

Installazione e configurazione

di

“Site Recovery Manager 8.x”

e

“vSphere Replication 8.x”

**Guida all'installazione e configurazione di un ambiente
per il "Disaster Recovery"**

Indice:

1. Installazione di “Site Recovery Manager”.....	3
2. Installazione di vSphere Replication.....	16
3. Configurazione del “New Site Pair”.....	31
4. Network Mapping.....	36
5. Folder Mapping.....	40
6. Creazione di un Protection Group.....	50
7. Creazione di un Recovery Plans.....	53
8. Test del Recovery Plan.....	56
9. CleanUP.....	59
10. Creazione dei ruoli e permessi agli utenti.....	61

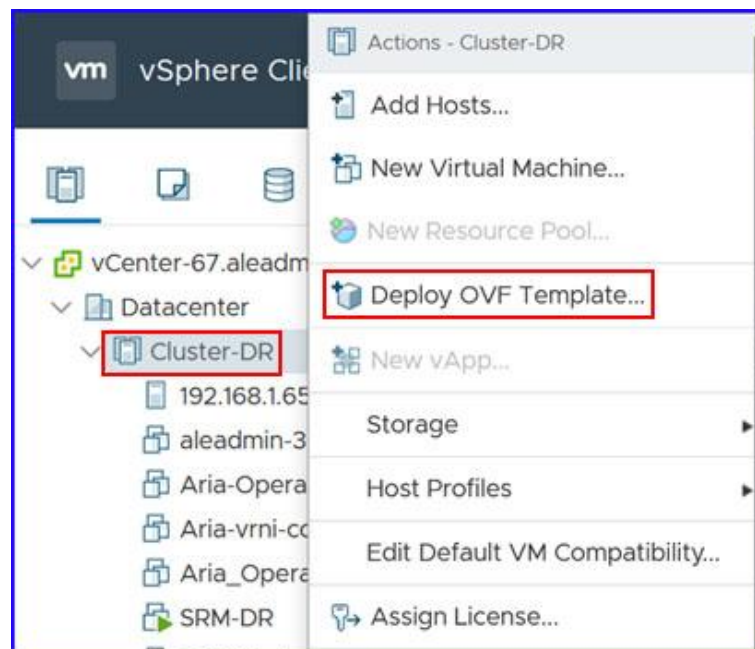
1. Installazione di “Site Recovery Manager”.

Prima di iniziare con l'installazione, verificare attentamente la matrice di compatibilità e i requisiti di sistema:

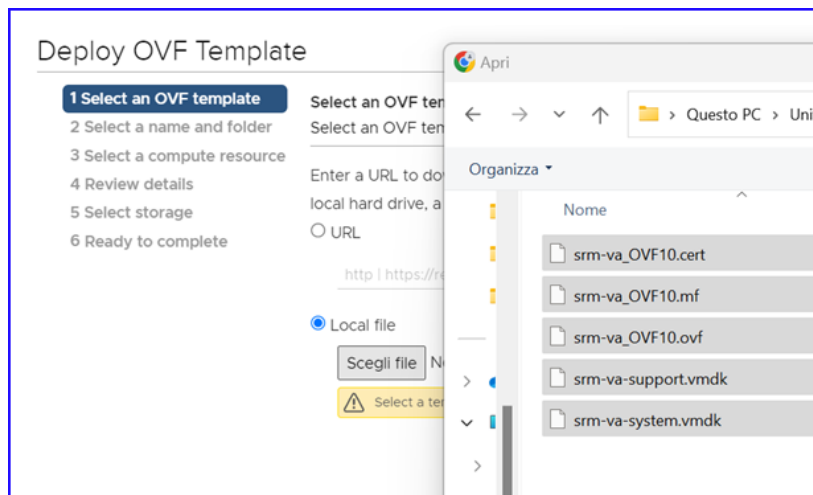
- Site Recovery Manager requisiti di Sistema:
 - https://docs.vmware.com/en/Site-Recovery-Manager/8.7/com.vmware.srm.install_config.doc/GUID-384B628F-35C8-4C96-9B36-ACCEBE6C6792.html
- Matrice di compatibilità “VMware Site Recovery Manager 8.x”
 - <https://docs.vmware.com/en/Site-Recovery-Manager/8.8/rn/compatibility-matrices-for-vmware-site-recovery-manager-88/index.html>

Steps:

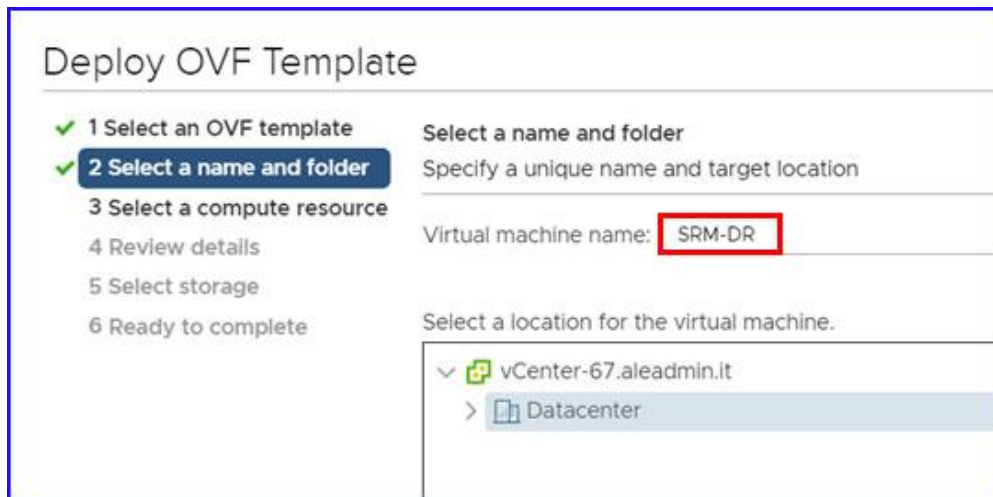
- Scaricare il file ISO di Site Recovery Manager dal portale di VMware\Broadcom
- Montare l'immagine ISO e aprire i file al suo interno.
- Creare una nuova Virtual machine (tasto dx sul cluster o sull'host Esxi).
- Cliccare su “Deploy OVF Template”.



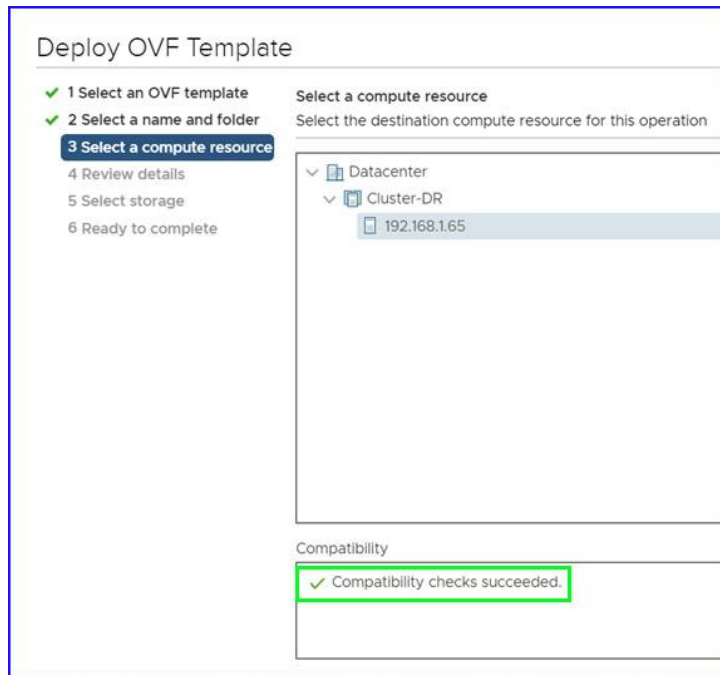
- Cliccare su “Open file”.
- Aprire la cartella del file ISO:
 - srm-va_OVF10.cert
 - srm-va_OVF10.mf
 - srm-va_OVF10.ovf
 - srm-va-support.vmdk
 - srm-va-system.vmdk



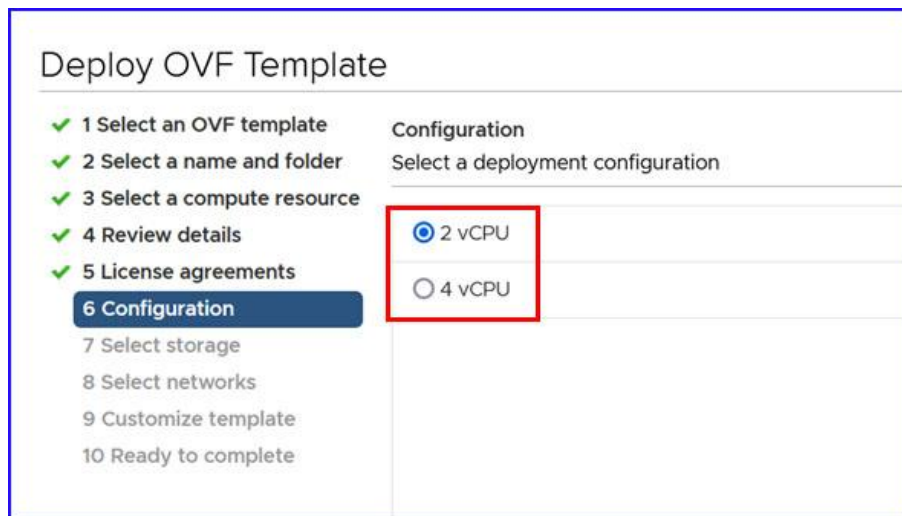
- Inserire il nome che si vuole dare all’appliance di site recovery manager:



- Verificare il Check di “compatibilità:



- Selezionare le vCPU in base alle proprie esigenze:



- Selezionare il “datastore” dove posizionare l’appliance di SRM:

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- 7 Select storage**
- 8 Select networks
- 9 Customize template
- 10 Ready to complete

Select storage
Select the storage for the configuration and disk files

Encrypt this virtual machine (Requires Key Management Server)

Select virtual disk format: Thick Pro

VM Storage Policy:

Name	Capacity	Provisioned	Free
datastore1	128.5 GB	972 MB	127.55 GB
DISK	1.09 TB	946.98 GB	733.37 GB
Disk2	1.09 TB	1.12 TB	264.63 GB

- Selezionare la network di destinazione in “Destination network”:

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- ✓ 7 Select storage
- 8 Select networks**
- 9 Customize template
- 10 Ready to complete

Select networks
Select a destination network for each source network.

Source Network	Destination Network
Network 1	VM Network

IP Allocation Settings

IP allocation: Static - Manual

IP protocol: IPv4

- Inserire i parametri richiesti:
 - Initial “root” password:
 - Initial “admin user” password:

Deploy OVF Template

1 Select an OVF template
2 Select a name and folder
3 Select a compute resource
4 Review details
5 License agreements
6 Configuration
7 Select storage
8 Select networks
9 Customize template
10 Ready to complete

Customize template
Customize the deployment properties of this software solution.

All properties have valid values

Application 8 settings

Enable SSHD
Determines whether the SSHD service will be enabled and started by default in the appliance.

Initial root password This will be used as an initial password for the root user.
Password:
Confirm Password:

Initial admin user password This will be used as an initial password for the admin user.
Password:
Confirm Password:

- Host Network IP Address Family:
- Hosty Network Mode:
- Default Gateway:
- Domain Name:

Deploy OVF Template

1 Select an OVF template
2 Select a name and folder
3 Select a compute resource
4 Review details
5 License agreements
6 Configuration
7 Select storage
8 Select networks
9 Customize template
10 Ready to complete

Networking Properties 8 settings

Host Network IP Address Family Network IP address family (i.e., 'ipv4' or 'ipv6').
ipv4

Host Network Mode Network mode (i.e., 'static', 'dhcp', or 'autoconf') (IPv6 or IPv4).
static

Default Gateway
The default gateway address for this VM. (from the IP Pool associated with the vSphere network mapped to the 'Network 1').
192.168.1.2

Domain Name
The domain name of this VM. (from the IP Pool associated with the vSphere network mapped to the 'Network 1').
srm-dr

Domain Search Path
The domain search path (comma or space separated domain names) for this VM. (from the IP Pool associated with the vSphere network mapped to the 'Network 1').
.....

CANCEL

- Domain Search Path:
- Domain Name Server:
- Network 1 IP Address:
- Network 1 Netprefix:

Deploy OVF Template

Progress list:

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- ✓ 7 Select storage
- ✓ 8 Select networks
- 9 Customize template**
- 10 Ready to complete

Configuration fields:

- Domain Search Path: aleadmin.it
- Domain Name Servers: 192.168.1.165
- Network 1 IP Address: 192.168.1.128
- Network 1 Netprefix: 24

- Rileggere i dati inseriti prima di premere il tasto “Finish”:

Deploy OVF Template

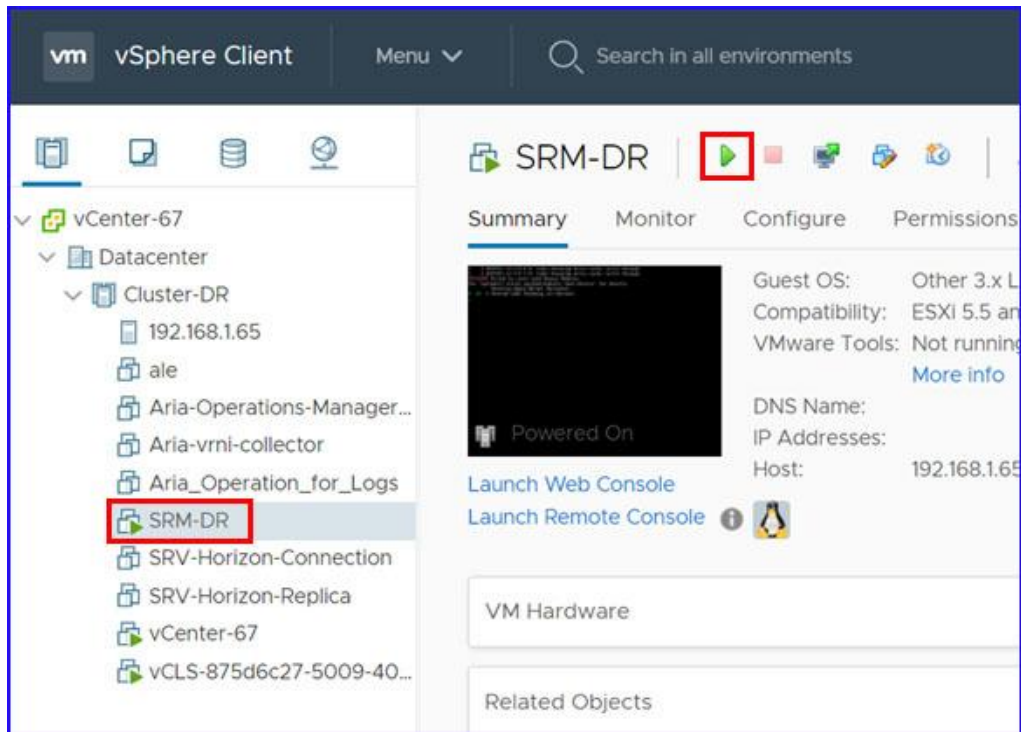
Progress list:

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- ✓ 7 Select storage
- ✓ 8 Select networks
- ✓ 9 Customize template
- 10 Ready to complete**

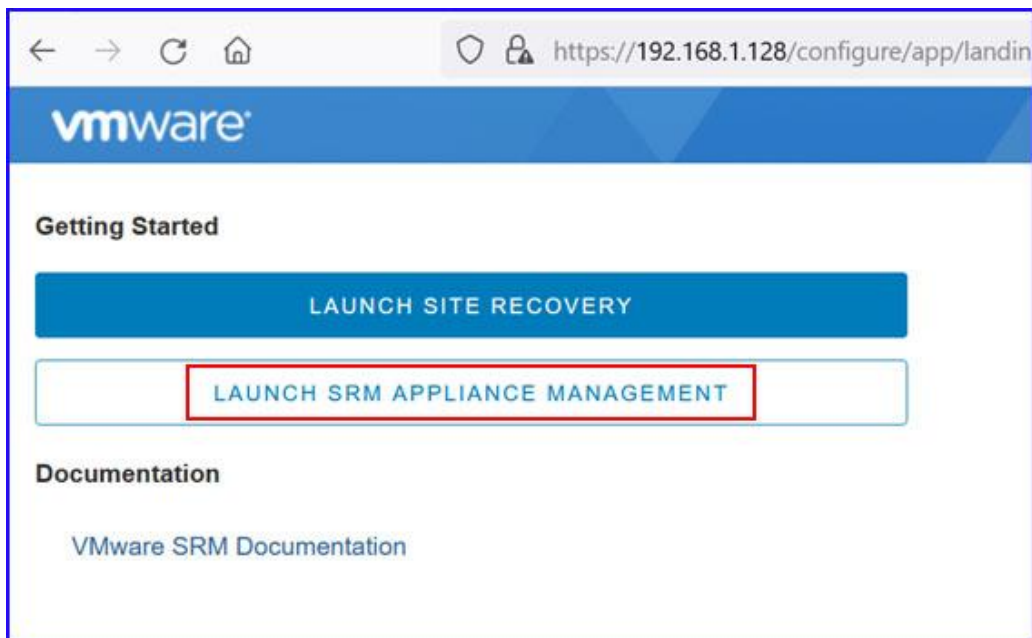
Ready to complete
Click Finish to start creation.

Provisioning type	Deploy from template
Name	SRM-DR
Template name	srm-va_OVF10
Download size	1.0 GB
Size on disk	33.0 GB
Folder	Datacenter
Resource	Cluster-DR
Storage mapping	1
All disks	Datastore: DISK; Format: Thick provision lazy zeroed
Network mapping	1

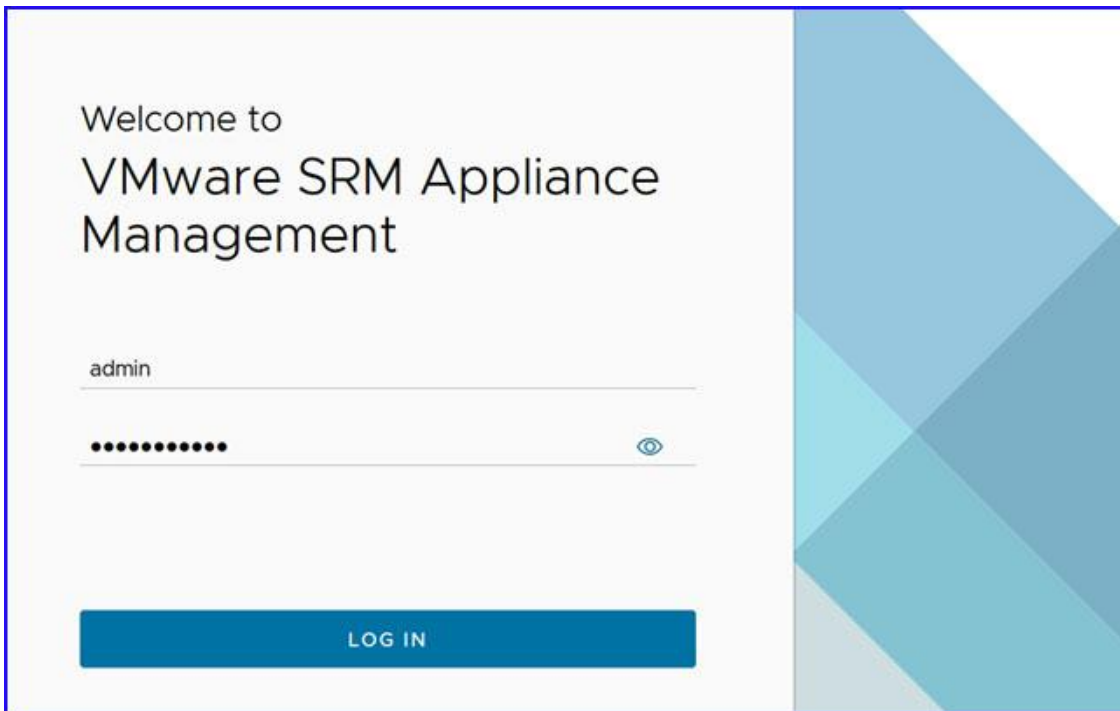
- Accendere il virtual appliance:



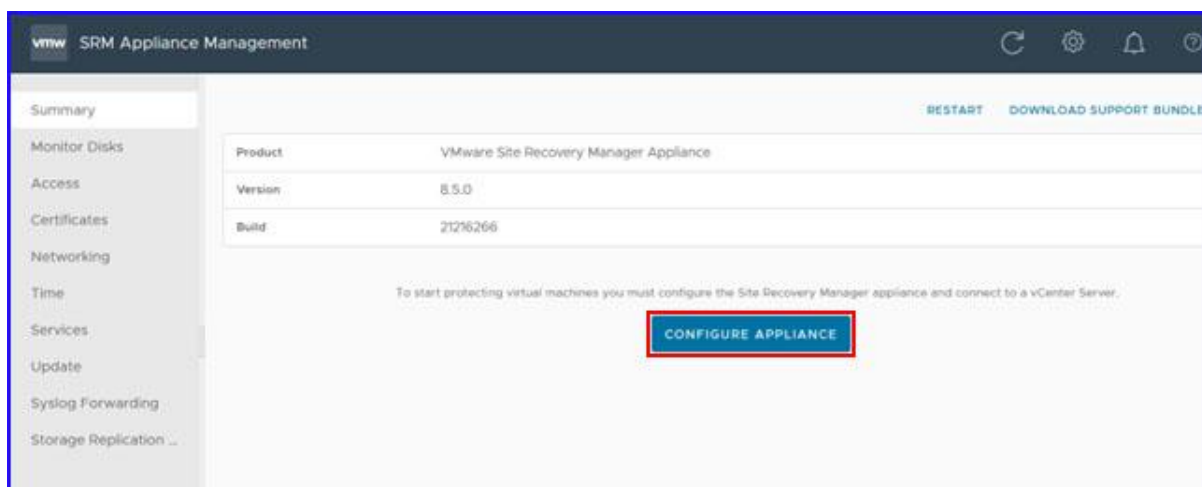
- Aprire l'interfaccia web di SRM (da browser) e cliccare su "Launch SRM Appliance Management":



- Inserire “username” e “password” (l’utente di default è “Admin”, la password è quella inserita negli step precedenti):
- cliccare sul tasto “Log In”:



- Cliccare sul tasto “Configure Appliance”:



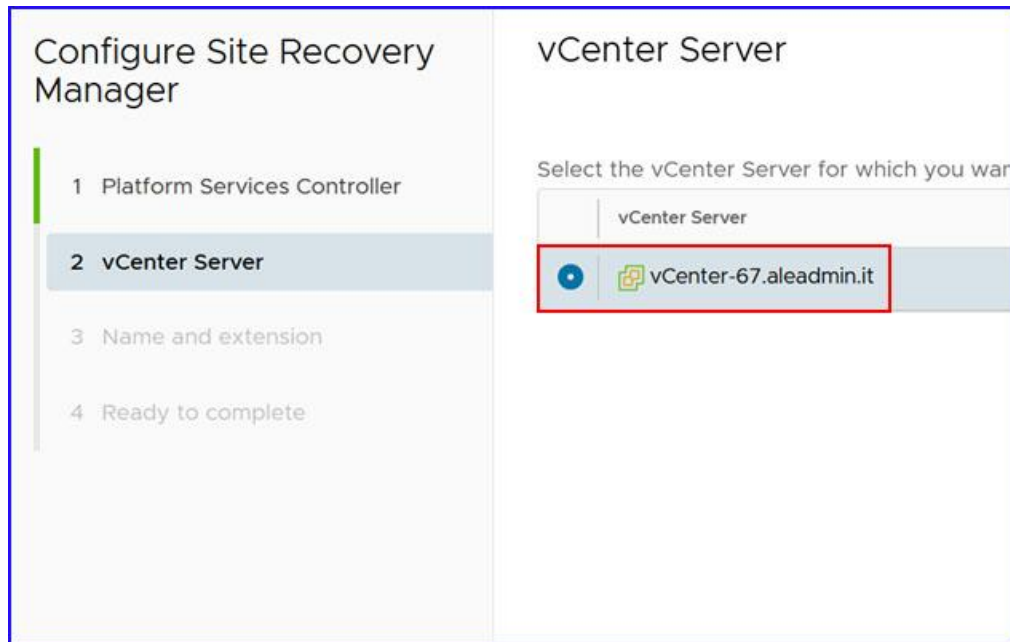
- Inserire i parametri richiesti:
 - PSC host name:
 - PSC port:
 - User name:
 - Password:

The screenshot shows the 'Configure Site Recovery Manager' wizard. The current step is '1 Platform Services Controller'. The interface includes a sidebar with steps: 1 Platform Services Controller, 2 vCenter Server, 3 Name and extension, and 4 Ready to complete. The main area is titled 'Platform Services Controller' and contains the instruction: 'All fields are required unless marked (optional). Enter the Platform Services Controller details for the vCenter Server for which you v Manager.' Below this is a form with four fields: 'PSC host name' (192.168.1.129), 'PSC port' (443), 'User name' (administrator@vsphere.local), and 'Password' (masked with dots). A red box highlights these four fields. A note at the bottom states: 'Note: If prompted, you must accept the certificate for the configuration to proceed.'

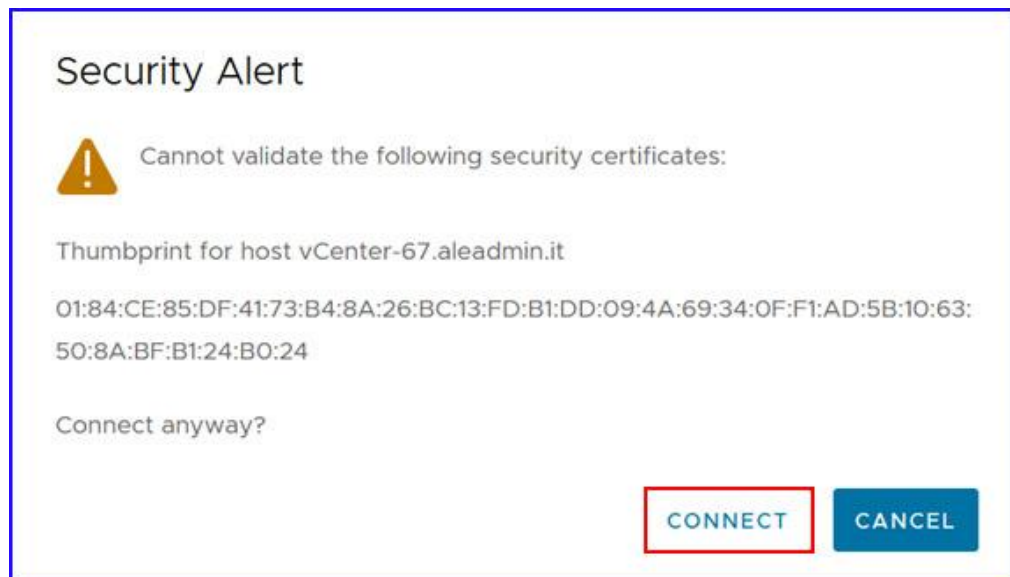
- Cliccare sul tasto "Connect":

The screenshot shows a 'Security Alert' dialog box. It features a yellow warning triangle icon and the text: 'Cannot validate the following security certificates:'. Below this, it lists the thumbprint for host 192.168.1.129: '01:84:CE:85:DF:41:73:B4:8A:26:BC:13:FD:B1:DD:09:4A:69:34:0F:F1:AD:5B:10:63:50:8A:BF:B1:24:B0:24'. The question 'Connect anyway?' is displayed. At the bottom right, there are two buttons: 'CONNECT' (highlighted with a red box) and 'CANCEL'.

- Selezionare il “vCenter Server”:



- Cliccare sul tasto “Connect”:



- Inserire i parametri richiesti:
 - Site name:
 - Administrator email:
 - Local host:

Configure Site Recovery Manager

1 Platform Services Controller
2 vCenter Server
3 Name and extension
4 Ready to complete

Name and extension
All fields are required unless marked (optional)

Enter name and extension for Site Recovery Manager

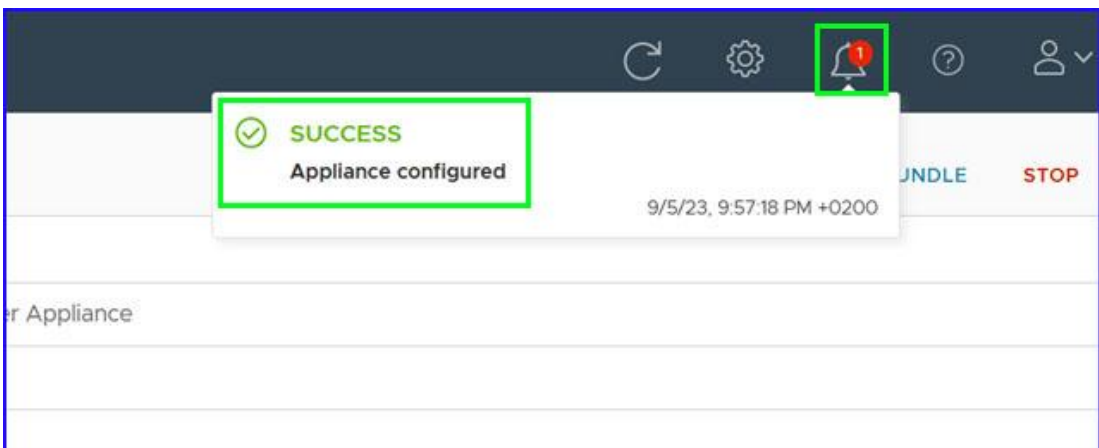
Site name:
A unique display name for this Site Recovery Manager site.

Administrator email:
An email address to use for system notifications.

Local host:
The address on the local host to be used by Site Recovery Manager.

Extension ID:
 Default extension ID (com.vmware.vcDr)
 Custom extension ID
The default extension ID is recommended for most configurations. For which multiple sites connect to a shared recovery site, use a unique c

Extension ID:
Organization:

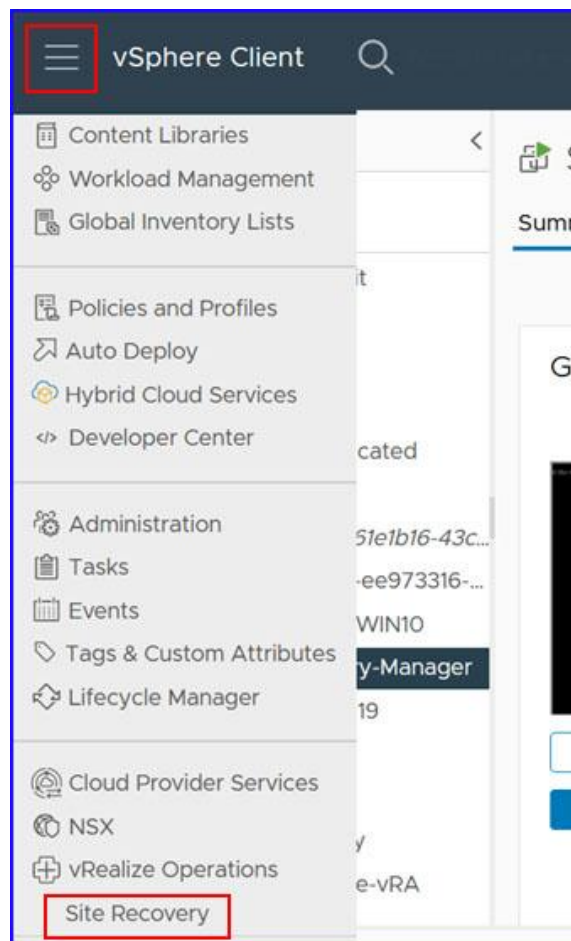


Nota: Configurare anche il secondo appliance di SRM, seguendo i passaggi precedenti.

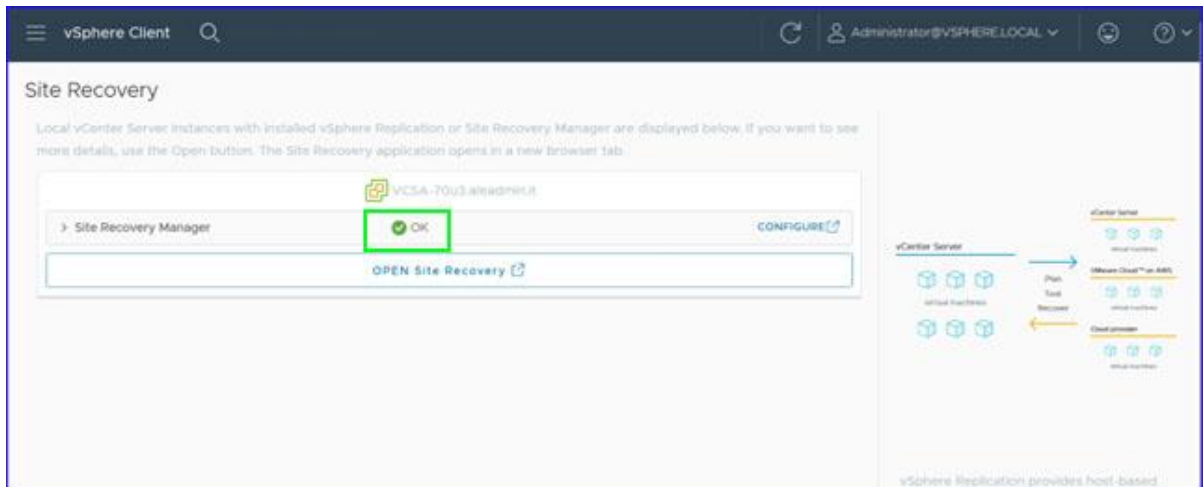
Gli ambienti standard di SRM sono sempre due... uno di Produzione e l'altro di DR (disaster recovery).

Al termine di entrambe le installazioni SRM, aprire le rispettive console dal vCenter per visualizzare la corretta integrazione con il vCenter.

- Cliccare sul tab “hamburger” 😊 ... e successivamente sulla scritta “Site Recovery”:



- Verificare la presenza del check "OK" (verde):



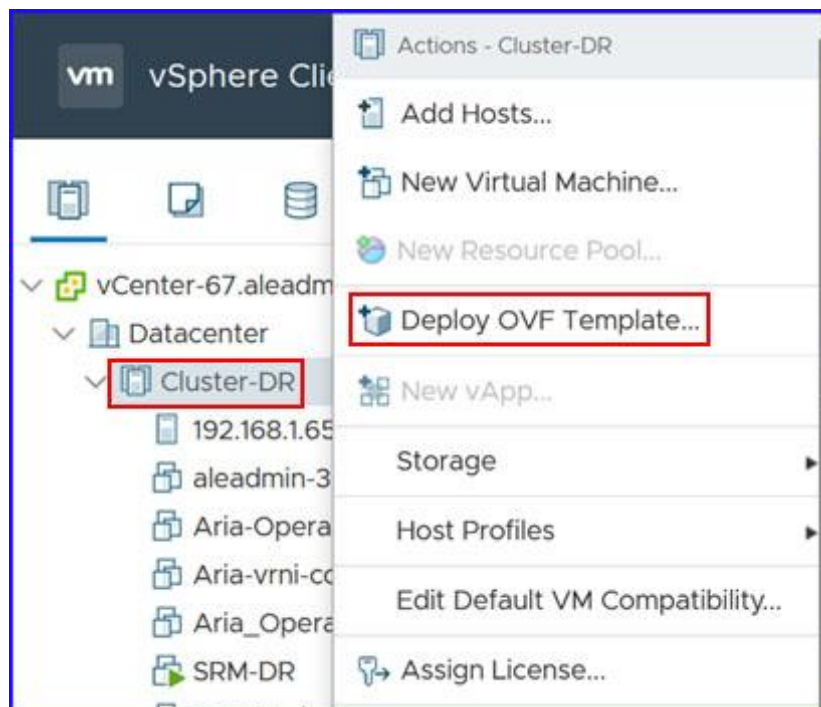
Installazione di Site Recovery manager conclusa.

2. Installazione di vSphere Replication

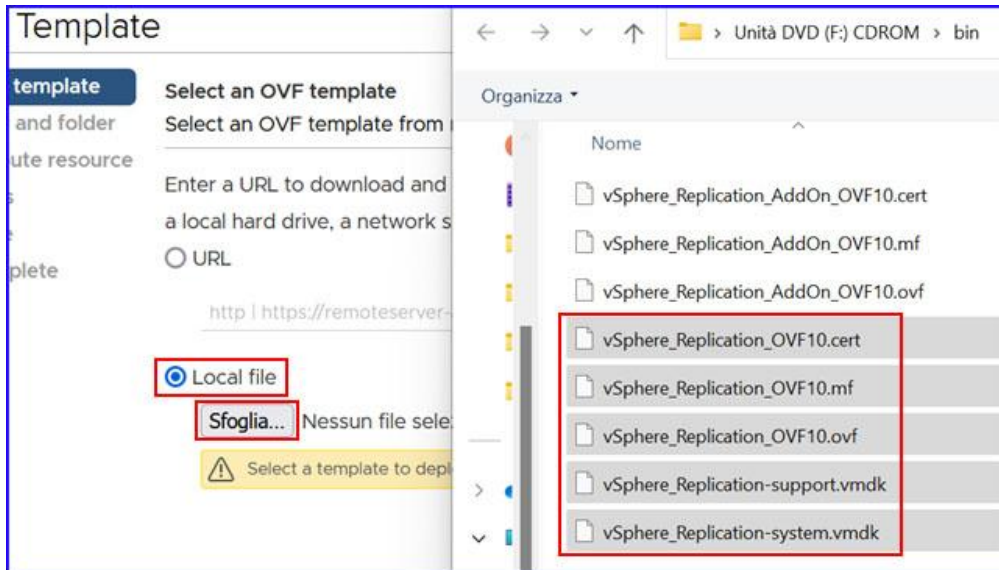
L'installazione di svere Replication Appliance è pressoché identica a quella di SRM.

Seguire i seguenti steps:

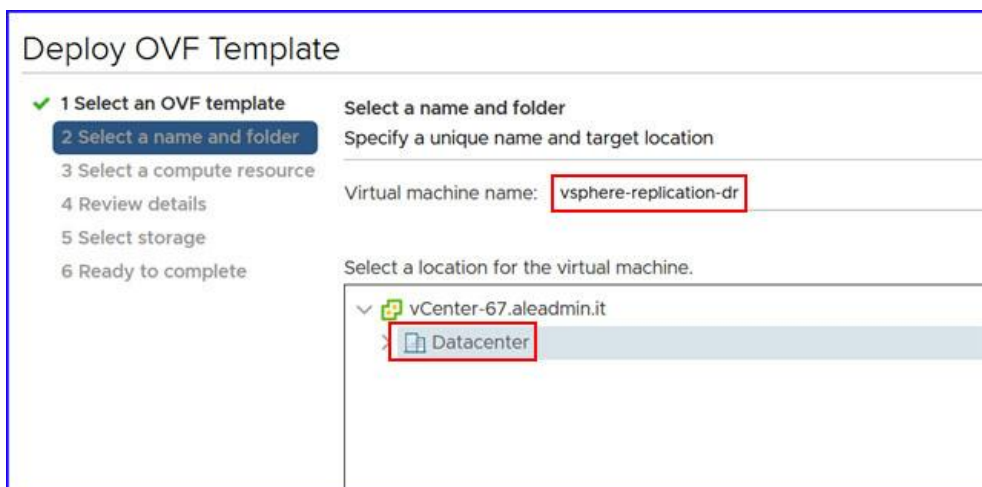
- Download del file ISO di vSphere replication dal sito di VMware\Broadcom
- Montare l'immagine ISO e aprire la cartella contenente i file:
- Creare una nuova virtuale machine... cliccando su "Deploy OVF Template".



- Cliccare su “Open file”.
- Dalla cartella selezionare solo i seguenti file:
 - vSphere_Replication_OVF10.cert
 - vSphere_Replication_OVF10.mf
 - vSphere_Replication_OVF10.ovf
 - vSphere_Replication-support.vmdk
 - vSphere_Replication-system.vmdk



- inserire il nome che si vuole dare al virtual appliance:



- verificare la compatibilità nella sezione “compatibility”:

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- 3 Select a compute resource**
- 4 Review details
- 5 Select storage
- 6 Ready to complete

Select a compute resource
Select the destination compute resource for this operation

- ▼ Datacenter
 - ▼ Cluster-DR
 - 192.168.1.65

Compatibility

✓ Compatibility checks succeeded.

... visualizzazione dei dettagli:

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- 4 Review details**
- 5 License agreements
- 6 Configuration
- 7 Select storage
- 8 Select networks
- 9 Customize template
- 10 Ready to complete

Review details
Verify the template details.

Publisher	VMware®, Inc. (Trusted certificate)
Product	vSphere Replication Appliance
Version	8.5.0.13765
Vendor	VMware, Inc.
Description	vSphere Replication Appliance
Download size	758.1 MB
Size on disk	1.6 GB (thin provisioned) 33.0 GB (thick provisioned)

- inserire il flag su “I accept all license Agreements”:

Deploy OVF Template

✓ 1 Select an OVF template
✓ 2 Select a name and folder
✓ 3 Select a compute resource
✓ 4 Review details
5 License agreements
6 Configuration
7 Select storage
8 Select networks
9 Customize template
10 Ready to complete

The end-user license agreement must be accepted.

Read and accept the terms for the license agreement.

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I accept all license agreements.

- Configurare le CPU in base alle esigenze dell'ambiente:

Deploy OVF Template

✓ 1 Select an OVF template
✓ 2 Select a name and folder
✓ 3 Select a compute resource
✓ 4 Review details
✓ 5 License agreements
6 Configuration
7 Select storage
8 Select networks
9 Customize template
10 Ready to complete

Configuration
Select a deployment configuration

2 vCPU
 4 vCPU

- Selezionare lo storage:

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- 7 Select storage**
- 8 Select networks
- 9 Customize template
- 10 Ready to complete

Select storage
Select the storage for the configuration and disk files

Encrypt this virtual machine (Requires Key Management Server)

Select virtual disk format: Thick Provision Lazy Zeroed

VM Storage Policy:

Name	Capacity	Provisioned	Free	Type
datastore1	128.5 GB	972 MB	127.55 GB	VMFS 5
DISK	1.09 TB	988.06 GB	692.29 GB	VMFS 5
Disk2	1.09 TB	1.12 TB	263.72 GB	VMFS 5

Compatibility

✓ Compatibility checks succeeded.

- Selezionare le network desiderata “Destination network”:

Deploy OVF Template

- ✓ 1 Select an OVF template
- ✓ 2 Select a name and folder
- ✓ 3 Select a compute resource
- ✓ 4 Review details
- ✓ 5 License agreements
- ✓ 6 Configuration
- ✓ 7 Select storage
- 8 Select networks**
- 9 Customize template
- 10 Ready to complete

Select networks
Select a destination network for each source network.

Source Network	Destination Network
Network 1	VM Network

IP Allocation Settings

IP allocation: Static - Manual

IP protocol: IPv4

- Inserire i seguenti parametri:
 - Initial “root” password:
 - Initial “admin user” password:
 - NTP Servers:

Deploy OVF Template

✓ 1 Select an OVF template
✓ 2 Select a name and folder
✓ 3 Select a compute resource
✓ 4 Review details
✓ 5 License agreements
✓ 6 Configuration
✓ 7 Select storage
✓ 8 Select networks
9 Customize template
10 Ready to complete

✓ All properties have valid values

Application	6 settings
Enable SSHD	Determines whether the SSHD service will be enabled in the appliance. <input type="checkbox"/>
Initial root password	This will be used as an initial password for the root user. Password: Confirm Password:
Initial admin user password	This will be used as an initial password for the admin user. Password: Confirm Password:
NTP Servers	A comma-separated list of hostnames or IP addresses. time.google.com

CANCEL

- Domain Search Path:
- Domain Name Servers:
- Network 1 IP Address:
- Network 1 Netprefix:

Deploy OVF Template

✓ 1 Select an OVF template
✓ 2 Select a name and folder
✓ 3 Select a compute resource
✓ 4 Review details
✓ 5 License agreements
✓ 6 Configuration
✓ 7 Select storage
✓ 8 Select networks
9 Customize template
10 Ready to complete

Domain Search Path	The domain search path (comma or space separated) for this VM. (from the IP Pool associated with the vSphere network) 'Network 1' network) vsphere-replication-dr
Domain Name Servers	The domain name server IP Addresses for this VM (from the IP Pool associated with the vSphere network) 'Network 1' network) aleadmin.it
Network 1 IP Address	The IP address for this interface. 192.168.1.127
Network 1 Netprefix	The prefix for this interface. 24

CANCEL

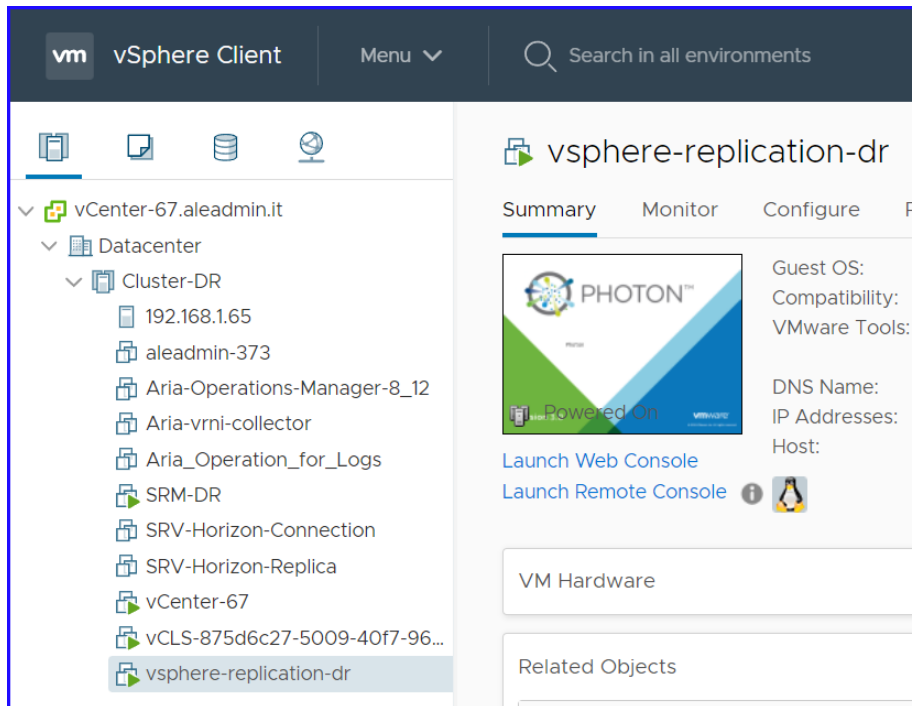
- Rileggere i parametri inseriti e cliccare sul tasto “Finish”:

Deploy OVF Template	
All disks	Datastore: DISK; Format: Thick provision lazy zeroed
Network mapping	1
Network 1	VM Network
IP allocation settings	
IP protocol	IPV4
IP allocation	Static - Manual
Properties	Enable SSHD = False NTP Servers = time.google.com Hostname = vsphere-replication-dr File Integrity Flag = False Host Network IP Address Family = ipv4 Host Network Mode = static Default Gateway = 192.168.1.2 Domain Name = vsphere-replication-dr Domain Search Path = aleadmin.it Domain Name Servers = 192.168.1.165 Network 1 IP Address = 192.168.1.127 Network 1 Netprefix = 24

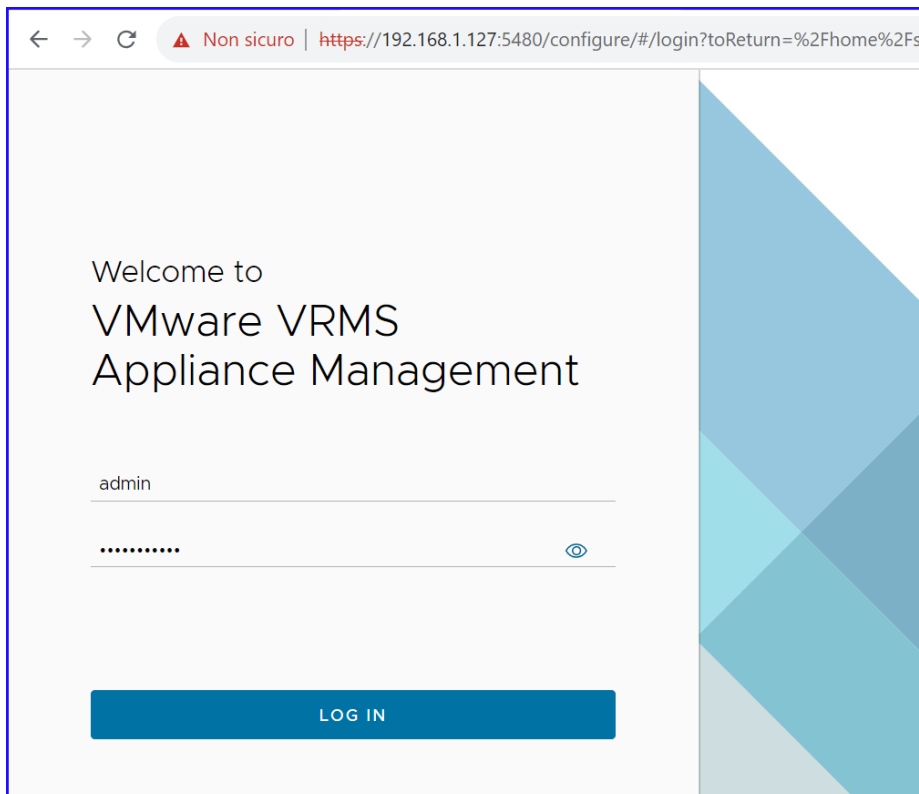
- Aprire “Recent task” per visualizzare lo stato del deploy dell’appliance

Recent Tasks			
Task Name	Target	Status	Details
Deploy OVF template	vsphere-replic...	51%	
Import OVF package	Cluster-DR	52%	

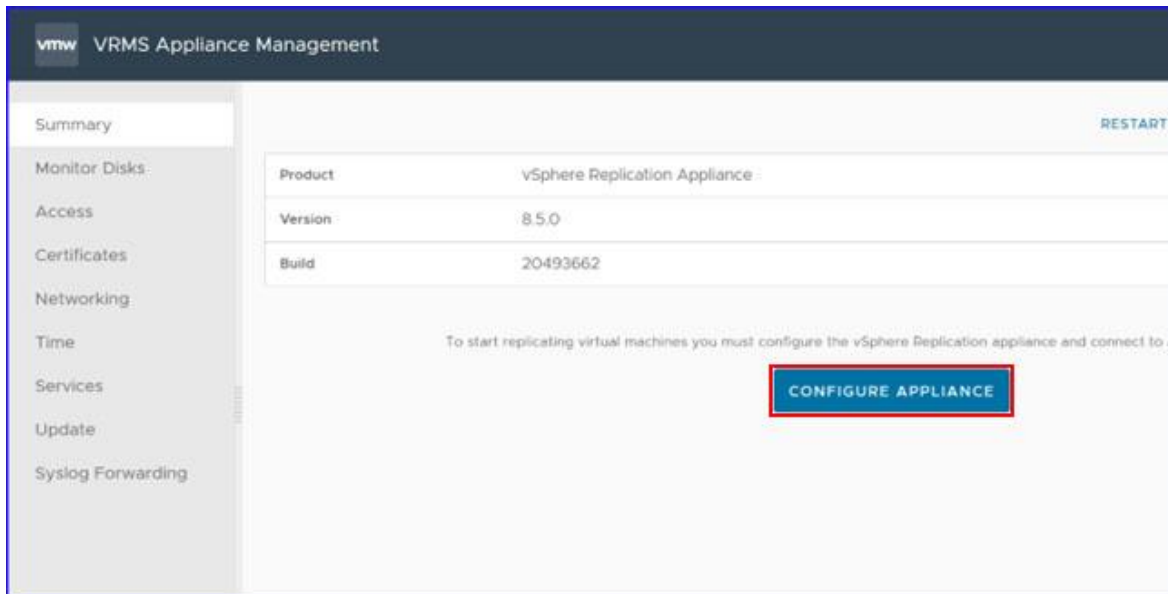
- Accendere il virtual Appliance



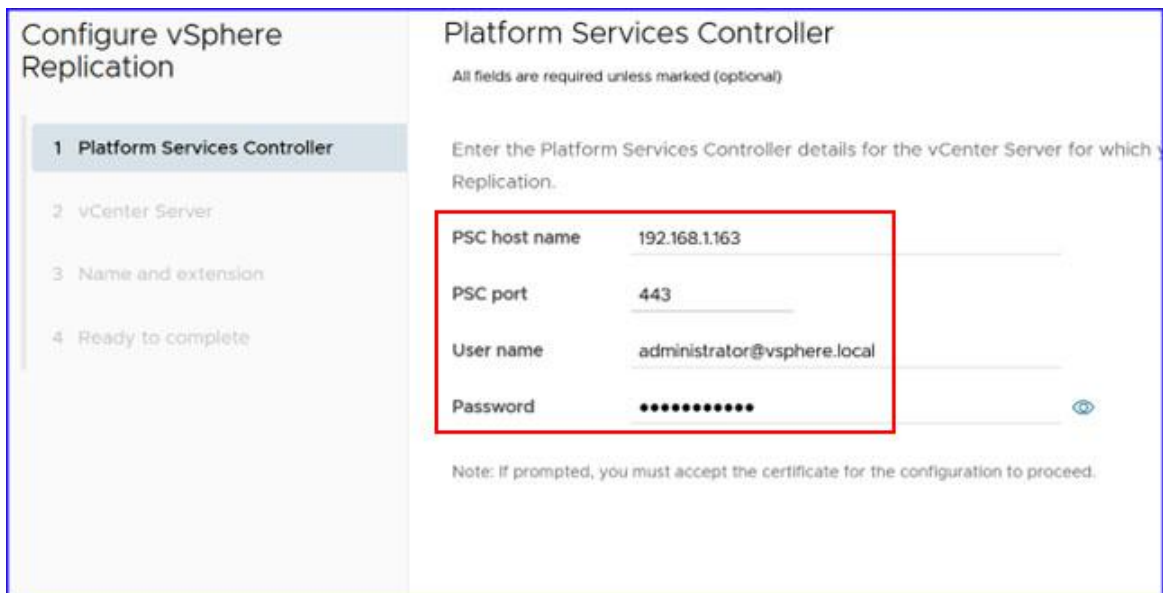
- Inserire le credenziali di login (default user “Admin”) e premere il tasto “Log In”:



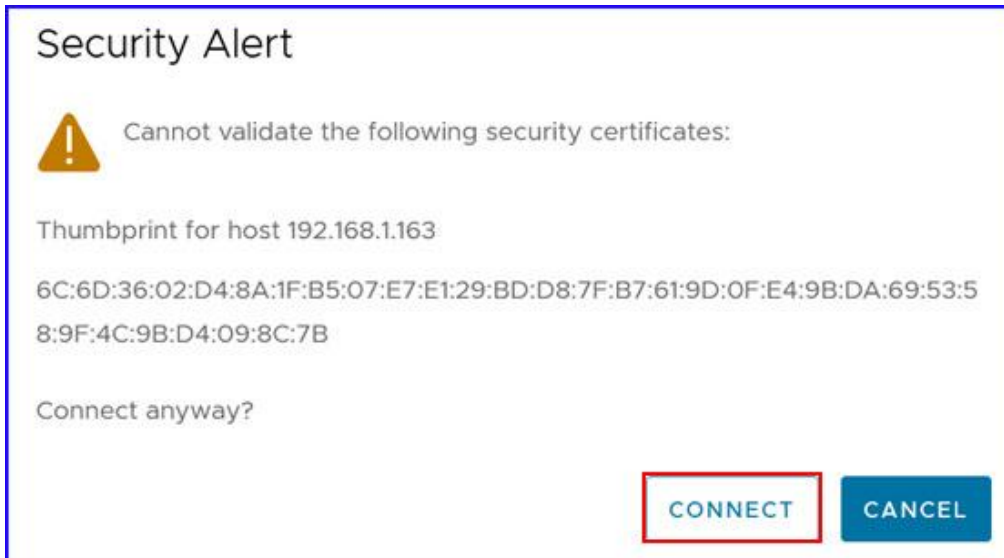
- Premere il tasto “Configure Appliance”:



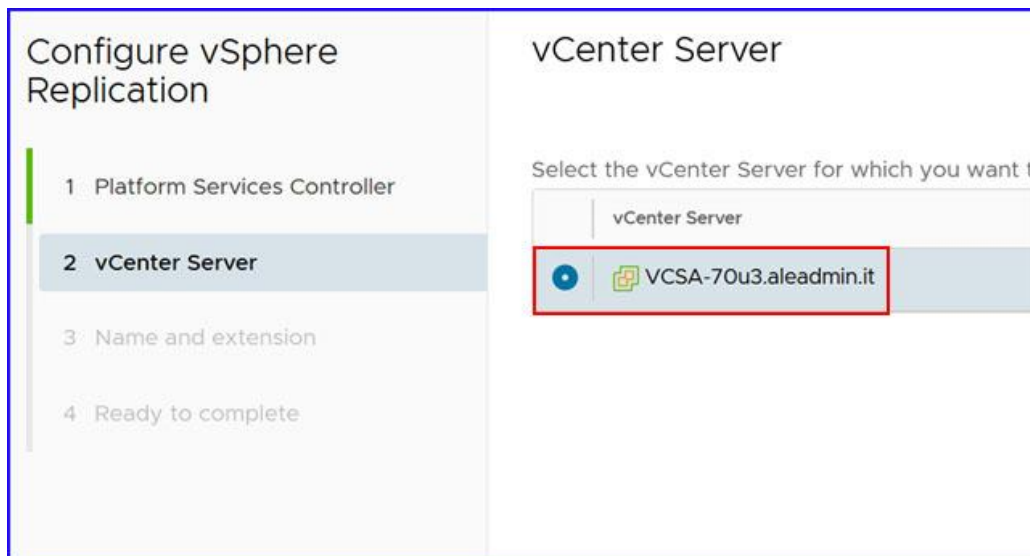
- Inserire i seguenti parametri:
 - PSC host name:
 - PSC port:
 - User name:
 - Password:



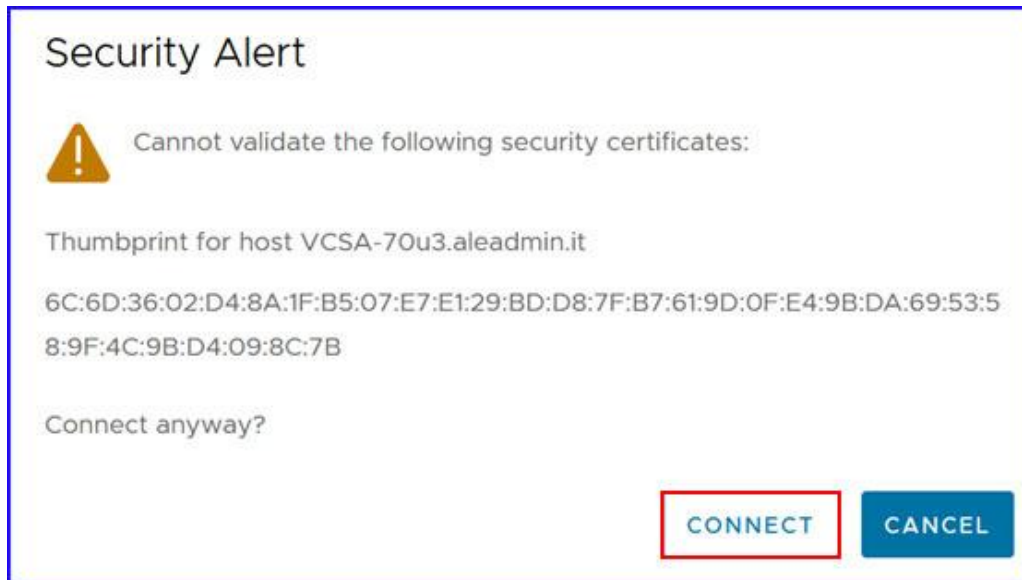
- Cliccare sul tasto “Connect”:



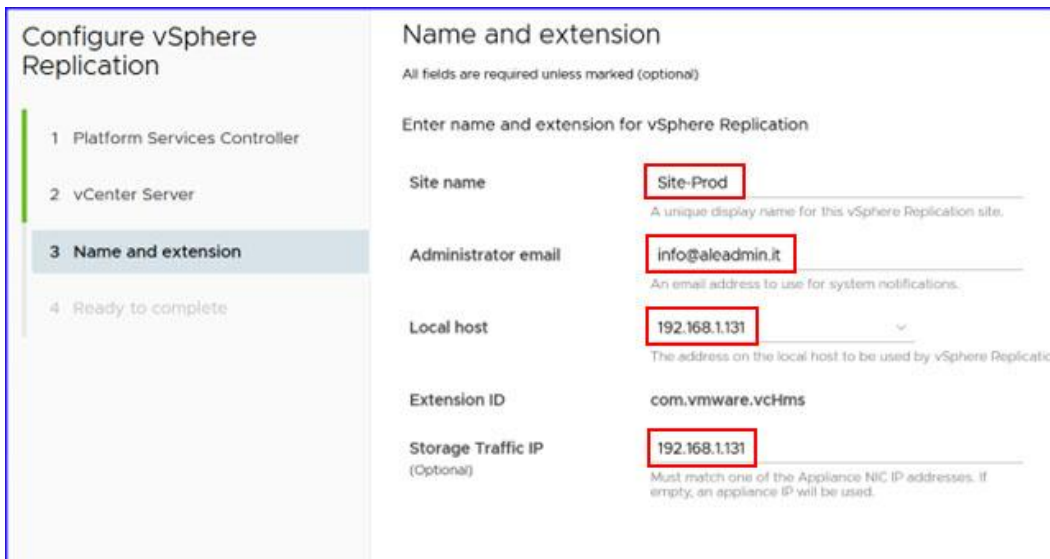
- Selezionare il vCenter Server:



- Cliccare sul tasto “Connect”:



- Inserire i seguenti parametri:
 - Site name:
 - Administrative email:
 - Local host:
 - Storage Traffic IP (inserisci l'indirizzo IP per l'adattatore VMKernel dedicato):



- Rileggere i parametri inseriti negli step precedenti e proseguire...

Configure vSphere Replication

- 1 Platform Services Controller
- 2 vCenter Server
- 3 Name and extension
- 4 Ready to complete**

Ready to complete

Review your settings before finishing the wizard.

Platform Services Controller	192.168.1.163
vCenter Server	VCSA-70u3.aleadmin.it
Site name	Site-Prod
Extension ID	com.vmware.vchms
Administrator email	info@aleadmin.it
Local host	192.168.1.131
IP address for incoming storage traffic	192.168.1.131

Configuring vSphere Replication. Please wait...

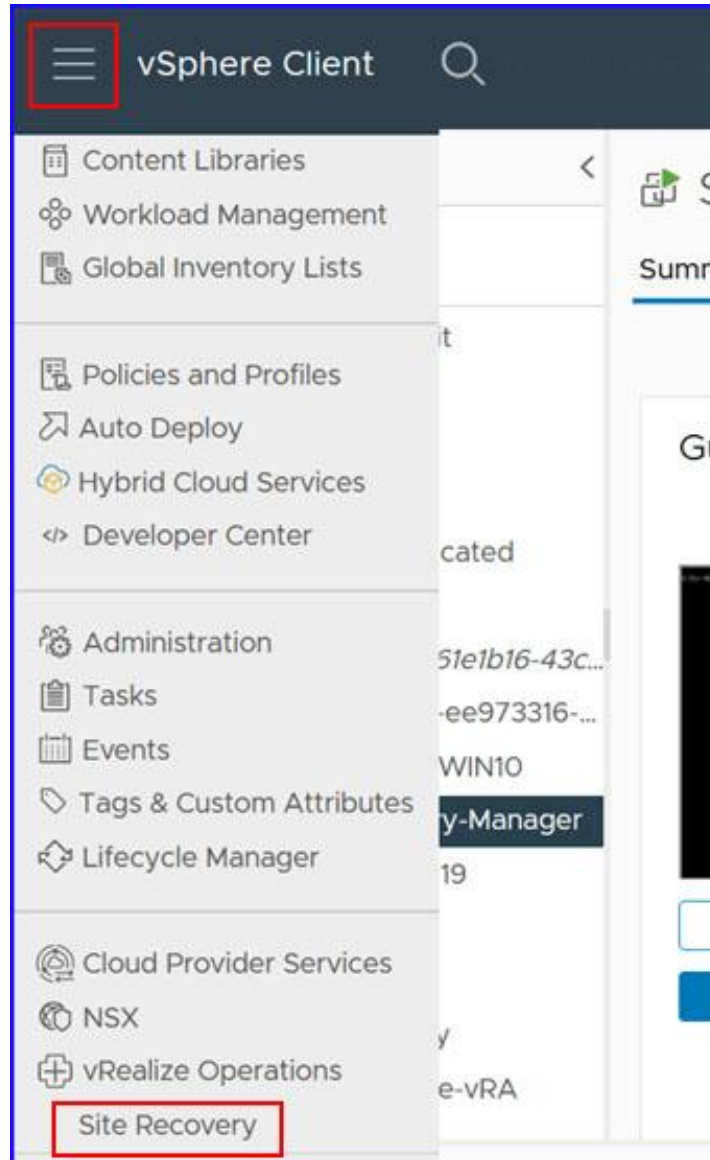
Registering vSphere Replication

to a particular vCenter Server.

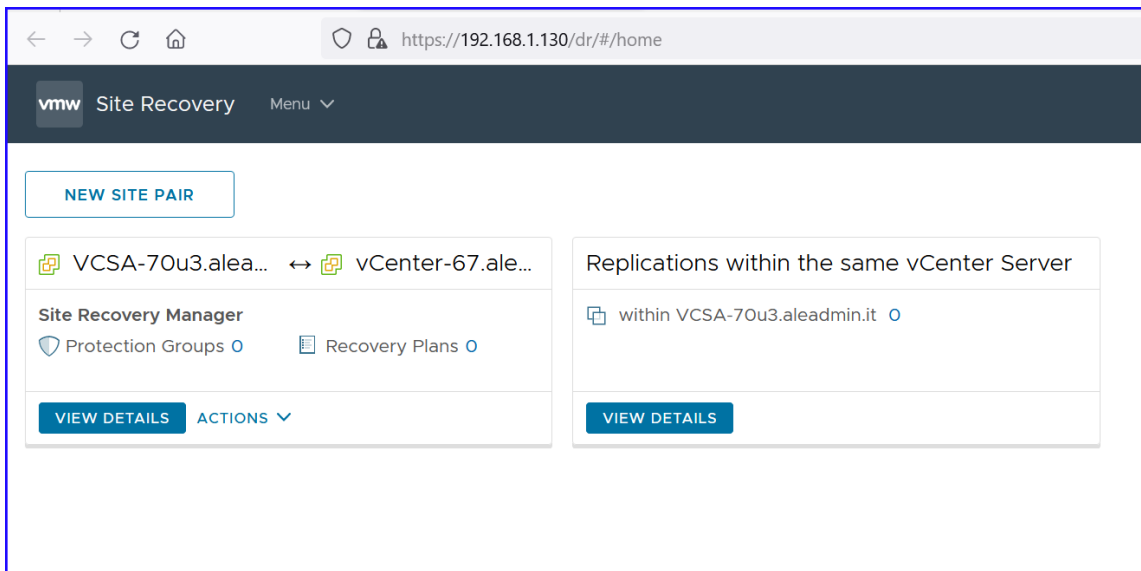
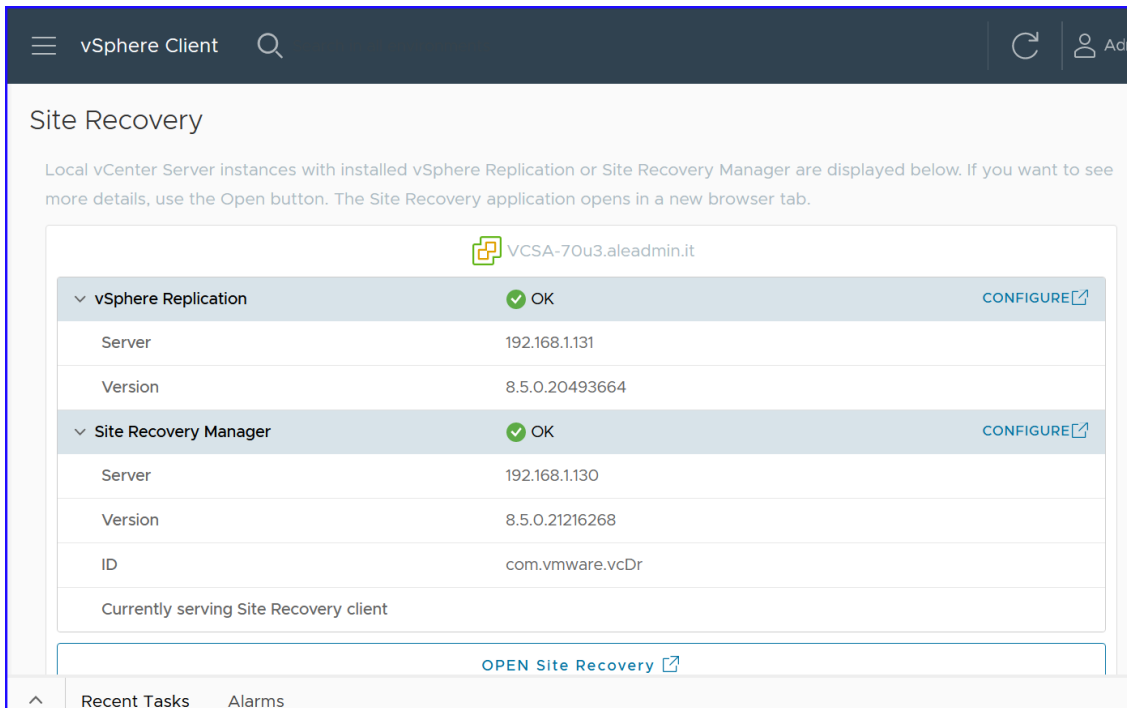
SUCCESS
Update the IP address for incoming traffic

Nota: Al termine di entrambe le installazioni di vSphere Replication Appliance, aprire le console da vCenter per visualizzare l'integrazione con vCenter Server.

- Cliccare sulla scritta "Site Recovery":

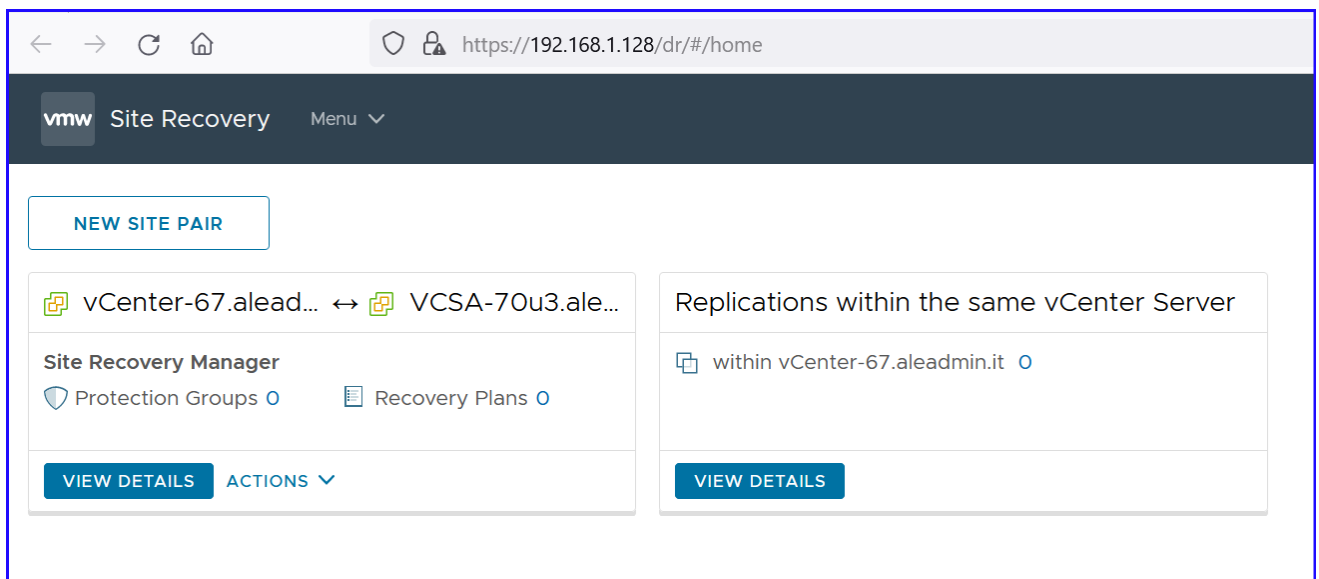
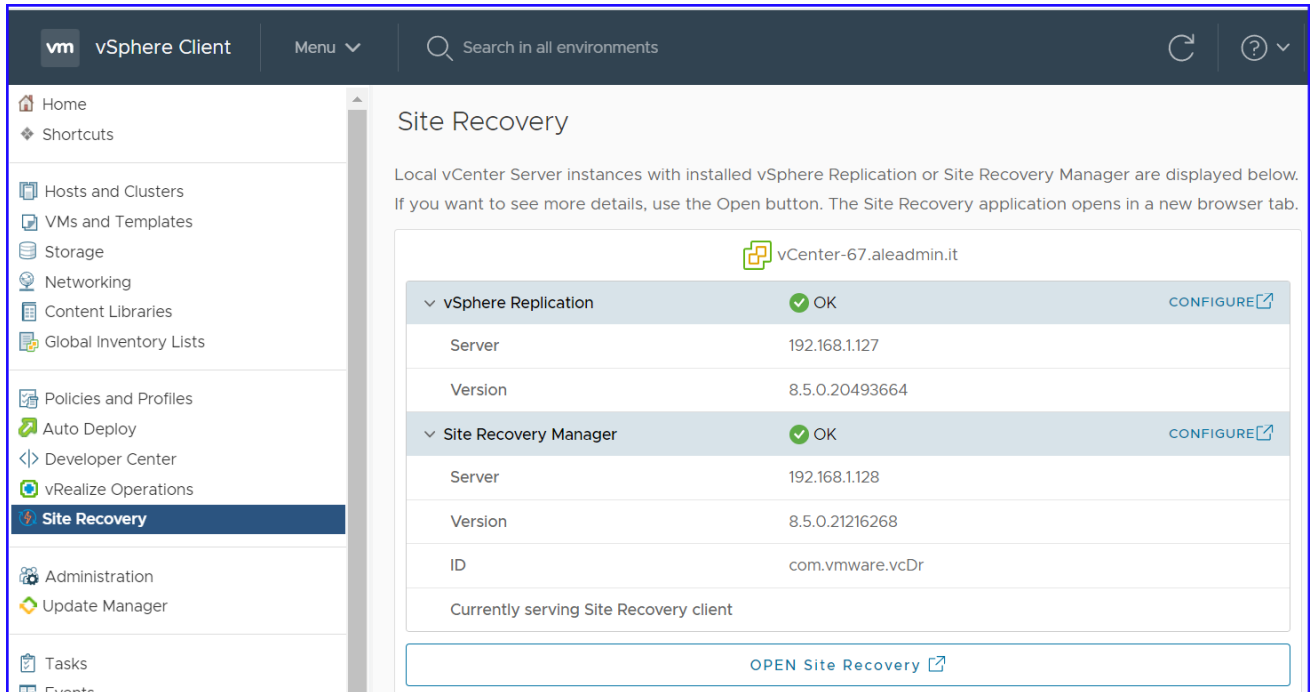


- Cliccare sul tasto “OPEN Site Recovery”:



Site Disaster Recovery:

- Click “OPEN Site Recovery”:

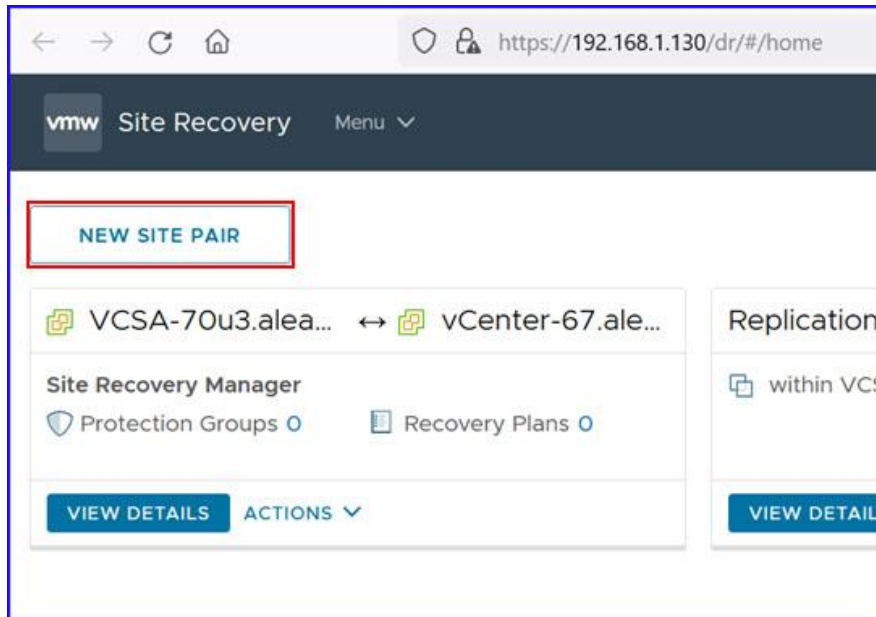


Nota: vSphere Replication deve essere installato su entrambi i siti (come SRM)

3. Configurazione del “New Site Pair”

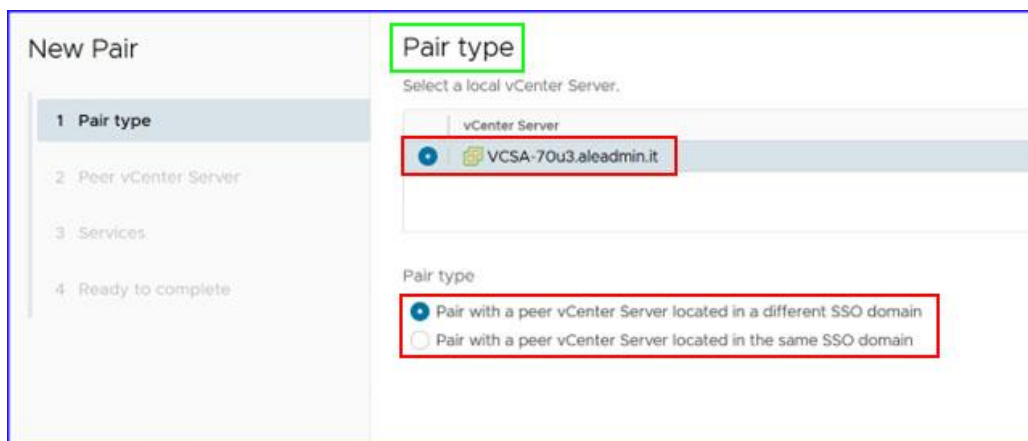
Procedura:

- Cliccare su “NEW SITE PAIR”:



- Selezionare il vCenter del "Pair type" (Sito protetto):
- Selezionare “Pair with a peer vCenter Server located in a different SSO domain” (single vCenter Server).
- Selezionare “Pair with a peer vCenter Server located in the same SSO domain” (vCenter server Linked mode).

Note: in questo caso specifico andrò a selezionare la prima opzione del “Pair type”.



- Inserire i seguenti parametri:
 - PSC host name:
 - PSC port:
 - User name:
 - Password:
- Cliccare sul tasto “Find vCenter Server Instance”:

New Pair

- 1 Pair type
- 2 Peer vCenter Server**
- 3 Services
- 4 Ready to complete

Peer vCenter Server


All fields are required unless marked (optional)
Enter the Platform Services Controller details for the peer vCenter Server.

PSC host name	192.168.1.129
PSC port	443
User name	administrator@vsphere.local
Password	••••••••

FIND VCENTER SERVER INSTANCES

Cliccare sul tasto “Connect”:

Security Alert

 Site Recovery Client cannot validate the following security certificates:

Thumbprint for host 192.168.1.129

01:84:CE:85:DF:41:73:B4:8A:26:BC:13:FD:B1:DD:09:4A:69:34:0F:F1:AD:5B:10:63:50:8A:BF:B1:24:B0:24

Connect anyway?

CONNECT **CANCEL**

- Settare i parametri per il “Peer vCenter Server” (vCenter Disaster Recovery):

The screenshot shows the 'Peer vCenter Server' configuration step in a 'New Pair' wizard. The left sidebar shows the progress: 1 Pair type, 2 Peer vCenter Server (selected), 3 Services, and 4 Ready to complete. The main area contains the following fields:

- PSC host name: 192.168.1.129
- PSC port: 443
- User name: administrator@vsphere.local
- Password: masked with dots and an eye icon to toggle visibility.

A blue button labeled 'FIND VCENTER SERVER INSTANCES' is present. Below it, a message says 'Select a vCenter Server you want to pair.' A table lists the discovered vCenter servers:

vCenter Server
<input checked="" type="radio"/> vCenter-67.aleadmin.it

- Selezionare “vSphere Replication”:
- Cliccare sul tasto “Next” per proseguire:

The screenshot shows the 'Services' selection step in the 'New Pair' wizard. The left sidebar shows the progress: 1 Pair type, 2 Peer vCenter Server, 3 Services (selected), and 4 Ready to complete. The main area displays a table of services identified on the selected vCenter Server instances:

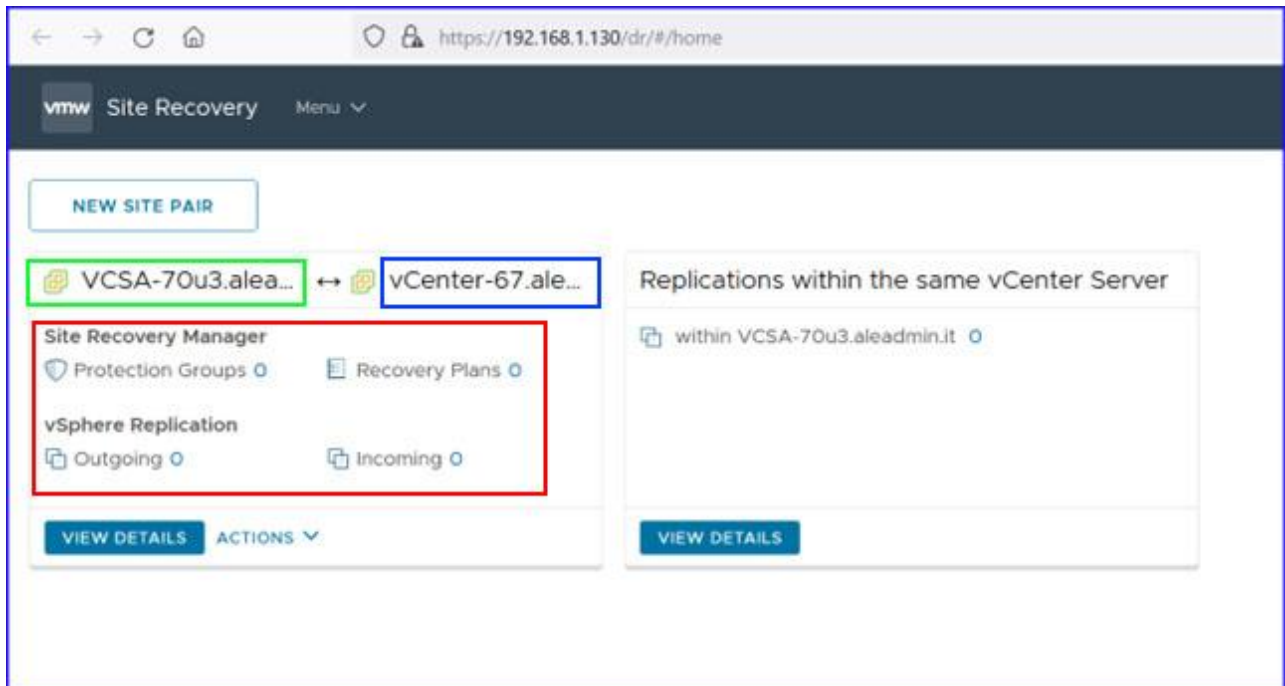
Service	VCSA-70u3.aleadmin.it	vCenter-67.aleadmin.it
<input checked="" type="checkbox"/> vSphere Replication	Site-Prod	Site-DR

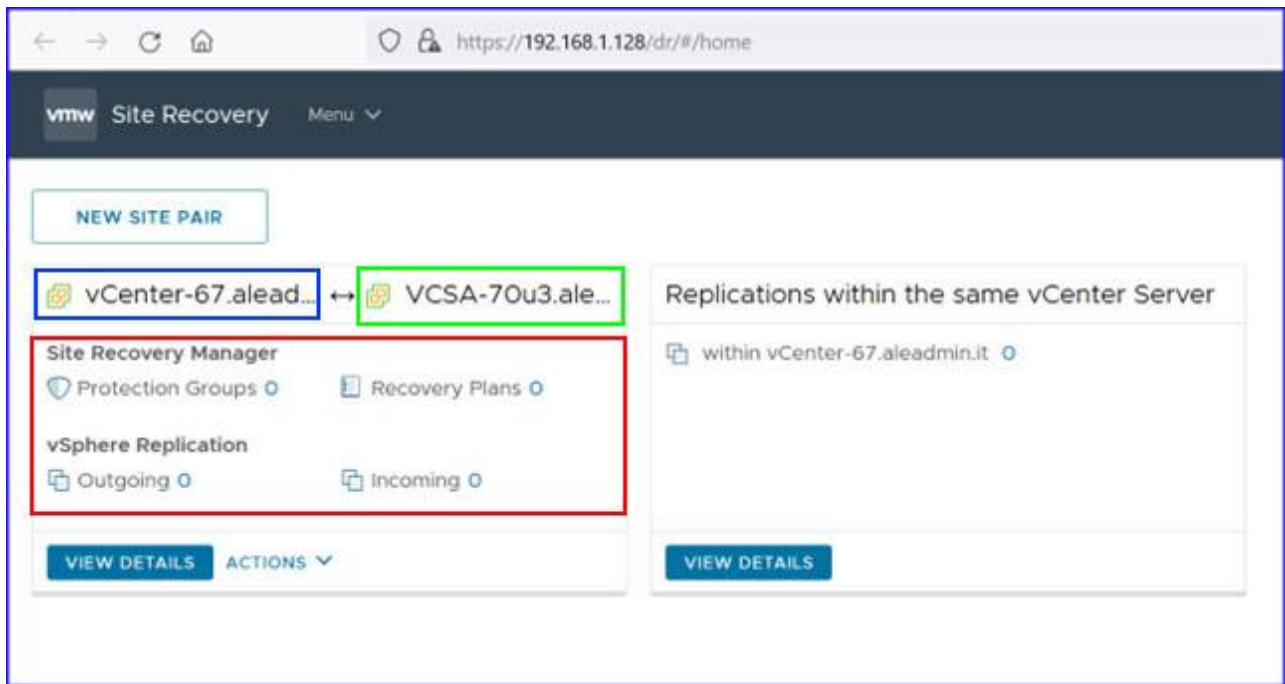
At the bottom right, there are three buttons: 'CANCEL', 'BACK', and 'NEXT' (highlighted in red).

- Cliccare sul tasto “Finish”:



L'associazione tra il "Protected Site" e il "Disaster Recovery Site" è concluso.



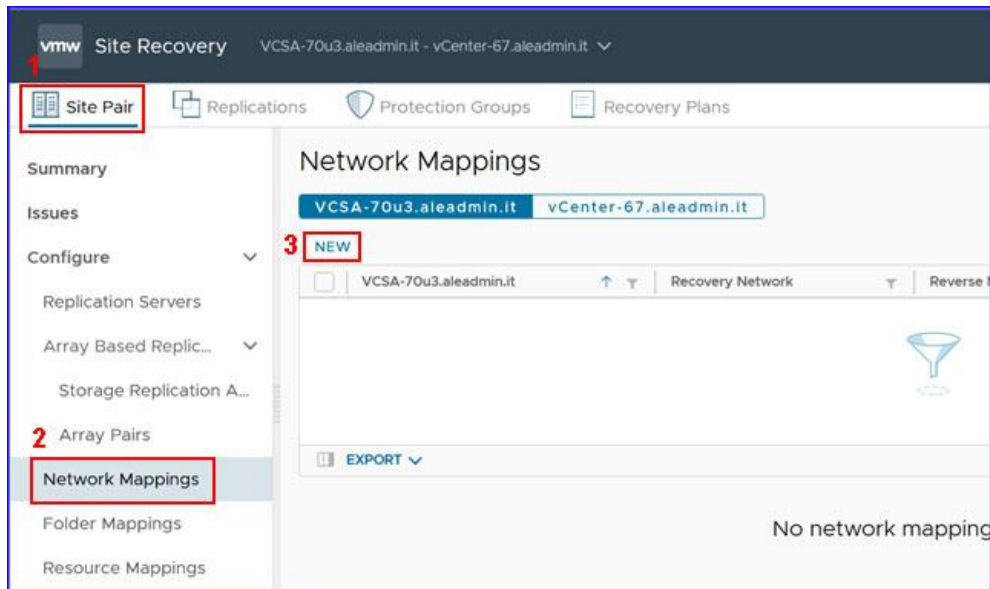


Nota: eseguendo l'associazione dal sito protetto... sarà visibile da entrambe le parti.

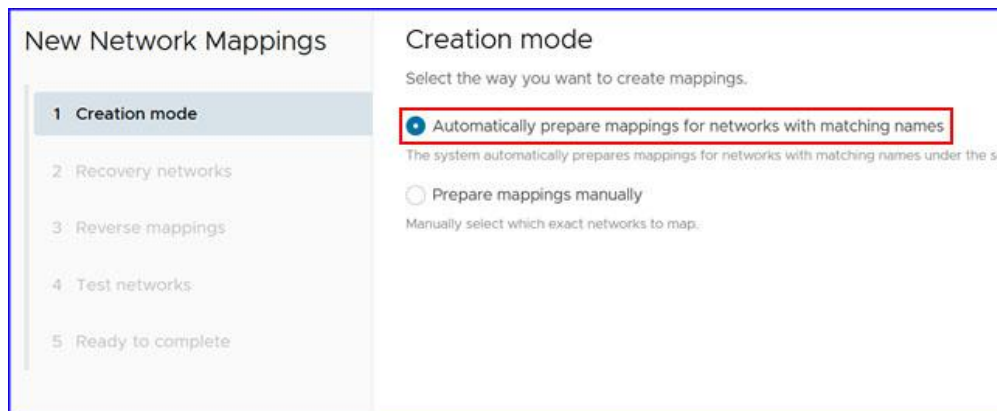
4. Network Mapping

VMware Site Recovery Manager utilizzerà le mappature di rete per determinare a quale gruppo di porte connettere le macchine virtuali ripristinate.

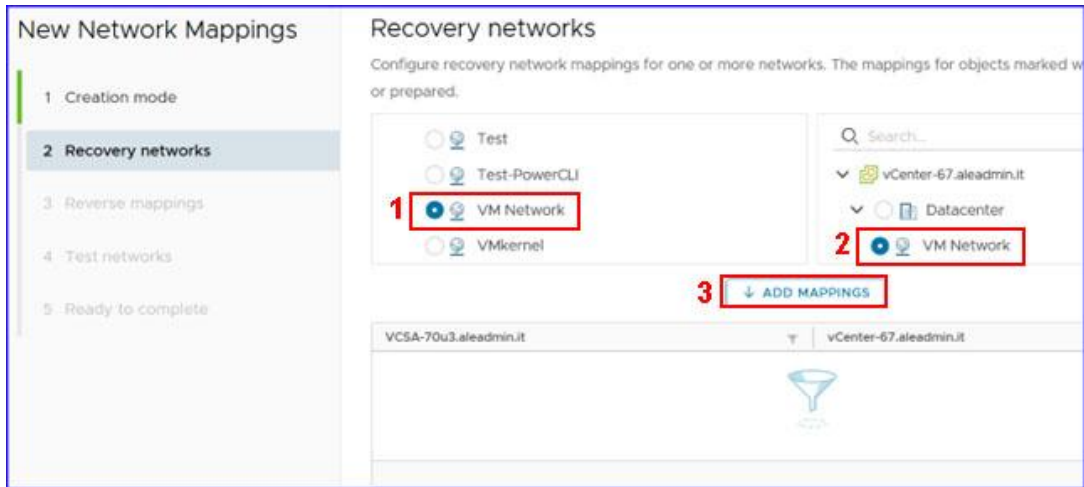
- Selezionare il tab “Site Pair”:
- Selezionare la scritta “Network Mappings”:
- Cliccare sulla scritta “NEW”:



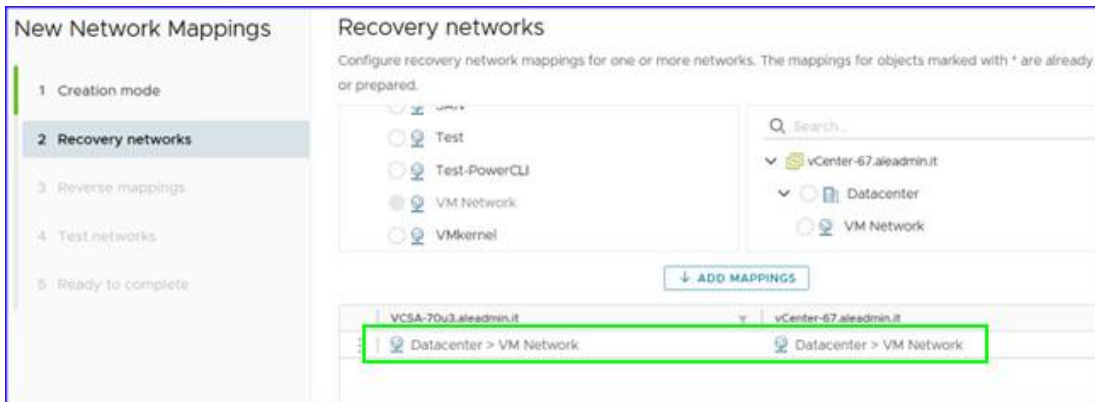
- Selezionare “Automatically prepare mappings for networks with matching names”:



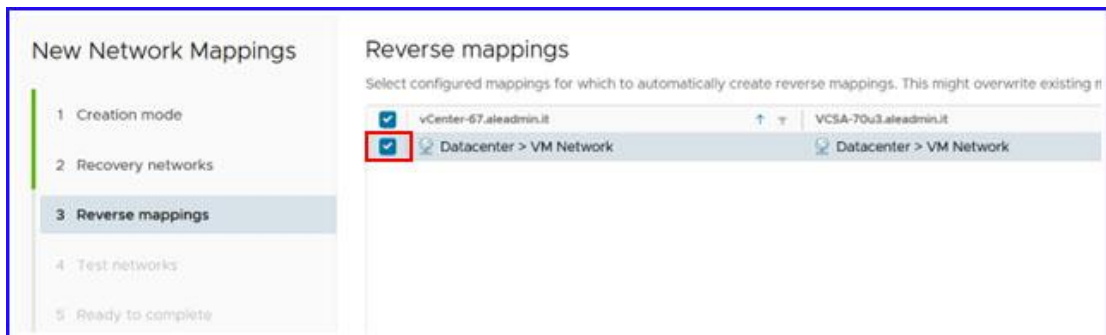
- Selezionare le mappature di rete per una o più reti:
- Cliccare sul tasto “ADD MAPPINGS”:



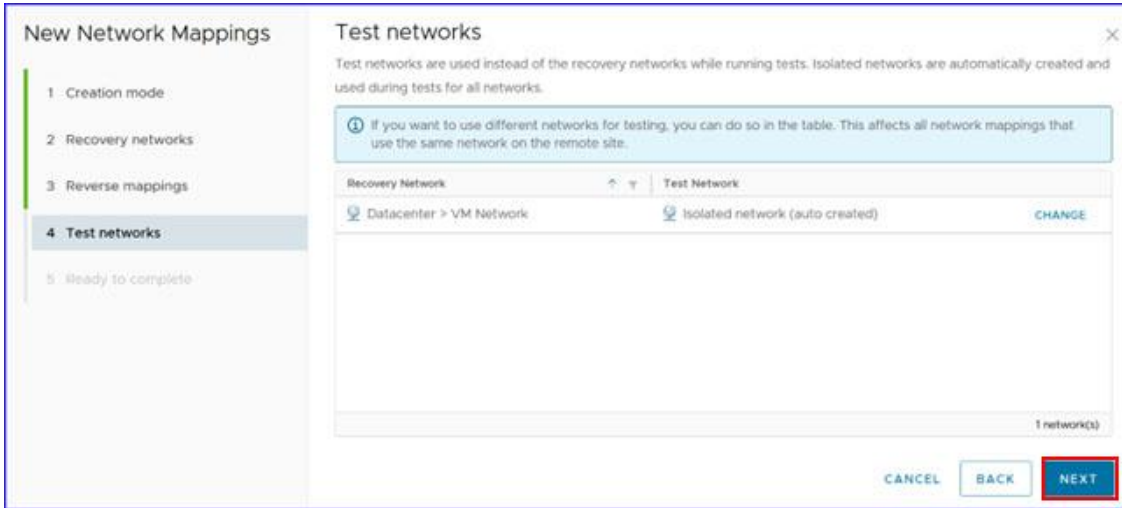
... mappatura network aggiunta... proseguire...



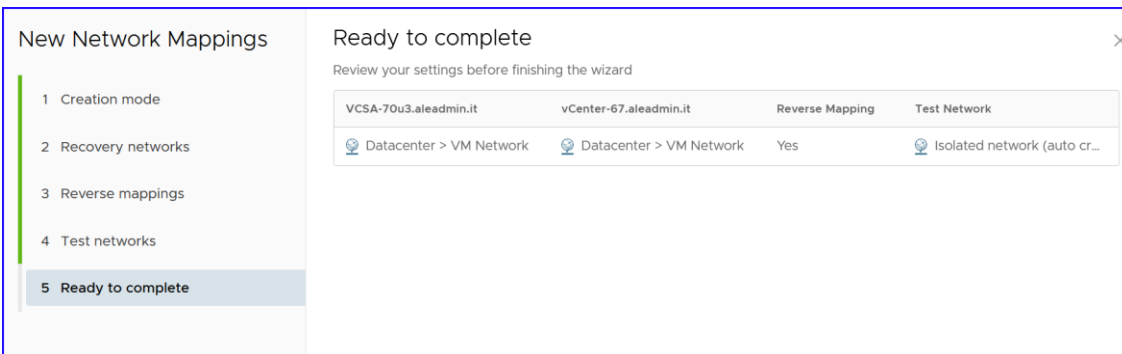
- Selezionare il “Reverse mappings”:



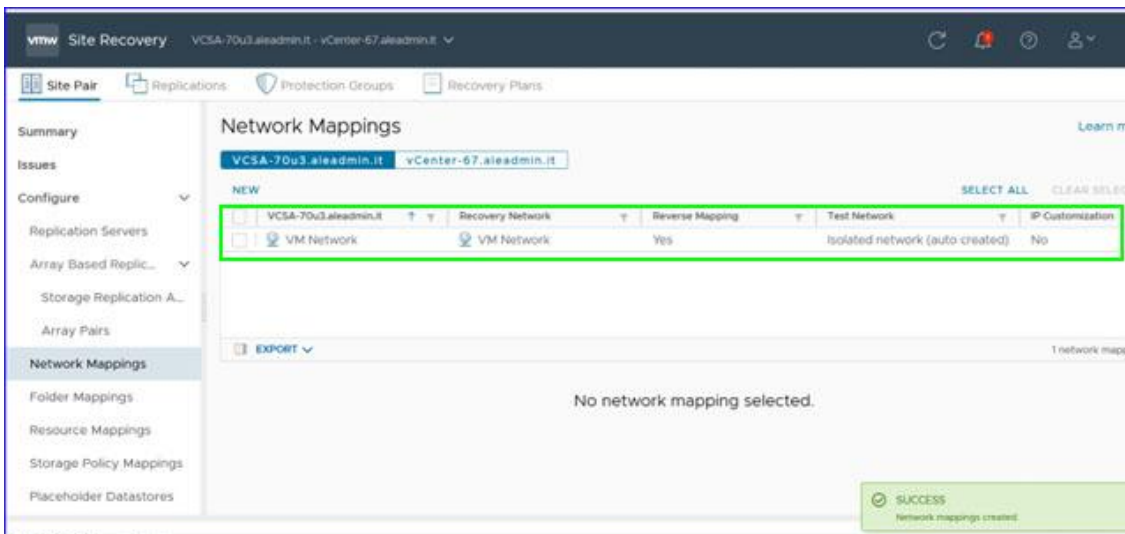
- Cliccare sul tasto “Next”:



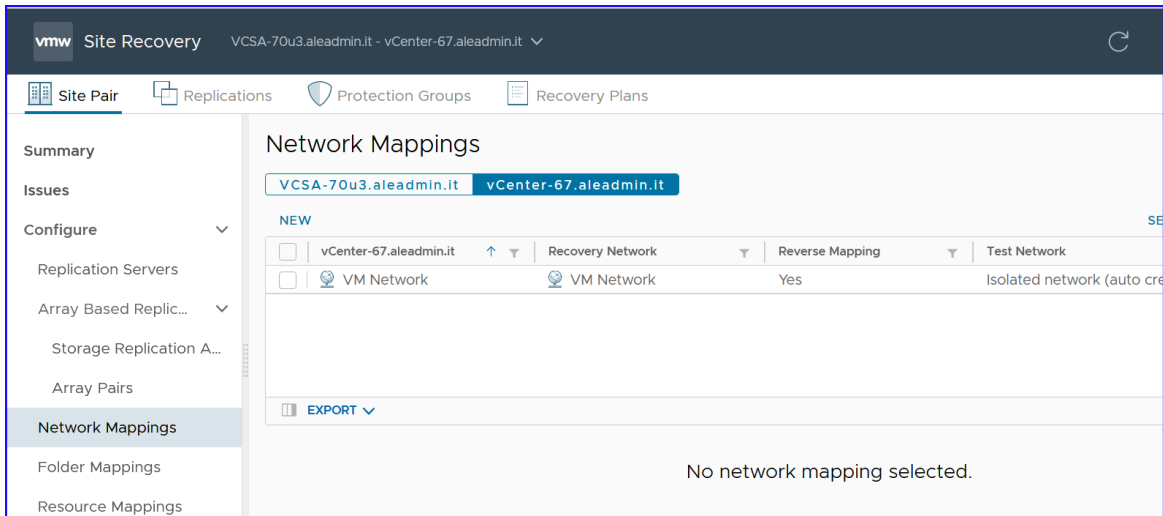
- Rileggere e cliccare sul tasto “Finish”:



- Mapping completato:

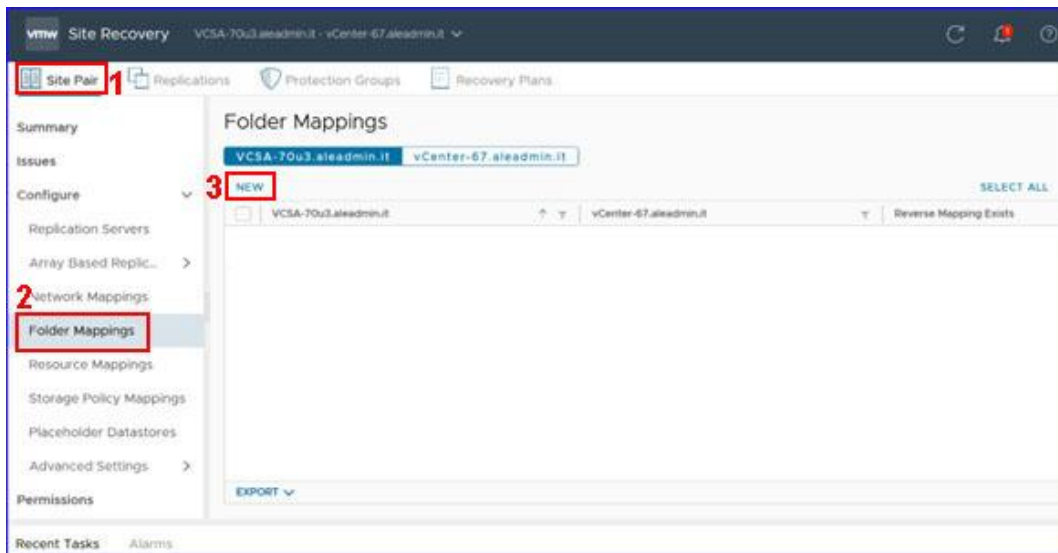


Nota: Selezionando il vCenter del “Disaster Recovery” è possibile visualizzare "Reverse Mappings":

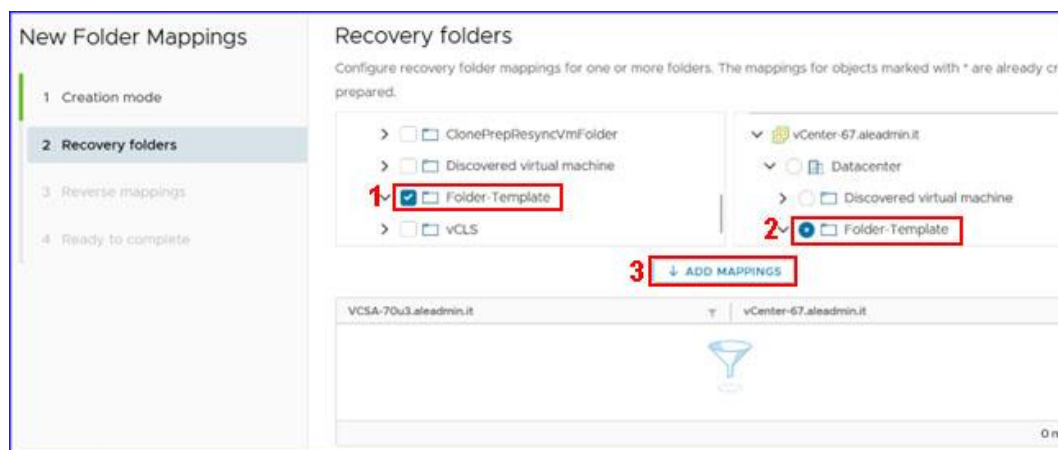


5. Folder Mapping

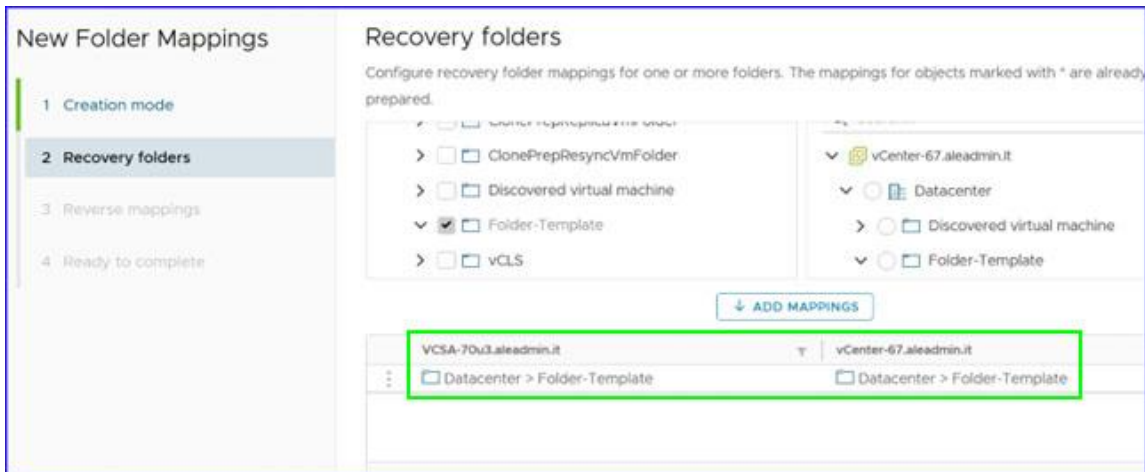
- Selezionare il tab “Site Pair”:
- Selezionare “Folder Mappings”:
- Cliccare sulla scritta “NEW”:



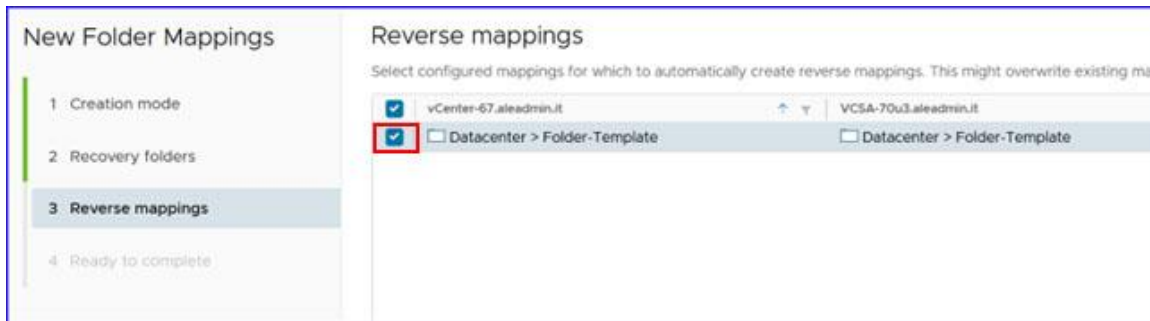
- Selezionare le mappature delle cartelle per una o più cartelle:
- Cliccare sul tasto “ADD MAPPINGS”:



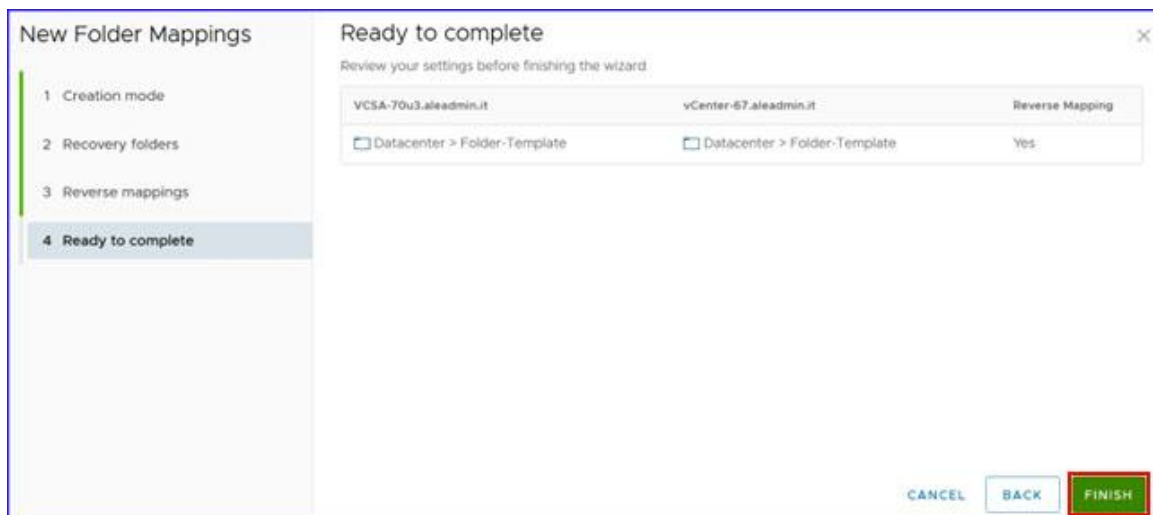
- Mappatura aggiunta:



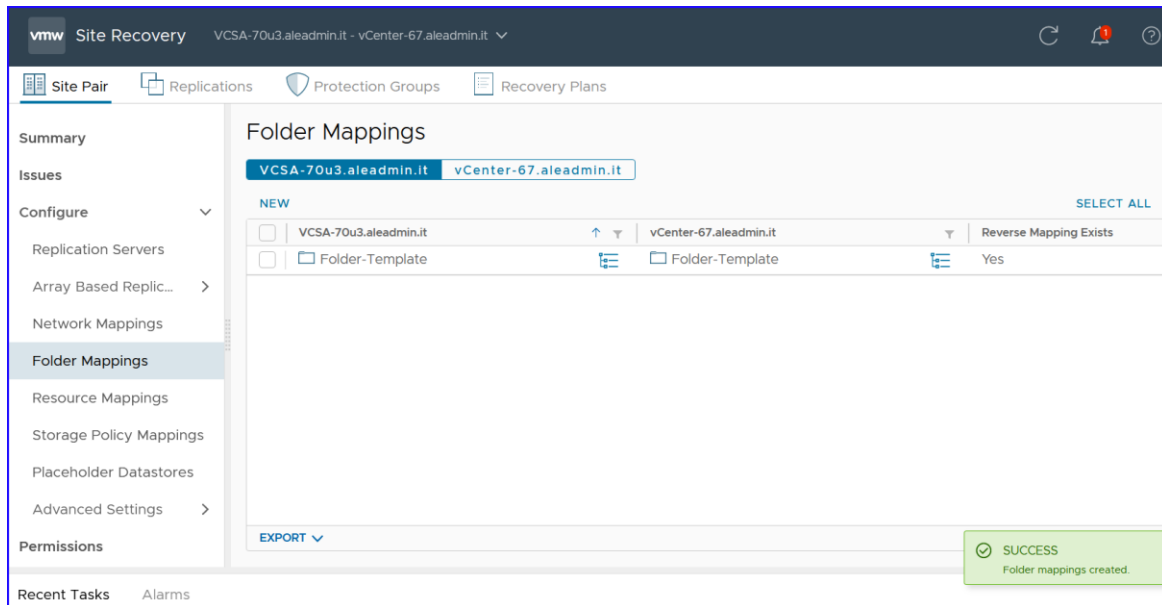
- Selezionare il “Reverse mappings”:



- Rileggere e cliccare sul tasto “FINISH”:

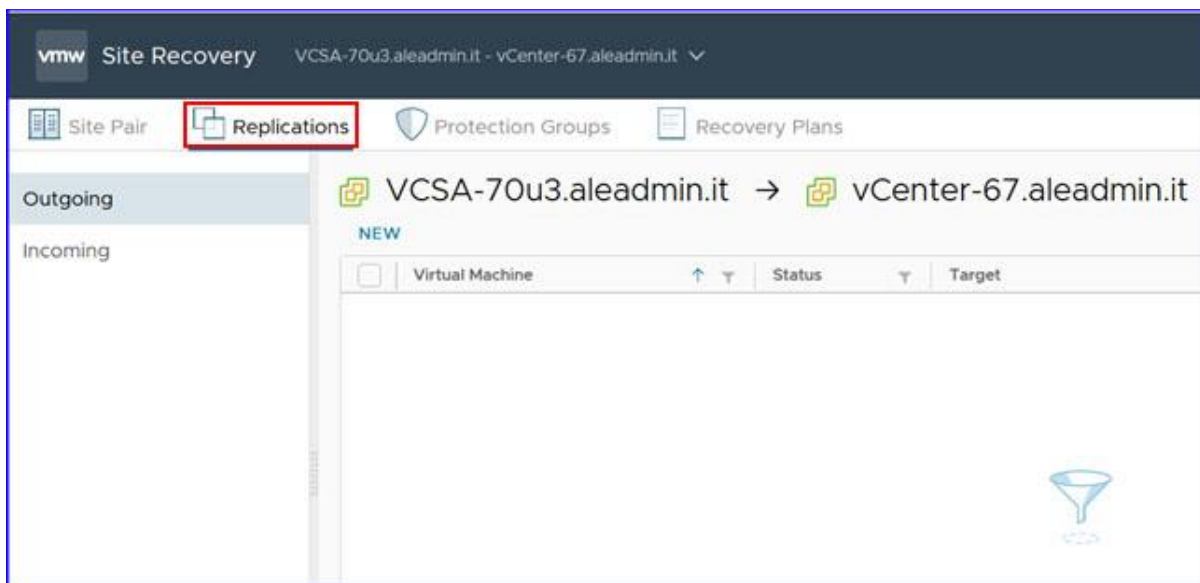


... mappatura completata:



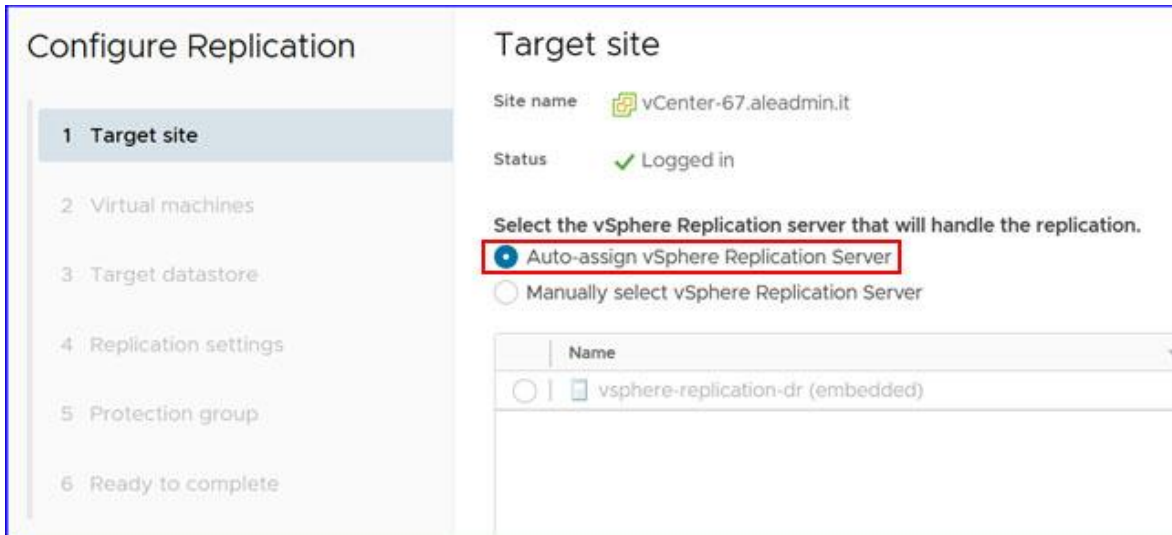
Configurazione delle repliche delle virtual machine

- Selezionare il tab “Replication”:
- Cliccare sulla scritta “NEW”:

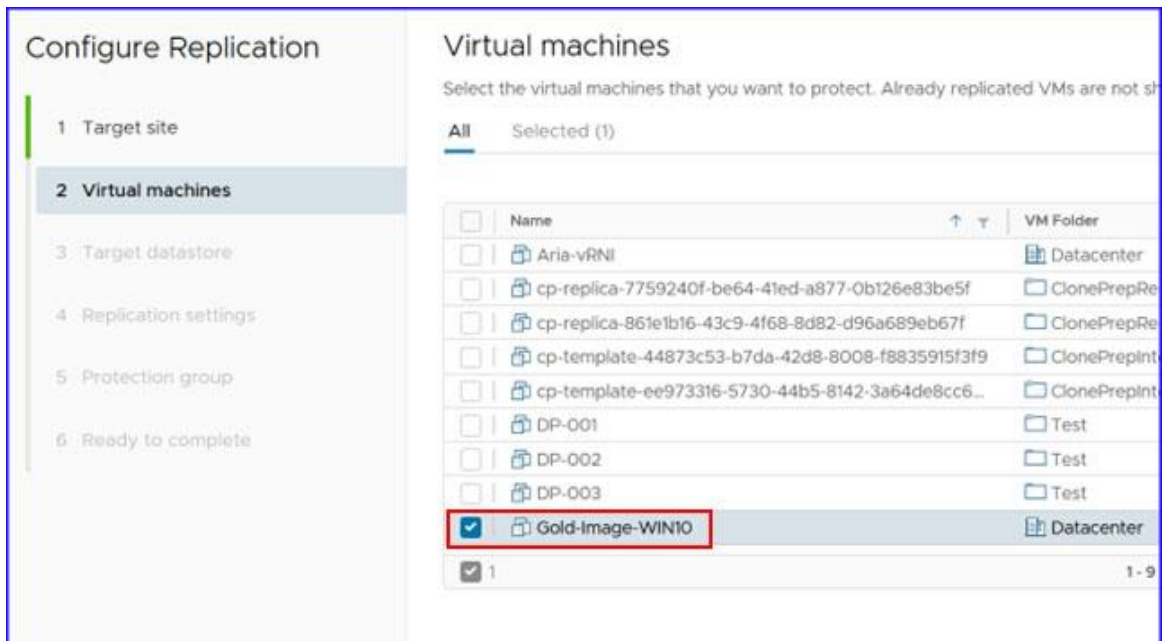


La procedura guidata “Configure Replication” inizia con la selezione del vSphere Replication Server.

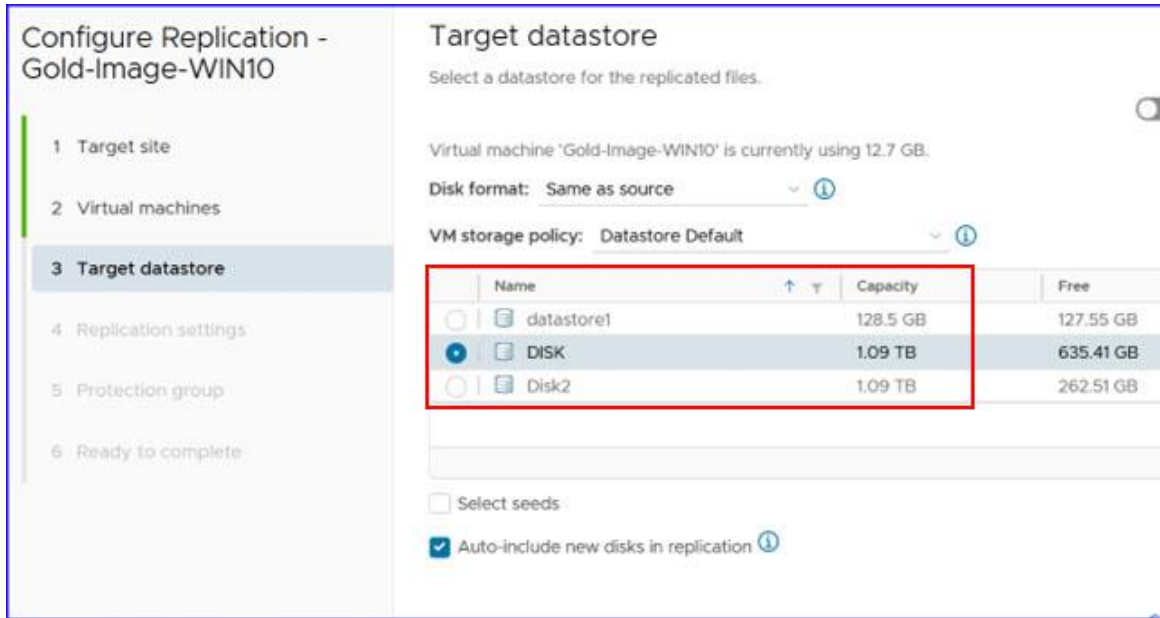
Lasciare l'opzione preselezionata in “Auto-assign” a meno che non sia necessario sceglierne manualmente uno specifico.



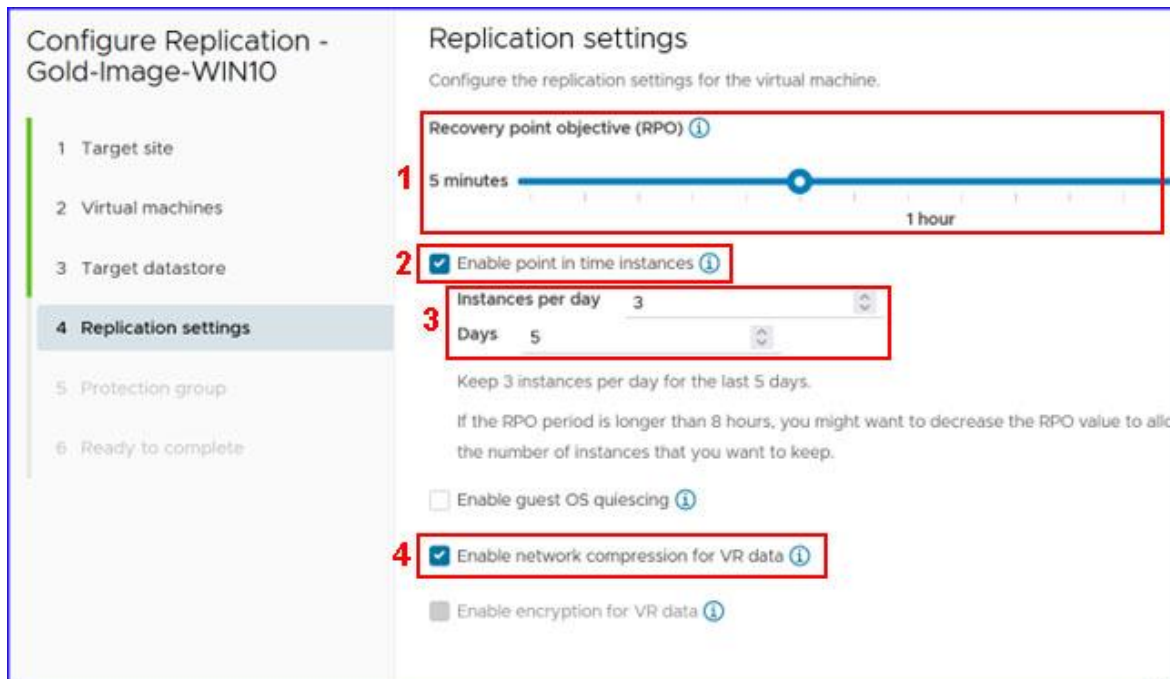
- Selezionare una o più macchine virtuali da replicare nel sito di “disaster recovery”:



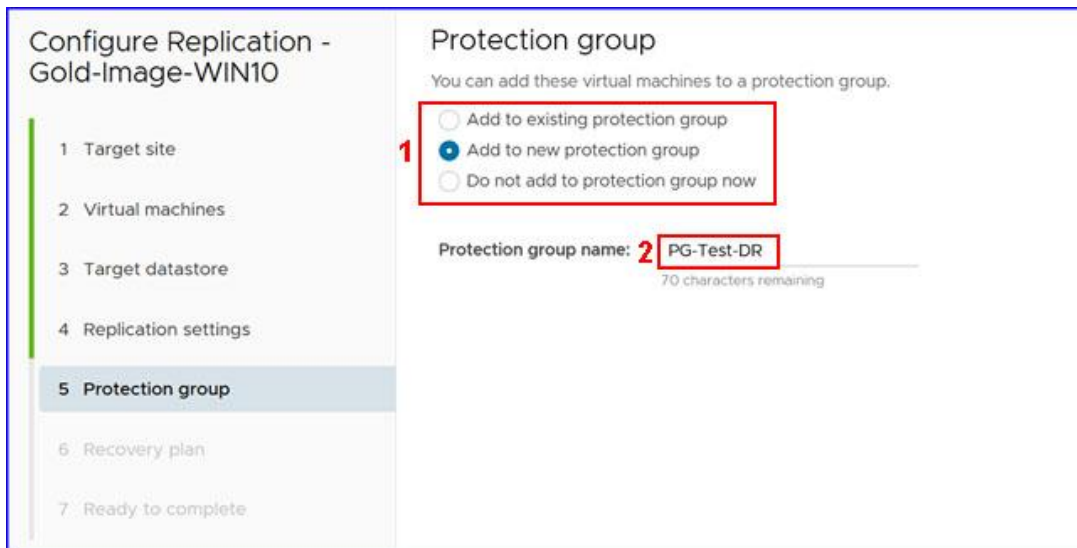
- Selezionare il datastore:



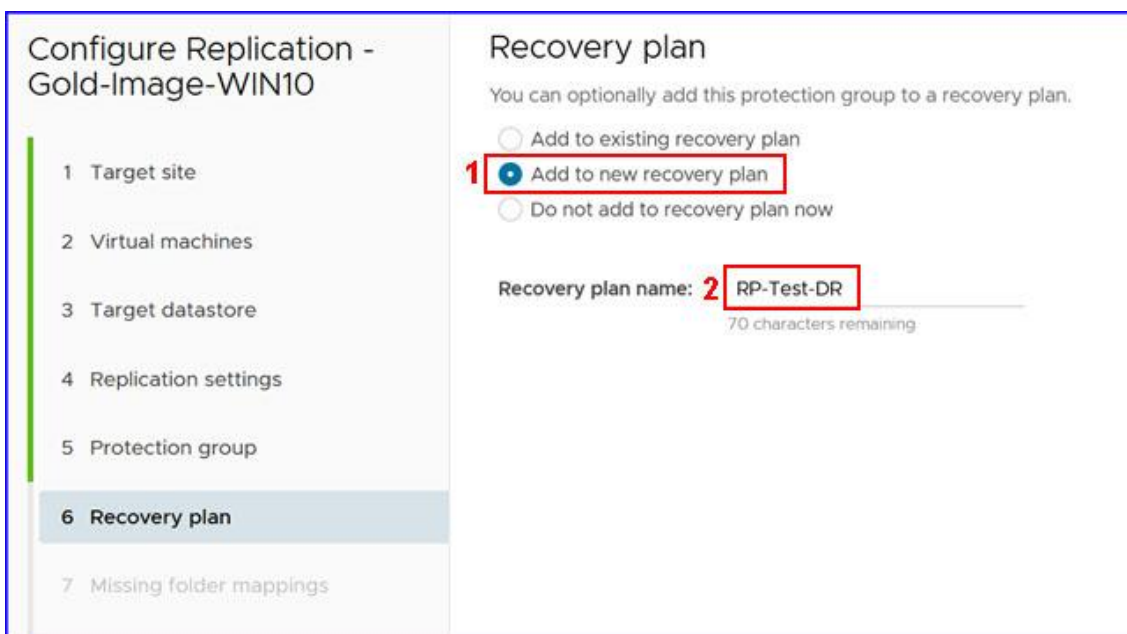
- Completare le impostazioni in base alle proprie esigenze:



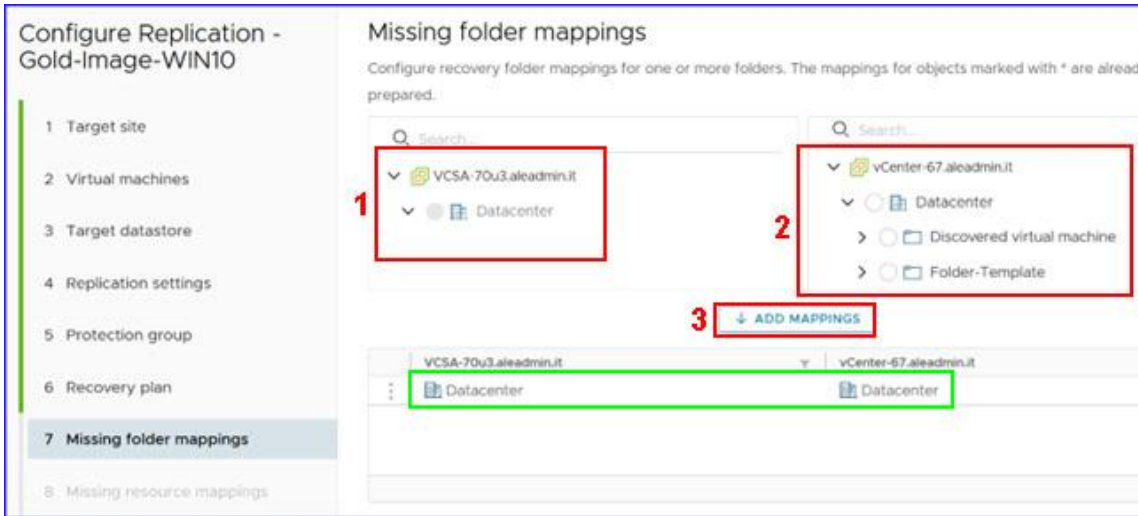
- Nella sezione "Protection Group" è possibile sceglierne uno esistente, crearne uno nuovo oppure crearlo in seguito.
- Inserire il nome per il nuovo PG:



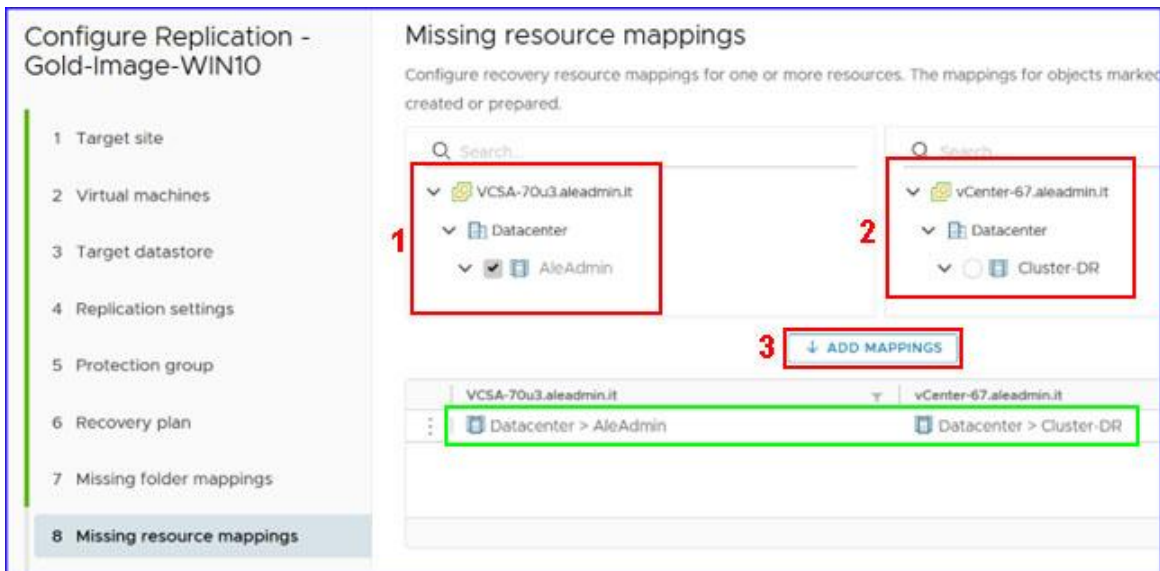
- Nella sezione "Recovery Plan" si può scegliere un Recovery Plan esistente, crearne uno nuovo o farlo in seguito:
- Inserire un nome per il recovery plan:



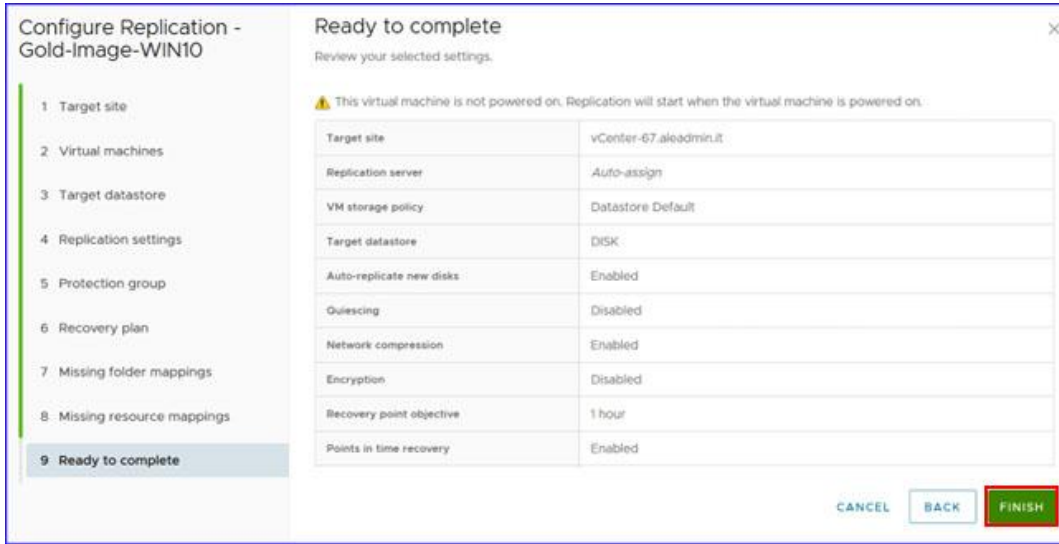
- Selezionare le mappature delle cartelle per una o più cartelle:
- Cliccare sul bottone “ADD MAPPINGS”:



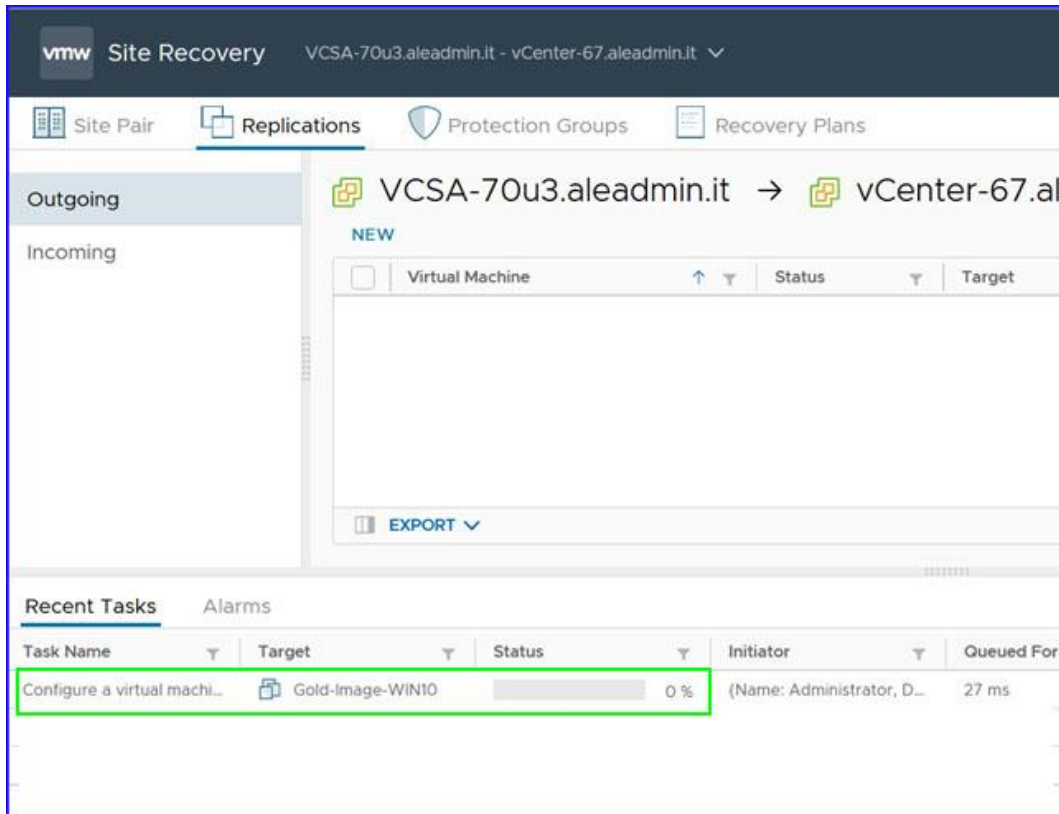
- Selezionare i mapping per una o più risorse:
- Cliccare sul tasto “ADD MAPPINGS”:

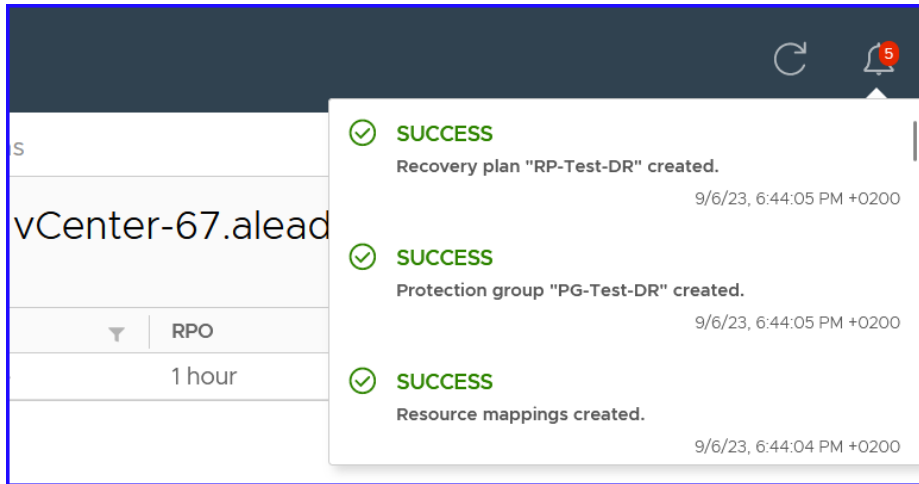


- Cliccare sul tasto “Finish”:



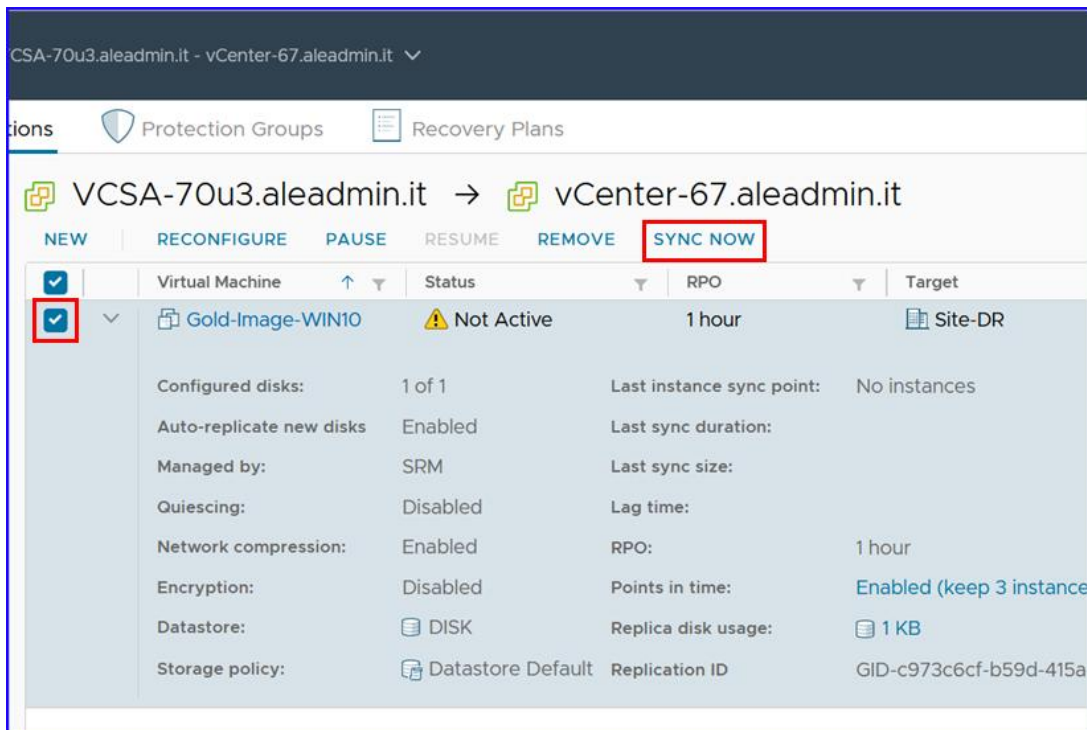
- visualizzare il processo attraverso "Recent Task":

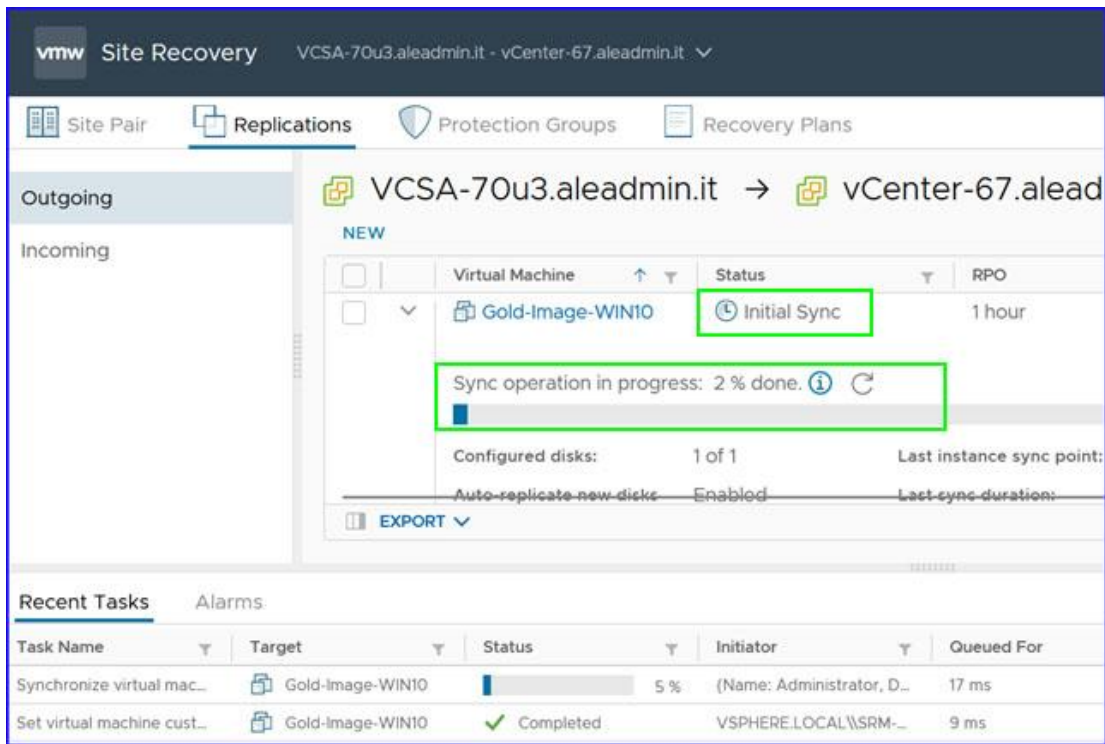




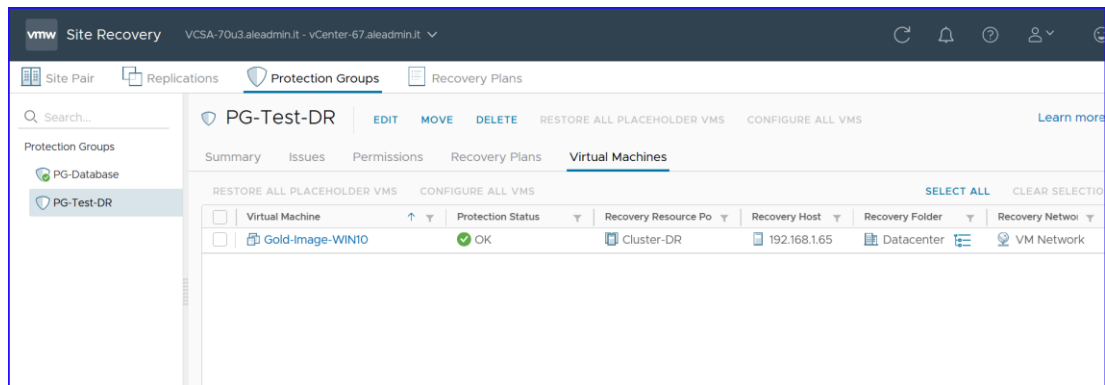
A scopo di test, eseguire la prima sincronizzazione della macchina virtuale sul sito di disaster recovery:

- Cliccare sulla scritta "Sync Now":



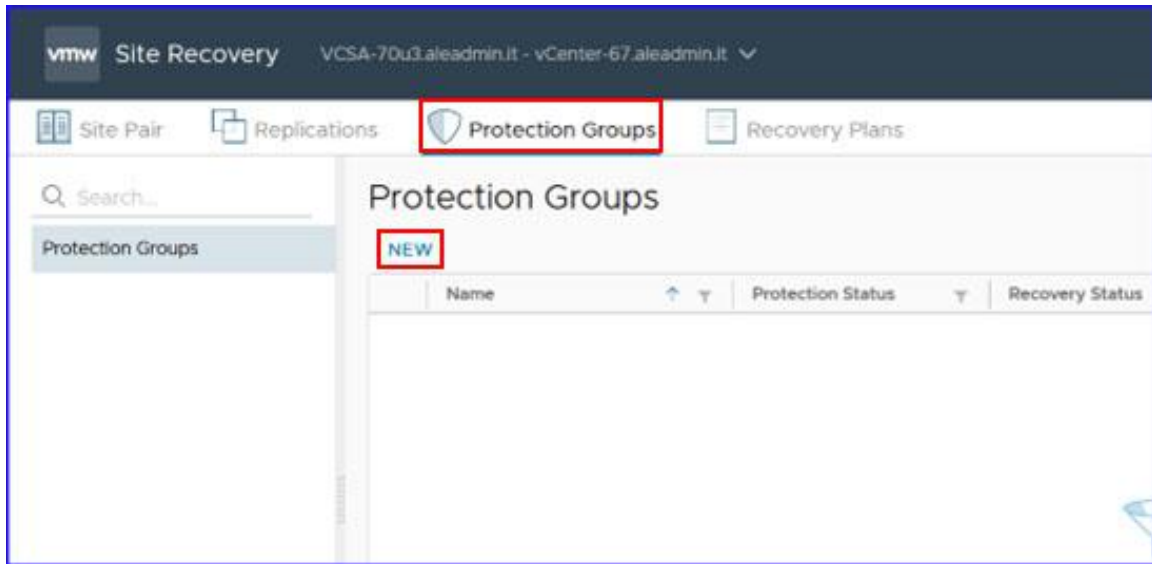


- Sincronizzazione completata con successo:

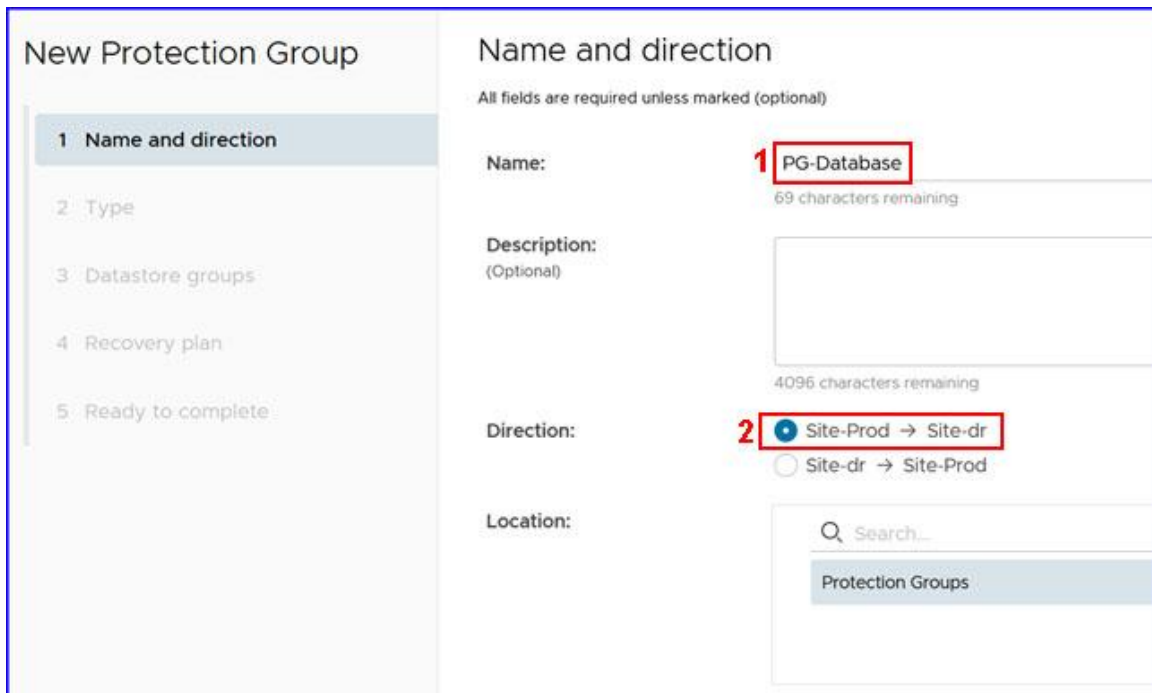


6. Creazione di un Protection Group

- Selezionare il tab “Protection Group”:
- Cliccare sulla scritta “NEW”:



- Inserire i seguenti parametri:
 - Name:
 - Direction:



- Select “Individual VMs (vSphere Replication)”:

The screenshot shows the 'New Protection Group' wizard in the 'Type' step. On the left, a vertical list of steps is shown: 1 Name and direction, 2 Type (highlighted), 3 Virtual machines, 4 Recovery plan, and 5 Ready to complete. On the right, under the heading 'Type', there is a prompt: 'Select the type of protection group you want to create:'. Below this are four radio button options: 'Datastore groups (array-based replication)', 'Individual VMs (vSphere Replication)', 'Virtual Volumes (vVol replication)', and 'Storage policies (array-based replication)'. The 'Individual VMs (vSphere Replication)' option is selected and highlighted with a red box. Each option has a brief description below it.

- Selezionare una o più macchine virtuali (in questo caso solo una VM):

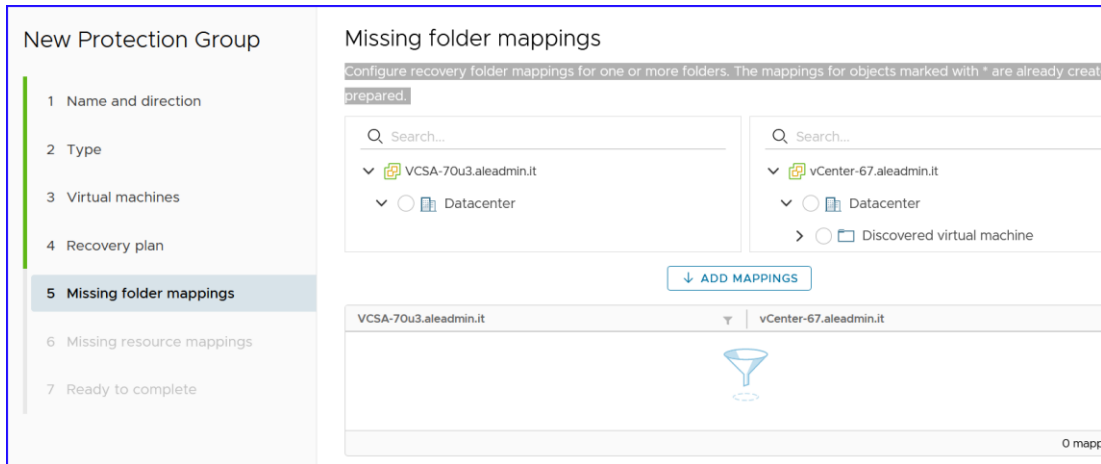
The screenshot shows the 'New Protection Group' wizard in the 'Virtual machines' step. On the left, the steps are: 1 Name and direction, 2 Type, 3 Virtual machines (highlighted), 4 Recovery plan, and 5 Ready to complete. On the right, under the heading 'Virtual machines', there is a prompt: 'Select the virtual machines to include in the protection group'. Below this is a table with columns: 'Virtual machine', 'Status', and 'Protection Status'. The table contains one entry: 'SRV-SQL-2019' with status 'Not Active' and 'Add to this protection group'. A red box highlights the checkbox in the 'Virtual machine' column for this entry.

- Nella sezione "Recovery Plan" possiamo scegliere un Recovery Plan esistente, crearne uno nuovo o farlo in seguito:

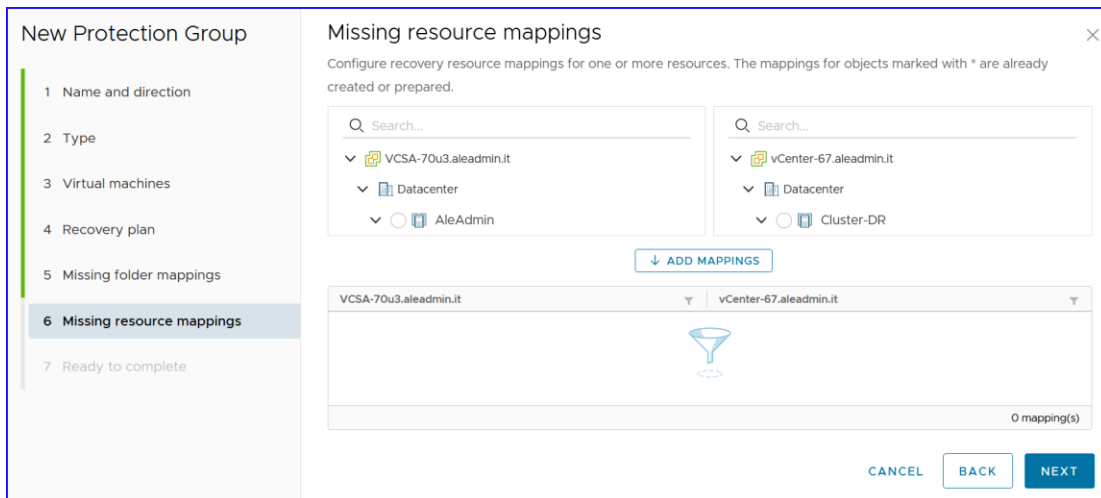
- Inserire il nome per il “Recovery Plan”:

The screenshot shows the 'New Protection Group' wizard in the 'Recovery plan' step. On the left, the steps are: 1 Name and direction, 2 Type, 3 Virtual machines, 4 Recovery plan (highlighted), 5 Missing folder mappings, 6 Missing resource mappings, and 7 Ready to complete. On the right, under the heading 'Recovery plan', there is a prompt: 'You can optionally add this protection group to a recovery plan.'. Below this are three radio button options: 'Add to existing recovery plan', 'Add to new recovery plan', and 'Do not add to recovery plan now'. The 'Add to new recovery plan' option is selected and highlighted with a red box. Below the options is a text input field labeled 'Recovery plan name:' with the text 'RP-Database' entered. A red box highlights the input field. Below the input field, it says '69 characters remaining'.

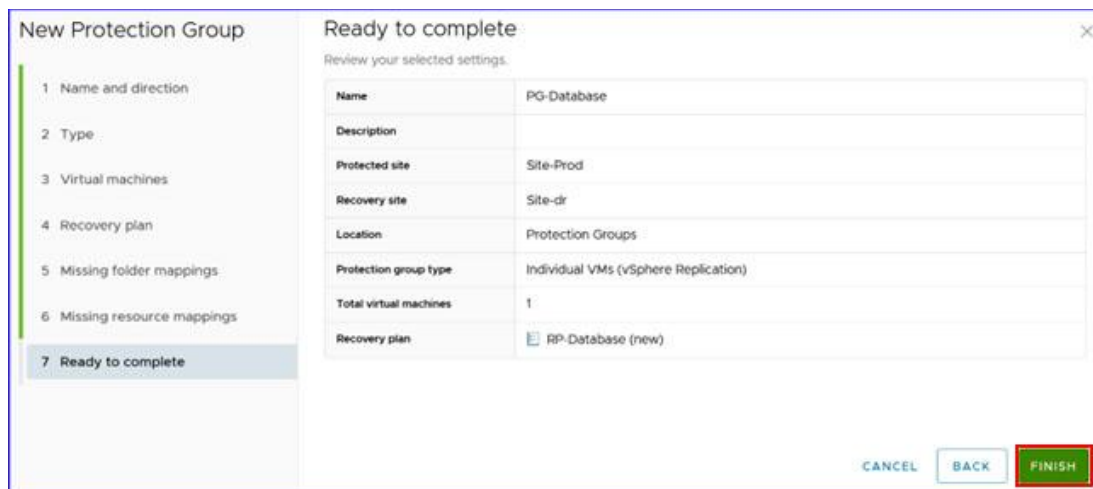
- Selezionare le mappature per una o più cartelle:
- Cliccare sul tasto “ADD MAPPINGS”:



- Selezionare le mappature per una o più risorse:
- Cliccare sul tasto “ADD MAPPINGS”:



- Cliccare sul tasto “Finish”:



7. Creazione di un Recovery Plans

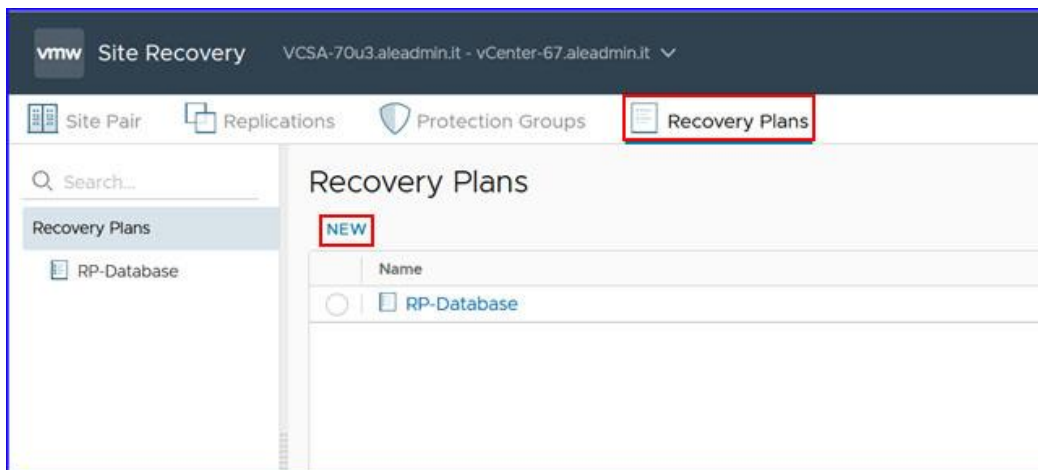
In VMware Site Recovery Manager, i piani di ripristino sono flessibili, personalizzabili e automatizzati, essi orchestrano il processo di ripristino (ordine di avvio/arresto della VM, indirizzi di rete da utilizzare, ecc.).

Un “Recovery plan” può include uno o più “Protection Group”.

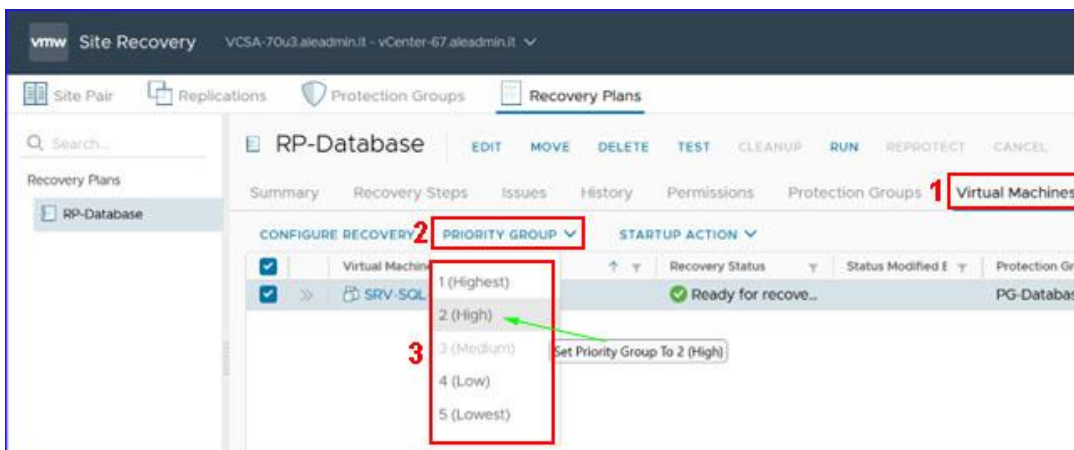
Un “Protection Group”. può far parte di più “Recovery plan”.

Nell’immagine sottostante abbiamo già creato un “Recovery plan” tramite la procedura guidata del “Protection Group”, quindi di seguito vedremo come configurarlo.

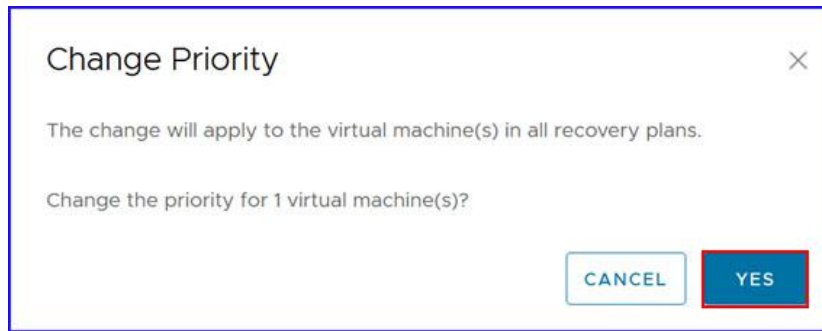
- Selezionare il tab “Recovery Plans”:
- Cliccare sulla scritta “NEW”:



- Selezionare il tab “Virtual machine”:
- Cliccare su “Priority Group” e scegliere uno dei 5 livelli a seconda delle proprie esigenze:



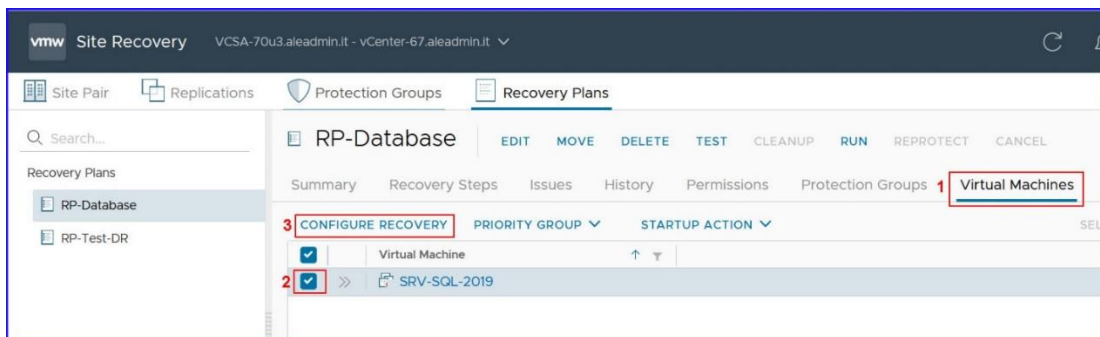
- Cliccare sul tasto “Yes”:



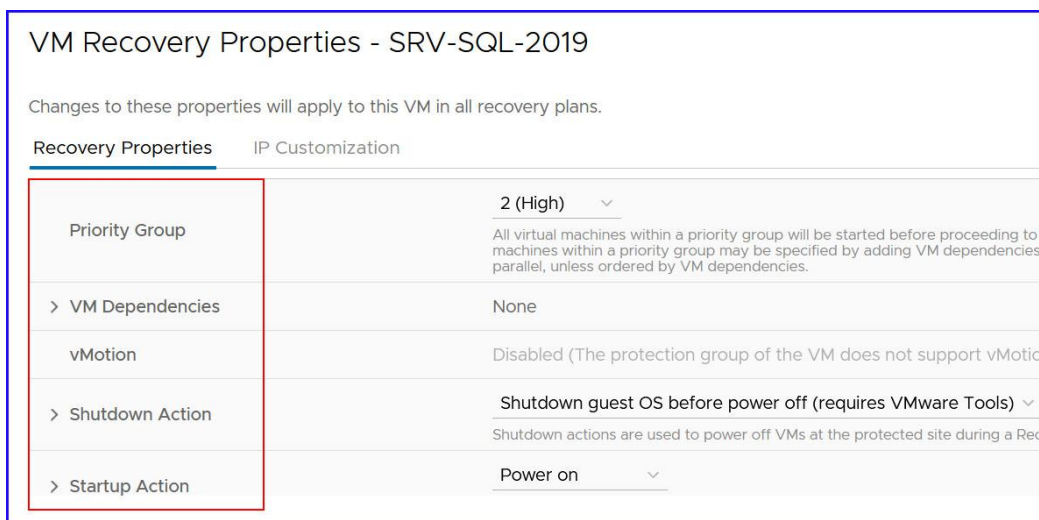
Per ogni virtual machine presente nell'elenco è possibile configurare l'ordine di avvio desiderato.

Nella schermata "Recovery Plan" è possibile configurare alcuni parametri per le macchine virtuali in “disaster recovery”.

- selezionare “Virtual Machine”:
- inserire il “flag” accanto al nome della virtual machine:
- cliccare sulla scritta “Configure Recovery”:



- Parametri configurabili:



> Startup Action	Power on
> Pre Power On Steps	None
> Post Power On Steps	None

- Nella sezione "STARTUP ACTION" si può decidere di "accendere" o "non accendere" la VM in disaster recovery:

RP-Database | EDIT MOVE DELETE TEST CLEANUP RUN

Summary Recovery Steps Issues History Permissions Protection

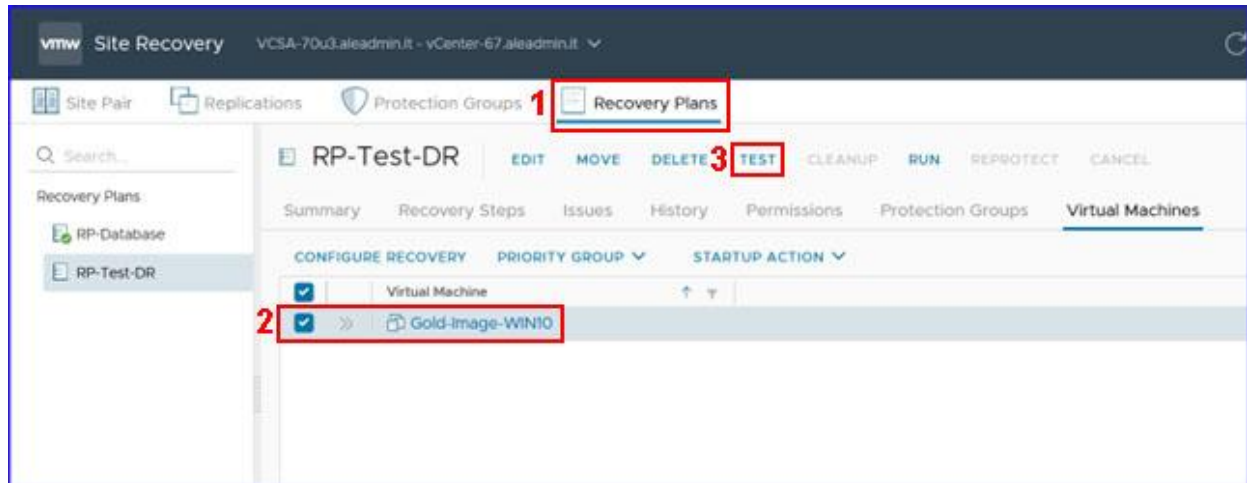
CONFIGURE RECOVERY PRIORITY GROUP ▾ 1 STARTUP ACTION ▾

<input checked="" type="checkbox"/>	Virtual Machine	
<input checked="" type="checkbox"/>	>> SRV-SQL-2019	2

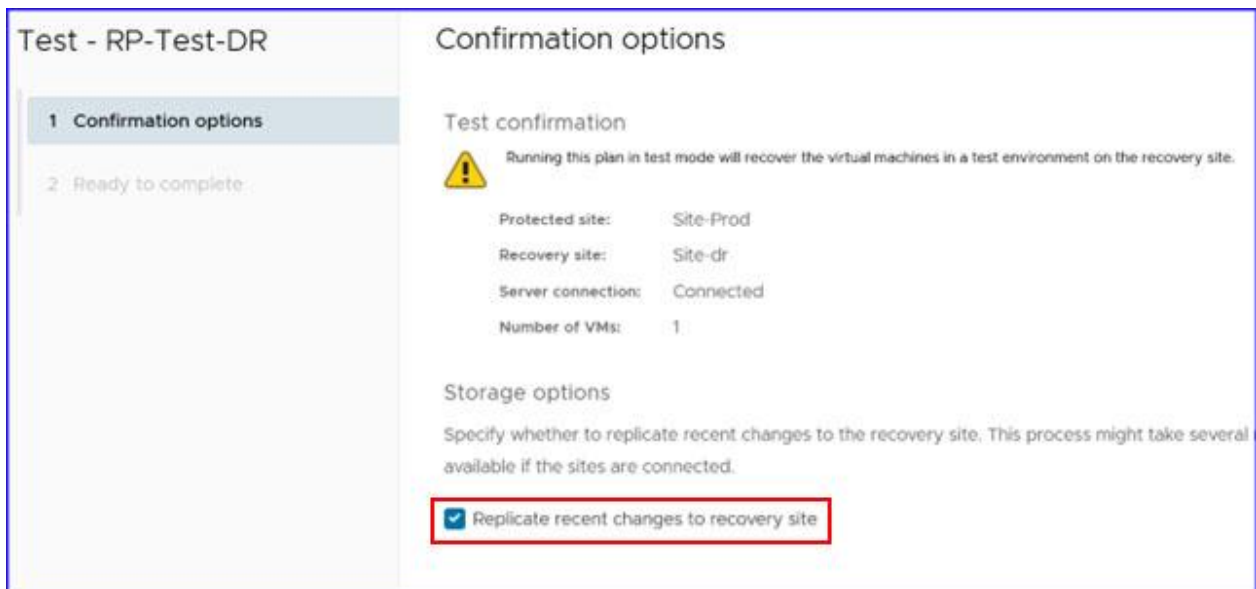
Power On
Do Not Power On

8. Test del Recovery Plan

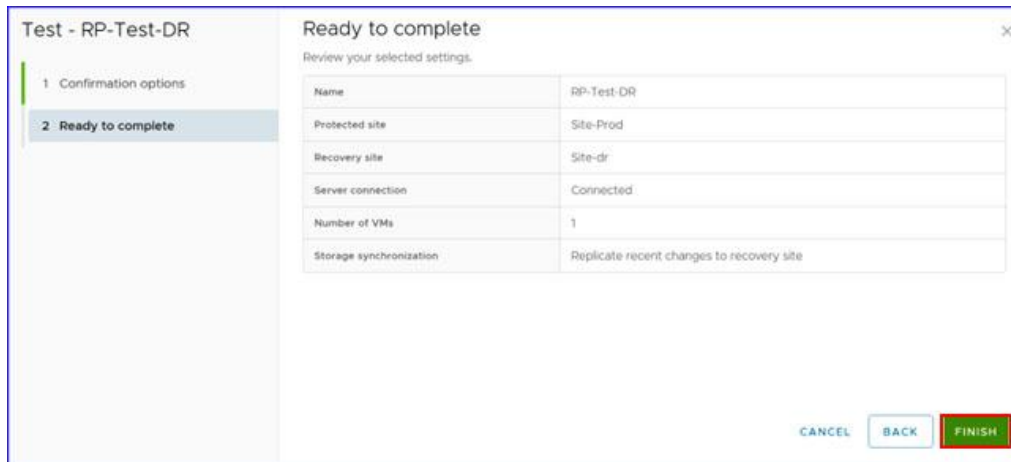
- Selezionare “Recovery Plan”:
- Cliccare sulla scritta “Test”:



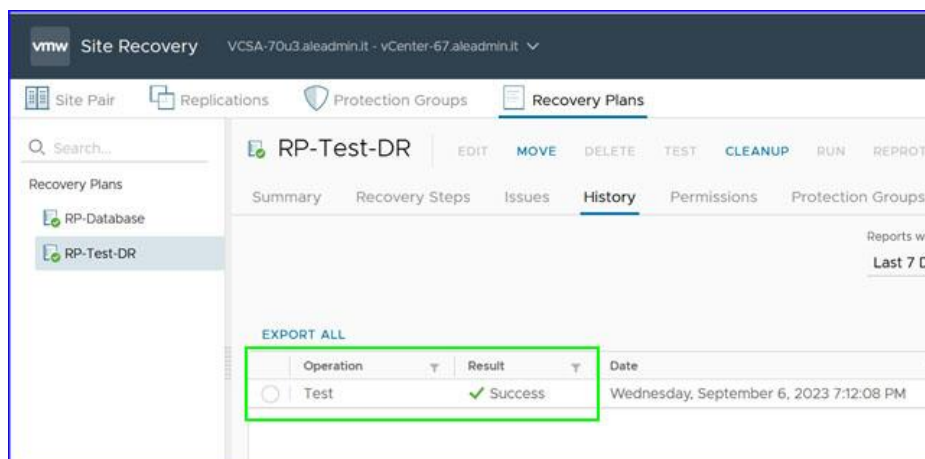
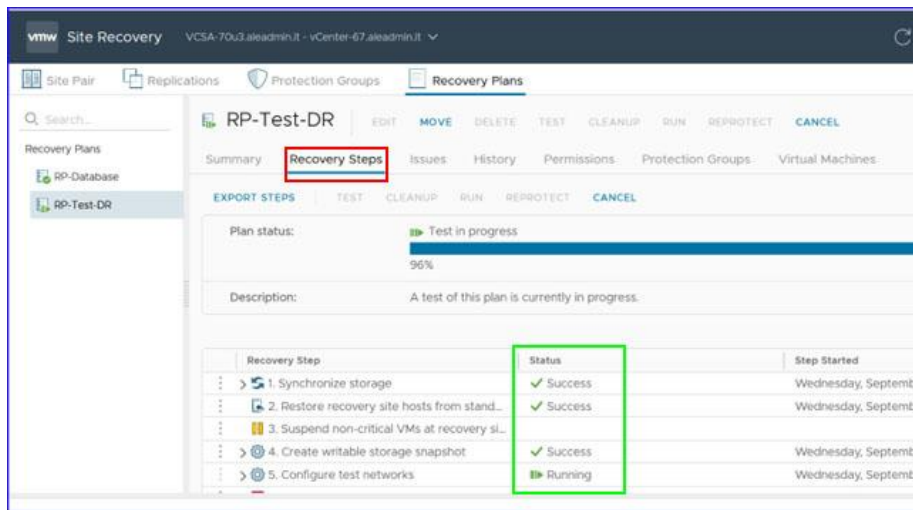
- Selezionare “Replicate recent changes to recovery site” per replicare solo le modifiche recenti:



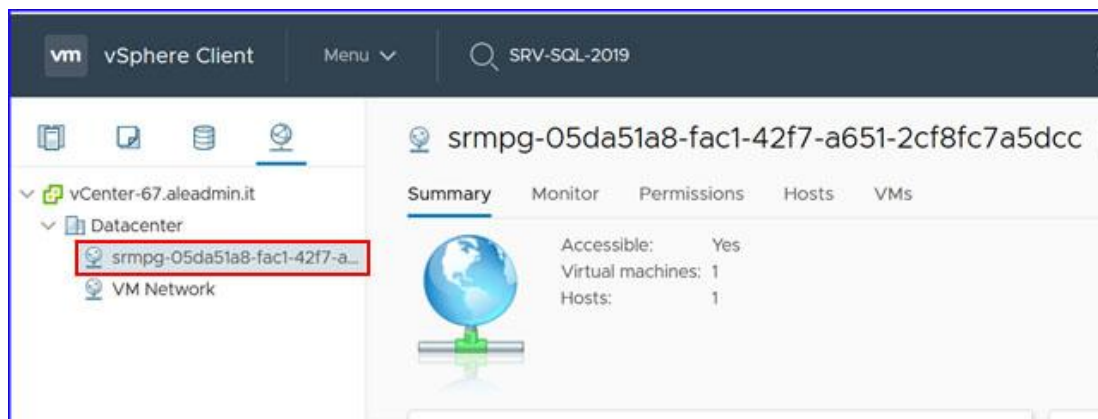
- Cliccare sul tasto “Finish”:



- Per visualizzare i vari passaggi della fase di test, selezionare il tab “Recovery Steps”:



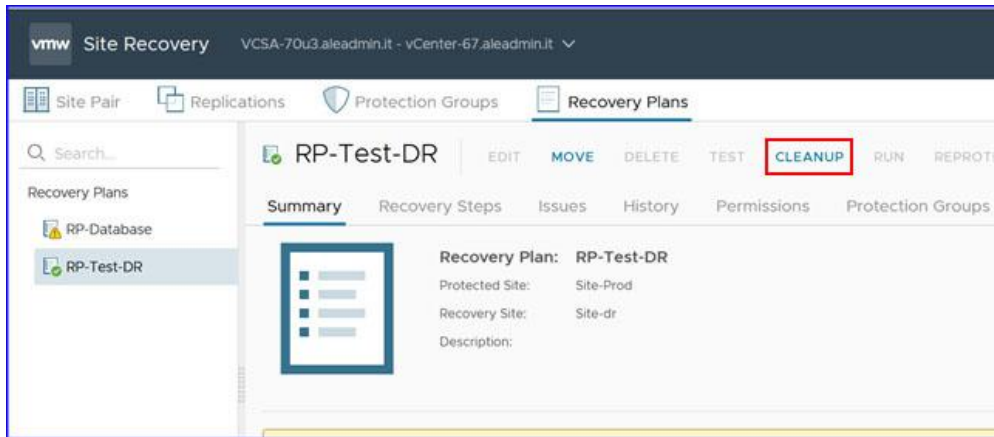
Nota: Considerando che si tratta di un test... è stata creata automaticamente dalla procedura stessa una rete dedicata al test (chiamata bolla) sul sito di disaster recovery:



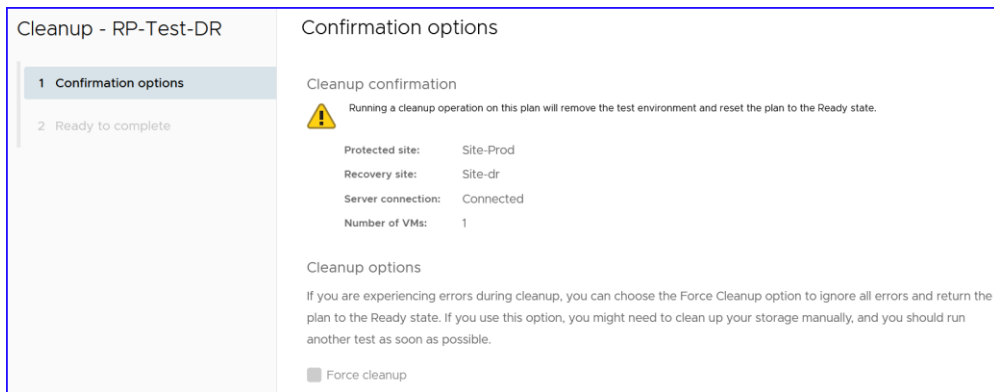
9. CleanUP

Il processo di "CleanUP" pulisce il test DR e ripristina l'ambiente allo stato precedente al test stesso.

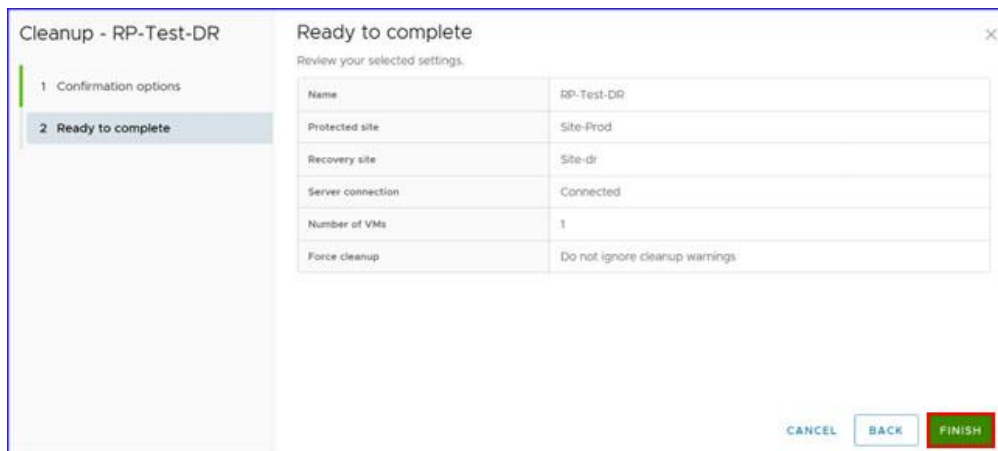
- Cliccare sulla scritta "CLEANUP":



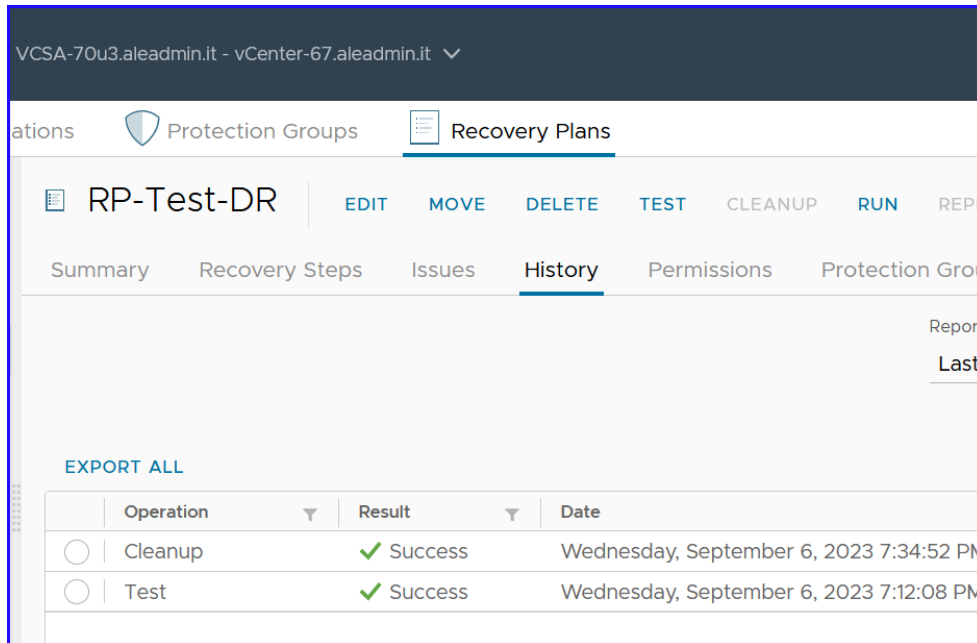
- Cliccare sul tasto "Next":



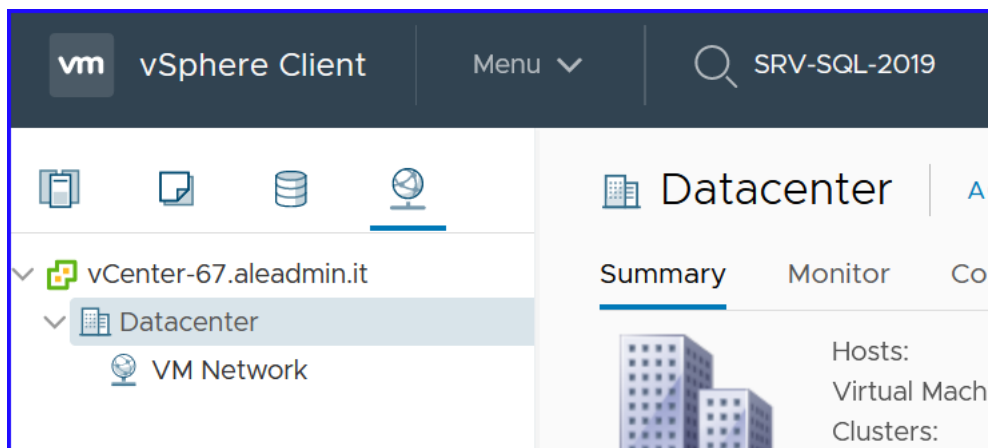
- Cliccare sul tasto "Finish":



Fase di "Test" e "Cleanup" eseguiti con successo:

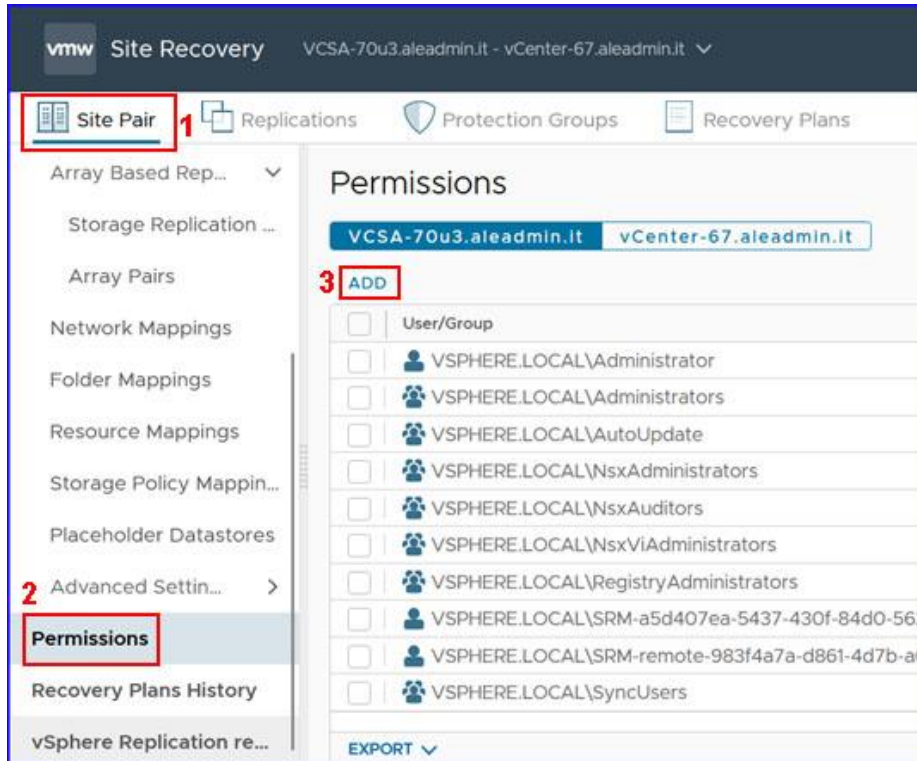


- La "bolla di rete" è stata eliminata mediante la fase di pulizia della procedura "CleanUP".

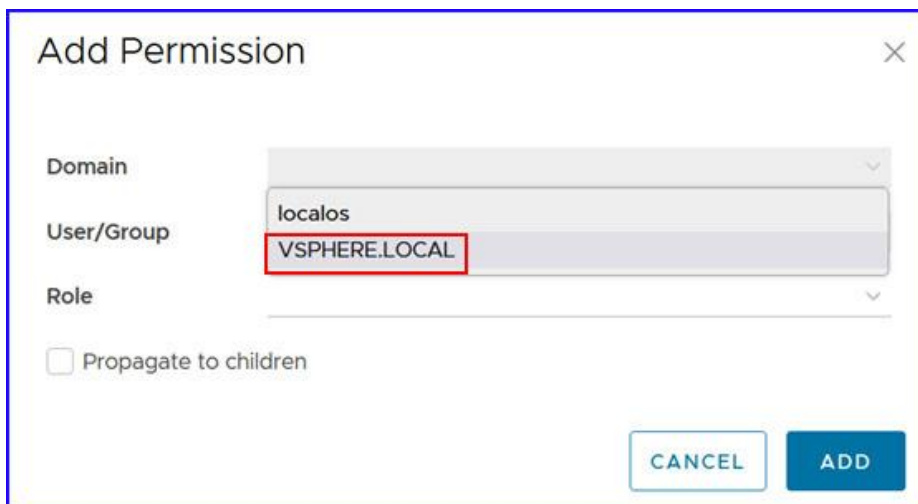


10. Creazione dei ruoli e permessi agli utenti

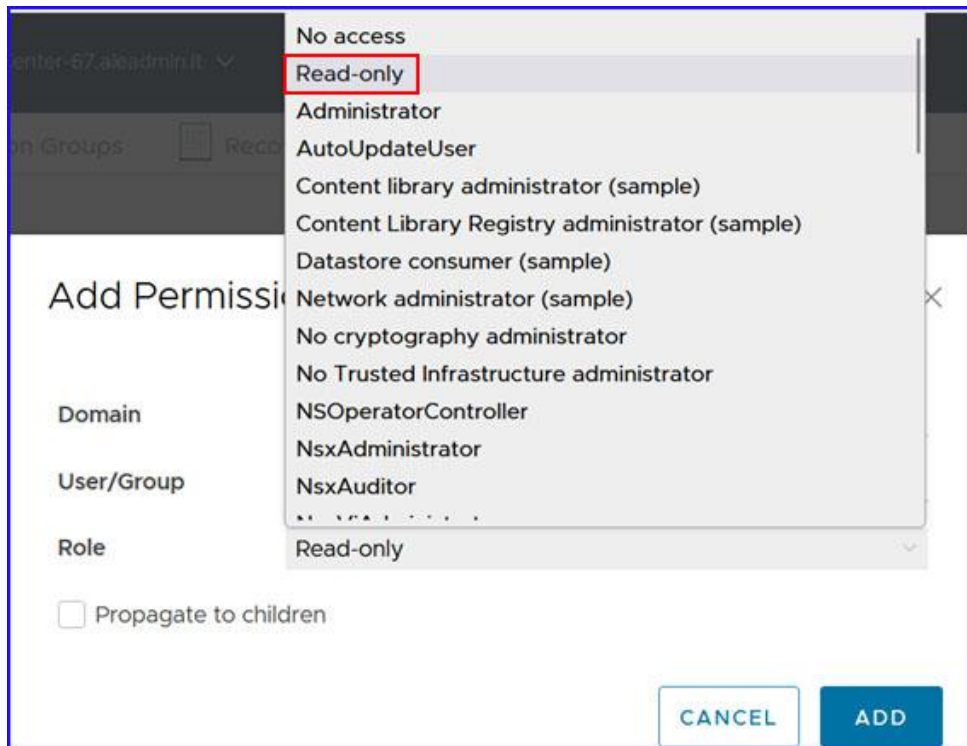
- Selezionare “Site Pair”:
- Cliccare sul menù “Permissions”:
- Cliccare sulla scritta “ADD”:



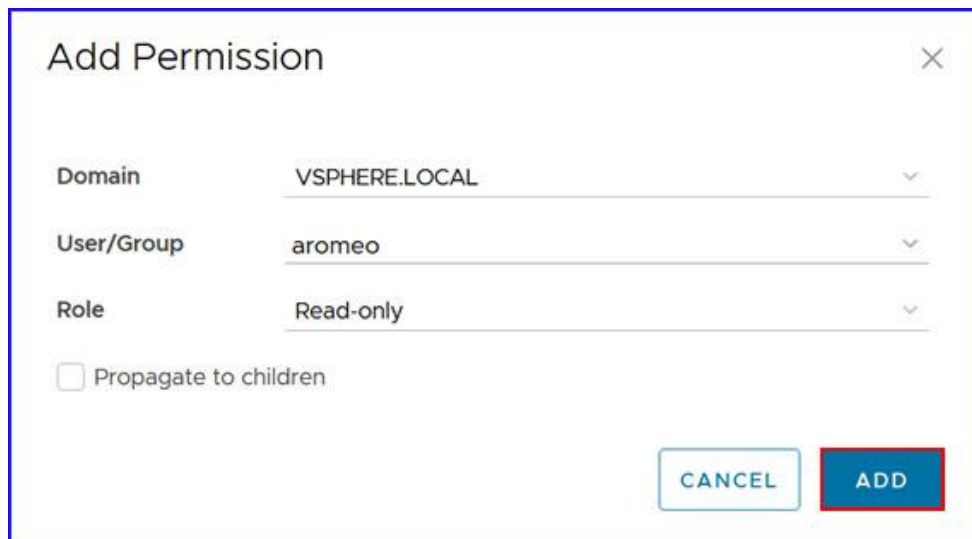
- Selezioane “localos” per l’account locale:
- Selezionare “vSphere.local” per gli account di dominio SSO:

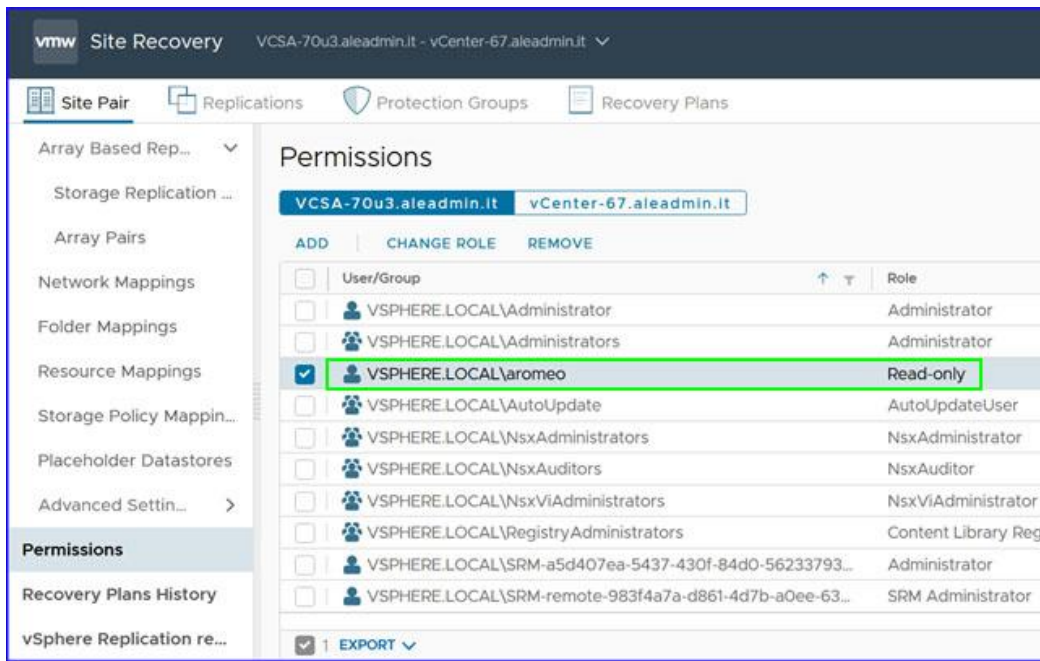


- Selezionare il ruolo appropriato che si vuole dare all'utenza:

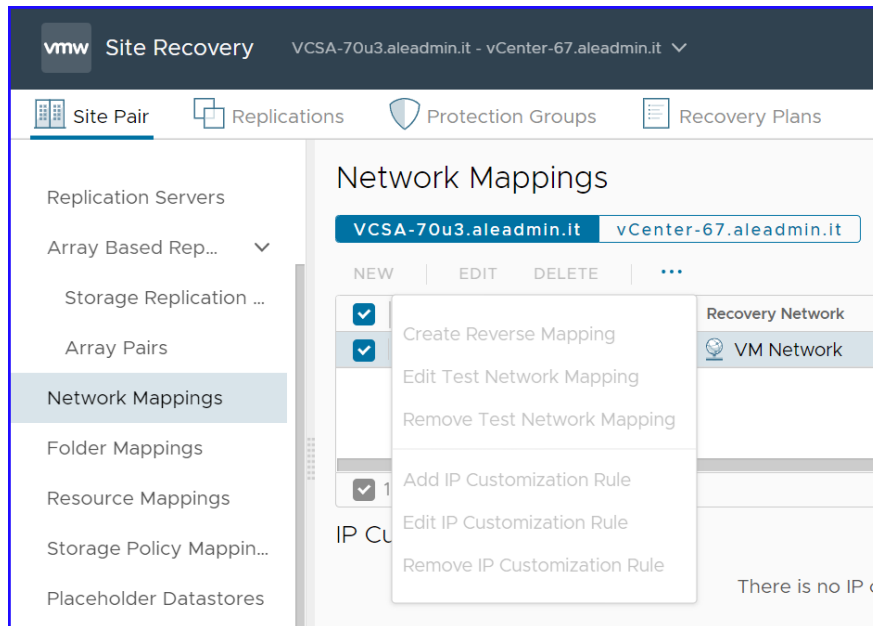


- Cliccare sul tasto "ADD":





Nota: essendo un utente con permessi di sola lettura, tutti i menu sono disabilitati.



Seguendo passo-passo questa guida è possibile configurare un ambiente di DR partendo da zero.

By: Alessandro Romeo