Supported network configurations

ONTAP Select

NetApp
November 06, 2020

This PDF was generated from https://docs.netapp.com/us-en/ontap-select/concept_nw_supported_configs.html on October 27, 2021. Always check docs.netapp.com for the latest.

Table of Contents

Supported network configurations 1

Supported network configurations

Select the best hardware and configure your network to optimize performance and resiliency.

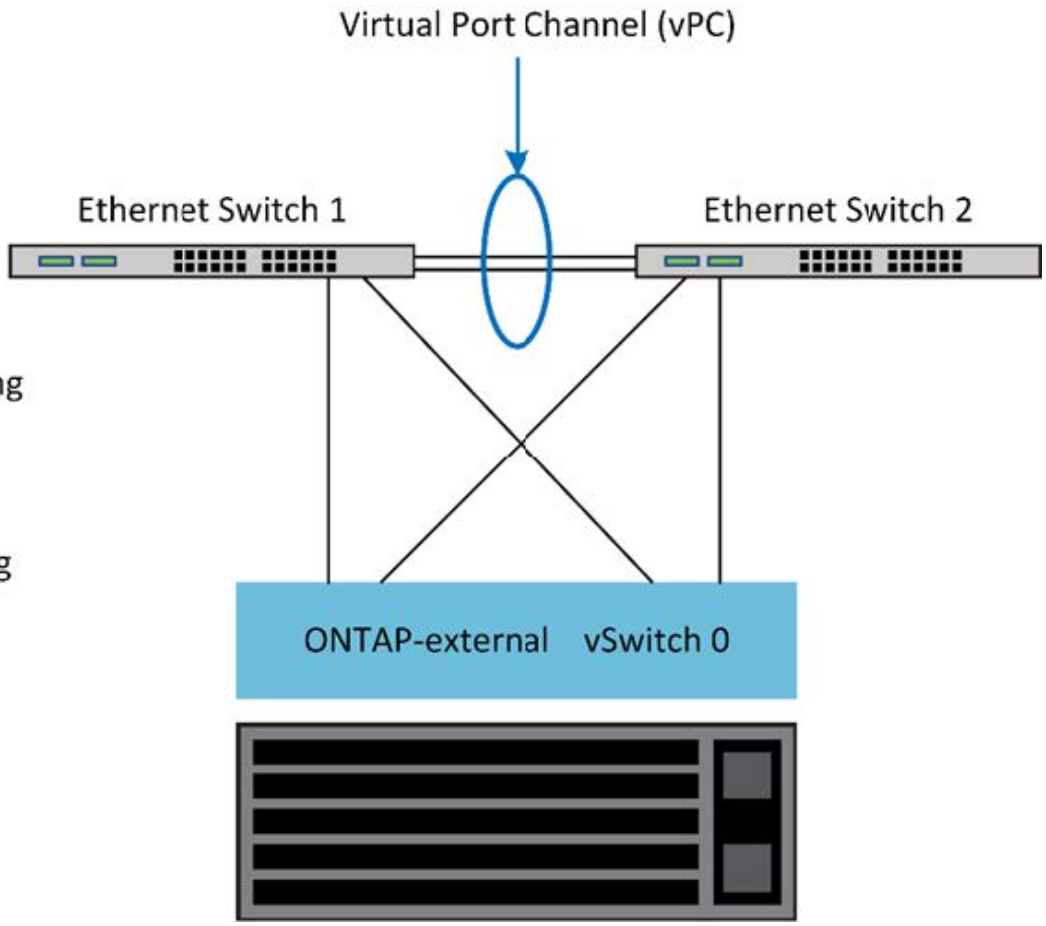
Server vendors understand that customers have different needs and choice is critical. As a result, when purchasing a physical server, there are numerous options available when making network connectivity decisions. Most commodity systems ship with various NIC choices that provide single-port and multiport options with varying permutations of speed and throughput. Starting with ONTAP Select 9.8, 25Gb/s and 40Gb/s NIC adapters are supported with VMWare ESX.

Because the performance of the ONTAP Select VM is tied directly to the characteristics of the underlying hardware, increasing the throughput to the VM by selecting higher-speed NICs results in a higher-performing cluster and a better overall user experience. Four 10Gb NICs or two higher-speed NICs (25/40 Gb/s) can be used to achieve a high performance network layout. There are a number of other configurations that are also supported. For two-node clusters, 4 x 1Gb ports or 1 x 10Gb ports are supported. For single node clusters, 2 x 1Gb ports are supported.

Network minimum and recommended configurations

	Minimum Requirements	Recommendations
Single node clusters	2 x 1Gb	2 x 10Gb
Two node clusters/MetroCluster SDS	4 x 1Gb or 1 x 10Gb	2 x 10Gb
4/6/8 node clusters	2 x 10Gb	4 x 10Gb or 2 x 25/40Gb

Network configuration using multiple physical switches
When sufficient hardware is available, NetApp recommends using the multiswitch configuration shown in the following figure, due to the added protection against physical switch failures.



ONTAP-internal:
Virtual Switch Tagging
VLAN 10

ONTAP-external:
Virtual Guest Tagging
Native VLAN 20

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.