

Automating and Simplifying SAN Provisioning for QLogic Enhanced Gen 5 (16Gb) and Gen 6 (32Gb) Fibre Channel Adapters

Leveraging Advanced Brocade Fabric Capabilities with QLogic StorFusion




Fabric pre-provisioning enables servers to be quickly and easily deployed, replaced, and moved across the SAN.

Key Benefits:

- Deploy servers in minutes, instead of days or weeks with fabric assigned provisioning.
- Fast, efficient setup for zones and LUNs before server arrives on site.
- Eliminate time consuming, expensive manual processes.
- Free IT staff to work on other projects.
- QLogic® FA-WWN and F-BLD capabilities from Cavium™ integrate with Brocade Gen 5 and Gen 6 Fabrics.
- Simple, single-pane-of-glass management with Cavium's QConvergeConsole and integration with Brocade Network Advisor.

Enterprise organizations depend on their IT experts to ensure that critical data is available whenever and wherever it is needed. At the same time, the amount of data under storage along with the number of servers, applications, and users continues to grow annually. To keep up, administrators must plan ahead and deploy servers as quickly as possible across the enterprise.

Unfortunately, many basic server/SAN setup tasks such as fabric zoning, LUN mapping and masking remain a very time-consuming, manual process for many organizations. SAN administrators must typically wait until the physical server arrives on site in order to obtain the port world-wide name (pWWN) details directly from the host bus adapter (HBA),

which is used to set up zones, storage LUNs, and other services that need port-level authentication. These activities require the coordination of many separate IT teams. And the tasks are typically performed sequentially, which can cause further delays if the teams are not readily available.

As a result, deploying a server in a Fibre Channel (FC) SAN often takes many days or weeks. Administrators must repeat this tedious, time-consuming process whenever they replace servers or move them across the enterprise. For a large enterprise environment with thousands of servers, this process can consume hundreds of man-hours and many thousands of dollars per year. And the risk of human error is high, since it is a manual process, which can cause additional delays and expenses.

JOINT CAVIUM AND BROCADE SOLUTION

Fortunately, there is a solution that allows administrators to dramatically simplify and expedite the entire process. QLogic® StorFusion™ from Cavium™ is a new suite of Enhanced Gen 5 FC and Gen 6 FC Adapter features leveraging Brocade's Gen 5 FC and Gen 6 FC Fabric Vision™ designed to address the needs of IT organizations that require reliability, security, and guaranteed network performance. Rapid deployment and orchestration are key benefits of StorFusion.

QLogic Enhanced Gen 5 FC and Gen 6 FC Adapters now integrate with Brocade's fabric-assigned port world-wide name (FA-WWN) and fabric-based boot LUN discovery (F-BLD) capabilities when connected to a Brocade Gen 5 or Gen 6 FC SAN fabric. This joint solution eliminates many tedious, manual steps and processes. At the same time, it enables key setup tasks to be easily and quickly performed before the server arrives on site.

As a result, server deployment takes just minutes, instead of days or weeks, and integration with Brocade Network Advisor further simplifies management. The ability to quickly deploy thousands of servers provides increased productivity for administrators and users, lower costs, and it frees IT staff to work on other projects.

FABRIC-ASSIGNED PROVISIONING

Instead of waiting for the physical server and HBA to arrive in order to obtain port details, administrators can create a virtual port WWN that can be used for zoning, logical unit numbering (LUN) mapping, and masking. By utilizing fabric-assigned provisioning, FA-WWNs can be automatically created and provisioned for use with current and future servers.

When the server finally arrives on site and is attached to the SAN, the FA-WWN is automatically assigned to the server. The entire process is accomplished in a few simple steps. In addition, administrators can easily perform other common activities using FA-WWN, including:

- Easily replacing servers or adapters without having to change zoning, LUN mapping or masking
- Moving servers across ports or gateways by simply reassigning the FA-WWN to another port
- Simplifying boot over SAN configurations, since any physical server mapped to the virtual port can boot from that LUN

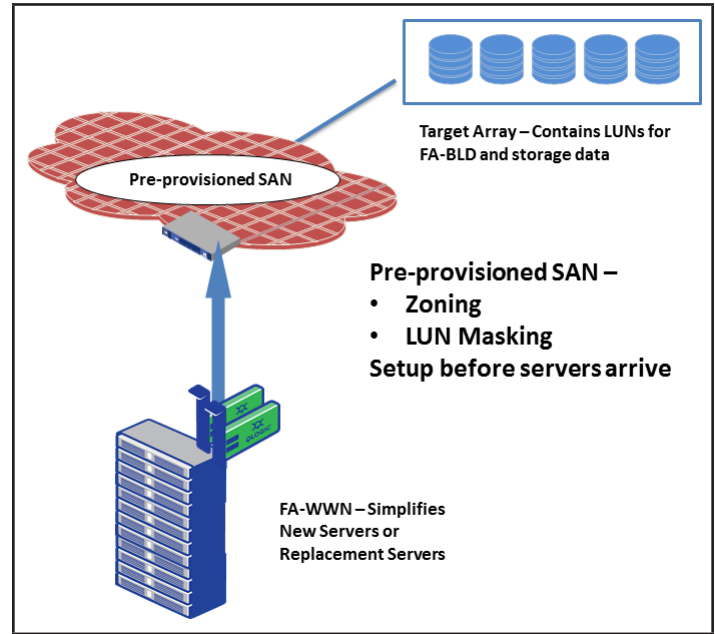
Administrators can use FA-WWN to enjoy the speed and efficiency of F-BLD. This feature enables a target LUN to be a bootable device for the assigned FA-WWN server. This process simplifies and accelerates operating system boot up for each server, and enables administrators to easily roll out replacement servers across the enterprise SAN environment.

As enterprise organizations expand their cloud, physical and virtual environments, time-to-market is critical. By implementing the latest QLogic and Brocade SAN solutions, organizations can eliminate tedious manual processes, dynamically provision resources, and deploy them into production environments quickly and easily.

TECHNOLOGY REQUIREMENTS

Enabling FA-WWN and F-BLD capabilities with QLogic StorFusion requires:

- Servers with one or more QLogic 2690 Series Enhanced Gen 5 (16Gb) and 2700 Series Gen 6 (32Gb) Fibre Channel HBAs
- Brocade Gen 5 FC or Gen 6 FC switch with FOS 7.3.0a or higher



Fast, Easy Setup and Deployment with Fabric-assigned Provisioning

ABOUT CAVIUM

Cavium, Inc. (NASDAQ: CAVM), offers a broad portfolio of infrastructure solutions for compute, security, storage, switching, connectivity and baseband processing. Cavium's highly integrated multi-core SoC products deliver software compatible solutions across low to high performance points enabling secure and intelligent functionality in Enterprise, Data Center and Service Provider Equipment. Cavium processors and solutions are supported by an extensive ecosystem of operating systems, tools, application stacks, hardware reference designs and other products. Cavium is headquartered in San Jose, CA with design centers in California, Massachusetts, India, Israel, China and Taiwan. .



Follow us:      

Corporate Headquarters Cavium, Inc. 2315 N. First Street San Jose, CA 95131 408-943-7100

International Offices UK | Ireland | Germany | France | India | Japan | China | Hong Kong | Singapore | Taiwan | Israel

Copyright © 2015 - 2017 Cavium, Inc. All rights reserved worldwide. QLogic LLC (formerly QLogic Corporation) is a wholly owned subsidiary of Cavium, Inc. Cavium, QLogic, and StorFusion are registered trademarks or trademarks of Cavium Inc., registered in the United States and other countries. All other brand and product names are registered trademarks or trademarks of their respective owners.

This document is provided for informational purposes only and may contain errors. Cavium reserves the right, without notice, to make changes to this document or in product design or specifications. Cavium disclaims any warranty of any kind, expressed or implied, and does not guarantee that any results or performance described in the document will be achieved by you. All statements regarding Cavium's future direction and intent are subject to change or withdrawal without notice and represent goals and objectives only.