



Create an Amazon FSx for ONTAP working environment

Cloud Manager

Julia
September 01, 2021

This PDF was generated from https://docs.netapp.com/us-en/occm/task_creating_fsx_working_environment.html on September 09, 2021. Always check docs.netapp.com for the latest.

Table of Contents

- Create an Amazon FSx for ONTAP working environment 1
 - Create an Amazon FSx for ONTAP working environment 1
 - Discover an existing FSx for ONTAP file system 5

Create an Amazon FSx for ONTAP working environment

Cloud Manager enables you to create an FSx for ONTAP working environment to add volumes and manage additional data services.

Create an Amazon FSx for ONTAP working environment

The first step is to create an FSx for ONTAP working environment. If you already created an FSx for ONTAP file system in the AWS Management Console, you can [discover it using Cloud Manager](#).

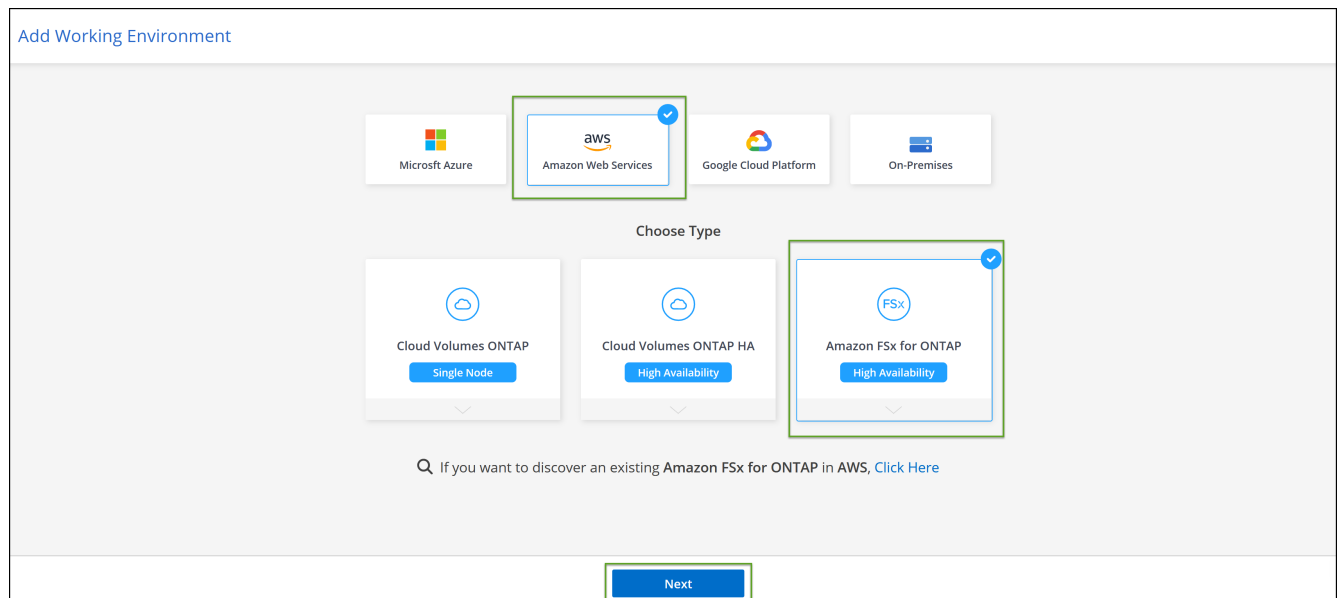
Before you begin

Before creating your FSx for ONTAP working environment in Cloud Manager, you will need:

- An AWS access key and secret key for an IAM user with the [required FSx for ONTAP permissions](#).
- The region and VPN information for where you will create the FSx for ONTAP instance.

Steps

1. In Cloud Manager, add a new Working Environment, select the location **Amazon Web Services**, and click **Next**.
2. Select **Amazon FSx for ONTAP** and click **Next**.



3. You can select existing FSx for ONTAP credentials or create new credentials using your AWS access key and secret key. Click to verify your IAM user policy adheres to [FSx for ONTAP requirements](#).
4. Provide information about your FSx for ONTAP instance:
 - a. Enter the working environment name you want to use.
 - b. Optionally, you can create tags by clicking the plus sign and entering a tag name and value.
 - c. Enter and confirm the ONTAP Cluster password you want to use.
 - d. Select the option to use the same password for your SVM user or set a different password.

e. Click **Next**.

Add FSx for ONTAP

Details and Credentials

Details

Working Environment Name i
myfsxenvironment

Tags Optional
[Add Tags](#)

Credentials

User Name
fsxadmin

ONTAP Cluster Password
.....

Confirm ONTAP Cluster Password
.....

☒ Use the same password for SVM user (vsadmin)

[Previous](#) [Next](#)

5. Provide region and VPC information:

- Select a region and VPC with subnets in at least two Availability Zones so each node is in a dedicated Availability Zone.
- Accept the default security group or select a different one. [AWS security groups](#) control inbound and outbound traffic. These are configured by your AWS admin and are associated with your [AWS elastic network interface \(ENI\)](#).
- Select an Availability Zone and subnet for each node.
- Click **Next**.

Add FSx for ONTAP

Region and VPC

Region: us-east-2 | US East (Ohio)

VPC: VPC4QA - 10.0.0.0/16

Security Group: Default security group

Node 1

Availability Zone: us-east-2b

Subnet: 10.0.4.0/24

Node 2

Availability Zone: us-east-2c

Subnet: 10.0.3.0/24

[Previous](#) [Next](#)

6. Leave *CIDR Range* empty and click **Next** to automatically set an available range. Optionally, you can use [AWS Transit Gateway](#) to manually configure a range.

Add FSx for ONTAP

Floating IP

Floating IP addresses are required for cluster and SVM access and for NFS and CIFS data access.

Floating IPs can migrate between HA nodes if failures occur. To access the data from outside the VPC, you can set up an [AWS transit gateway](#).

CIDR Range

Optional

Example: 10.10.10.10/24

Notice: You must specify a CIDR block that is outside of the CIDR blocks for all VPCs in the selected AWS region.

Previous

Next

7. Select route tables that include routes to the floating IP addresses. If you have just one route table for the subnets in your VPC (the main route table), Cloud Manager automatically adds the floating IP addresses to that route table. Click **Next** to continue.

Add FSx for ONTAP

Route Tables

Select the route tables that should include routes to the floating IP addresses. This enables client access to volumes. Clients associated with unselected route tables won't have access to volumes. [Learn More](#)

2 Route table

<input type="checkbox"/>	Name	Main	ID	Associate with Subnets	Tags	
<input checked="" type="checkbox"/>	VPC4QA	Yes	rtb-0880ec9d aeb55d630	2 Subnets	2	▼
<input type="checkbox"/>	No tag name	No	rtb-0e0c7d9e a4cf05d66	1 Subnet	1	▼


Notice: The main route table is the default for the VPC

Previous

Next

8. Accept the default AWS master key or click **Change Key** to select a different AWS Customer Master Key (CMK). For more information on CMK, see [Setting up the AWS KMS](#). Click **Next** to continue.

Add FSx for ONTAP
Data Encryption


AWS Managed Encryption

AWS is responsible for data encryption and decryption operations. Key management is handled by AWS key management services.

Default Master Key: aws/fsx [Change Key](#)


Previous
Next

9. Configure your storage:

- Select the throughput, capacity, and unit.
- You can optionally specify an IOPS value. If you don't specify an IOPS value, Cloud Manager will set a default value based on 3 IOPS per GiB of the total capacity entered. For example, if you enter 2000 GiB for the total capacity and no value for the IOPS, the effective IOPS value will be set to 6000.




If you specify an IOPS value that does not meet the minimum requirements, you'll receive an error when adding the working environment.


Failed to create FSx for ONTAP systems [Show Less](#)

Invalid SSD IOPS provided: 400 IOPS. Amazon FSx does not support provisioning fewer than 3 IOPS per GB of SSD storage capacity on a ONTAP file system.

c. Click **Next**.

Add FSx for ONTAP
Storage Configuration


SSD Disk Properties

Throughput
Capacity
Unit

512 MBps
3
TIB

IOPS Value
Optional ⓘ

400


Notice: The current version of FSx does not allow changing the capacity after creation. Also, note that the capacity drives the cost of the service.

Previous
Next

10. Review your configuration:

- Click the tabs to review your ONTAP properties, provider properties, and networking configuration.
- Click **Previous** to make changes to any settings.
- Click **Add** to accept the settings and create your Working Environment.

Review

 **myfsxenvironment**
FSx for ONTAP | HA | Multiple AZs

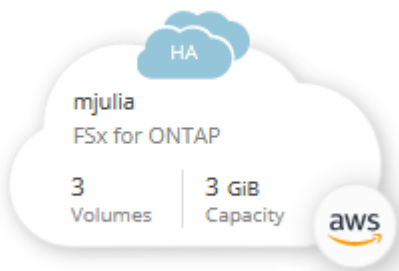
Overview

ONTAP Properties	Provider Properties	Networking
HA Deployment Model	Multiple Availability Zone	
Capacity	3 TiB	
Throughput	512 MBps	

PreviousAdd

Result

Cloud Manager displays your FSx for ONTAP configuration on the Canvas page.



You can now add volumes from to your FSx for ONTAP working environment using Cloud Manager.

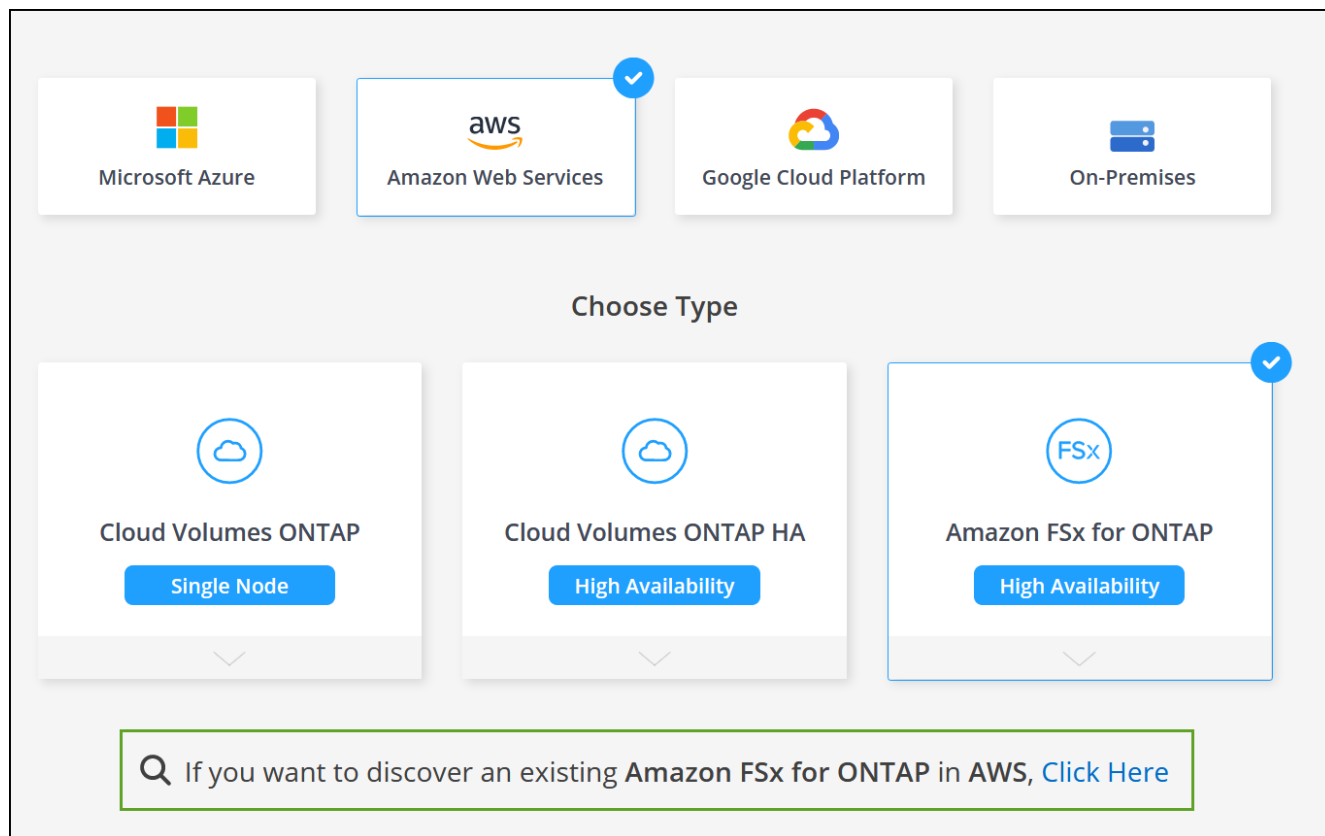
Discover an existing FSx for ONTAP file system

If you created an FSx for ONTAP file system using the AWS Management Console or if you want to restore a working environment you previously removed, you can discover it using Cloud Manager.

Steps

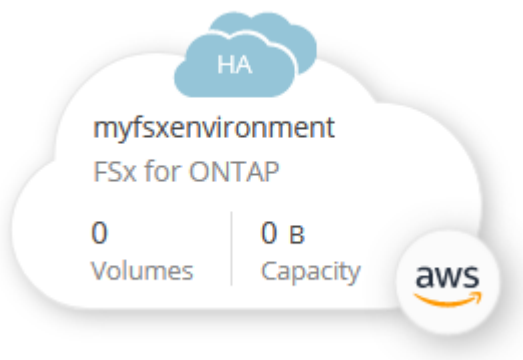
- In Cloud Manager, click **Add Working Environment**, select **Amazon Web Services**.

2. Select **Amazon FSx for ONTAP** and click **Click Here**.



3. Select existing credentials or create new credentials. Click **Next**.

4. Select the AWS region and the working environment you want to add.



5. Click **Add**.

Result

Cloud Manager displays your discovered FSx for ONTAP file system.

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.