

Simple, In-Place SSD Management



Ease NVMe™ SSD Management

Complex mission-critical workloads like big data, multi-tenant cloud and hyperscale applications ignited a revolution in data center design, deployment, optimization and support. They also fostered a level of complexity that makes their management extremely demanding. Managing your storage shouldn't be.

Micron's 9300 series brings simple NVMe SSDs to your infrastructure, freeing your IT staff to focus on growth projects, not device management. Advanced enterprise infrastructures like big data, real-time analytics, and hybrid and multi-cloud deployments have become the IT norm. Data architectures and the storage devices underpinning them have grown in capacity, capability and complexity.

Ease NVMe SSD management with Micron's 9300 series SSDs. Their integrated health monitoring and easy update features help simplify your complex storage environment.



Figure 1: Micron® 9300 SSD With NVMe

3 Reasons to Use Micron's 9300 Series NVMe SSDs to Simplify SSD Management

1. Simple

Easily ensure your 9300 series SSDs are equipped with the latest firmware from Micron engineers – in one single file.

2. Continuity

Keep your complex infrastructure operating at its peak by ensuring your 9300 series SSDs are up to date without host system restarts and application/service interruption.

3. Standard

Stay on top of what's driving your infrastructure with SSD health monitoring that is a snap with standard SSD health reporting through SMART.

With the growth of massively distributed applications, businesses are building their future on the cloud, data growth rates are demanding more from storage than ever before and storage technology is moving faster every day. SSDs are essential components that build the platforms on which these live. And managing storage devices should be as simple as possible (and they should not cause application outages).



Micron is making it easier than ever to manage our highest-performance SSDs without disruption.

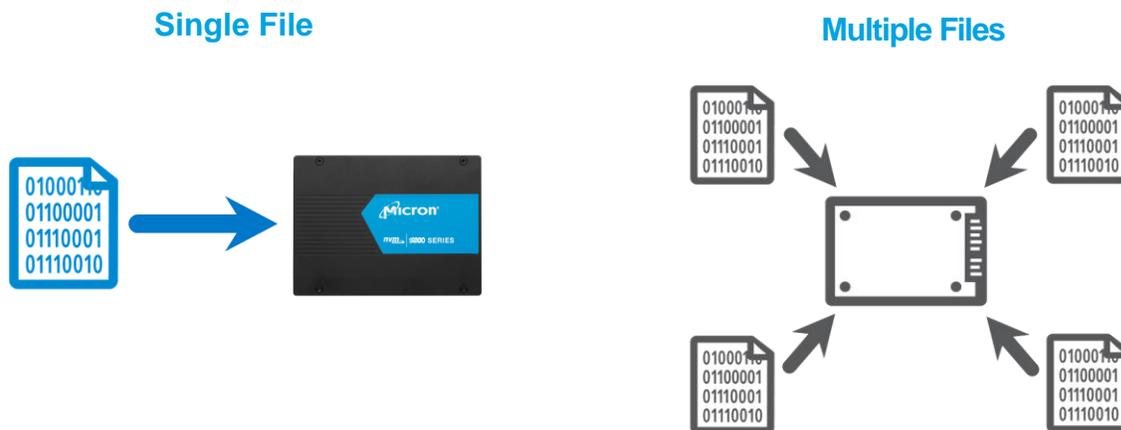
Updates and monitoring of high-capacity, high-speed SSDs with NVMe should be as easy as possible. Single-file updates without system restarts and continuous health monitoring through common standards are essential.

Simple

Firmware is at the heart of SSDs. Firmware manages the SSD's most basic operations – like reading and writing data, response times, the ability to handle a broad workload range and data integrity assurance. Firmware on SSDs has grown ever more sophisticated, incorporating a host of developments meant to ensure optimal operations.

Sophisticated firmware can sometimes make the SSD firmware update process complex and convoluted. But it shouldn't be. Micron's 9300 series of NVMe SSDs keep it simple.

Instead of a group of binary files that must be installed on an SSD in just the right order, the 9300 firmware updates are easy: one file, one update. Micron's 9300 series SSDs feature a single-file update to each of the models in the product line. The result? An easy, one-step process to keep your installed 9300 SSDs up to date.



Micron's 9300 series of NVMe SSDs support complete drive updates with a single file. We provide a fully supported tool to assist in making field updates fast and easy.

Older NVMe SSDs required multi-files for an update. This can be complex (files may have to be installed in a specific order, there may not be tools readily available and errors in the update process may render the SSD inoperable).

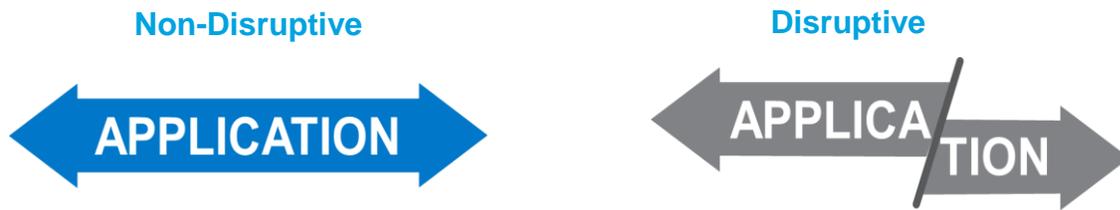
Figure 2: Simple Updates

Continuity

Firmware updates (whether single-file like the 9300 or multiple-file) may provide significant enhancements and offer compelling reasons to deploy them. With NVMe SSDs, a firmware update requires a system restart (because NVMe SSDs sit on the PCIe bus). However, when the SSDs are already deployed in running systems, this forced system reboot can be disruptive.

Micron's 9300 series SSDs offer firmware update without reset – a feature that enables new firmware updates to be deployed on installed, running SSDs without requiring a system restart.

This means that applications run smooth and without the complete application shutdown/restart sequence needed when an update forces the host platform to reboot.



The 9300 series SSDs enable smooth application operation when updating the SSD. Our firmware update without reset feature enables new firmware updates without the host system having to be rebooted.

When SSD updates require a system restart, application services are interrupted and unavailable on the affected platform until a complete system restart.

Figure 3: Application Behavior

Micron® 9300 Series NVMe™ SSDs

Standard

As complex, on-premises and cloud infrastructures have become the norm, data architects and systems administrators have gotten savvier. They expect SSD monitoring and management to be available via standard communications channels versus being proprietary.

Our Micron 9300 series SSDs have a litany of monitoring and reporting functions integrated into the drives themselves. These management-critical attributes are monitored through the industry-standard SMART process. Standardization helps enable easy management of vast data centers, virtualized computing deployments and tiered storage solutions.



Figure 4: Standard Monitoring and Management

Learn More

Visit www.micron.com to learn more about the 9300 series SSDs with NVMe. Contact our [Sales Team](#) to learn about evaluating the 9300 in your environment.

micron.com

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