



# Performance general considerations

## ONTAP Select

Barb Einarsen  
November 19, 2019

This PDF was generated from [https://docs.netapp.com/us-en/ontap-select/concept\\_perf\\_general.html](https://docs.netapp.com/us-en/ontap-select/concept_perf_general.html) on April 21, 2020. Always check docs.netapp.com for the latest.

# Table of Contents

Performance general considerations ..... 1

# Performance general considerations

Performance varies based on hardware configuration.

The performance numbers described in this section are intended as a rough estimate of the performance of an ONTAP Select cluster and are not a performance guarantee.

The performance of an ONTAP Select cluster can vary considerably due to the characteristics of the underlying hardware and configuration. As a matter of fact, the specific hardware configuration is the biggest factor in the performance of a particular ONTAP Select instance. Here are some of the factors that affect the performance of a specific ONTAP Select instance:

- **Core frequency.** In general, a higher frequency is preferable.
- **Single socket versus multsocket.** ONTAP Select does not use multsocket features, but the hypervisor overhead for supporting multsocket configurations accounts for some amount of deviation in total performance.
- **RAID card configuration and associated hypervisor driver.** The default driver provided by the hypervisor might need to be replaced by the hardware vendor driver.
- **Drive type and number of drives in the RAID group(s).**
- **Hypervisor version and patch level.**

This section includes performance comparisons only when the testing was performed on the exact same test bed to highlight the impact of a specific feature. In general, we document the hardware environment and run the highest performance configuration possible on that platform.

## Copyright Information

Copyright © 2019–2020 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.