

# Automating and Simplifying SAN Provisioning for QLogic® Enhanced 16GFC and 32GFC Fibre Channel Adapters

Leveraging Advanced Brocade Fabric Capabilities with QLogic® StorFusion

## StorFusion™

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

- 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 Marvell integrate with Brocade Gen 5 (16GFC) and Gen 6 (32GFC) Fabrics
- Simple, single-pane-of-glass management with Marvell QConvergeConsole and integration with Brocade SANnav

## Overview

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 (Storage Area Network) 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 worldwide 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 Marvell® and Brocade® Solution

Fortunately, there is a solution that allows administrators to dramatically simplify and expedite the entire process. QLogic® StorFusion™ from Marvell is a new suite of Enhanced 16GFC and 32GFC Adapter features leveraging Brocade's Gen 5 (16GFC) and Gen 6 (32GFC) 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 16GFC and 32GFC 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 (16GFC) and Gen 6 (32GFC) 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 SANnav 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 FAWWN to another port
- Simplifying boot over SAN configurations, since any physical server mapped to the virtual port can boot from that LUN

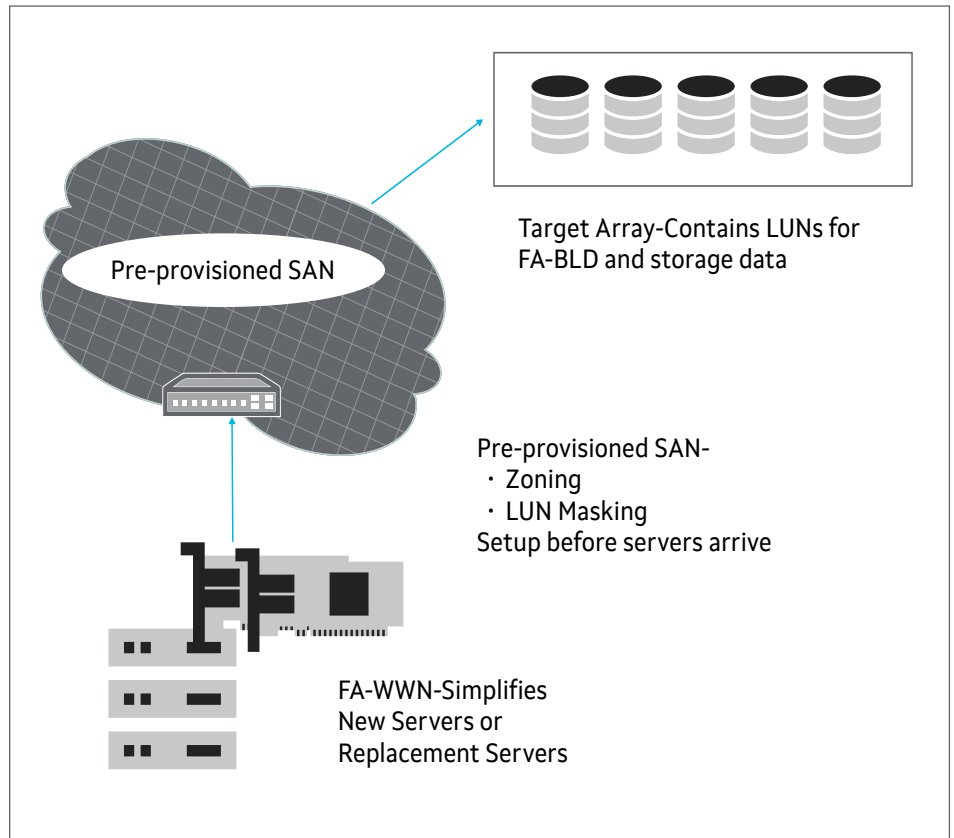
Administrators can use FA-WWN to enjoy the speed and efficiency of F-BLD. This feature enables a target LUN to be a bootable device for the assigned FA-WWN server. This process simplifies and accelerates operating system boot up for each server, and enables administrators to easily roll out replacement 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 16GFC and 2700 Series 32GFC and Enhanced 32GFC (Fibre Channel) HBAs
- Brocade Gen 5 (16GFC) or Gen 6 (32GFC) switch with FOS 7.3.0a or higher



**Fast, Easy Setup and Deployment with Fabric-assigned Provisioning**



To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

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