Acronis

NAS backup using Docker container

Contents

How to configure Acronis Backup Agent to protect QNAP/Synology NAS devices

The guide describes how to set up and configure QNAP and Synology NAS devices for running Acronis backup agent using containers technology on top of these devices and how to protect data stored on these NAS devices.

The described solution applies to both Acronis Backup 12.5 installed locally or managed from cloud ("Cloud deployment" mode) and Acronis Cyber Cloud.

Preparation

1. **Check** if your NAS model is **compatible with containerization** software
- Synology: https://www.synology.com/en-us/dsm/packages/Docker
- QNAP: https://www.qnap.com/solution/container_station/en-us/
   o QNAP devices must run **x86 CPU**. ARM CPU is not supported. See https://www.qnap.com/en/how-to/faq/article/how-can-i-determine-whether-my-nas-uses-an-arm-or-x86-processor/
2. (*If you use Acronis Backup 12.5*) Confirm the version of Acronis Backup 12.5: it should be **Update 3.2 or higher (build #11010+)**.
3. Required **licenses**:
   a. One "*Acronis Backup 12.5 Standard Server*" or "*Acronis Backup 12.5 Advanced Server*" license if you use Acronis Backup 12.5 installed locally.
   b. One quota of "*Servers*" offering item if you use Acronis Cyber Cloud or Acronis Backup 12.5 in "Cloud deployment" mode.
4. Prepare registration token for registering Acronis Backup agent in **Acronis Cyber Cloud** platform OR in **Acronis Backup 12.5** running locally:
- Login to the Acronis Cyber Cloud Portal (https://cloud.acronis.com/) and log into Backup console OR log into Backup console of locally installed Acronis Backup 12.5
- (*If you use Acronis Cyber Cloud*) Copy the address of the **datacenter** assigned to your account for later use (https://us4-cloud.acronis.com in the below example):
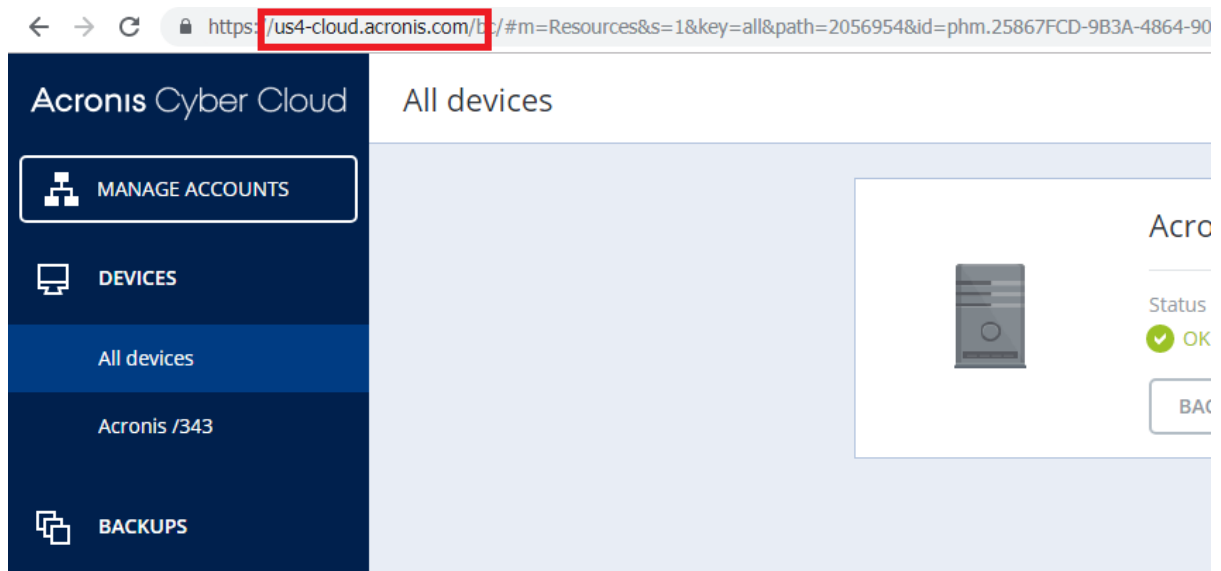
- From **All devices** list click **Add** in the right upper corner and **Generate** a new registration **token**. COPY the token for later use:
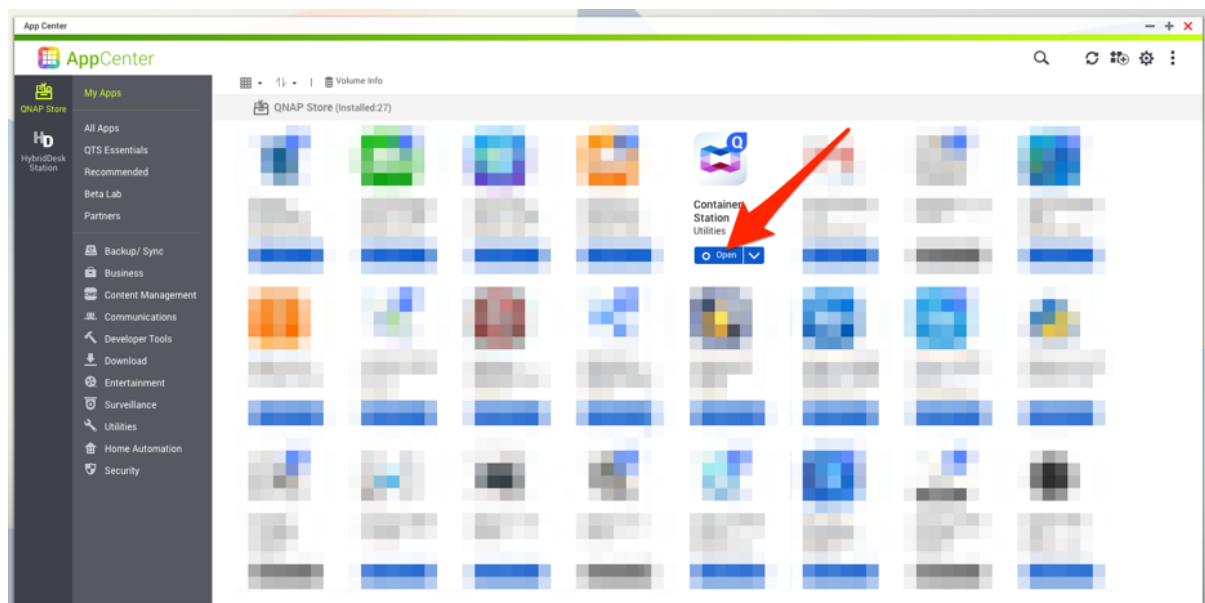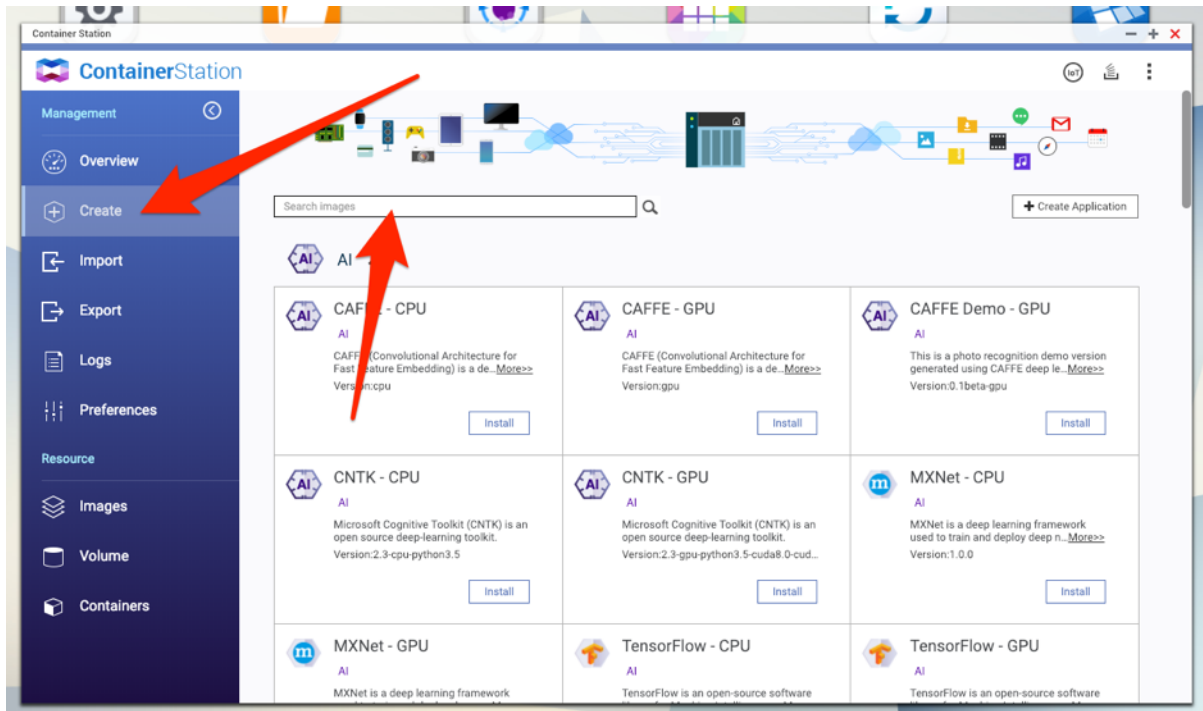
NAS setup

QNAP Container Station setup

1. Go to your QNAP NAS Administration Portal and open "**AppCenter**".
2. Search for Container Station and Click "**Start**" if it's not already running:
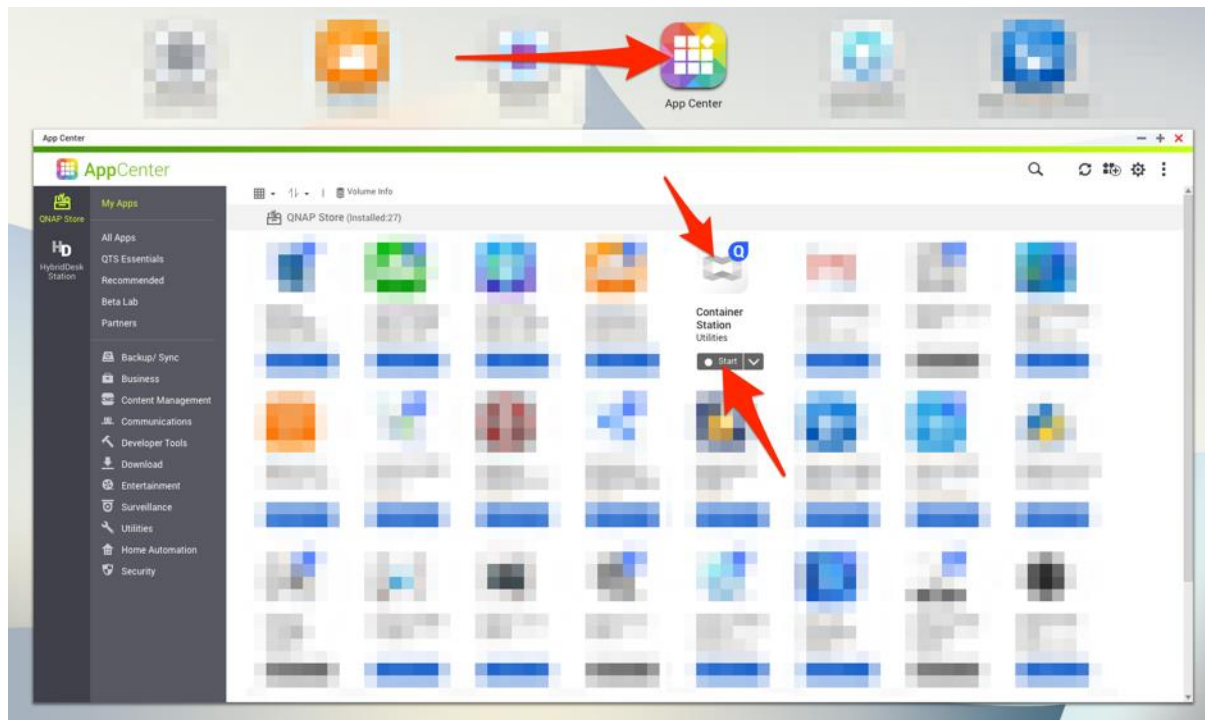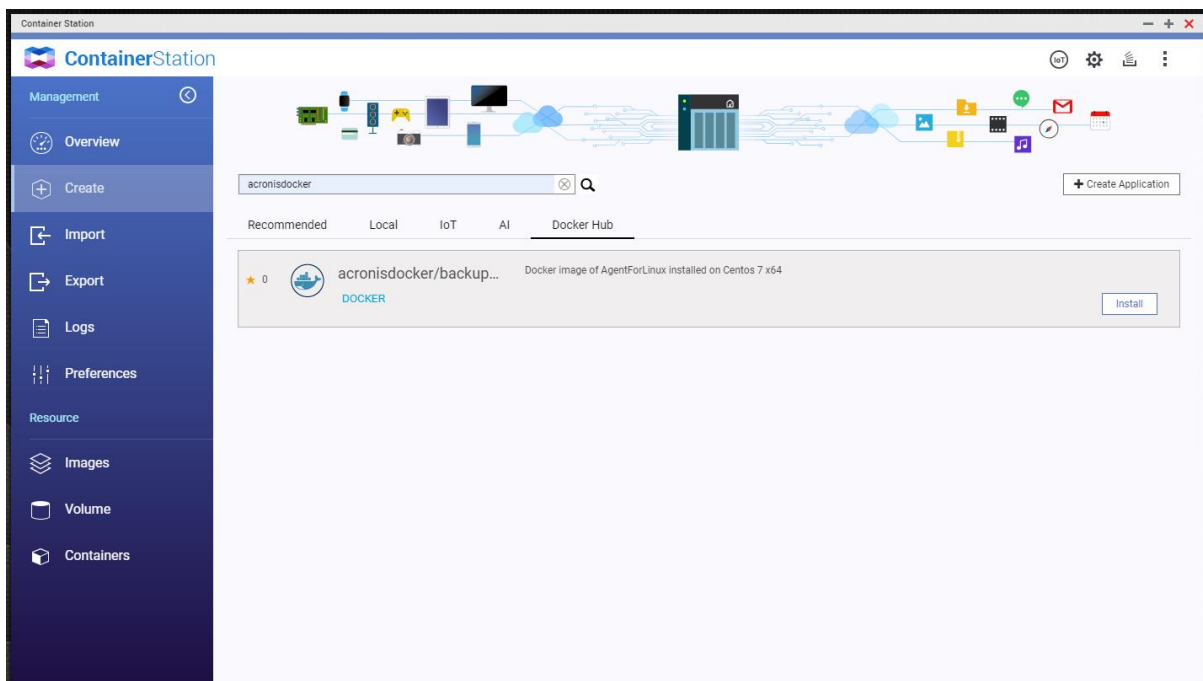

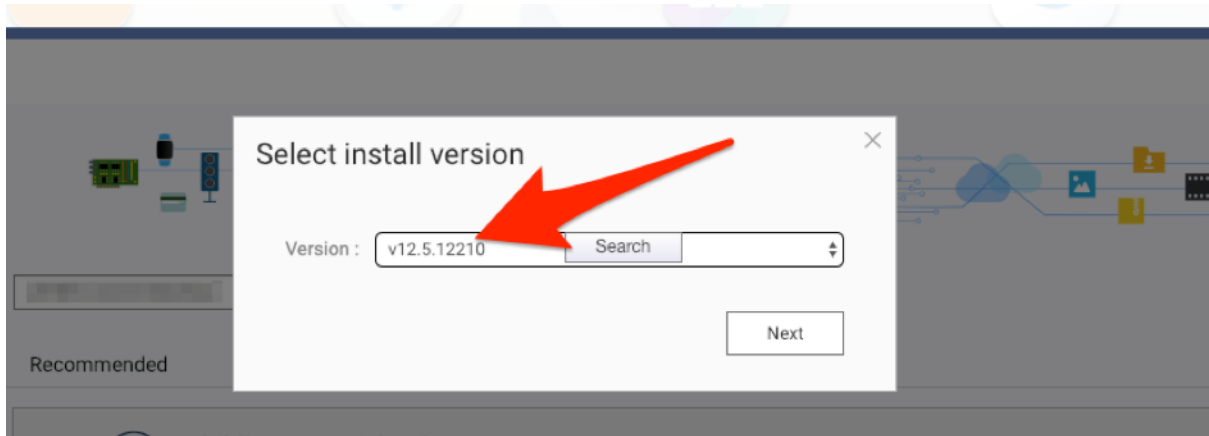3. Click on "**Open**" to open the Container Station:

4. Open Container Station on NAS and choose "**Create**" and search for "**acronis**". There will be "**acronisdocker/backup_agent**" discovered:
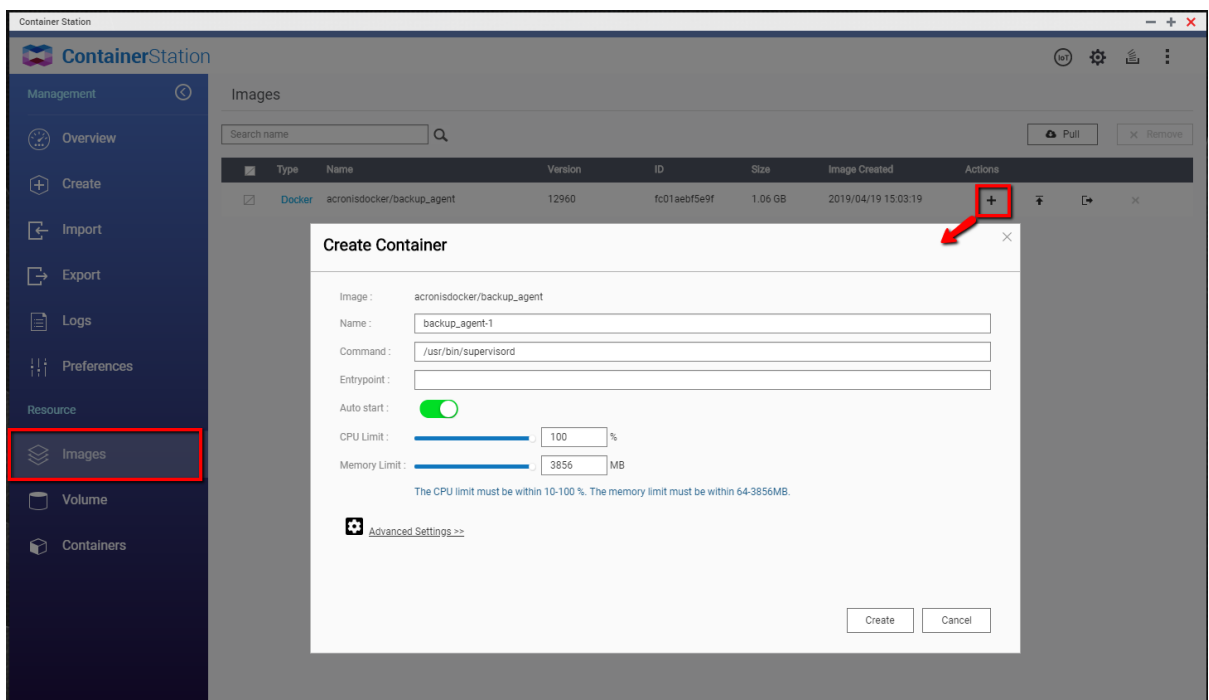

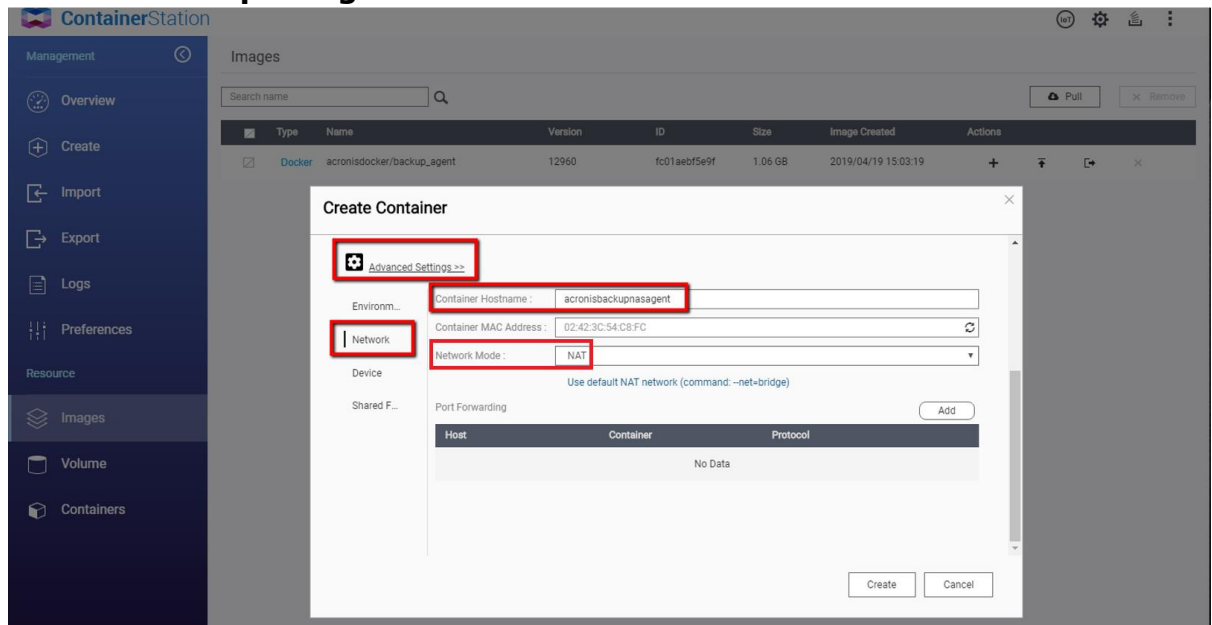5. Make sure "**Docker Hub**" tab is selected and click "**Install**":

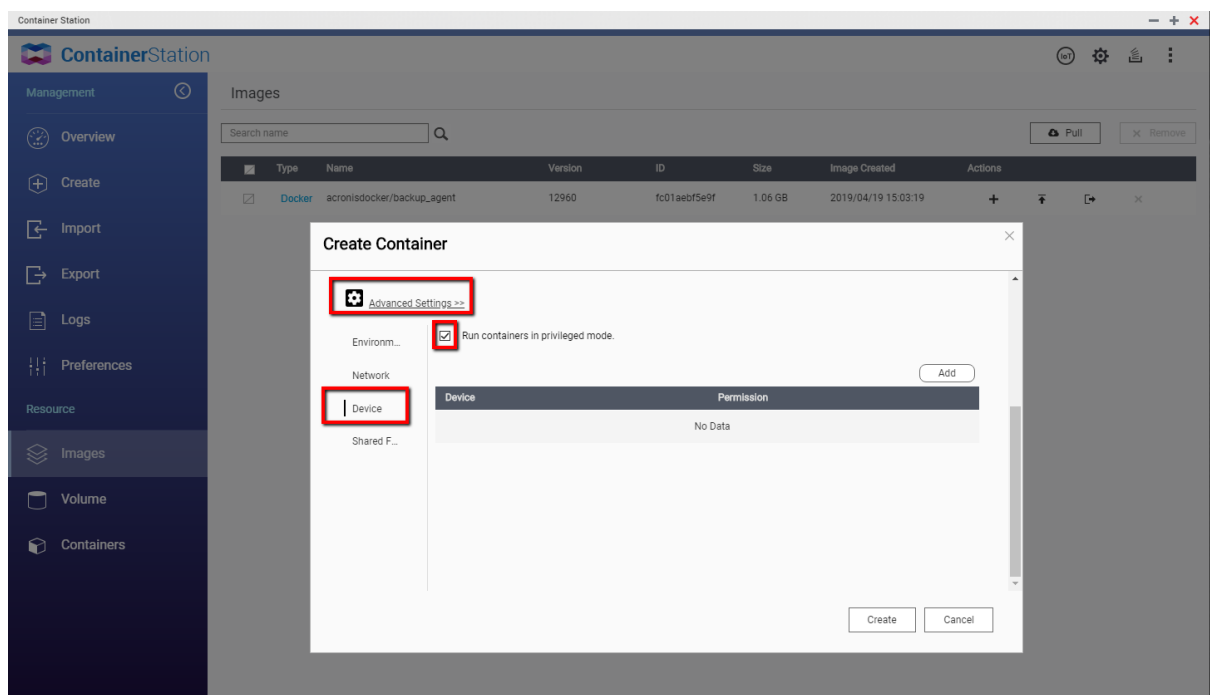6. Select latest available version and click "**Next**":

7. Define a **name** (example: "**acronisbackupnasagent**") and add "**/usr/bin/supervisord**" to the **command** field:
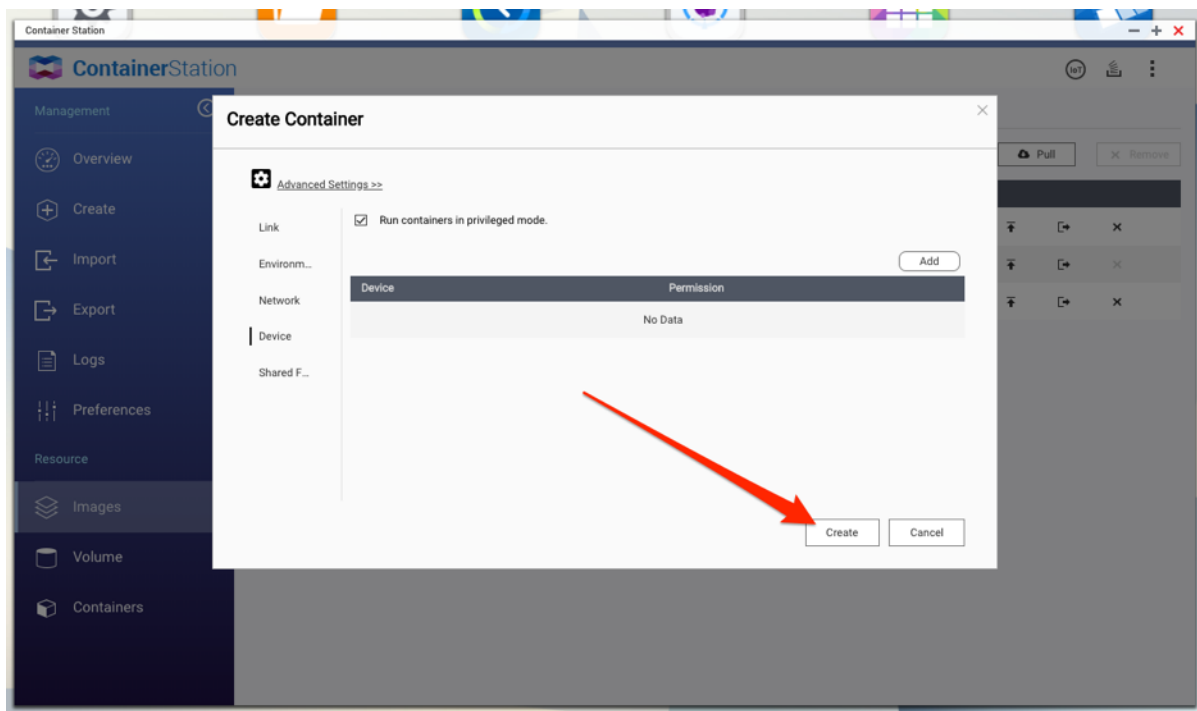
8. Go to **Advanced Settings** and specify **Container Hostname** e.g. "**acronisbackupnasagent**" under **Network.**
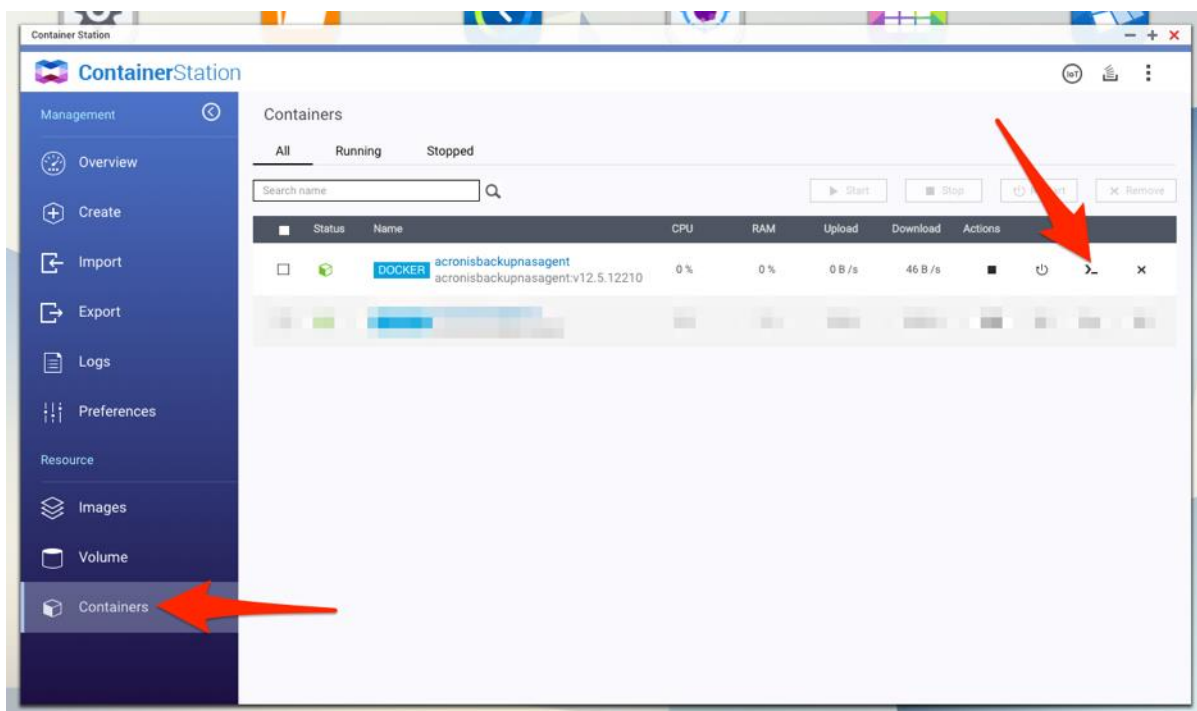

9. **IMPORTANT!** Activate "**Run containers in privileged mode**" under **Device**:

10. Click "**Create**":

11. Wait till the container is created (can take up to 1-2 minutes), then go to "**Containers**" and click on "**>_**" next to the new container:

12. Enter the following command with your details and click "Ok":

Tip: If the below commands do not work, try changing the "Network mode" in step 8 from "**NAT**" to "**Bridged**" to ensure that the agent can access Internet for proper registration in Acronis cloud.

a. If you use **Acronis Cyber Cloud**:

/bin/bash /register_mms.sh *-o register -a **YOURDATACENTERURL** -- token **TOKEN** -t cloud*

(Example: "*/bin/bash /register_mms.sh -o register -a https://us4-cloud.acronis.com --token 09B3-4087-4A0C -t cloud*")

b. If you use **Acronis Backup 12.5**:

/bin/bash /register_mms.sh *-o register -a* **YOURMANAGEMENTSERVERURL** *--token **TOKEN***

(Example: "*/bin/bash /register_mms.sh -o register -a https://10.250.10.10:9877 --token 09B3-4087-4A0C*")
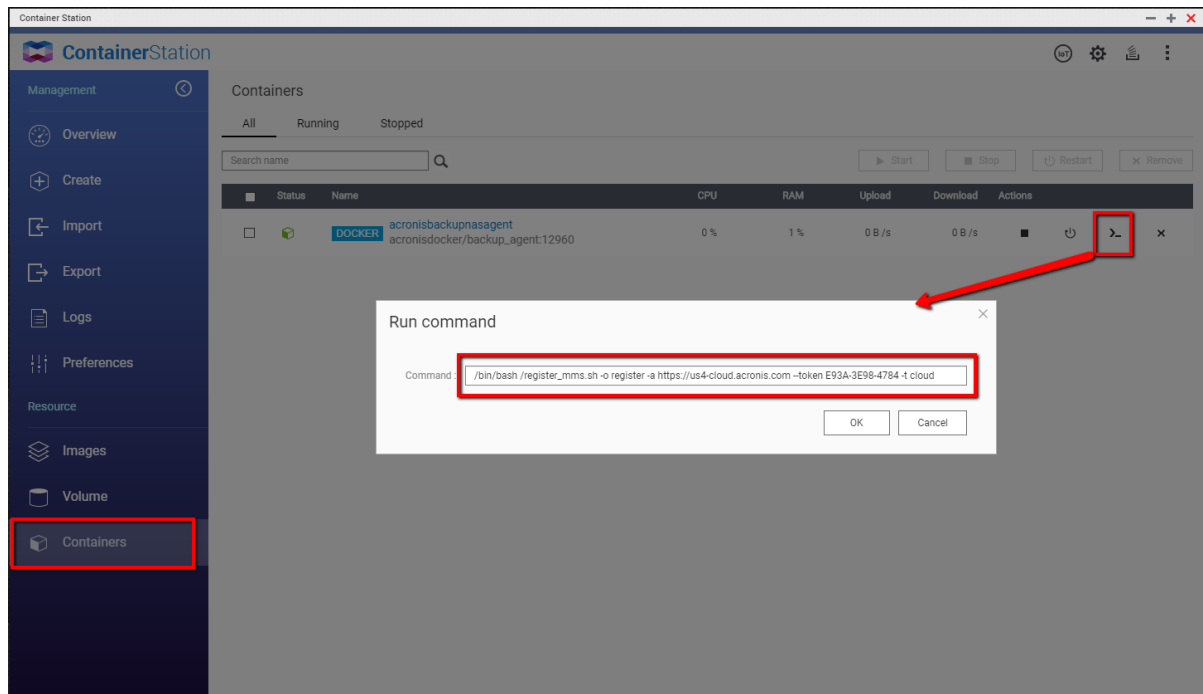

13. If you see "**Success. 200 null**" and "**Process exited with code 0**" you successfully installed the agent and can close all windows.


14. **Finish.** The Agent should appear in the backup console in the **Devices** list under the same name as defined for the container in step 7 above.

Synology setup

1. Go to your Synology NAS Administration Portal and open "**Package Center**".
2. Search for "**Docker**" and click "**Install**" if it's not already running:
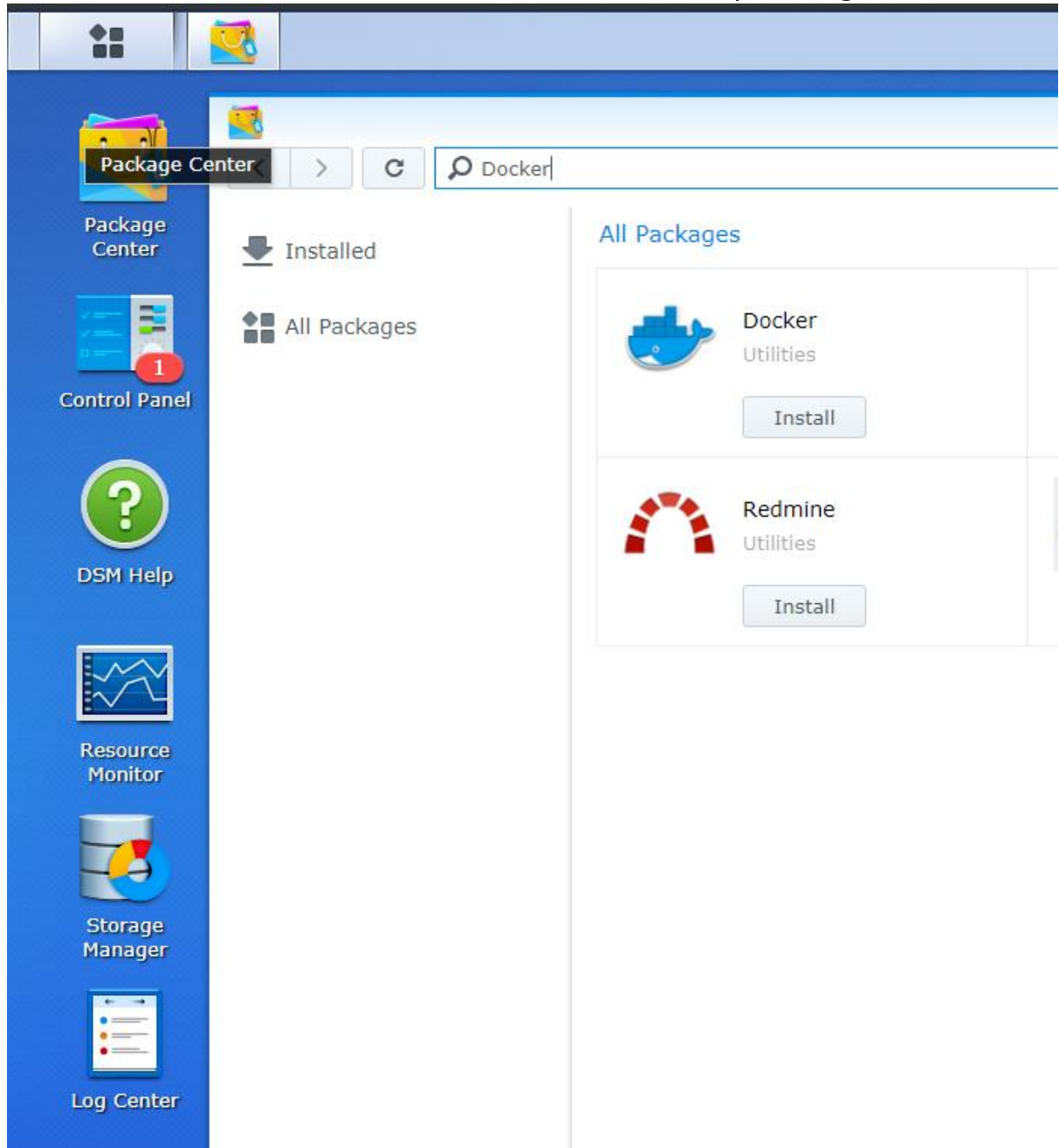
3. Open "**Docker**" application, search for "**acronisdocker/backup_agent**" container image in "**Registry**" menu and download this image:
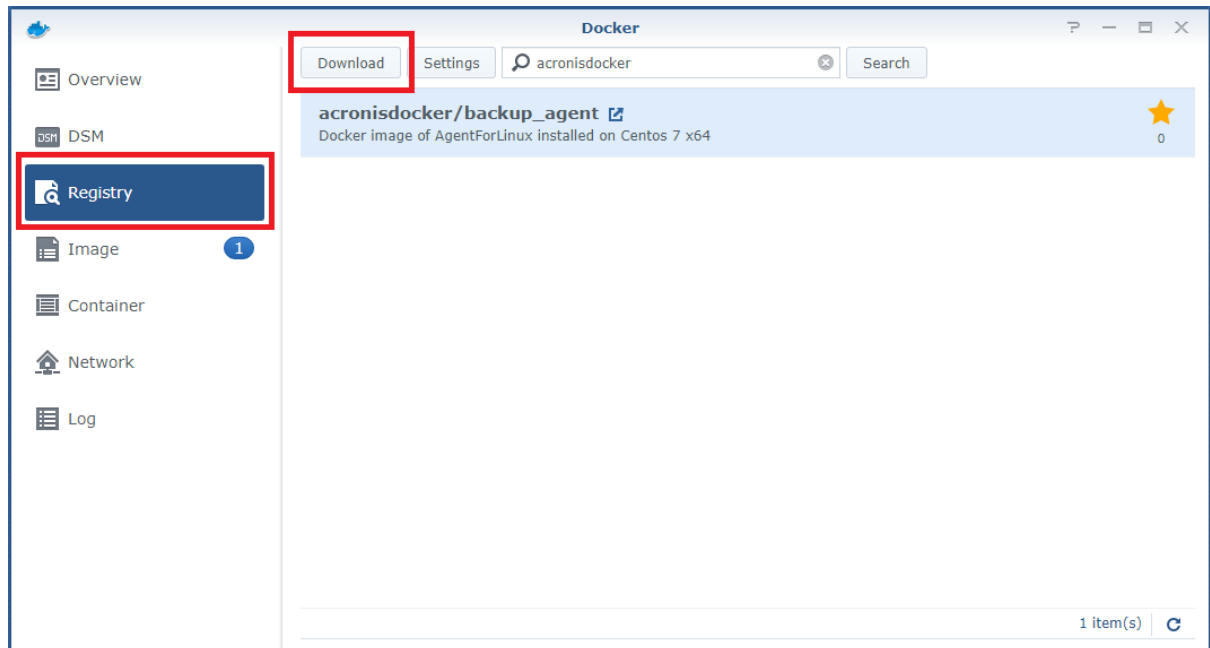
4. **Launch** the container from the downloaded image.
5. Define the container name and make sure to check "**Execute container using high privilege**" option:
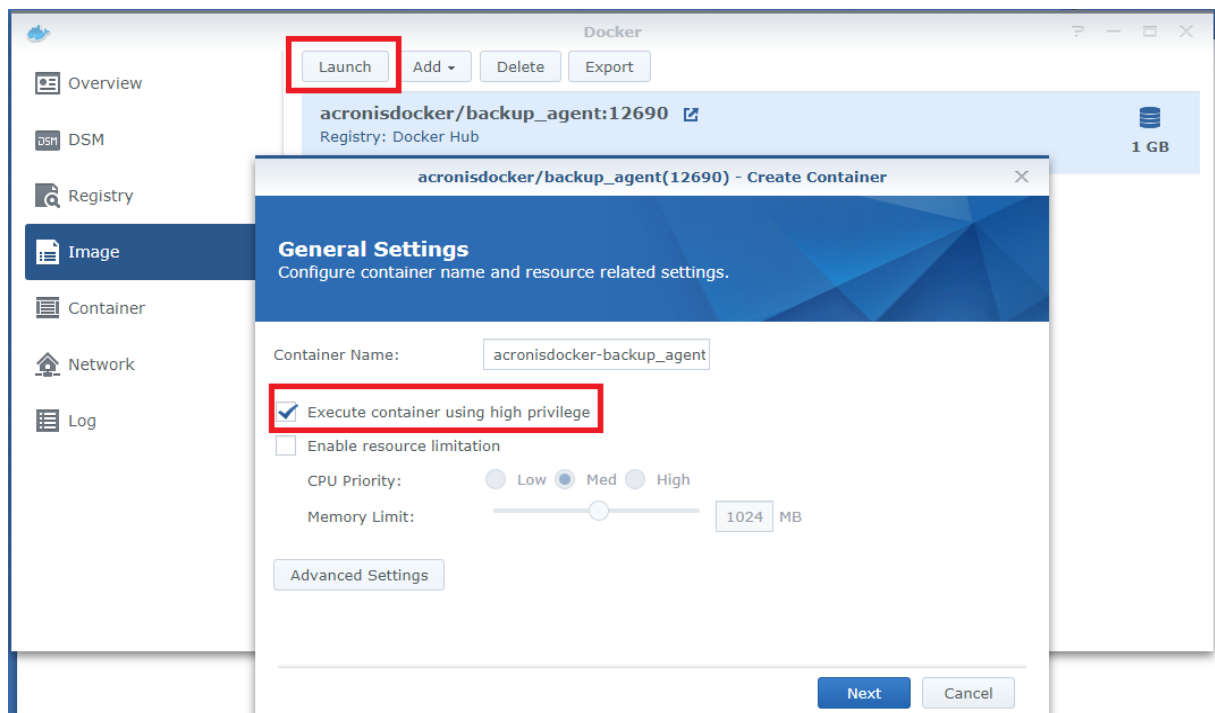
6. Open "**Container**" menu, then "**Details**" for the launched container and switch to "**Terminal**" tab

7. Click **Arrow down** sign near "**Create**" button -> "**Launch with command**"
8. In the opened terminal issue the following command:
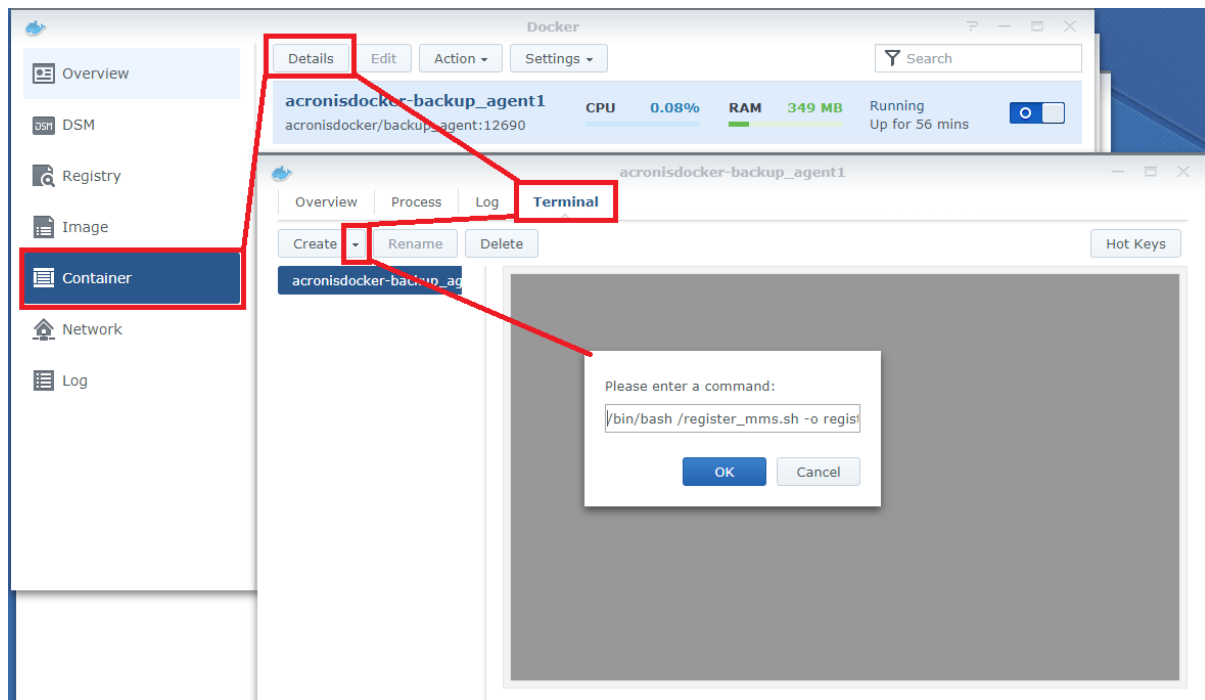   a. If you use **Acronis Cyber Cloud**:

   /bin/bash /register_mms.sh -o register -a **YOURDATACENTERURL** --token **TOKEN** -t cloud

(Example: "/bin/bash /register_mms.sh -o register -a https://us4-cloud.acronis.com --token 09B3-4087-4A0C -t cloud")

   b. If you use **Acronis Backup 12.5**:

   **/bin/bash /register_mms.sh** -o register -a **YOURMANAGEMENTSERVERURL** --token **TOKEN**

(Example: "/bin/bash /register_mms.sh -o register -a https://10.250.10.10:9877 --token 09B3-4087-4A0C")

9. **Finish.** The Agent should appear in the backup console in the **Devices** list under the same name as defined for container in step 5 above.

Protecting data on NAS device

1. Go to the Backup Portal (Acronis Cyber Cloud: https://cloud.acronis.com/; Acronis Backup 12.5: https://[YourManagementServerAddress:9877]) to create backup plans:
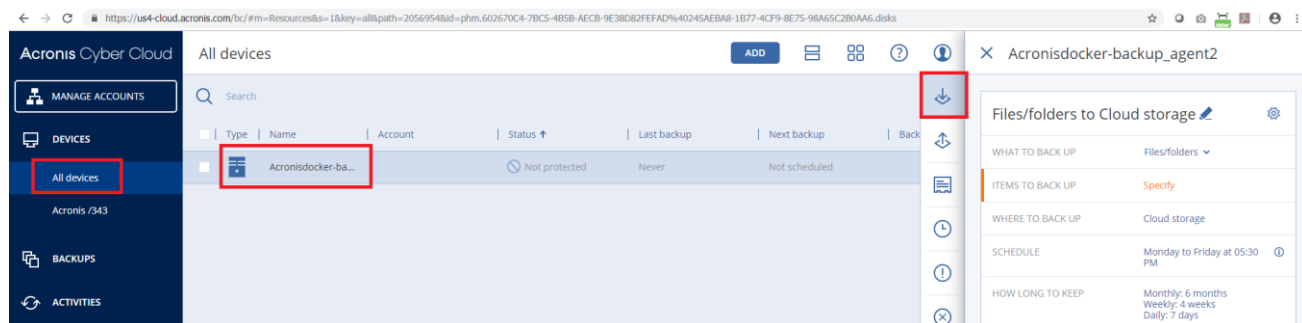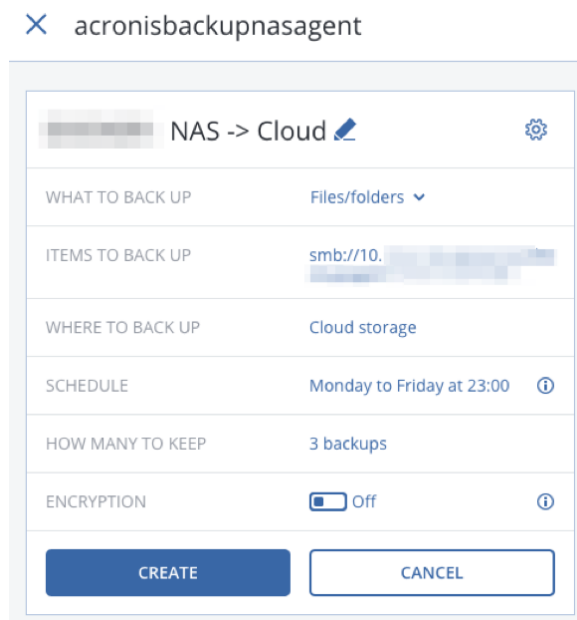

2. **Create a Files/folders backup**:
   "What to backup": **Files/folders**
   "Items to backup": **Network Folder**, e.g. network share on the NAS device
   Define rest of options as you like and save the plan

   Example:

Limitations

1. Updating the agent running inside a container via Acronis web console interface from Settings -> Agents is not supported. The container should be updated separately once new version comes out.
2. To back up data from NAS device only **Files/Folders** backup type should be used. **Entire machine** or **Disks/volumes** backup type is not supported.

For additional information, please visit www.acronis.com