



# **Using Active IQ data to manage ONTAP clusters**

## **Cloud Manager**

Tom Onacki, Ben Cammett  
October 01, 2021

# Table of Contents

- Using Active IQ data to manage ONTAP clusters ..... 1
  - Viewing unused Cloud Volumes ONTAP licenses ..... 1
  - Using unused Cloud Volumes ONTAP licenses ..... 1
  - Downloading new disk and shelf firmware ..... 4
  - Viewing on-prem workloads that are candidates for the cloud ..... 4

# Using Active IQ data to manage ONTAP clusters

The Active IQ page in Cloud Manager shows you any undiscovered ONTAP clusters in your on-premises environments, whether any clusters require updated disk or shelf firmware, and if you are using all the Cloud Volumes ONTAP licenses that you were granted when you purchased the on-prem systems. This information is provided to Cloud Manager from [Active IQ Digital Advisor](#).

## Viewing unused Cloud Volumes ONTAP licenses

Many on-premises ONTAP storage system packages that you purchased included a free Cloud Volumes ONTAP license so you can try the NetApp cloud storage offerings in Cloud Manager. You can use the license to create a new Cloud Volumes ONTAP instance, or you can apply the license to an existing Cloud Volumes ONTAP instance to expand the capacity by 368 TiB.

You can see whether you have any unused Cloud Volumes ONTAP licenses based on your NetApp Support Site credentials.

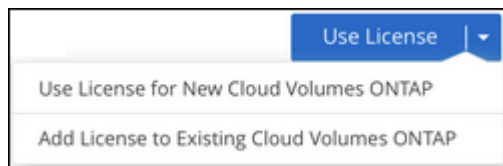
### Steps

1. In Cloud Manager, click the **Active IQ** tab.
2. Click the **Licenses** tab in the lower portion of the page.

Cluster Inventory (42)		Licenses (30)		Firmware Updates (7)		Cloud Ready Workloads (1375)	
Serial Number	License Type	Hyperscaler	Model Type	Expires	AutoSupport		
90320130000000001514	BYOL	AWS	Single	December 31, 2022	No	Use License	▼
90820130000000001141	BYOL	AWS	Single	N/A	Yes		
90820130000000001142	BYOL	AWS	Single	December 31, 2022	Yes	Use License	▼
90820130000000001143	BYOL	AWS	HA	December 31, 2022	Yes	Use License	▼

A **Use License** button appears for each unused license.

3. If you want to activate and start using the license, click **Use License**.



See the tasks below to learn about the options for using the available licenses.

## Using unused Cloud Volumes ONTAP licenses

You can use unused licenses to create a new Cloud Volumes ONTAP instance or to extend the capacity of the license on an existing Cloud Volumes ONTAP instance. The capacity of the license is 368 TiB.

The *Expires* column indicates the last day the license is active. When creating a new Cloud Volumes ONTAP

system this is the date the license expires. When updating an existing Cloud Volumes ONTAP system this indicates the length of time the existing license is extended.

The *License Type*, *Hyperscaler*, and *Model Type* columns describe the type of Cloud Volumes ONTAP license it is. For example, **BYOL | Single | Azure** means the license is a "bring-your-own" license for a "single node" Cloud Volumes ONTAP system deployed in "Microsoft Azure". The values that can appear in this column are shown in the table.

Column	Values
License Type	PAYGO BYOL
Hyperscaler	Azure AWS GCP All Providers
Model Type	Single HA

When creating a *new* Cloud Volumes ONTAP system, this is the type of system you are deploying. For example, using the sample license (**BYOL | Single | Azure**), you can create a single-node Cloud Volumes ONTAP system in Azure with entitlement for up to 368 TiB. This license can't be used to create an HA system or to deploy an instance in AWS.

When updating an *existing* Cloud Volumes ONTAP system, this indicates the type of system that can have the capacity for its existing license extended. Using the sample license again, you can extend the license for any single-node Cloud Volumes ONTAP system in Azure. This license can't be used to extend the license for an HA system or for an instance deployed in AWS.

## Creating a new Cloud Volumes ONTAP system with the unused license

Follow these steps to create a new Cloud Volumes ONTAP instance with the unused license.

### Steps

1. Click **Use License** and select **Use License for a new Cloud Volumes ONTAP**.
2. In the "Use License..." page, verify the license information and click **Use License**.

In most cases you will be directed to the **Details & Credentials** page for creating the working environment for the Cloud Volumes ONTAP system because both the cloud provider and number of nodes are defined by the license.

If you are using a license defined as "All Providers", then you are directed to the **Choose a Location** page so you can pick the cloud provider first, before completing the **Details & Credentials** page.

3. Follow the steps to create the working environment and your first volume.

See the following sections depending on the cloud provider on which you are deploying the Cloud Volumes ONTAP system.

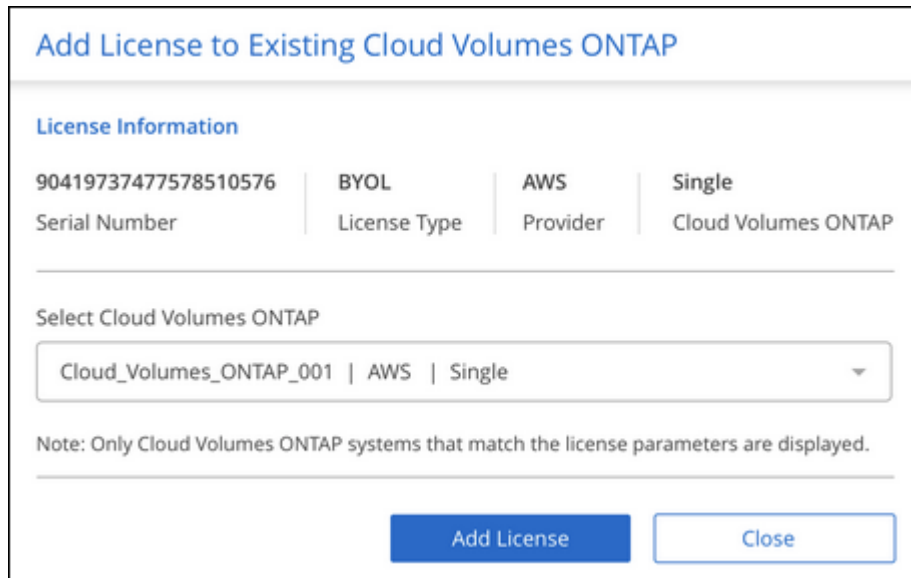
- [Launching Cloud Volumes ONTAP in Azure](#)
- [Launching Cloud Volumes ONTAP in AWS](#)

## Extending the license capacity for an existing Cloud Volumes ONTAP system

If you have a currently deployed Cloud Volumes ONTAP system that matches the license requirements of one of the free licenses (meaning the same cloud provider, number of nodes, etc.), you can follow these steps to extend the capacity of the license by 368 TiB.

### Steps

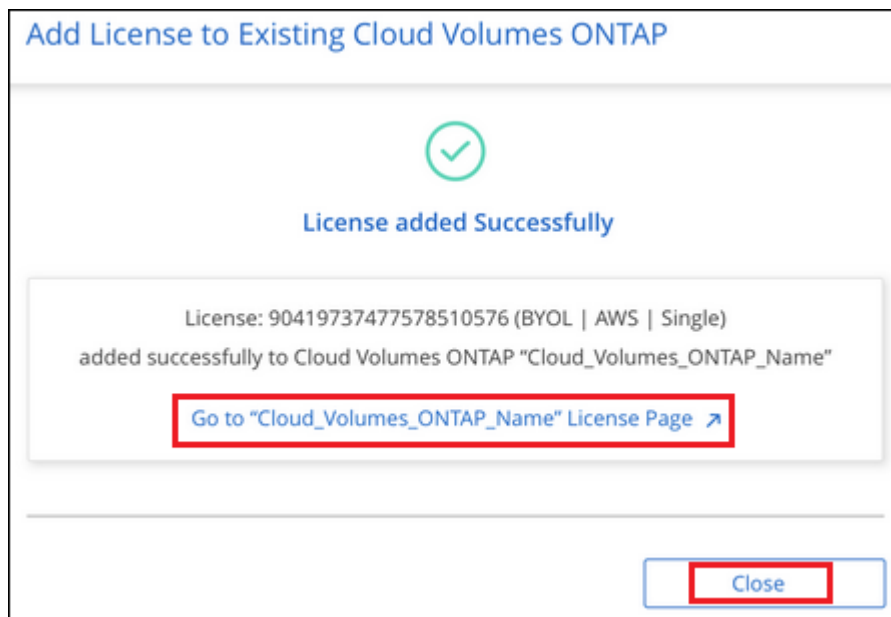
1. Click **Use License** and select **Add License to existing Cloud Volumes ONTAP**.



The screenshot shows a dialog box titled "Add License to Existing Cloud Volumes ONTAP". It contains a section for "License Information" with a table showing the license details: Serial Number (90419737477578510576), License Type (BYOL), Provider (AWS), and Cloud Volumes ONTAP (Single). Below this is a dropdown menu labeled "Select Cloud Volumes ONTAP" with the selected option "Cloud\_Volumes\_ONTAP\_001 | AWS | Single". A note states: "Note: Only Cloud Volumes ONTAP systems that match the license parameters are displayed." At the bottom are two buttons: "Add License" and "Close".

2. In the "Add License..." page, select the Cloud Volumes ONTAP system where you want to extend the license and click **Add License**.

A confirmation dialog is displayed.



The screenshot shows a confirmation dialog box titled "Add License to Existing Cloud Volumes ONTAP". It features a green checkmark icon and the text "License added Successfully". Below this, it states: "License: 90419737477578510576 (BYOL | AWS | Single) added successfully to Cloud Volumes ONTAP 'Cloud\_Volumes\_ONTAP\_Name'". A red box highlights a link that says "Go to 'Cloud\_Volumes\_ONTAP\_Name' License Page ➔". At the bottom right, a "Close" button is also highlighted with a red box.

3. You can click **Close** to close the window and return to the Active IQ page, or you can click the link to go to

the Cloud Volumes ONTAP Licensing page to view more details about licensing for that system.

## Downloading new disk and shelf firmware

You can see whether any of your discovered ONTAP clusters need to have their shelf or disk firmware updated. And you can download the Ansible playbook to upgrade the firmware.

**Note:** The ability to view and download new firmware is available only when you have subscribed to certain support plans.

### Steps

1. From the Active IQ page, click the **Firmware Updates** tab.

Cluster Inventory (42)	Licenses (30)	Firmware Updates (7)	Cloud Ready Workloads (1375)	Download All
Cluster Name	Cluster Status	Disk Firmware	Shelf Firmware	
durbkpcclu99	Undiscovered	Update Available	No Updates Available	
durdevnasclu01	Undiscovered	Update Available	No Updates Available	
durlabdevclu01	Discovered	No Updates Available	No Updates Available	
blrprdcclu02	Undiscovered	No Updates Available	No Updates Available	

If any cluster require new firmware, a **Download All** button appears.

2. Click **Download All** and save the zip file.
3. Unzip the zip file and see the following instructions to [update your storage system firmware](#).

### Result

Your firmware is updated. The next time your ONTAP system sends an AutoSupport message to Active IQ, the status in the *Firmware Updates* page will be updated to show that updates are no longer needed.

## Viewing on-prem workloads that are candidates for the cloud

Certain workloads or volumes are ideal to move to a Cloud Volumes ONTAP system from your on-prem ONTAP clusters. Some of the advantages include reduced costs and improved performance and resiliency. The *Cloud Ready Workloads* tab provides a list of these workloads from your discovered ONTAP clusters.

Cluster Inventory (42)		Licenses (30)		Firmware Updates (7)		Cloud Ready Workloads (1375)
Cluster Name	Cluster Status	SVM Name	Volume Name	Workload Type		
hioprclu02	Undiscovered	vsvhiopax01prd	volpaxprd_hanabackup01	SAP HANA		
hioprclu02	Undiscovered	svmhiocdb02prd	volcldbprd_sqluserdata01	MSSQL		
durdevclu02	Discovered	vsvdurpax01spd	volpaxdev_hana_data	SAP HANA		
durdevclu02	Discovered	vsvdurpax01spd	volpaxstg_hana_backup	SAP HANA		
durdevclu02	Discovered	vsvdurerp01spd	xdperpspd_oradata02	ORACLE		

The supported workloads that are called out on this page include: SAP, SAP HANA, Oracle, File share, and SharePoint.

*Lift and shift* is an approach for migrating your apps to the cloud. It means moving an application and its associated data to a cloud platform without redesigning the app. See more information about [lift and shift](#).

## 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.