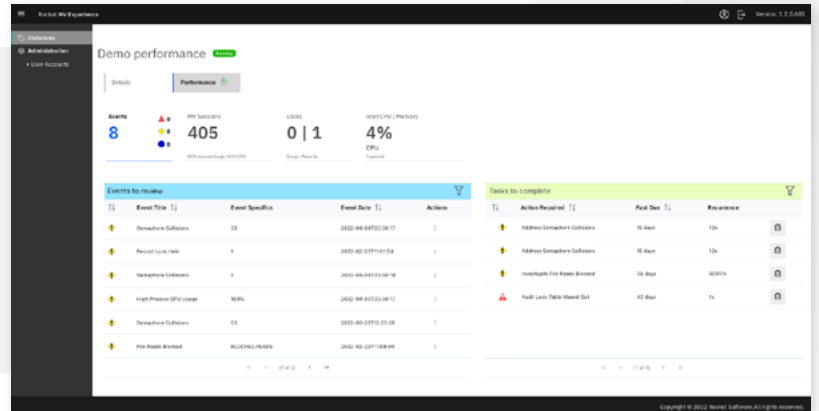
Gain Insight to Help Prevent Future Bottlenecks

By studying and making plans based on trends and reports for less critical issues, MVX: Performance allows DBAs to be proactive, possibly preventing future bottlenecks. For example, by looking at license usage over time, you can easily meet predictable spikes in demand.

The MVX: Performance Sessions monitoring tile shows information on the number of active users logged into the registered Rocket UniVerse instance, and on their license consumption. By showing users-versus-license usage on the server, the dashboard helps reveal if the system is being overwhelmed. For instance, if a "License Limit Warning" alert is generated, you know immediately that the number of authorized licenses is nearing its maximum number of users. Based on the information in the alert, you can activate new Rocket UniVerse users and connection pools to meet spikes in demand.

The MVX: Performance Sessions monitoring tile also charts peak license usage, which you can pivot over time periods such as the last seven days, the last month, or the last three months.
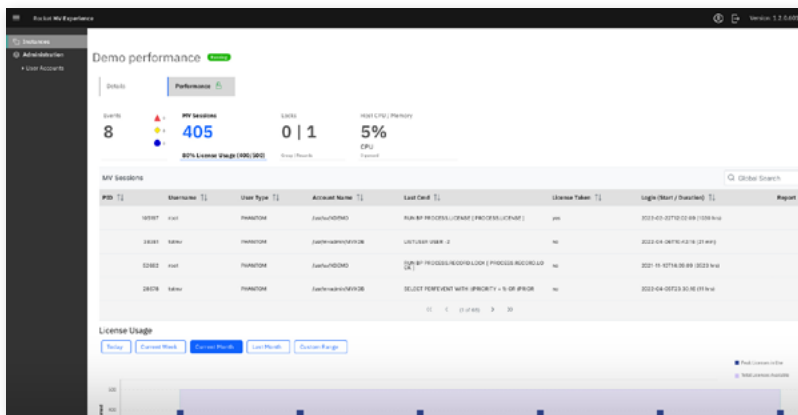

Figure 2:

With the **Sessions** tile, you get a more in-depth view of the specific Process IDs (PIDs) that have been running on the system so you can better understand consumption across key performance tracking parameters, such as memory, CPU usage, file/record locks, and PORTSTATUS output for that specific PID.

Maximize Rocket UniVerse Availability

DBAs can rely on the MVX: Performance dashboard and alerts to monitor aspects such as license usage, record locks, and database process resource usage. MVX: Performance empowers DBAs to see if Rocket UniVerse is behaving as expected and to quickly identify and address issues that could impact performance.

Using an easy-to-configure event notification engine, DBAs choose how they want to be notified of performance-impacting issues. This could include setting up alerts to appear in the UI, receiving notifications via email, or directing issues via an API. DBAs can also decide when notifications should be sent; database event notifications can be sent in daily, weekly, and/or monthly reports for reviewing recurring issues.

Figure 3:

The Locks monitoring tile provides insight into the current file, group, and record locks being applied on the system. It shows trends related to the types and numbers of locks being held over time so you can easily identify abnormal activity on the server and gain additional insight into the specific locks that have been applied.

A table displays information related to record and file locks so you can determine if the locks need to be released, what process or people are holding the lock, how long the lock has been held, and how many additional processes are waiting on it. If you want similar information for group locks, simply look at the group locks table.
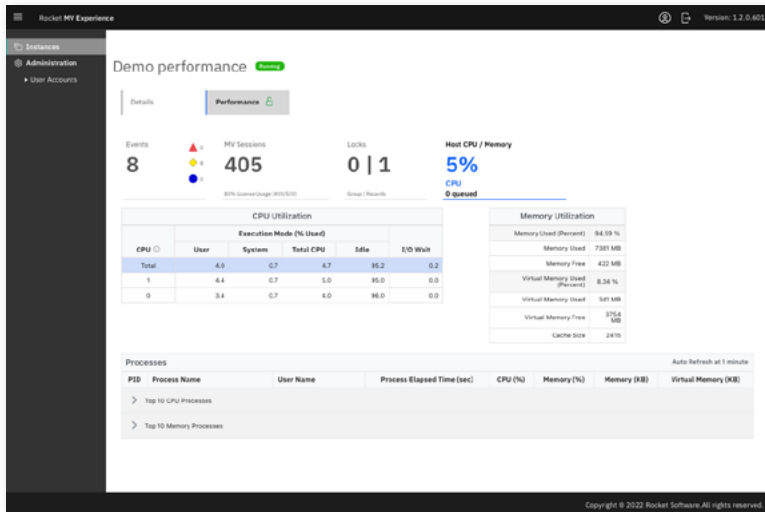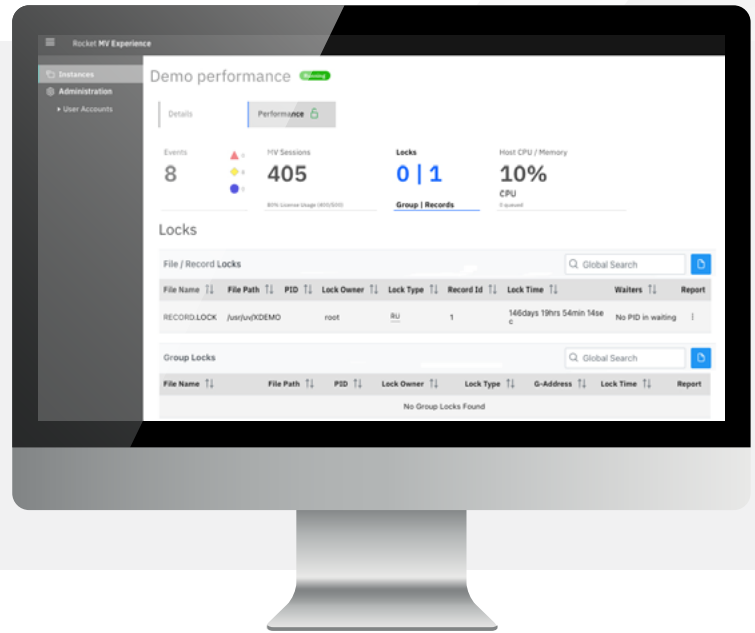
Figure 4:

The Host CPU Memory monitoring tile shows CPU and Memory consumption and the number of processes queued.

CPU utilization stats at a glance: % used in terms of users, systems, total CPU, idle and I/O wait.

Memory Consumption stats show: Memory used (%), Memory used (MB), Memory free (MB), Virtual memory used (%), Virtual memory used (MB), Virtual memory free (MB), Cache size.

You'll also see the top 10 processes for CPU and top 10 for memory: PID, process name, user name, process elapsed time (sec), CPU (%), Memory (%), Memory (KB), Virtual Memory (KB).

> Rocket Software's MultiValue Performance Experience for UniVerse provides proactive awareness of important performance-impacting issues that affect the stability of mission-critical applications where downtime is not an option, including valuable insights so we can quickly pinpoint and address these issues.

Henry Unger
President, Pulsiam

Get started with MVX: Performance today

It's simple to install and easy to use. Best of all, it has a short learning curve—but only if you're on Rocket UniVerse 11.3.4. So, be sure your maintenance contract is current and plan your upgrade to Rocket UniVerse 11.3.4.

About Rocket Software

Rocket Software partners with the largest Fortune 1000 organizations to solve their most complex IT challenges across Applications, Data and Infrastructure. Rocket Software brings customers from where they are in their modernization journey to where they want to be by architecting innovative solutions that deliver next-generation experiences. Over 10 million global IT and business professionals trust Rocket Software to deliver solutions that improve responsiveness to change and optimize workloads. Rocket Software enables organizations to modernize in place with a hybrid cloud strategy to protect investment, decrease risk and reduce time to value. Rocket Software is a privately held U.S. corporation headquartered in the Boston area with centers of excellence strategically located throughout North America, Europe, Asia and Australia. Rocket Software is a portfolio company of Bain Capital Private Equity. Follow Rocket Software on LinkedIn and Twitter.