



Configure protected and recovery site resources

ONTAP tools for VMware vSphere 9.8

NetApp
August 30, 2024

Table of Contents

- Configure protected and recovery site resources 1
- Configure network mappings 1
- Configure folder mappings 1
- Configure resource mappings 2
- Map storage policies 3
- Configure placeholder datastores 3
- Configure SRA using array manager 4

Configure protected and recovery site resources

Configure network mappings

You must configure your resource mappings like VM networks, ESXi hosts, and folders on both sites to enable the mapping of each resource from the protected site to the appropriate resource at the recovery site.


You must complete the following resource configurations:

- Network mappings
- Folder mappings
- Resource mappings
- Placeholder datastores

What you will need

You must have connected the protected and recovery sites.

Steps

1. Log in to your vCenter Server and click on **Site Recovery > Sites**.
2. Select your protected site, and then click **Manage**.
3. In the Manage tab, select **Network Mappings**.
4. Click the  icon to create a new network mapping.

The Create Network Mapping wizard appears.

5. In the Create Network Mapping wizard, perform the following:
 - a. Select **Automatically Prepare Mappings for Networks with Matching Names**, and click **Next**.
 - b. Select the required data center objects for the protected and recovery sites, and click **Add Mappings**.
 - c. Click **Next** after mappings are created successfully.
 - d. Select the object that was used earlier to create reverse mapping, and then click **Finish**.

Result

The Network Mappings page displays the protected site resources and the recovery site resources. You can follow the same steps for other networks in your environment.


Configure folder mappings

You must map your folders on the protected site and recovery site to enable communication between them.

What you will need

You must have connected the protected and recovery sites.

Steps

1. Log in to your vCenter Server, and click on **Site Recovery > Sites**.
2. Select your protected site, and then click **Manage**.
3. In the Manage tab, select **Folder Mappings**.
4. Click the  icon to create a new folder mapping.

The Create Folder Mapping wizard appears.

5. In the Create Folder Mapping wizard, perform the following:
 - a. Select **Automatically Prepare Mappings for Folders with Matching Names**, and click **Next**.
 - b. Select the required data center objects for the protected and recovery sites, and click **Add Mappings**.
 - c. Click **Next** after mappings are created successfully.
 - d. Select the object that was used earlier to create reverse mapping, and then click **Finish**.

Result

The Folder Mappings page displays the protected site resources and the recovery site resources. You can follow the same steps for other networks in your environment.

Configure resource mappings

You must map your resources on the protected site and recovery site so that virtual machines are configured to fail over into one group of hosts or the other.


What you will need

You must have connected the protected and recovery sites.



In Site Recovery Manager (SRM), resources can be resource pools, ESXi hosts, or vSphere clusters.

Steps

1. Log in to your vCenter Server, and click on **Site Recovery > Sites**.
2. Select your protected site, and then click **Manage**.
3. In the Manage tab, select **Resource Mappings**.
4. Click the  icon to create a new resource mapping.

The Create Resource Mapping wizard appears.

5. In the Create Resource Mapping wizard, perform the following:
 - a. Select **Automatically Prepare Mappings for Resource with Matching Names**, and click **Next**.
 - b. Select the required data center objects for the protected and recovery sites, and click **Add Mappings**.
 - c. Click **Next** after mappings are created successfully.

- d. Select the object that was used earlier to create reverse mapping, and then click **Finish**.

Result

The Resource Mappings page displays the protected site resources and the recovery site resources. You can follow the same steps for other networks in your environment.

Map storage policies

You should map the storage policies on the protected site to the storage policies on the recovery site for your recovery plan to place the recovered virtual machines on the appropriate datastores based on your mappings. After the virtual machine is recovered on recovery site, mapped VM Storage Policy will be assigned to virtual machine.

Steps

1. On the vSphere Client, click **Site Recovery > Open Site Recovery**.
2. In the Site Pair tab, click **Configure > Storage Policy Mappings**.
3. Select the required site, and then click **New** to create a new mapping.
4. Select the option **Automatically prepare mappings for storage policies with matching names**, and then click **NEXT**.

SRM will select storage policies on the protected site for which a storage policy with the same name exists on the recovery site. You can also select the manual mapping option to select multiple storage policies.

5. Click **Add mappings**, and then click **NEXT**.
6. In the **Reverse mapping** section, select the required check boxes for mapping, and then click **NEXT**.
7. In the **Ready to complete** section, review your selections and click **FINISH**.


Configure placeholder datastores

You must configure a placeholder datastore to hold a place in the vCenter inventory at the recovery site for the protected virtual machine (VM). The placeholder datastore does not need to be large as the placeholder VMs are small and use only a few hundred or fewer kilobytes.

What you will need

- You must have connected the protected and recovery sites.
- You must have configured your resource mappings.

Steps

1. Log in to your vCenter Server, and click on **Site Recovery > Sites**.
2. Select your protected site, and then click **Manage**.
3. In the Manage tab, select **Placeholder Datastores**.
4. Click the  icon to create a new placeholder datastore.

5. Select the appropriate datastore, and then click **OK**.



Placeholder datastores can be local or remote and should not be replicated.

6. Repeat the steps 3 to 5 to configure a placeholder datastore for the recovery site.

Configure SRA using array manager

You can configure Storage Replication Adapter (SRA) by using the Array Manager wizard of Site Recovery Manager (SRM) to enable interactions between SRM and storage virtual machines (SVMs).

What you will need

- You must have paired the protected sites and recovery sites in SRM.
- You must have configured your storage before configuring the array manager.
- You must have configured and replicated the SnapMirror relationships between the protected sites and recovery sites.
- You must have enabled the SVM management LIFs to enable multitenancy.

SRA supports cluster-level management and SVM-level management. If you add storage at a cluster level, then you can discover and perform operations on all of the SVMs in the cluster. If you add storage at an SVM level, then you can manage only that specific SVM.



VMware does not support NFS4.1 protocol for SRM.

Steps

1. In SRM, click **Array Managers**, and then click **Add Array Manager**.
2. Enter the following information to describe the array in SRM:
 - a. Enter a name to identify the array manager in the **Display Name** field.
 - b. In the **SRA Type** field, select **NetApp Storage Replication Adapter for ONTAP**.
 - c. Enter the information to connect to the cluster or the SVM:
 - If you are connecting to a cluster, you should enter the cluster management LIF.
 - If you are connecting directly to an SVM, you should enter the IP address of the SVM management LIF.



When configuring the array manager, you must use the same connection and credentials for the storage system that was used to add the storage system in Virtual Storage Console's Storage Systems menu. For example, if the array manager configuration is SVM scoped, then the storage under VSC must be added at SVM level.

- d. If you are connecting to a cluster, enter the name of the SVM in the **SVM name** field.

You can also leave this field blank.

- e. Enter the volumes to be discovered in the **Volume include list** field.

You can enter the source volume at the protected site and the replicated destination volume at the recovery site. You can enter either the full volume name or the partial volume name.

For example, if you want to discover volume *src_vol1* that is in a SnapMirror relationship with volume *dst_vol1*, you must specify *src_vol1* in the protected site field and *dst_vol1* in the recovery site field.

- f. **(Optional)** Enter the volumes to be excluded from discovery in the **Volume exclude list** field.

You can enter the source volume at the protected site and the replicated destination volume at the recovery site. You can enter either the full volume name or the partial volume name.

For example, if you want to exclude volume *src_vol1* that is in a SnapMirror relationship with volume *dst_vol1*, you must specify *src_vol1* in the protected site field and *dst_vol1* in the recovery site field.

- g. **(Optional)** Enter the user name of the cluster-level account or SVM-level account in the **Username** field.
- h. Enter the password of the user account in the **Password** field.

3. Click **Next**.

4. Verify that the array is discovered and displayed at the bottom of the Add Array Manager window.

5. Click **Finish**.

You can follow the same steps for the recovery site by using the appropriate SVM management IP addresses and credentials. On the Enable Array Pairs screen of the Add Array Manager wizard, you should verify that the correct array pair is selected, and that it shows as ready to be enabled.

Copyright information

Copyright © 2024 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.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

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.