



# **General configuration guidelines for all storage arrays**

## **ONTAP FlexArray**

NetApp  
September 20, 2021

This PDF was generated from [https://docs.netapp.com/us-en/ontap-flexarray/implement-third-party/concept\\_requirement\\_for\\_8\\_gb\\_array\\_port\\_initialization.html](https://docs.netapp.com/us-en/ontap-flexarray/implement-third-party/concept_requirement_for_8_gb_array_port_initialization.html) on September 20, 2021. Always check docs.netapp.com for the latest.

# Table of Contents

- General configuration guidelines for all storage arrays ..... 1
  - Requirement for 8-Gb array port initialization ..... 1
  - Required fill word settings for 8 Gb Brocade switch ports ..... 1

# General configuration guidelines for all storage arrays

There are certain configuration guidelines that you must follow for any of the storage arrays supported by ONTAP.

## Requirement for 8-Gb array port initialization

In a typical Fibre Channel (FC) fabric, storage array ports initialize as N-Ports (node ports) and their corresponding switch ports initialize as F-Ports (fabric ports). In some cases, these F-ports might go offline and resume operation as L-Ports (loop ports), resulting in fabric errors.

This behavior is caused by topology auto-negotiation issues in the Brocade switch.

To ensure that switch ports always initialize as F-ports, you must run the `portcfgport <portnumber> 1` command on Brocade switch ports that are connected to storage arrays. You must run this command when you start configuring the system to avoid this problem, and you must fix the problem if it occurs.

To promote efficiency on the fabric as a whole, you can also use this workaround on any Brocade ports attached to ONTAP initiator ports.

## Required fill word settings for 8 Gb Brocade switch ports

If you are using 8 Gb Brocade switches running firmware version FOS 6.3.1 or later in your storage environment, you must verify that appropriate fill word settings are configured on the switch ports connected to ONTAP systems and that the switch ports are connected to storage arrays. Providing incorrect fill words might lead to link initialization failures in the switch ports.

For ONTAP systems, you must set the fill word on the corresponding switch ports to 3.

For storage arrays, you must set the fill word according to the following recommended values, using the Brocade switch documentation for instructions:

Storage array	Fill word value on the Brocade switch ports
Hitachi	2
HP XP	
All other storage arrays supported with Data ONTAP systems	3

### Related information

[NetApp Interoperability Matrix Tool](#)

## Copyright Information

Copyright © 2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system- without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

## Trademark Information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.