■ NetApp

Flash Cache

Cloud Manager

Ben Cammett November 16, 2020

This PDF was generated from https://docs.netapp.com/us-en/occm/concept_flash_cache.html on February 28, 2021. Always check docs.netapp.com for the latest.

Table of Contents

| Flash Cache | |
 | . 1 |
|---------------------|----------|------|------|------|------|------|------|------|------|------|------|------|-----|
| What's Flash Cache | ? |
 | . 1 |
| Supported instances | s in AWS |
 | . 1 |
| Supported VM type | in Azure |
 | . 1 |
| Limitations | |
 | . 1 |

Flash Cache

Some Cloud Volumes ONTAP configurations in AWS and Azure include local NVMe storage, which Cloud Volumes ONTAP uses as *Flash Cache* for better performance.

What's Flash Cache?

Flash Cache speeds access to data through real-time intelligent caching of recently read user data and NetApp metadata. It's effective for random read-intensive workloads, including databases, email, and file services.

Supported instances in AWS

Select one of the following EC2 instance types with a new or existing Cloud Volumes ONTAP Premium or BYOL system:

- c5d.4xlarge
- · c5d.9xlarge
- · c5d.18xlarge
- m5d.8xlarge
- m5d.12xlarge
- r5d.2xlarge

Supported VM type in Azure

Select the Standard L8s v2 VM type with a single node Cloud Volumes ONTAP BYOL system in Azure.

Limitations

• Compression must be disabled on all volumes to take advantage of the Flash Cache performance improvements.

Choose no storage efficiency when creating a volume from Cloud Manager, or create a volume and then disable data compression by using the CLI.

Cache rewarming after a reboot is not supported with Cloud Volumes ONTAP.

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.