

# N2W Backup & Recovery Quick Start Guide for Azure V4.4.1



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#### 1 Introduction

N2W Backup & Recovery is a powerful tool that's essentially "plug-and-play". It takes about 20 minutes to set up the basic N2W configuration. The *Quick Start Guide for Azure* will walk you through the core steps to get N2W up and run on the Azure cloud as a virtual machine with N2W installed on it.

Before installing N2W on Azure, review the basic N2W installation in the <u>N2W Backup & Recovery Quick Start Guide</u>.

A quick word about passwords before we get going. N2W strongly recommends that you create a strong password for the server. Make sure no one can access it or guess it. Change passwords regularly. N2W enforces the following password rules:

- Minimum length of 8 characters.
- Not a common word or phrase.
- Not numeric characters only.

After meeting the Requirements, you can install Azure on N2W with the following procedures:

- 1. Create a Custom Role on Azure
- 2. Deploy N2W VM on Azure
- 3. Configure N2W on Azure with the Configuration Wizard
- 4. Set permissions on the N2W instance for access to other targets in Azure.

#### 1.1 Requirements

Before continuing, check that you have met the following requirements:

- 1. You already have an Azure account and access to the Azure portal.
- 2. You can access the Azure Marketplace and create virtual machines.



### 2 Create Custom Role and Permissions on Azure

Note: For complete information on setting permissions, see section 7, "Using Azure with N2W", in the N2W Backup & Recovery Quick Start Guide 4.1.0.

- 1. In Microsoft Azure, select Subscriptions.
- 2. Select your subscription and then select Access control.
- 3. In the + Add menu, select Add custom role.
- 4. In the Basics tab, type the name for your custom role In the Custom role name box.
- 5. In the Baseline permissions section, select **Start from JSON**.
- Download and extract the JSON files in the minimal\_azure\_iam\_permissions\_for\_411.zip\_file at https://n2ws.zendesk.com/hc/en-us/articles/28833036917021-Required-Minimum-Azurepermissions-for-N2W-operations

Note: You will be able to edit the file or change the configuration before selecting the **Review + create** button.

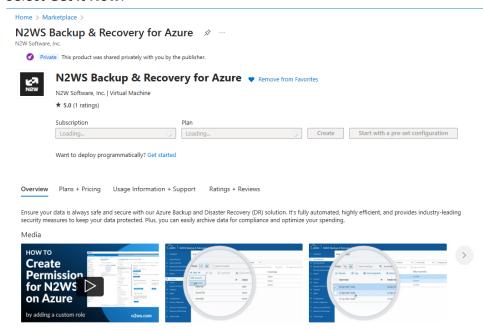
- 7. In the **Select a file** box, select the downloaded JSON file relevant for your N2W license.
- 8. Select Next.
- 9. In the Permissions tab, select Next.
- 10. In the Assignable scopes tab, select Assignable scope.
- 11. In the Type list of the Add assignable scopes section, select Subscription.
- 12. From the subscription list in the right-hand column, select your subscription and then select.
- **13.** In the Assignable scopes page, select **Next**. The JSON tab opens with your custom role file.
- 14. Review and edit the JSON file as necessary, and then select Next.
- **15.** In the **Review + create** tab, perform a final review, and then select **Create**.
- **16.** When the custom role is successfully created, select **OK**. It may take a few minutes to display the new role everywhere.



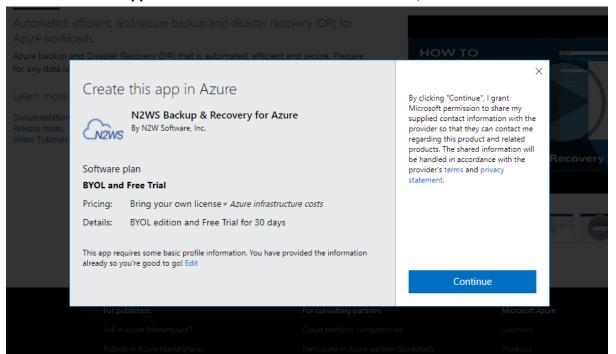
## 3 Deploy N2W Server on Azure

To view a video of the N2W deployment on Azure, see <a href="https://n2ws.com/support/install-guide">https://n2ws.com/support/install-guide</a>

- 1. In Microsoft Azure Marketplace for Apps, select Consulting Services.
- 2. In the Products list, select N2W Backup & Recovery for Azure.
- 3. Select Get it Now.



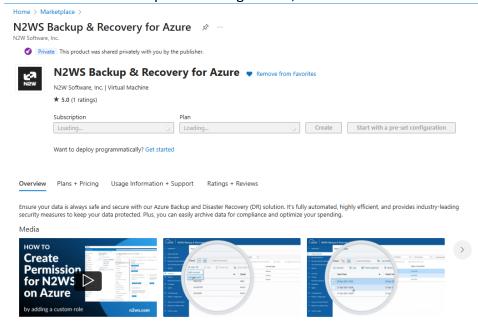
4. In the Create this app in Azure window for BYOL and Free Trial, select Continue.



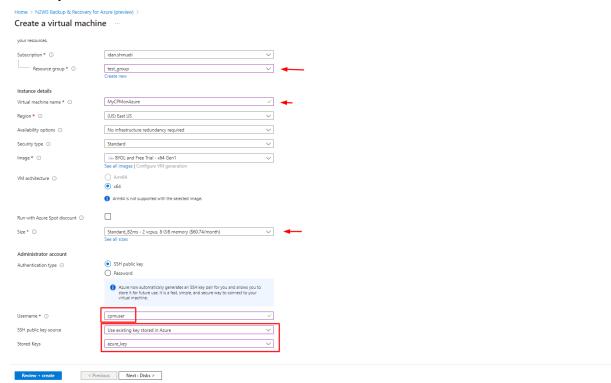
The 'Taking you to N2W Backup & Recovery for Azure to complete this process' message opens.



5. In the N2W Backup & Recovery for Azure (preview) page, select BYOL and Free Trial in the Plan list to start with a pre-set configuration; and then select Create.



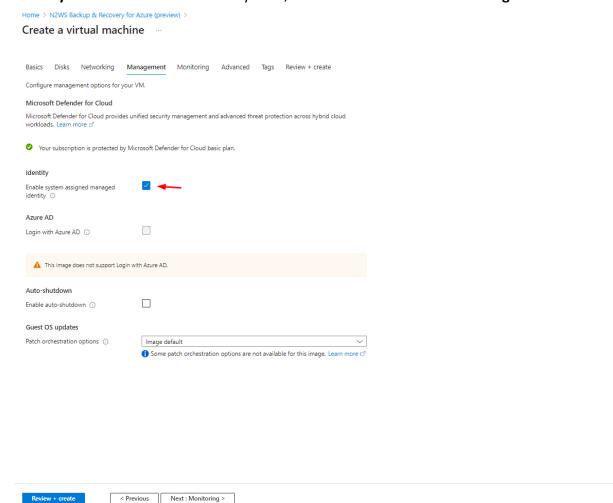
6. In the **Create a virtual machine Basics** page, select the already defined username in the **Subscription** list.



- 7. In the **Resource Group** list, select the resource group where you want to deploy the machine.
- 8. In the Instance details section:
  - a. Type the Virtual machine name.
  - b. Select the **Region** where to deploy the machine.



- 9. Select the proper **Size** of the virtual machine. Two virtual CPUs and 8 GB RAM are the minimum required for a small company.
- 10. In the **Username** list, you can enter the Azure username, but it will be best to use 'cpmuser' as the username.
- 11. In the **SSH public key source** list, select **Use existing key stored in Azure** or you can create a new key.
- 12. In the **Stored Keys** list, select **azure\_key**, and then select **Next: Disks**.
- 13. In the **Disks** tab, select **Review + create**, and then select **Next: Networking**.
- 14. In the **Networking** tab, select **Delete public IP and NIC when VM is deleted**, and then select **Next: Management**.
- 15. In the **Management** tab **Identity** section, you can select **Enable system assigned managed identity** or use a user-based identity later, and then select **Next: Monitoring**.



- 16. In the Monitoring tab, select Next: Advanced.
- 17. In the **Advanced** tab **User data** section, select **Enable user data**, and then select **Next** for **Tags**, if necessary.
- 18. Select Next: Review + create.



19. At the bottom of the **Review + create** tab, select **Create** to start the process.

Home > N2WS Backup & Recovery for Azure (preview) > Create a virtual machine ✓ Validation passed Basics Disks Networking Management Monitoring Advanced Tags 1 Cost given below is an estimate and not the final price. Please use Pricing calculator for all your pricing needs. Price N2WS Backup & Recovery for Azure Not covered by credits ① by N2W Software, Inc. 0.0000 USD/hr Terms of use | Privacy policy There was a problem showing prices from the Private Offers database. Custom pricing may apply. 1 X Standard B2ms Subscription credits apply ① by Microsoft 0.0832 USD/hr Terms of use | Privacy policy Pricing for other VM sizes TERMS By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details. Idan Shmueli Name Preferred e-mail address Preferred phone number Basics idan.shmueli Subscription Resource group test\_group MyCPMonAzure Region East US Availability options No infrastructure redundancy required Security type Standard

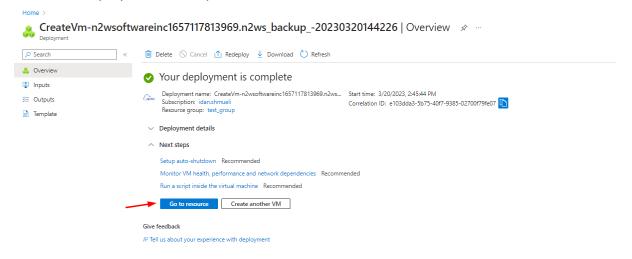
Deployment stage messages appear in the upper right corner followed by 'Deployment is in progress' details.

Next > Download a template for automation

< Previous

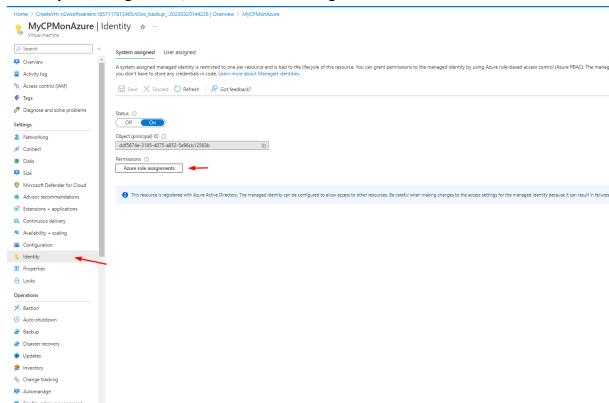


20. When the deployment is complete, select **Go to resource**.



The **CPMonAzure** screen opens.

- 21. In the Networking section of the Properties tab, copy the Public IP address.
- 22. In the CPMonAzure menu, select Identity.
- 23. In the System assigned tab, select Azure role assignments under Permissions.

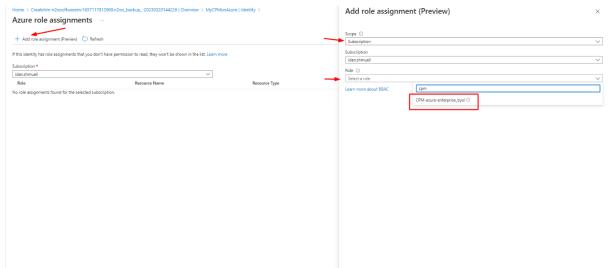


24. On the Azure role assignments page, select the pre-defined user in the Subscription list.



25. Select +Add role assignment (preview).

The Add role assignment (Preview) window opens.



- **26.** In the **Scope** list, select **Subscription**.
- 27. In the **Role** list, select **CPM-azure-enterprise\_byol**, which should contain minimal permissions for the virtual machine to handle your resources. Then select **Save**. Role assignment messages appear in the upper right corner.

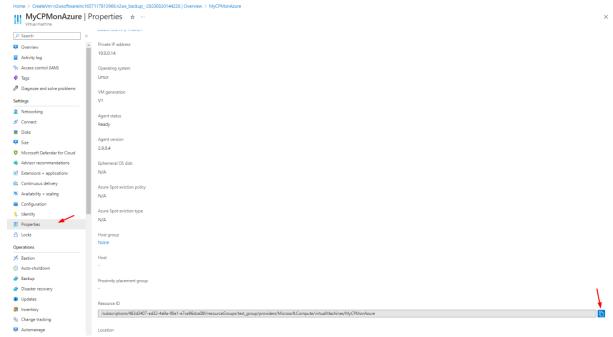
The Azure portion of the configuration is complete.



# 4 Configure N2W on Azure with the Configuration Wizard

To view a video of the N2W configuration, see https://n2ws.com/support/install-guide

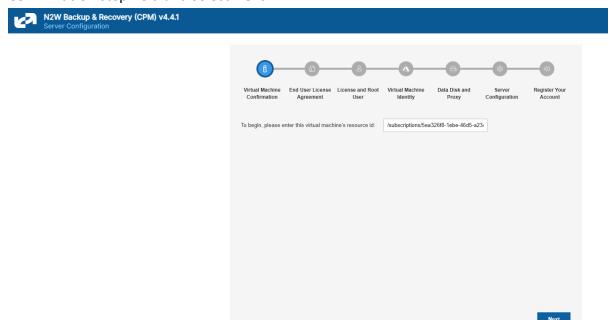
- 1. In Microsoft Azure, open a new tab and log on to N2W using the public IP address of the virtual machine over HTTPS.
- 2. In the menu select Overview.
- 3. In the Properties section, copy the Public IP address under Networking.
- 4. Open a new tab in the browser and paste the **Public IP address** in the address bar. The N2W Server Configuration page opens.
- 5. In the menu of the prior tab, select **Properties** and copy the **Resource ID**.



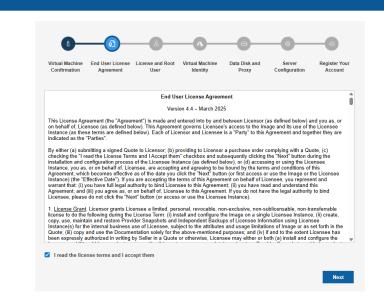


N2W Backup & Recovery (CPM) v4.4.1

**6.** In the N2W Configuration screen, paste the **Resource ID** in the **Virtual Machine Confirmation** step field and select **Next.** 

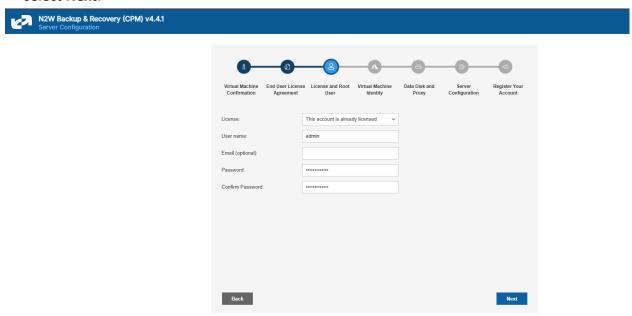


7. Accept the End User License Agreement terms and select Next.

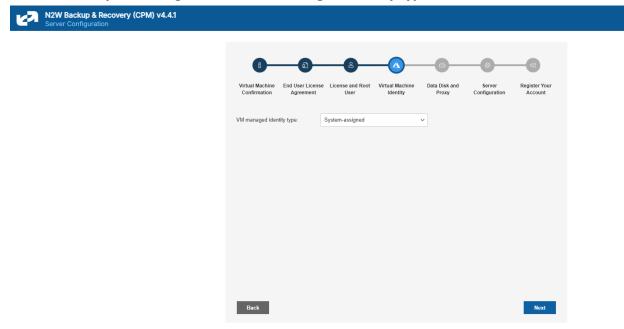




- 8. In the License and Root User step:
  - a. In the **License** list, select the proper license method.
  - b. Complete the logon root **Username**, optional **Email**, and **Password** sequence, and then select **Next**.



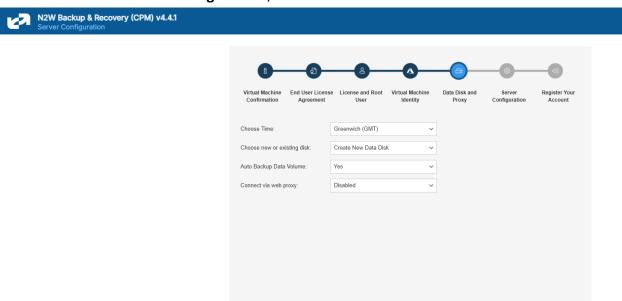
**9.** In the **Virtual Machine Identity** step, using the system assigned identity configured on Azure, select **System-assigned** in the **VM managed identity type** list, and then select **Next**.





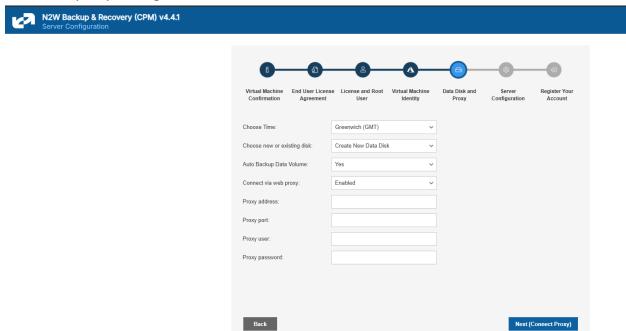
#### 10. In the Data Disk and Proxy step:

- **a.** In the **Choose Time** list, select the appropriate time zone.
- b. In the Choose new or existing disk list, select Create New Data Disk.



c. Choose proxy settings as needed, and then select Next.

Back





- 11. In the Server Configuration step, review the disk defaults, and then select **Next**.
  - Capacity (GiB) defaults to 10 GB, which is the minimum size.

Note: This value may need to be increased depending on the number of VMs and disks you are protecting.

• Volume Type defaults to Premium SSD, which is the minimum disk type recommended.

Note: For more details on the recommended virtual machine type and Azure disk size requirements of N2W for Azure, see the following KB article:

https://n2ws.zendesk.com/hc/en-us/articles/28857377102493-Recommended-VM-Types-for-an-N2W-Server-in-Azure

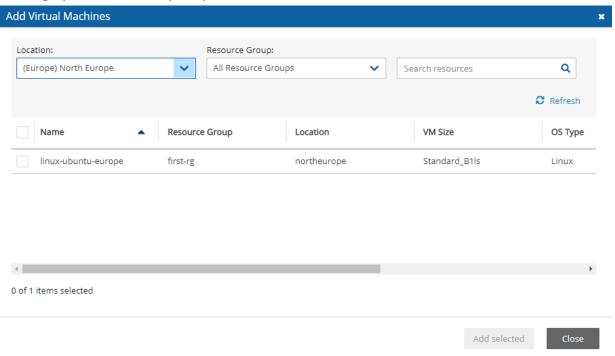
- 12. In the **Register Your Account** step, if you have not configured N2W before, enter the requested information, and select **Register Now**. Otherwise, select **I don't want to register now**, and then select **Configure System**.
- 13. The system is now configuring; this may take up-to 10 minutes to finish. Once it does you will be automatically directed to the logon page, and the installation is finished.



# **5** Creating an Azure Backup Policy

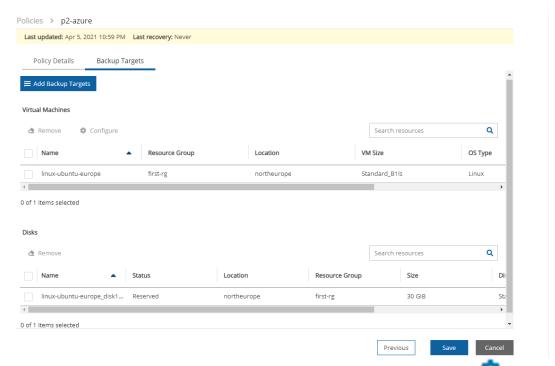
To back up resources in Azure, create an N2W policy.

- 1. In N2W, select the **Policies** tab.
- 2. In the + New list, select Azure policy.
- 3. In the New Azure Policy screen, complete the fields:
  - Name Enter a name for the policy.
  - User Select from the list.
  - Account Select from the list. Or, select + New to add an account. See section 7.2.
  - **Enabled** Clear to disable the policy.
  - Subscription Select from the list.
  - Schedules Optionally, select one or more schedules from the list, or select + New to add a schedule. See section 4.3.
  - **Auto Target Removal** Select **Yes** to automatically remove a non-existing target from the policy.
- 4. Select the **Backup Targets** tab.
- 5. In the **Add Backup Targets** menu, select the targets to back up, Disks and/or Virtual Machines. The Add Virtual Machines / Disks screen opens.
- 6. When selecting Virtual Machines, it is *required* to filter by the **Location** of the target resources using the list in the upper left corner *before* selecting the individual targets. Filtering by Resource Group is optional.





7. When finished selecting targets, select **Add selected**. The Backup Targets tab lists the selected targets.



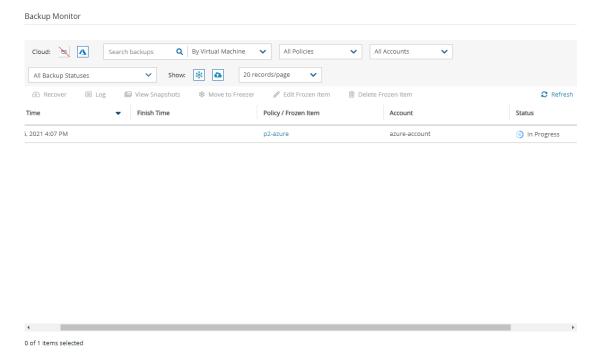
- 8. To determine which disks for each Virtual Machines target to back up, select Configure. In the Which Disks list of the Policy Virtual Machine and Disk Configuration screen, select the disks to include or exclude in the backup.
- 9. When finished, in the **Backup Targets** tab, select **Save**.



## 5.1 Backing Up an Azure Policy

If the policy has a schedule, the policy will back up automatically according to the schedule. To run a policy as soon as possible, in the **Policies** view, select the policy and select **© Run ASAP**. To view the policy progress and backups, select **Backup Monitor**.

- The backup progress is shown in the **Status** column.
- Use the Cloud buttons to display the Azure policies.





# 6 Recovering from an Azure Backup

Note: Only one VM is recoverable during a recovery operation.

After creating a backup, you can recover it from the **Backup Monitor**. In the VM recovery Basic Options, there are Azure options for replicating data to additional locations to protect against potential data loss and data unavailability:

- **Availability Zone** A redundant data center (different building, different servers, different power, etc.), within a geographical area that is managed by Azure.
- Availability Set A redundant data center (different building, different servers, different power, etc.) that can be launched and fully configured by the customer and managed by the customer.
- No Redundancy Infrastructure Required By selecting this option, the customer can
  choose not to replicate its data to an additional (redundant) location in another zone
  or set. By choosing this option, the customer would save some money, but in rare
  cases (usually 11 9s of durability and 99.9% of availability), the customer can
  experience some degree of data loss and availability.

In the Disk Recovery screen, you may be presented with an option to change the encryption when recovering certain disks.

Note: To add an additional layer of encryption during the recovery process, see

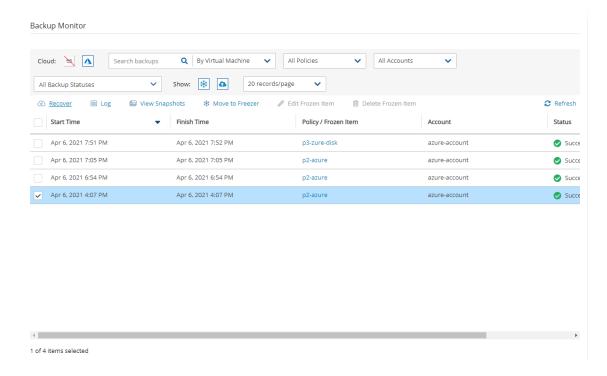
https://docs.microsoft.com/en-us/azure/virtual-machines/disks-enable-customer-managed-keys-portal.

Disk encryption settings can be changed only when the disk is unattached or the owner VM is deallocated.



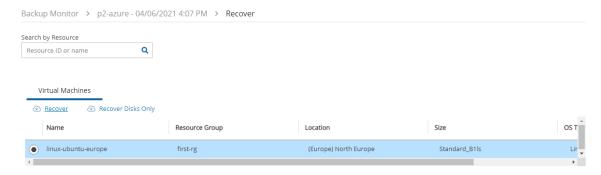
# 6.1.1 Recovering a VM and Disks

#### To recover a VM and/or attached disks:

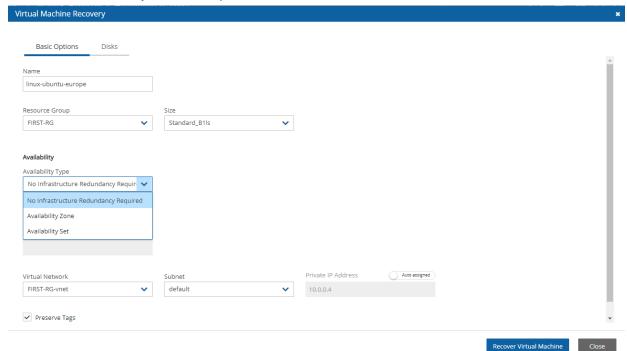




1. In the **Backup Monitor**, select the backup and then select **Recover**.



- 2. To recover a VM, with or without its attached disks, select the VM snapshot that you want to recover from and then select **Recover**.
  - d. In the **Virtual Machines** tab of the Recover screen, select 1 VM and then select **Property of the Recover**. The **Basic Options** tab opens.



- e. In the **Availability Type** list, select one of the following:
  - **No Infrastructure Redundancy Required** Select to not replicate data at a redundant location in another zone or set.
  - Availability Zone Select a zone in the Availability Zone list.
  - Availability Set Select a set in the Availability Set list.
- f. In the **Private IP Address** box, assign an available IP address or switch the **Custom** toggle key to **Auto assigned**.
- g. In the **Disks** tab, enter a new **Name** for each disk. Similar names will cause the recovery to fail.

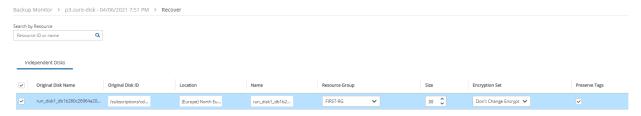


- h. Select Recover Virtual Machine.
- 3. To recover only Disks attached to the VM, select **Recover Disks Only**. a. In the **Disks** tab, enter a new **Name** for each disk. Similar names will cause the recovery to fail. b. See Note in section 7.5 about changing the **Encryption Set** for certain disks. c. Change other settings as needed. d. Select **Recover Disk**.
- 4. To view the recovery progress, select **Recovery Monitor**. Use the **Cloud** buttons to display the Azure ( ) recoveries.

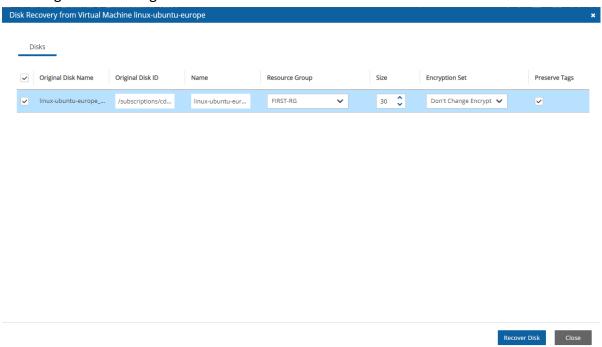
#### 6.1.2 Recovering Independent Disks

#### To recover from backups with independent disks:

1. Select the backup and then select A Recover as in step 1 of the VM recovery.



- 2. In the Independent Disks tab:
  - i. Enter a new Name for each disk to recover as similar names will cause failure.
  - j. See Note in section 7 about changing the **Encryption Set** for certain disks.
  - k. Change other settings as needed.



- Select Recover Disk.
- 3. To view the recovery progress, select **Recovery Monitor**. Use the **Cloud** buttons to display the Azure ( ) recoveries.



# 7 What to do After Deploying Your N2W Server on Azure

Once your N2W server is deployed you can now start to configure your backup policies to start protecting your resources.

For Azure tutorial videos see the following link - <a href="https://n2ws.com/support/video-tutorials?e-filter-d7a0d74-post\_tag=azure">https://n2ws.com/support/video-tutorials?e-filter-d7a0d74-post\_tag=azure</a>

Full User Guide manual can be found here - <a href="https://docs.n2ws.com/user-guide">https://docs.n2ws.com/user-guide</a>