Rebranding Cisco MDS 9000 SAN-OS Software as Cisco MDS 9000 NX-OS

Introduction

As part of the evolution of the data center, big changes are coming in the way that servers connect to each other and to their I/O devices. Over the next several years, the compelling advantages of server I/O convergence and unification will dramatically simplify data center provisioning and operations and reduce total cost of ownership (TCO). As part of its Data Center 3.0 vision, Cisco has already begun offering a unifying suite of products that will bring together the disparate worlds of IP networks, Fibre Channel SANs, and high-performance computing (HPC) server fabrics—and more products are on the way.

While many of the changes leading to convergence are product releases and features, others are more symbolic. One of these symbolic changes is the rebranding, of Cisco® MDS 9000 SAN-OS Software as Cisco MDS 9000 NX-OS® Software effective with Release 4.1.

Why Make This Change?

The industry, with Cisco leading the way, has laid out a roadmap to converge LANs and SANs over the next several years. The LAN and SAN will first intersect and then unify.

This convergence is already underway. The Cisco Nexus 5020 Switch, which Cisco announced on April 8, is the first data center product to deliver Ethernet switching, Fibre Channel, and Fibre Channel over Ethernet (FCoE). To distribute Fibre Channel traffic to Cisco MDS 9000 family–based SANs, the switch needs to understand storage as well as Ethernet, and the SAN as well as the LAN. When FCoE comes to the Cisco MDS 9000 family and Cisco Nexus 7000 Series Switches, these products will need to understand each other's environments as well.

If Cisco had to merge two different operating systems together to achieve this understanding, the process would have been challenging, even daunting. But in fact, Cisco MDS 9000 SAN-OS Software and Cisco MDS 9000 NX-OS Software are the same operating system, and always have been. The team that developed the Cisco Nexus 7000 Series is part of the same group that has been delivering the Cisco MDS 9000 Family products since 2002, and Cisco MDS 9000 NX-OS Software has been based from the start on the Cisco MDS 9000 SAN-OS Software source code. Both products are built from the same source code tree today, but for different environments and with feature sets appropriate to those environments. One image is built and installed for the Fibre Channel SAN environment and storage, and the other is built and installed for LAN switching, but the two share a common infrastructure, look and feel, engineering team, and code base.

Now, as the SAN and LAN intersect and interoperate, Cisco MDS 9000 NX-OS Software has become not just the OS for Cisco Nexus products, but the next OS across the data center.

How does this change affect you? Cisco will continue to work with storage partners in the same way as previously. Upcoming releases will be named as before except that they will be called "NX-OS" instead of "SAN-OS." The names of the software images you load onto your switches will not

change. And because the software itself is still the same, forward and backward compatibility and upgrading will be maintained.

What Will Actually Happen?

The next major release of Cisco MDS 9000 SAN-OS Software would have been Cisco MDS 9000 SAN-OS Software Release 4.1, but now it will be called Cisco MDS 9000 NX-OS Software Release 4.1 instead. Cisco MDS 9000 Family software releases prior to Release 4.1 will still use the name "SAN-OS," so there will be no change to previously released code, documents, or collateral.

The Cisco Nexus and Cisco MDS 9000 Family platforms will start numbering their releases in a single, continuous sequence. Some releases may contain new features for one or more Cisco Nexus platforms, some may contain new features for Cisco MDS 9000 Family platforms, and some may contain enhancements for both product families. This scheme may result in release numbering gaps as seen from the perspective of a single platform. For example, if Cisco MDS 9000 NX-OS Software Release 4.1(2) contains enhancements only for the Cisco Nexus platform, Cisco MDS 9000 Family customers will perceive that Cisco MDS 9000 NX-OS Software Release 4.1(1) is followed directly by Cisco MDS 9000 NX-OS Software Release 4.1(3).

What Does This Change Mean for Customers?

From a functional point of view, this change does not affect anything. Cisco MDS 9000 Family products will continue to work the same way they always have. Cisco MDS 9000 Family switches running Cisco MDS 9000 NX-OS Software Release 4.0 and later will interoperate with switches running Cisco MDS 9000 SAN-OS Software Release 3.0 and earlier, just as switches running Cisco MDS 9000 SAN-OS Software releases work with earlier software releases. This change is a name change only. Except for the name, Cisco MDS 9000 NX-OS Software Release 4.1 on the Cisco MDS 9000 Family products is the exact same software that would have been shipped as Cisco MDS 9000 SAN-OS Software Release 4.1 if the name had not been changed. From a practical, operational point of view, customers are not affected.

The capabilities delivered on each platform will continue to be appropriate for that platform's hardware. Furthermore, each software image checks its hardware configuration before attempting to install itself, so it is impossible to load a Cisco MDS 9000 NX-OS Software image for one platform onto another platform. Cisco MDS 9000 NX-OS Software documentation, downloads, and collateral will be identified by platform so that customers can easily focus on the storage features for the Cisco MDS 9000 Family or the Ethernet features for the Cisco Nexus products.

Note that the name change reflects the strategic convergence described earlier; it does not cause the convergence. The Cisco Nexus Family will include the features it needs to interoperate with Fibre Channel SANs, but it will not become the infrastructure for implementing Fibre Channel SANs; that is the role of the Cisco MDS 9000 Family. Conversely, the Cisco MDS 9000 Family will support FCoE in the future, but it will not become a core Ethernet switch; that is the role of the Cisco Nexus 7000 Series.

What Does This Change Mean for Cisco Storage Partners?

Original storage manufacturer (OSM) qualification and release processes for the Cisco MDS 9000 Family remain unchanged. There will be one-time documentation changes on both product technical publications and marketing collateral referring to the new release. Software image naming conventions will remain the same, as "SAN-OS" does not currently appear in the names of software images for the Cisco MDS 9000 Family. Cisco product IDs (PIDs) will also remain

unchanged, so ordering is not affected. OSM partners will continue to qualify only those releases that contain new storage-related features or fixes; they do not need to pay attention to Ethernet-only releases. OSM partner managers will continue to communicate release contents through their roadmaps as they do today.

Summary

Cisco MDS 9000 SAN-OS Software and Cisco MDS 9000 NX-OS Software are the same operating system and have been since the Cisco MDS 9000 NX-OS Software was announced in January 2008.

Starting from Release 4.1, Cisco MDS 9000 SAN-OS Software will be rebranded as Cisco MDS 9000 NX-OS Software. Cisco MDS 9000 NX-OS Software is based on Cisco MDS 9000 SAN-OS Software and is built from same source code tree, and rebranding establishes a single data center OS.

The effects of this change are mainly symbolic:

- Storage partner release processes remain the same.
- Release naming conventions remain the same except that “NX-OS” will replace “SAN-OS.”
- Storage services interface (SSI) images remain the same.
- Compatibility with previous Cisco MDS 9000 SAN-OS Software releases will continue.
- Previous versions of Cisco MDS 9000 SAN-OS Software are not renamed.

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