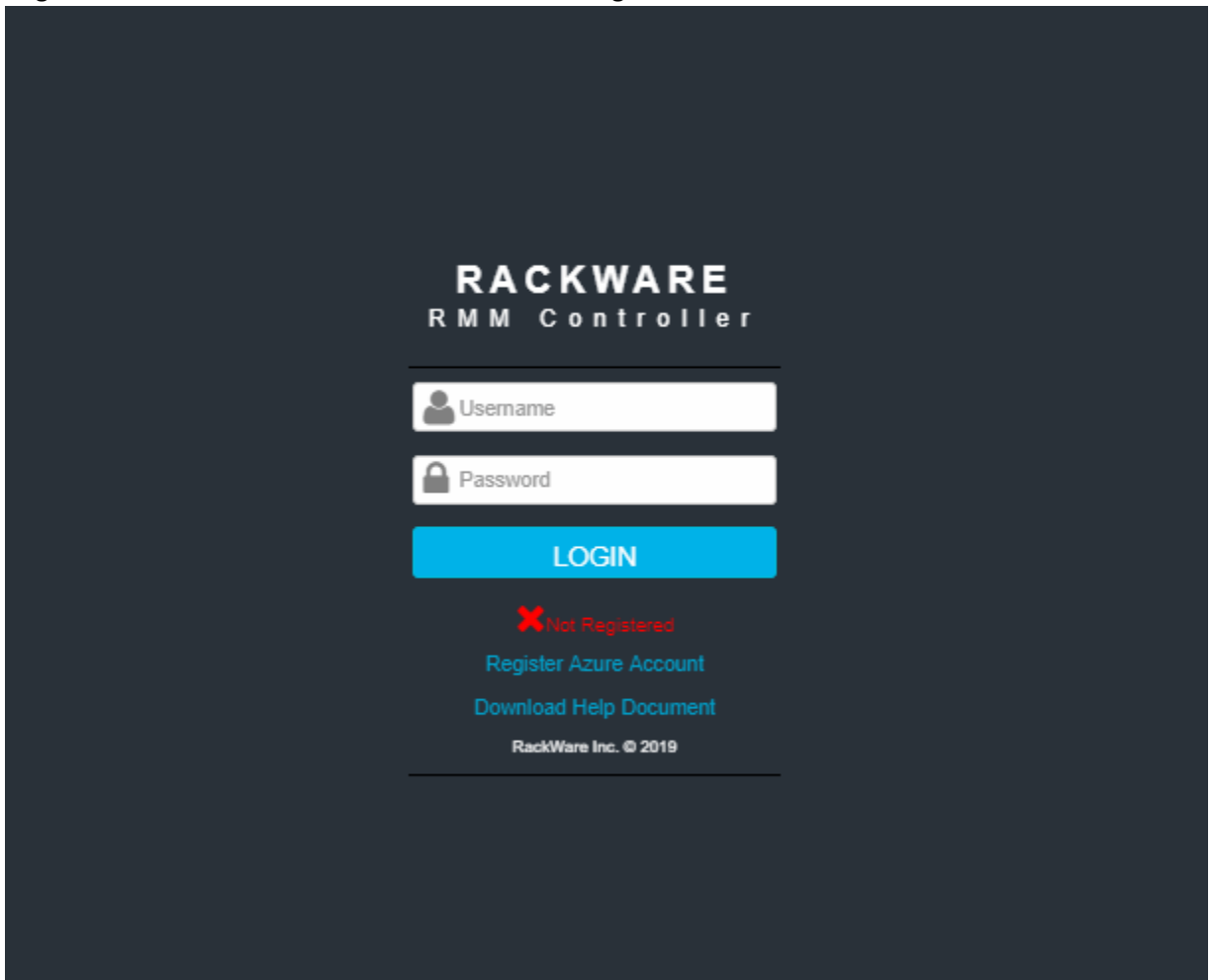
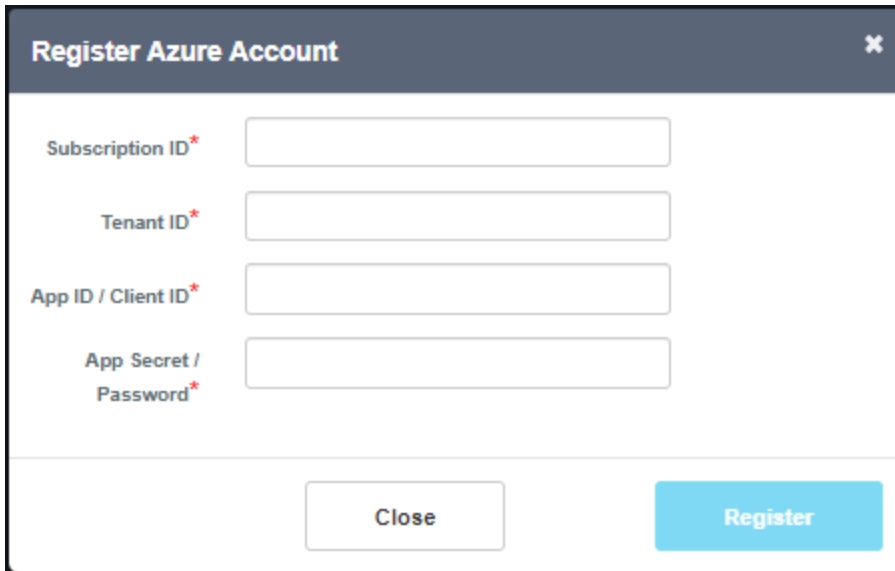


1. Register your details (at <https://www.rackwareinc.com/azure-migration-hub>) and get a download link to RMM-Controller OVA. If you see these steps with OVA link over an email, then you can ignore this step.
2. Download (from the link) and deploy RMM-Controller OVA in the local datacenter.
3. Note the IP address of the RMM-Controller OVA. You can optionally configure static IP to the imported OVA VM (OVA is Centos 7.x based appliance. Password: root/R@ckware123).
4. Open RMM-Controller dashboard in a browser (Chrome or Firefox are preferred browsers): <https://<controller-ip>/arpe/dashboard>
5. Register the controller instance. You can find the registration link on the controller dashboard:



Registration needs below details from the Azure account

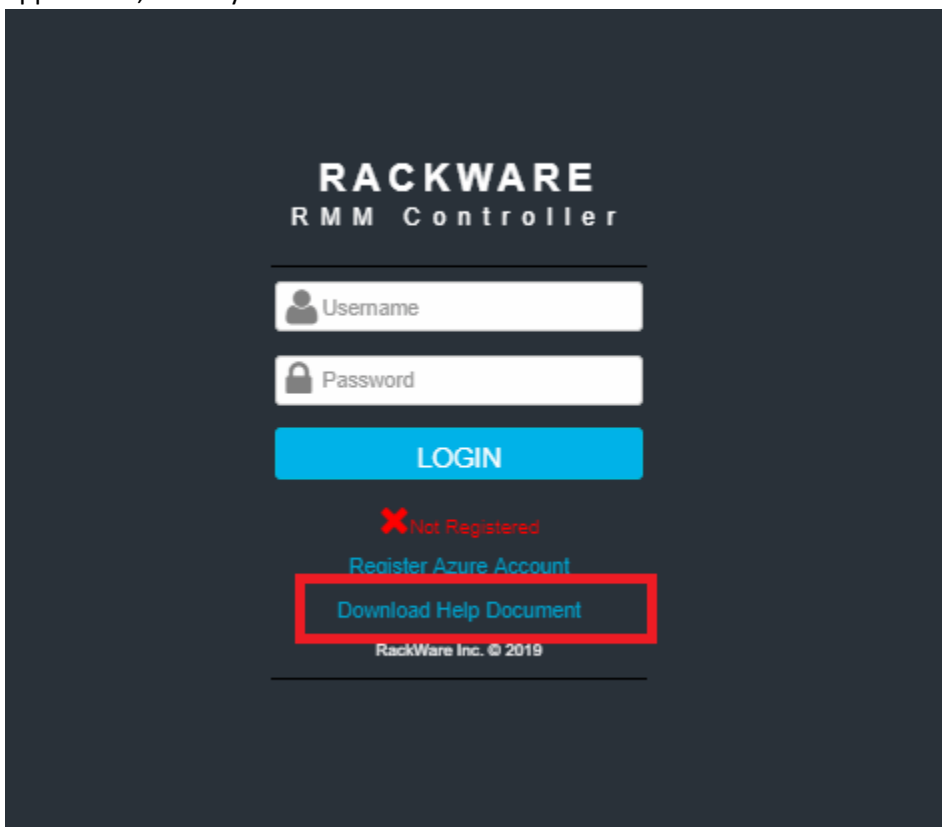


The image shows a dialog box titled "Register Azure Account" with a close button (X) in the top right corner. It contains four input fields, each with a red asterisk indicating it is required:

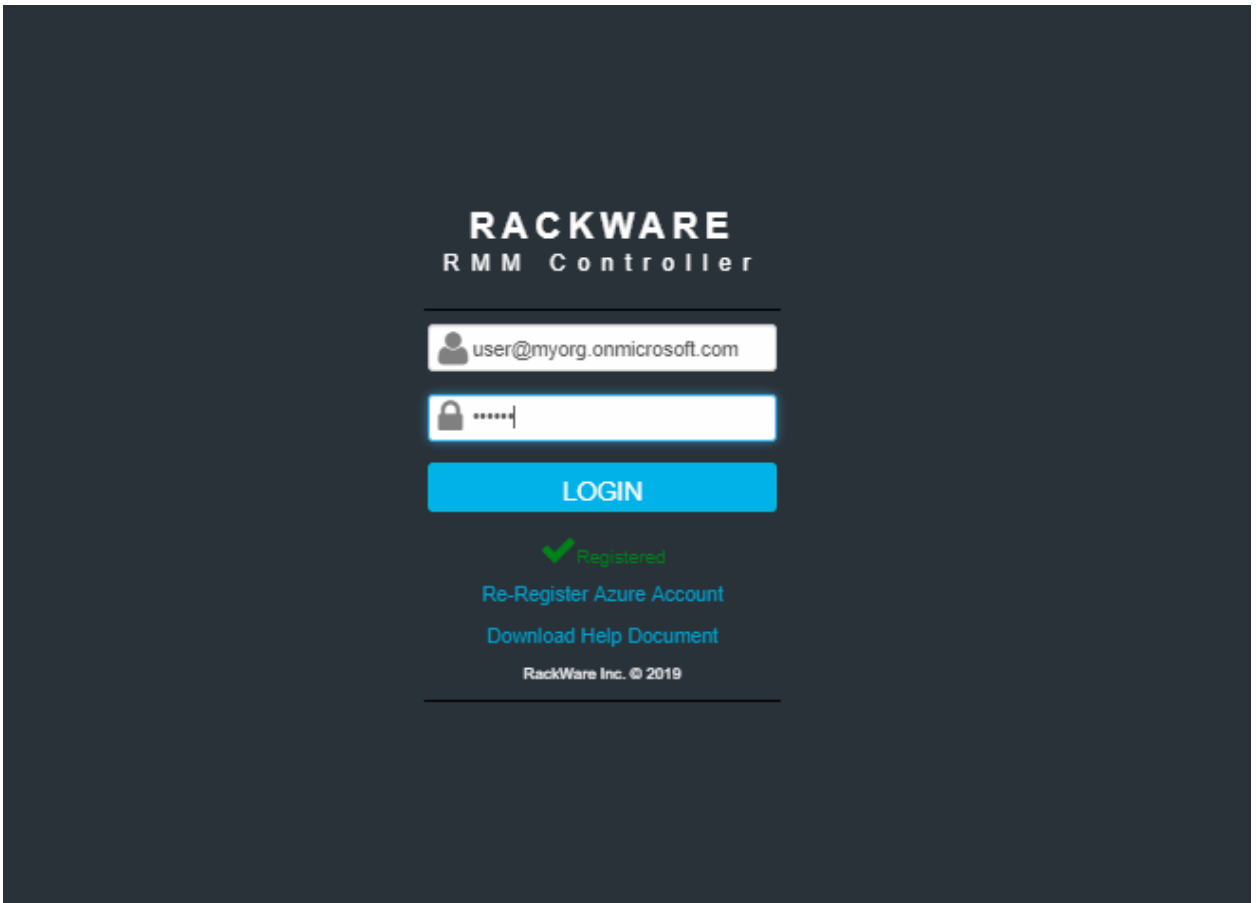
- Subscription ID*
- Tenant ID*
- App ID / Client ID*
- App Secret / Password*

At the bottom of the dialog, there are two buttons: "Close" and "Register".

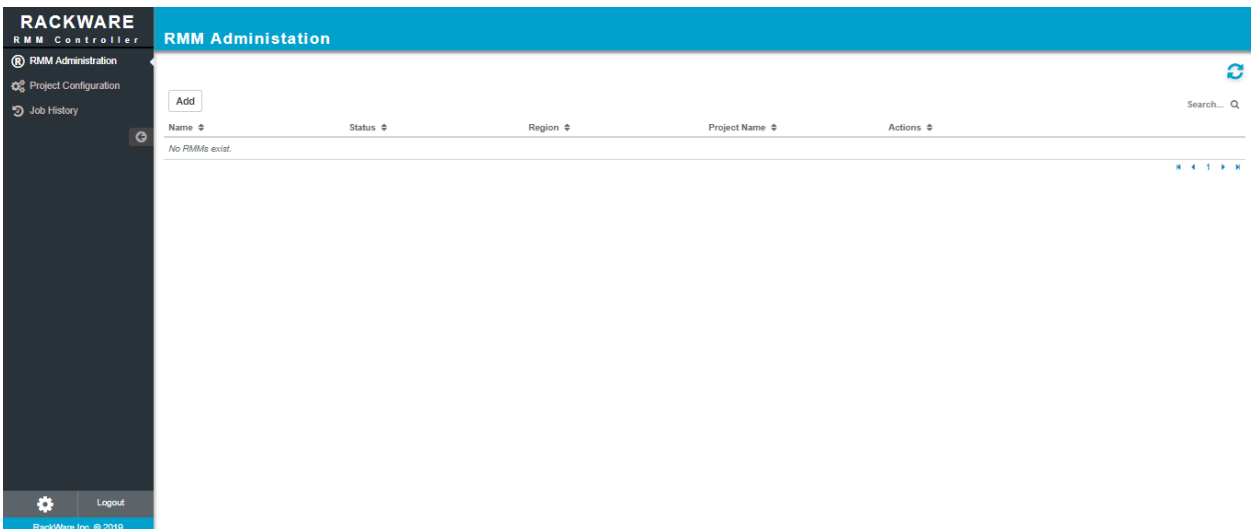
The help document on the controller landing page highlights the steps for creating an Azure AD application, which you need for the last two values above.



6. Once the controller is registered successfully, log in with your Azure AD credentials.



7. After logging in, you can browse your existing migrate-projects in Azure. The next step would be to provision RMM service in your Azure account from this dashboard. While provisioning RMM instance in the Azure, you select the Azure migrate-project, where provisioning RMM reports the migrations. Note that you have to create an Azure migrate project from the Azure dashboard, and once you do that, RMM-Controller lists it on the dashboard.



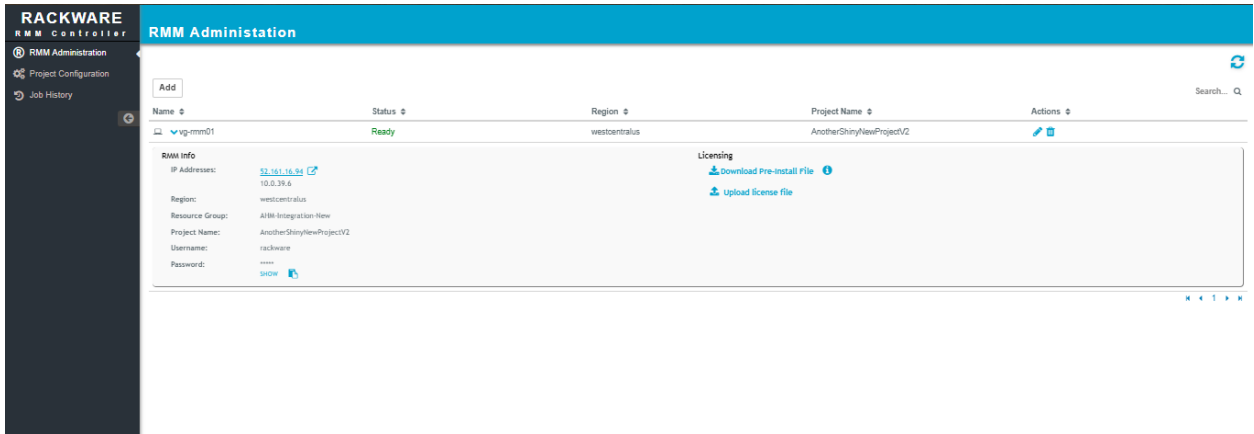
8. Click the 'Add' button to provision RMM service in your Azure account. Select Azure migrate-project where RMM reports migrations to and also all other relevant details (like network, subnet, region, etc.). RMM needs to be in the same region and resource group as your selected migrate-project.

Note that you can provision more than one RMM instances which report to the same Azure migrate-project.

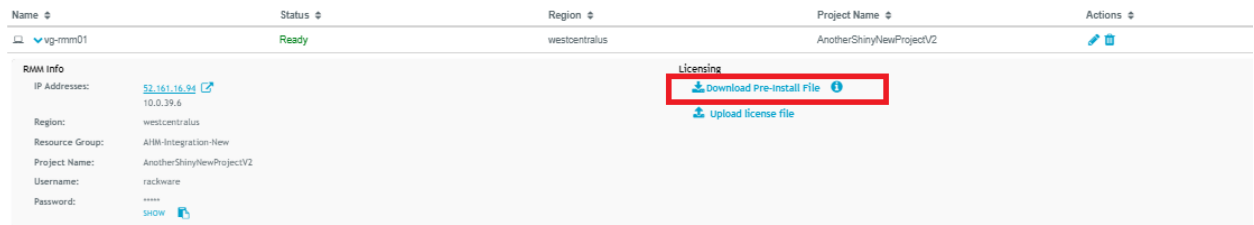
Adding or provisioning data disks to the RMM server is optional unless you want to capture your source servers in RMM and migrate captured images in Azure (this is typical setup for DR scenarios). RMM can also directly replicate your source servers in Azure without replicating to an image in RMM first.

Number of cores:	1
Memory (MB):	3584
Max Data Disk Count:	4
OS Disk Size (MB):	1047552
Resource Disk Size (MB):	7168

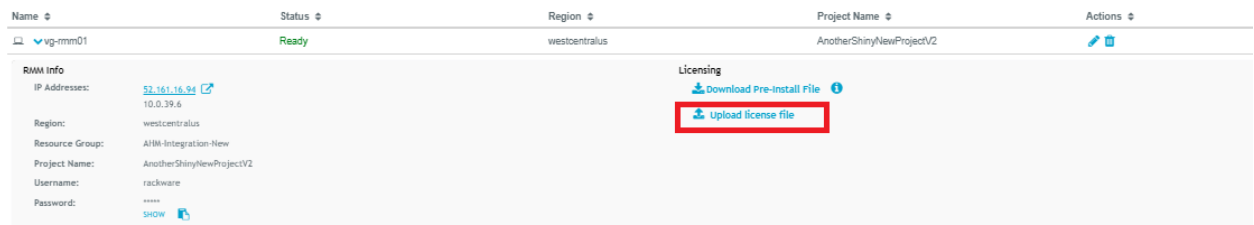
9. RMM service provisioning in Azure takes anywhere between 20-40 minutes. Once it is ready, RMM-Controller dashboard lists it as 'Ready.'



- Expand the provisioned RMM entry in the controller dashboard and click on 'Download Pre-Install File' option. Save the generated pre-install file locally, and then email it to azure-ssp-licensing@rackwareinc.com. Licensing support will email you back the license file (typical response time is between 2-24 hours, between Mon-Fri).

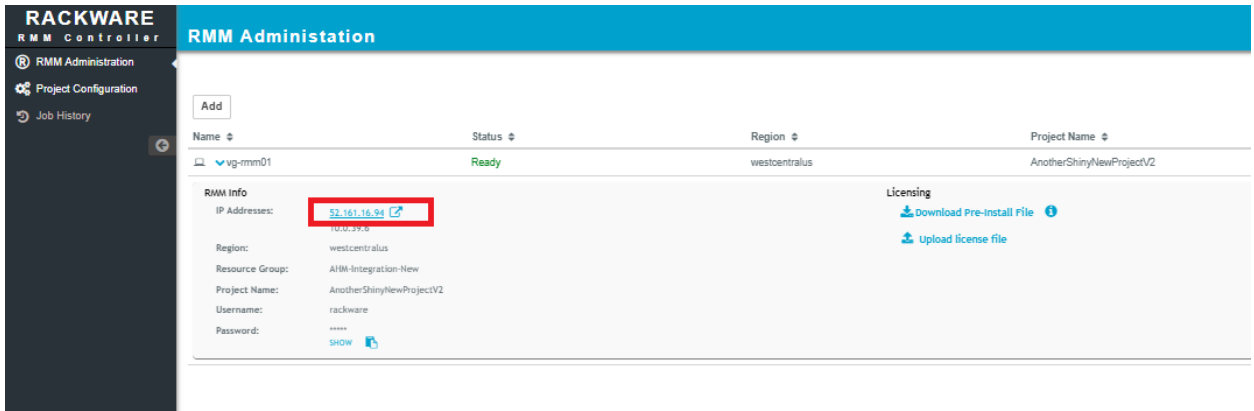


- Once you receive the license file from the support, upload it to the RMM from the controller GUI (expand RMM entry, and you can find the upload license file option).

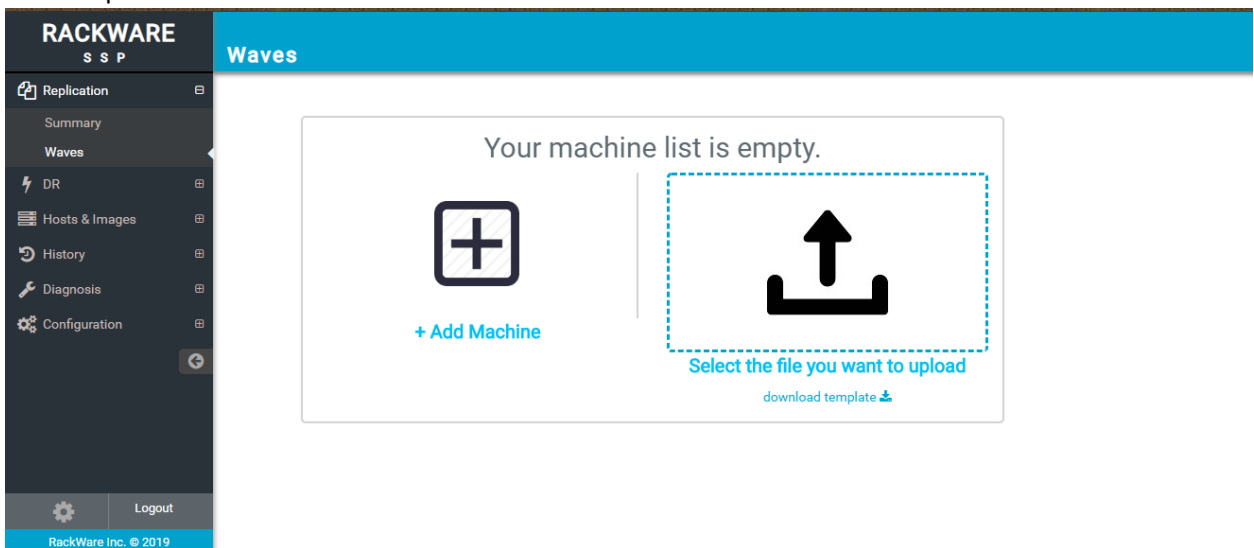


- Once the license is uploaded/applied to the RMM, your RMM is automatically activated and ready for use. Just click on the RMM address link under the RMM entry. It opens RMM's Self-Service Portal (SSP) dashboard in a new tab.

Note that first time when you open the SSP dashboard for the RMM, you have to accept the certificate in your browser, and the next time onwards, it logs you in automatically with your Azure credentials (it supports single sign-on [SSO]). Optionally, you can also hit <https://<RMMip>> link in a browser, and log in with your Azure credentials.



The SSP portal looks like this:



13. You can add individual machines or upload in batch. Added machines are put in the 'wave.' You can create more than one wave of machines, which are migrated to Azure. Adding machine needs IP address, username, and password.

Add Host
✕

Wave Name*

Target Type*

Autoprovision ?

Existing System ?

Capture ?

Source

DNS Name / IP Address*

Friendly Name

OS Linux Windows

Passwordless

Username*

Password

Passthrough

Target

Sync Type*

Direct Sync

Stage 1 & 2

Stage 1

Stage 2

Friendly Name*

Cancel

Add

RMM can optionally replicate first to an image in RMM (a.k.a 'Stage 1'), and then replicate the image to Azure cloud by provisioning an instance in the Azure (a.k.a. 'Stage 2').

The 'Direct Sync' mode replicates directly to Azure cloud by provisioning an instance first. Provisioned instance config will be selected at the wave level (see subsequent steps for this).

14. After creating a wave with one or more servers in the SSP portal, start a discovery process for all hosts. The discovery process in RMM connects to the source host with configured credentials, configures RMM ssh-key to the server, and fetches all basic OS and hardware info.

RACKWARE
SSP

Waves

RackwareWave

Wave Status: Idle

Started: Not available

Ended: Not available

Total Elapsed: Not available


Parallel Count:

Autoprovision: Not configured

DR Policy: * All hosts must be discovered to apply policy

Passthrough: enabled

Total Machines In Wave: 1



Successful: 0

Failed: 0

Cancelled: 0

Active: 0

Idle: 1

* To start the wave, each host must be successfully discovered or be disabled using the 'Enabled' column

👁
▶
⏮
⏪
⏩
⏭
✎

	Source	Target	Goal	Status	Elapsed Time	Replications Enabled	Actions
<input type="checkbox"/>	dmz-centos7	az-dmz-centos7	Host Sync	Undiscovered		YES	↶ ↷ 🗑 🔄

The discover is pre-req before replications can start for the wave in the SSP portal.

RACKWARE SSP

Waves

RackwareWave

Wave Status: *Idle*

Started: *Not available*

Ended: *Not available*

Total Elapsed: *Not available*

Parallel Count:

Autoprovision: *Not configured*

DR Policy: ** All hosts must be discovered to apply policy*

Passthrough: *enabled*

Total Machines In Wave: 1

Successful: 0

Failed: 0

Cancelled: 0

Active: 0

Idle: 1

* To start the wave, each host must be successfully discovered or be disabled using the 'Enabled' column

Source	Target	Goal	Status	Elapsed Time	Replications Enabled	Actions
dmz-centos7	az-dmz-centos7	Host Sync	Undiscovered		Yes	

RACKWARE SSP

Waves

RackwareWave

Wave Status: *Discovering*

Started: *Not available*

Ended: *Not available*

Total Elapsed: *Not available*

Parallel Count:

Autoprovision: *Not configured*

DR Policy: ** All hosts must be discovered to apply policy*

Passthrough: *enabled*

Total Machines In Wave: 1

Successful: 0

Failed: 0

Cancelled: 0

Active: 0

Idle: 1

* To start the wave, each host must be successfully discovered or be disabled using the 'Enabled' column

Source	Target	Goal	Status	Elapsed Time	Replications Enabled	Actions
dmz-centos7	az-dmz-centos7	Host Sync	Running		Yes	

15. Once discovery is complete, all other wave operations are enabled. You also see migrate-project in Azure updated with details of the discovered server(s).

RACKWARE SSP

Waves

RackwareWave

Wave Status: *Idle*

Started: *Not available*

Ended: *Not available*

Total Elapsed: *Not available*

Parallel Count:

Autoprovision: *Not configured*

DR Policy: *No Policy*

Passthrough: *enabled*

Total Machines In Wave: 1

Successful: 0

Failed: 0

Cancelled: 0

Active: 0

Idle: 1

Source	Target	Goal	Status	Elapsed Time	Replications Enabled	Actions
dmz-centos7	az-dmz-centos7	Host Sync	Success		Yes	

16. You need to configure provisioning details next. It is needed when you mark the goal for wave as one of these:

- Host sync (direct sync)
- Stage 1 and 2
- Stage 2

Part of the provisioning details are pre-configured for you, so you need to select a datacenter, networking details, and resource group for provisioned instance (where your servers from the wave are migrated).

The screenshot shows the 'RackwareWave' configuration page in the Rackware SSP interface. The left sidebar contains navigation options: Replication, Summary, Waves, DR, Hosts & Images, History, Diagnosis, and Configuration. The main content area displays the wave's status as 'Idle' and provides details for 'Started', 'Ended', and 'Total Elapsed' (all 'Not available'). A red box highlights the 'Autoprovision' field, which is set to 'Not configured'. Other fields include 'Parallel Count' (1), 'DR Policy' (No Policy), and 'Passthrough' (enabled). A progress indicator shows 'Total Machines In Wave: 1' with a donut chart. A table below lists the wave's configuration:

Source	Target	Goal	Status	Elapsed Time	Replications Enabled	Actions
dmz-centos7	az-dmz-centos7	Host Sync	Success		Yes	

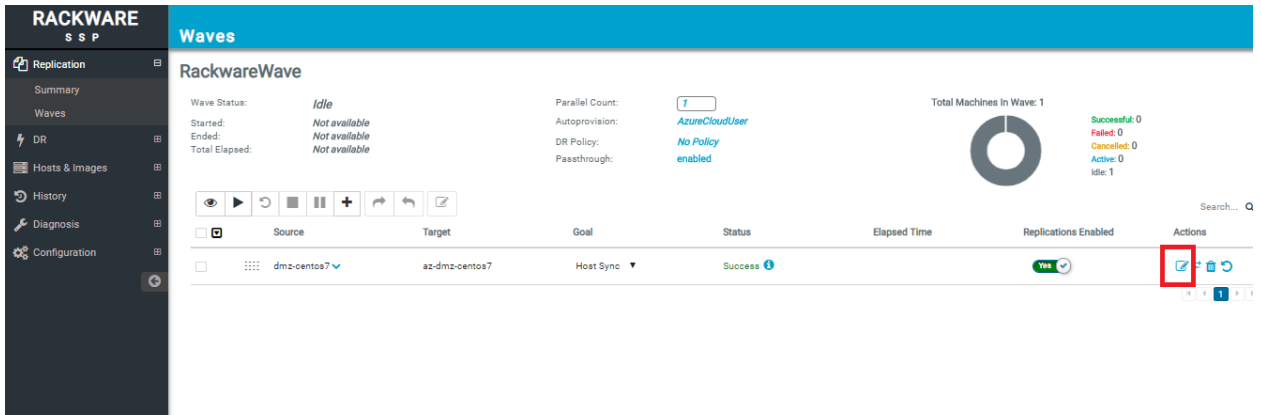
The 'Select an environment' dialog box contains the following fields and options:

- Environment:** AzureCloudUser
- Datacenter:** West Central U.S.
- Resource Group***: (Empty field with a red error message: 'Resource Group is required')
- Subnet Name:** (Empty field)
- VNet Name:** (Empty field)

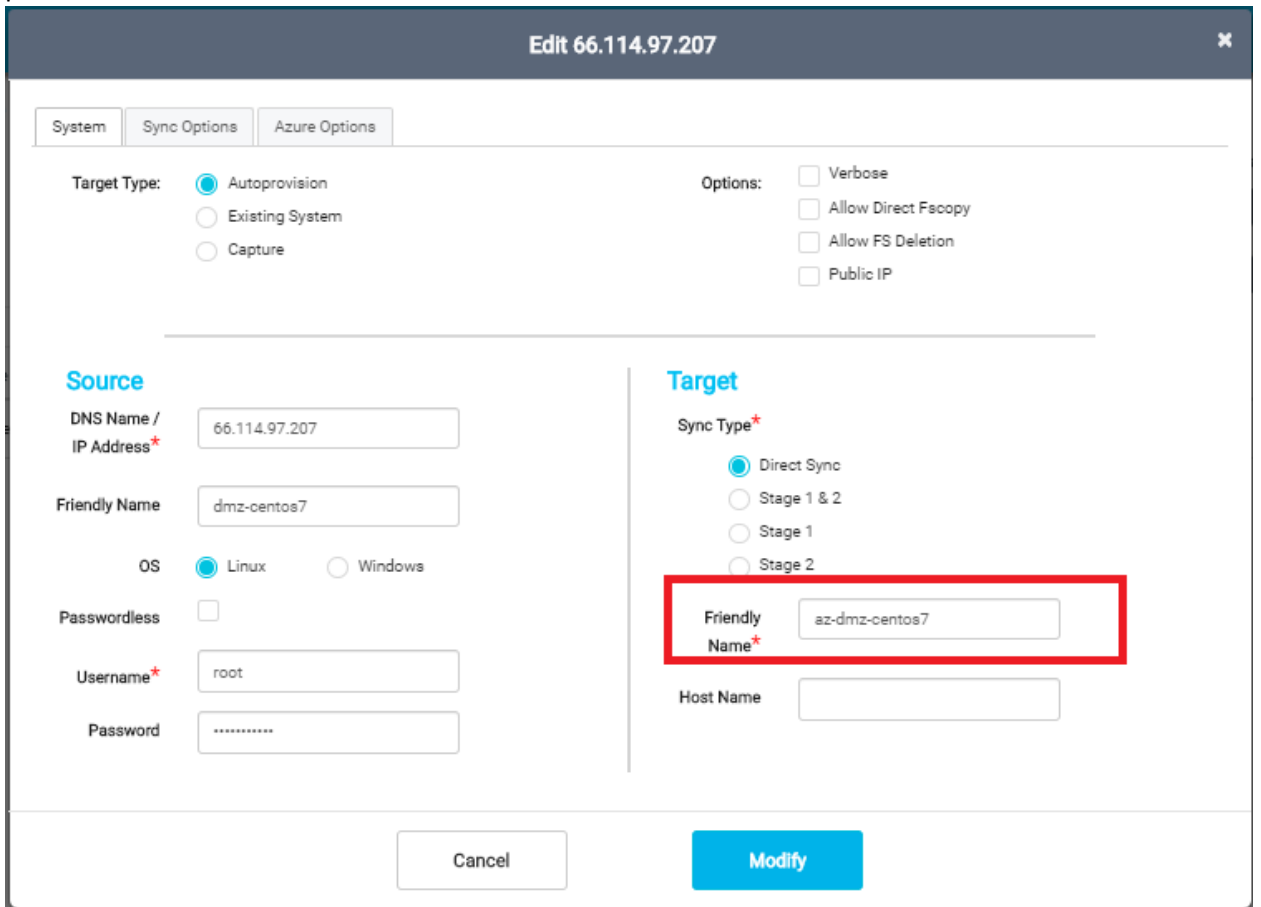
Buttons: Cancel, Apply Changes

17. Optionally, you can override provisioning details per server through below screens.

Edit the host entry which you want to override for provisioning details.



The target 'friendlyname' is what the name (hostname as well as display name) of your provisioned VM instance in Azure is set to.



If RMM doesn't have direct network connectivity with your selected network/subnet for the target VM, then you might also want to enable provisioning a 'Public IP' for the target VM.

Edit 66.114.97.207 ✕

System Sync Options **Azure Options**

Target Type: Autoprovision
 Existing System
 Capture

Options: Verbose
 Allow Direct Fscopy
 Allow FS Deletion
 Public IP

Source

DNS Name / IP Address*

Friendly Name

OS Linux Windows

Passwordless

Username*

Password

Target

Sync Type*
 Direct Sync
 Stage 1 & 2
 Stage 1
 Stage 2

Friendly Name*

Host Name

You can also optionally override other provisioning details for the host entry in 'Azure Options' menu tab. By default, RMM picks a shape for the host matching closest to its source side configuration, but you can override that on the below screen.

Edit 66.114.97.207 ✕

System Sync Options **Azure Options**

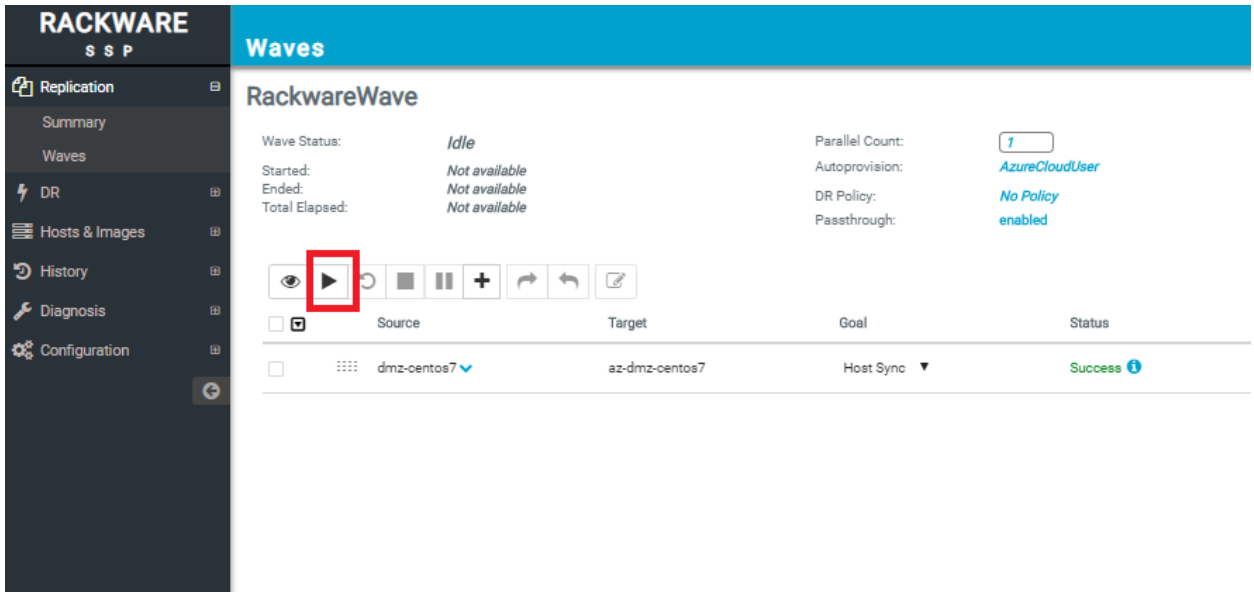
Shape

Resource Group*

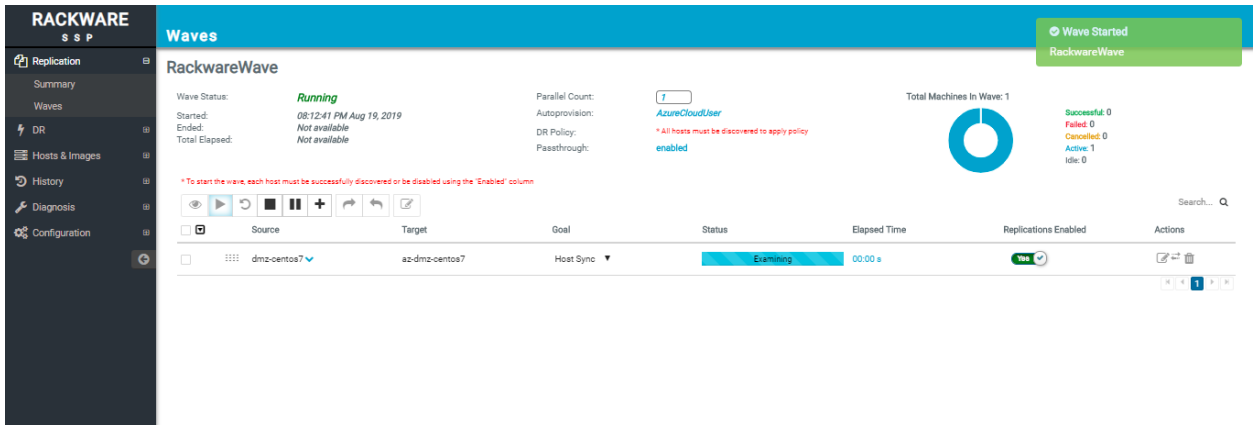
Subnet Name

VNet Name

18. Once all hosts are discovered and provisioning details configured, you can start wave by pressing the 'Play' button.

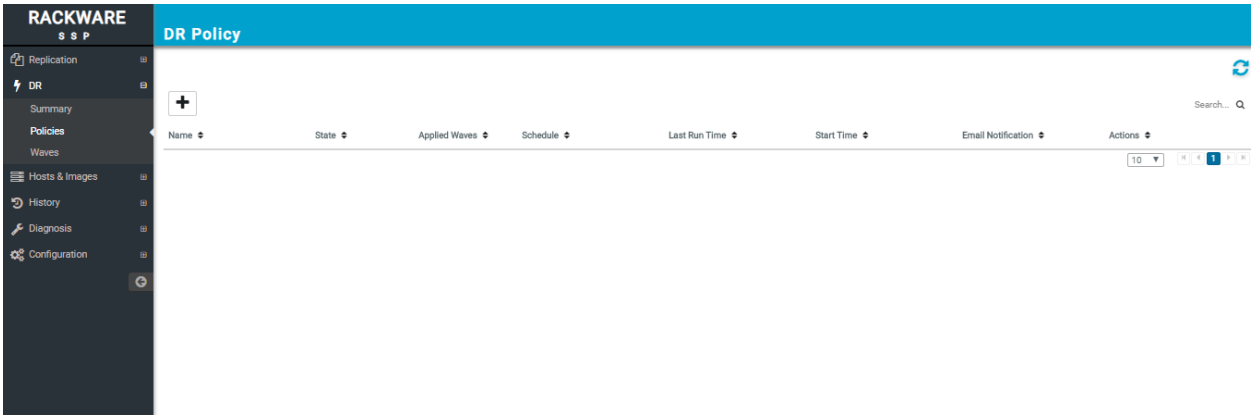


- The wave status should change to 'Running' now. All hosts in the wave start replicating in the selected mode. Except for stage-1 only servers, all machines start replicating to Azure now. You also start seeing resources (VM, nics, disks, etc.) being created in the selected datacenter and resource group from the wave config.

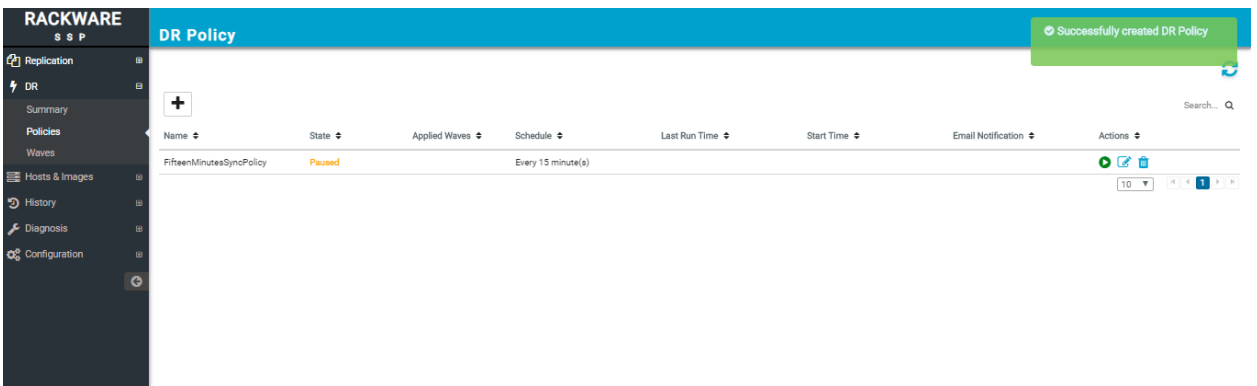
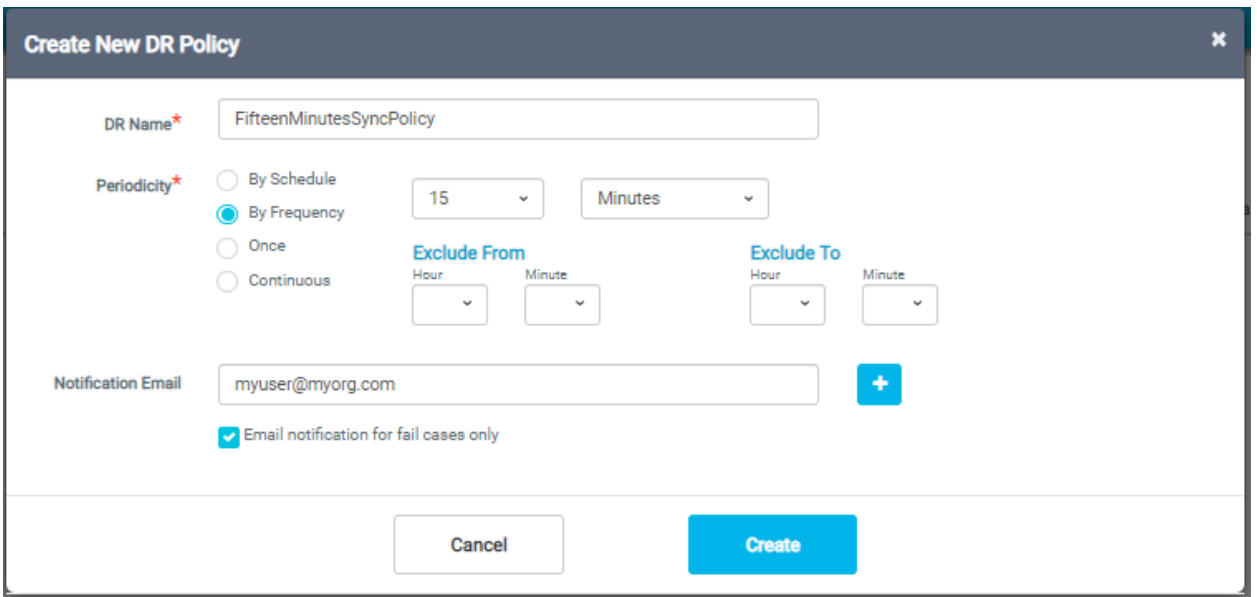


Your source servers remain in production and replication process does not interfere with anything. Also, all servers in-replication are reported to the Azure migrate-project too, with the detailed progress.

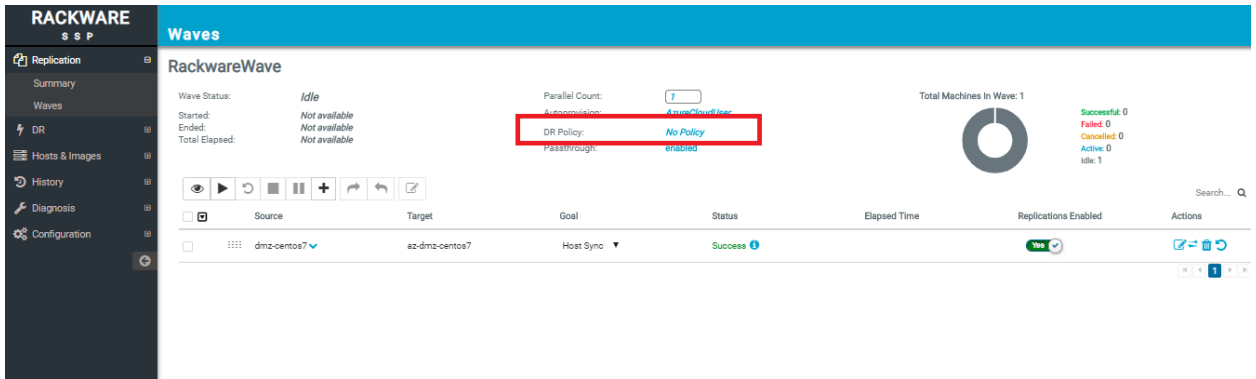
- Once replication completes, it marks the servers as 'Completed' in the Azure migrate-project configured for the RMM (this is configured during RMM provisioning from the RMM-Controller).
- You can start the wave again by pressing the 'Play' button again. Any such subsequent replications do a delta-synchronization (sync) for the server(s) in the wave.
- Optionally, you can create a DR policy for the replicated wave and let RMM run recurring syncs. Note that this needs a DR license for the RMM.



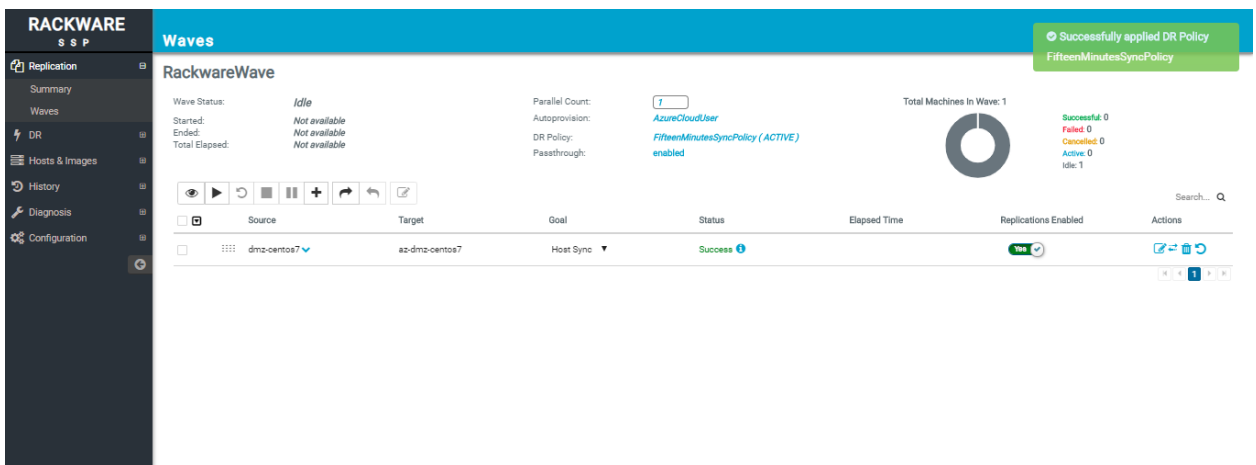
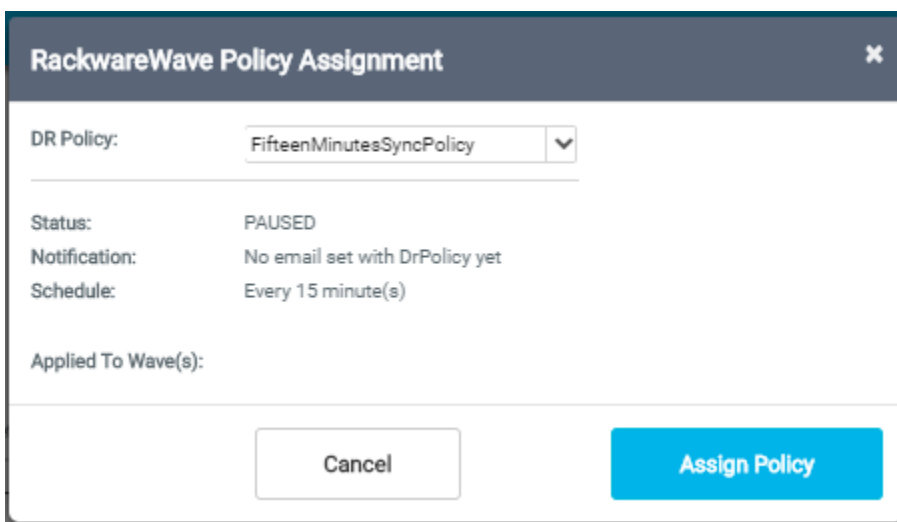
Create a policy and set frequency/schedule, alert list, and other relevant details.



Once a policy is created, it can be applied to the wave, from wave configuration options on the main page.



Select the created policy and apply it.



23. Note that once you apply DR policy to the wave, your wave moves from 'Replications' to 'DR' tab on the left. The wave is started for delta syncs in the configured scheduled/frequency under the DR policy.

RACKWARE
S S P

Waves

Replication
DR
Summary
Policies
Waves
Hosts & Images
History
Diagnosis
Configuration

Search...

Wave Name	Status	Machines	Failed	Policy	Actions
RackwareWave	Idle	0 / 1	1	FifteenMinutesSyncPolicy	

24. If you see any issues, then you can go to the 'Diagnosis' menu, create a diagnostics dump, download it, and send it to support@rackwareinc.com along with a detailed description of your problem.

RACKWARE
S S P

Diagnostic Dump

Replication
DR
Hosts & Images
History
Diagnosis
Log
Configuration

Create Delete Download

File Name	Time	Size
No dump files to show.		

RACKWARE
S S P

Diagnostic Dump

Replication
DR
Hosts & Images
History
Diagnosis
Log
Configuration

Create Delete Download

File Name	Time	Size
<input checked="" type="checkbox"/> rwdump-20190819_204827.tgz	08:48:35 PM Aug 19, 2019	1 MB