



DATA CENTER

Brocade FOS Target Path

Version 1.0

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Brocade® Fabric OS® (FOS) Target Path releases are recommended code levels for Brocade Fibre Channel switch platforms. These releases are guidelines to use when trying to determine the ideal version of Brocade FOS software and should be considered in conjunction with other requirements that may be unique to a particular environment. This document is updated on a periodic basis when Brocade has modified or added new Target Path release recommendations.

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OVERVIEW

This document provides guidance for selecting an ideal Brocade Fabric OS (FOS) code version for use on Brocade Fibre Channel (FC) switch platforms, and also for selecting optimum versions of code to use when migrating from one version of Brocade FOS to another. These recommended Brocade FOS versions are referred to as “Target Path” releases.

The Brocade FOS Target Path release recommendations in this document should be used in conjunction with advice and guidance from your Brocade switch vendor, as well as any special requirements and needs of your particular environment. Always refer to the Brocade FOS Release Notes documentation and carefully review the “Important Notes and Known Defects” information prior to selecting and installing any version of Brocade FOS on a switch.

This document will be updated on a periodic, as-needed basis to reflect the latest Brocade FOS Target Path release recommendations. Always check for the latest revision when planning to install a new Brocade FOS release on a Brocade FC switch.

DEFINITION OF TARGET PATH RELEASE

A Brocade FOS release may be identified as a Target Path release only if it meets the following criteria:

- A Brocade FOS version of firmware that was created primarily for stability and reliability, and not for the introduction of new features. This version of firmware may contain RAS (Reliability, Availability, and Serviceability) improvements and enhancements, but it will typically not contain any new software features or support for new hardware.
- Most of the Brocade partners and OEMs have qualified the firmware version and support it, making it an ideal option for customer environments that procure Brocade equipment from more than one vendor.
- The specified code level must be deployed in a sufficient number of end-user production environments for a period of at least three months and must have no known critical issues or defects, including firmware-related issues identified in a Technical Service Bulletin (TSB).

Once a specific Brocade FOS code version has been identified as a Target Path release, newer patches (that is, releases that vary only with a different letter appended to the release number) that are released on the same code stream can also be considered to be as safe as the designated Target Path release. Brocade generally recommends the Target Path release for most customers; however, after reviewing known issues reported in the Release Notes, it may be appropriate to select one of the newer patches for a particular site or environment. These newer patch releases may also be formally announced as the Target Path release for that code level, and in some cases they may be designated as a Target Path release after less than the three months of customer exposure time. Since patch releases typically contain minimal changes from their predecessors, the stability of the code has already been assessed in most cases, and it is unnecessary to wait for this additional field exposure.

The Target Path release designation in no way implies or guarantees that a release will be free of defects or will not contain behavioral issues that could cause an impact in a production environment. However, following the Target Path release recommendations produces the most trouble-free environments for data center Storage Area Networks (SANs) using Brocade switching platforms.

TARGET PATH RELEASE DESIGNATIONS

The table in this section specifies the Target Path release for each major version or family of Brocade FOS releases, beginning with Brocade FOS v6.2. In general, Brocade recommends running on the most recent major code level that is supported by a particular hardware platform, though it is not necessary to upgrade if you do not require the use of the new features or capabilities introduced in the later major release levels.

For some release levels, the Target Path release may contain some exceptions for special-purpose hardware platforms and functionality, such as encryption platforms, embedded switches, or use in a FICON® environment. These are called out in the Notes column for each major release level.

Table 1. Target Path Releases by Major Brocade FOS Level

Major Brocade FOS Level	Target Path Release	Notes
FOS v6.2	v6.2.2f	Should only be used for the Brocade 200E and 4G embedded switch platforms that are not supported with later Brocade FOS major release levels.
FOS v6.3	v6.3.2d	For FICON environments, Brocade FOS v6.3.0d can be used (v6.3.2d is not supported for FICON), though it is highly recommended that platforms being used for FICON be upgraded to Brocade FOS v6.4.2a or later.
FOS v6.4	v6.4.2a	Supported for both Open Systems and FICON environments. For units running in Access Gateway mode utilizing F_Port trunking, Brocade FOS v6.3.2d should be used. For more detailed information, refer to the section following this table that describes the F_Port trunking issue. For the Brocade Encryption Switch or Brocade FS8-18 Encryption Blade in a Brocade DCX® chassis, use Brocade FOS v6.4.2b instead of v6.4.2a.
FOS v7.0	TBD	Brocade FOS v7.0 does not have a Target Path release designated at this time. If using a hardware platform that is not supported by Brocade FOS v6.x, or if features introduced in Brocade FOS v7.x are required, the latest release level supported by an OEM should be used in most situations. For FICON environments, the only Brocade FOS v7.x code level that has been certified is Brocade FOS v7.0.0c. Brocade currently expects that a Brocade FOS v7.0.2x release will be the first formal Target Path release at the v7.0 level. The specific code version will be noted in a future update to this document.

Code Selection for Platforms in Access Gateway Mode Using F_Port Trunking

Platforms in Access Gateway mode utilizing F_Port trunking may be affected by a known issue tracked under defect #378374. If the F_Port trunks were created while operating with Brocade FOS v6.1, and then additional F_Port trunks were created later while running firmware Brocade FOS v6.2 or v6.3, a subsequent upgrade to Brocade FOS v6.4 can trigger disabling of links. Due to an inconsistency between the v6.1 and the v6.2/6.3 trunking tables, when upgrading to Brocade FOS v6.4 some of the F_Port trunk links could be disabled during upgrade. Customers with this specific configuration should use Brocade FOS v6.3.2d until a Target Path release of firmware containing a fix is made available. Customers that never created F_Port trunks while running Brocade FOS v6.1 are not at risk. Likewise, customers who created F_Port trunks only while running v6.1, and who did not create any F_Port trunks while running v6.2/6.3, are also not at risk. There are no issues related to E_Port trunks.

MIGRATING WITH TARGET PATH RELEASES

The following upgrade paths are recommended for customers who are running older versions of Brocade FOS and who wish to upgrade to a Target Path release, in order to avoid the known issues or pitfalls that might exist in some older versions of firmware. If a switch is already running at a major release level that is different from the specific code version recommended in the migration path, simply move forward to the next major release level's recommended Target Path release, and continue the migration process from there. For example, if a switch in an Open Systems environment is already running Brocade FOS v6.1.0c, the next step in the migration to Brocade FOS v6.4.2a or v7.0.0x would be to migrate to Brocade FOS v6.2.2f.

Always carefully review the Brocade FOS Release Notes for both the version of code that you are moving away from and the version of code that is being installed, prior to performing the new code installation.

Upgrade path to Brocade FOS 6.4.2a or FOS v7.0.0x for Open Systems environments:

FOS 6.0.0c → FOS 6.1.2c → FOS 6.2.2f → FOS 6.3.2d → FOS 6.4.2a → FOS 7.0.0x

Upgrade path to Brocade FOS 6.4.2a or FOS v7.0.0c for FICON environments:

FOS 6.1.2 → FOS 6.2.0e_upgrade → FOS 6.3.0d → FOS 6.4.2a → FOS 7.0.0c

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