Amilcar Petroleum Operations

Hewlett Packard Enterprise

Configuration and Integration of the Solution

Veeam + HPE StoreOnce

Table of Contents

1. Introduction

Modern businesses are anchored to a hybrid, hyper-scale ecosystem where every interaction results in massive and complex datasets that are crucial in their digital transformation journey. While this data needs to be protected and recovered in a simple, automated, reliable, and resilient manner, an unprecedented surge in ransomware attacks mandates the inclusion of data protection within a

comprehensive security strategy. Hewlett Packard Enterprise and Veeam co-innovation provides numerous integration options with Veeam Backup & Replication and HPE storage to deliver features that enable rapid, efficient, scalable, and secure backup and recovery throughout the lifecycle of data generated by a myriad of workloads.

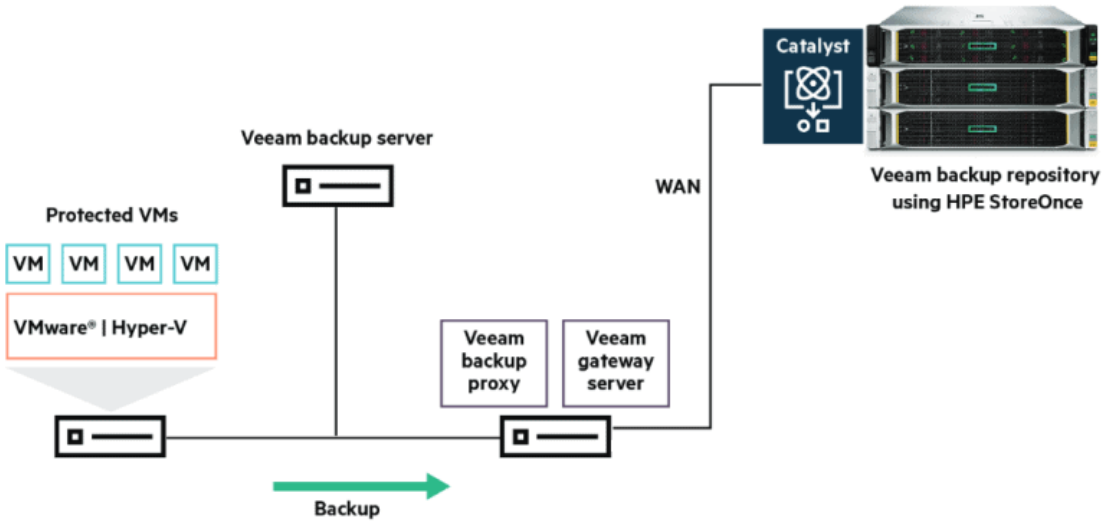
The integration of HPE StoreOnce with Veeam Backup & Replication version 12 present many benefits for complying with the 3-2-1-1 data protection rule (extension of 3-2-1 rule, where one copy must be immutable or air-gapped for ransomware protection) to protect data against planned and unplanned outages.

This document provides information for setting up and managing data availability infrastructures that include Veeam Backup & Replication, HPE StoreOnce backup appliances configured with HPE StoreOnce Catalyst backup targets.

2. Access

	Address IP		Mask
Management settings	**Management Console**	172.16.1.64	255.255.255.0
	ILO	172.16.1.65	255.255.255.0

3. Architecture



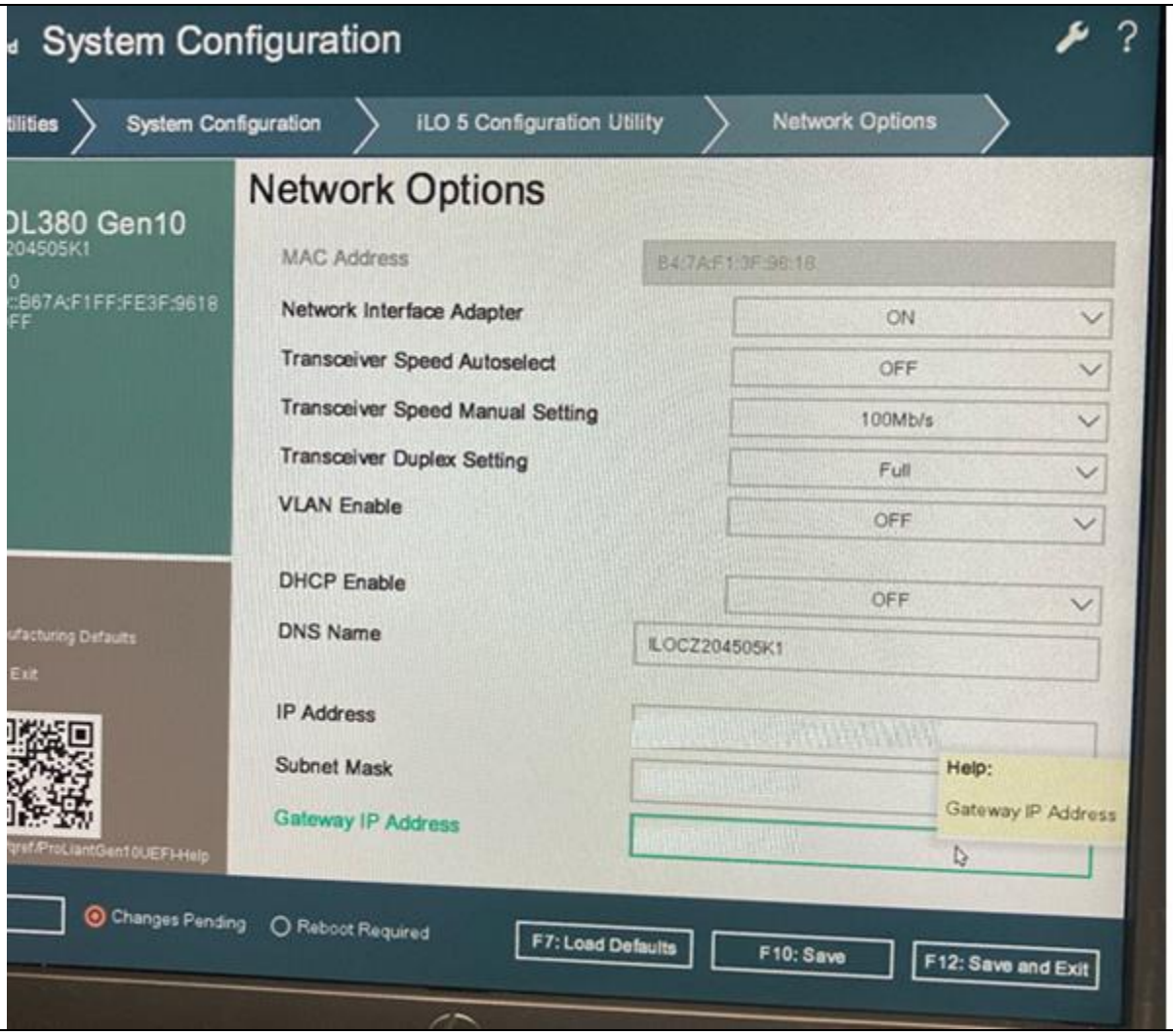
4. ILO and Console Configuration

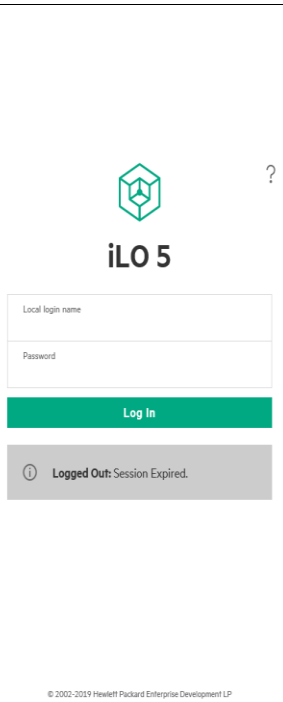
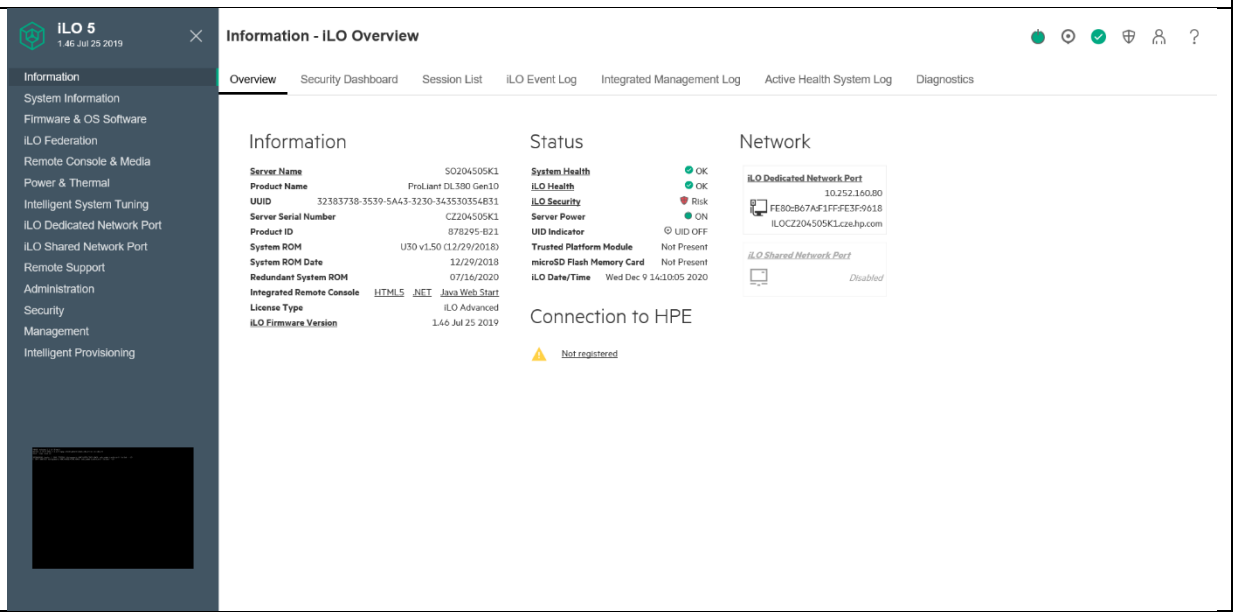
During startup,

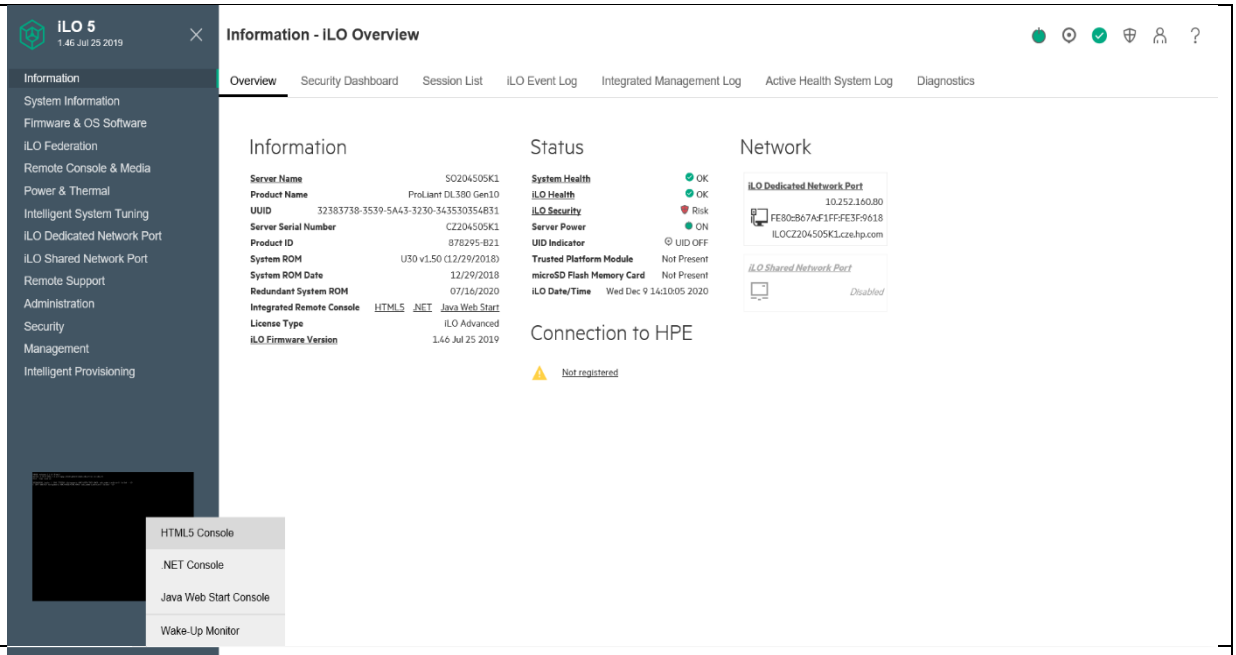
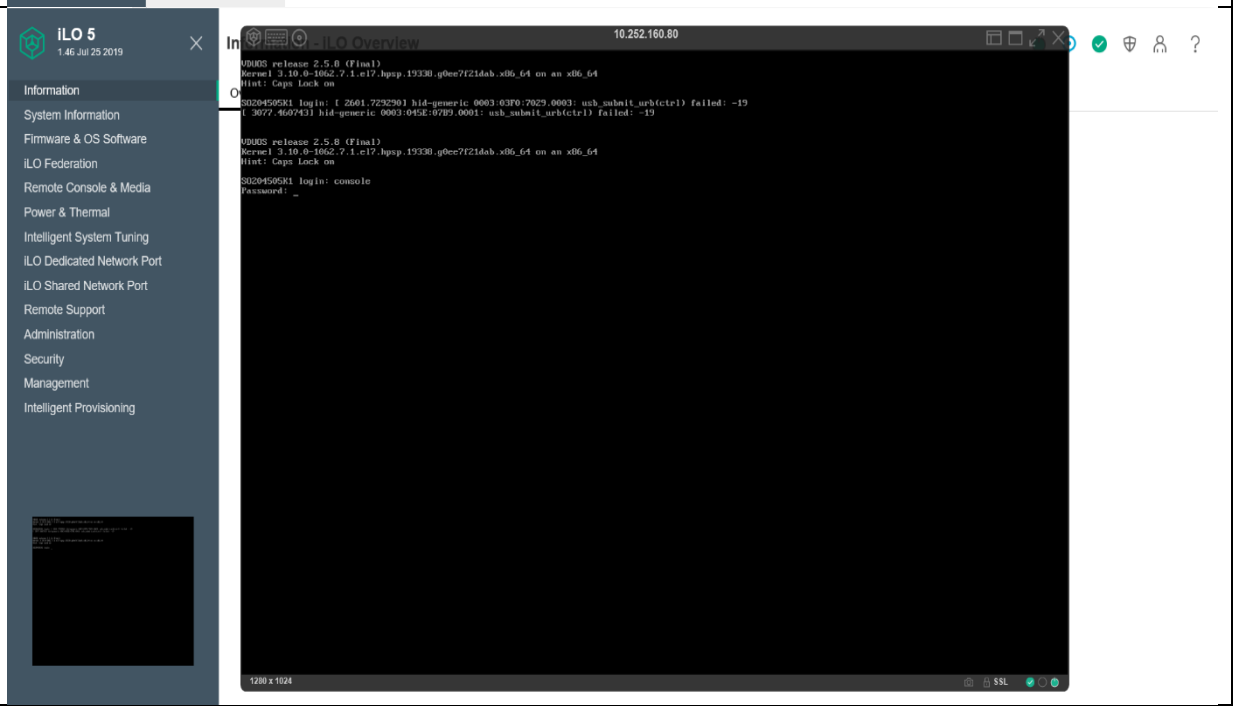
1/ Press F9 System Utilities.

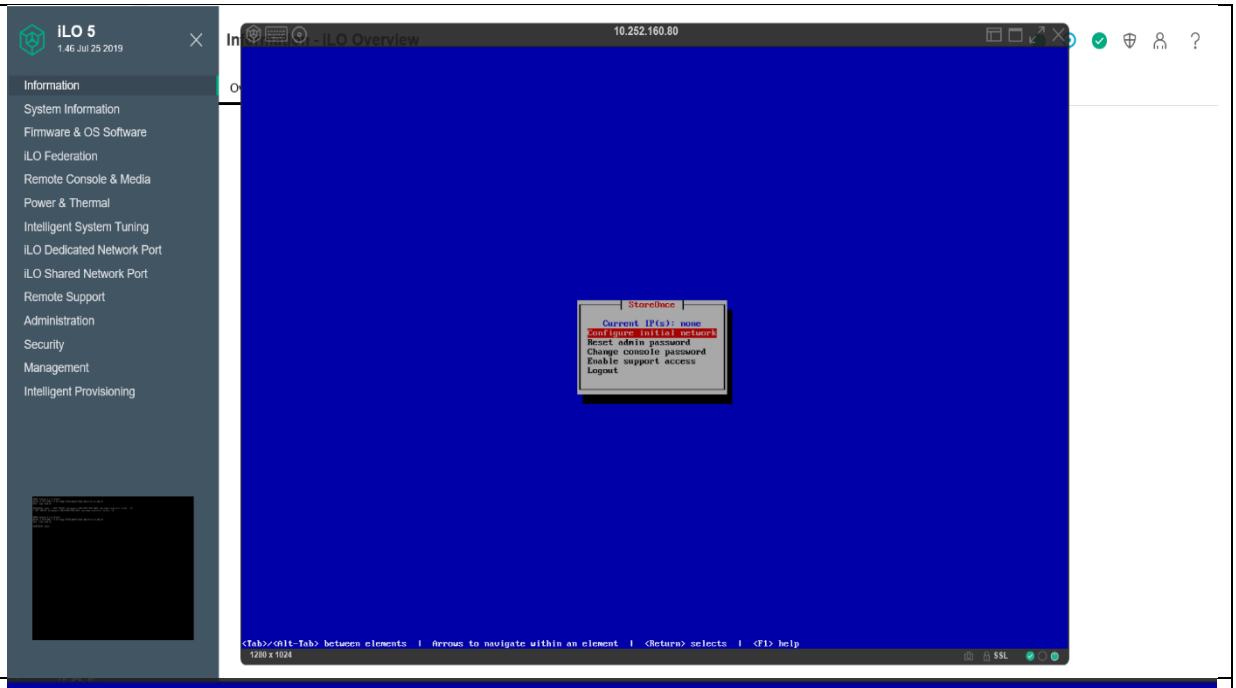
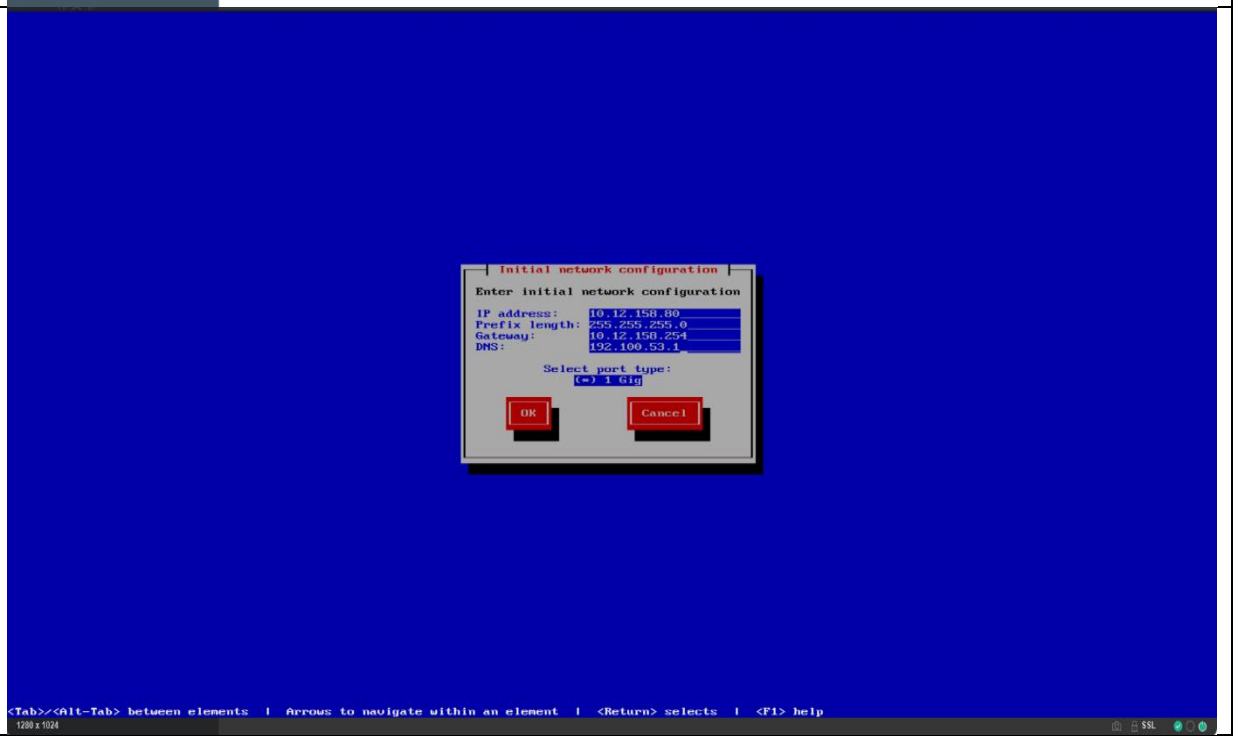
2/ Go to System Configuration, iLO 5 Configuration, Network Options.

3/ Configure the options
iLO IP address: 172.16.1.65
iLO subnet mask:255.255.255.0

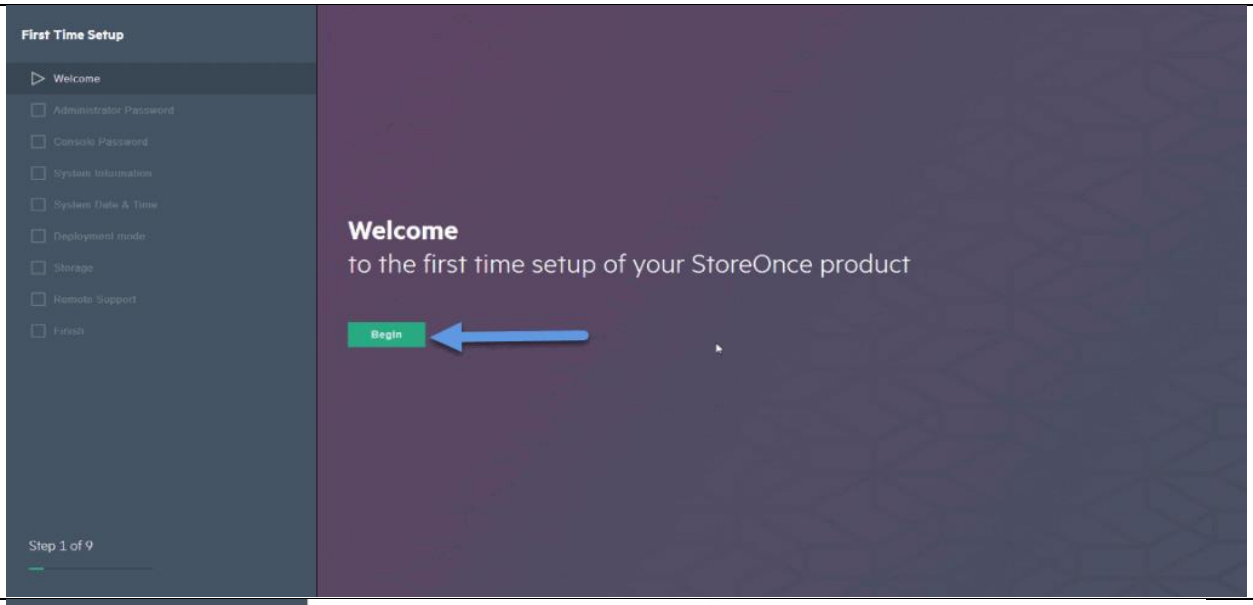
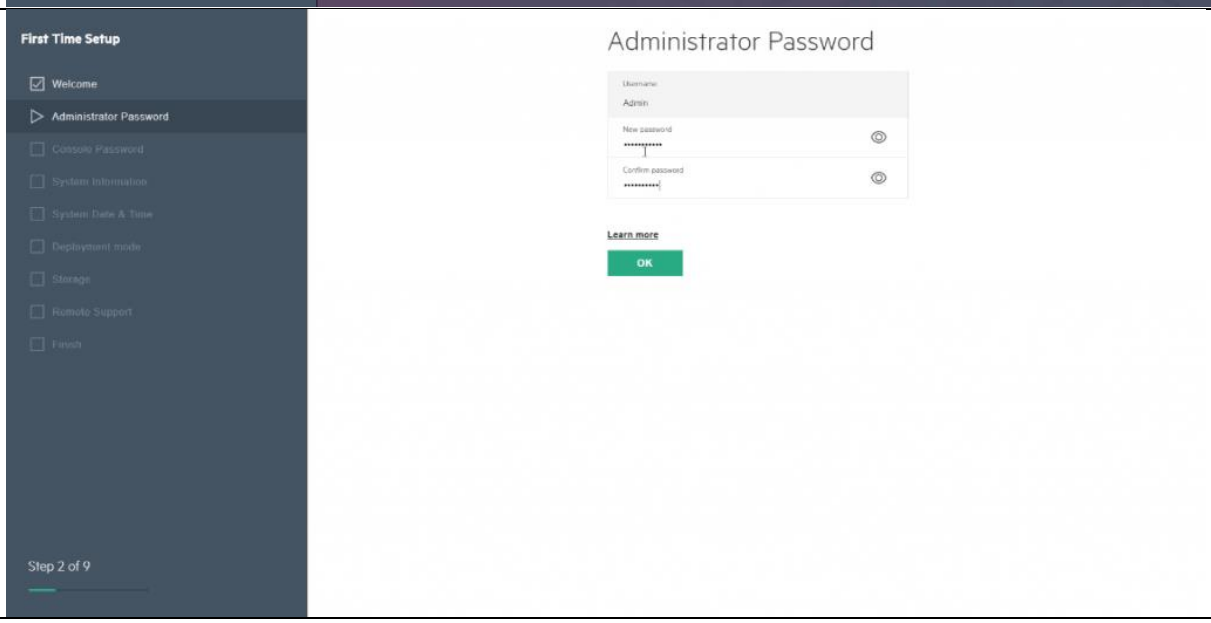


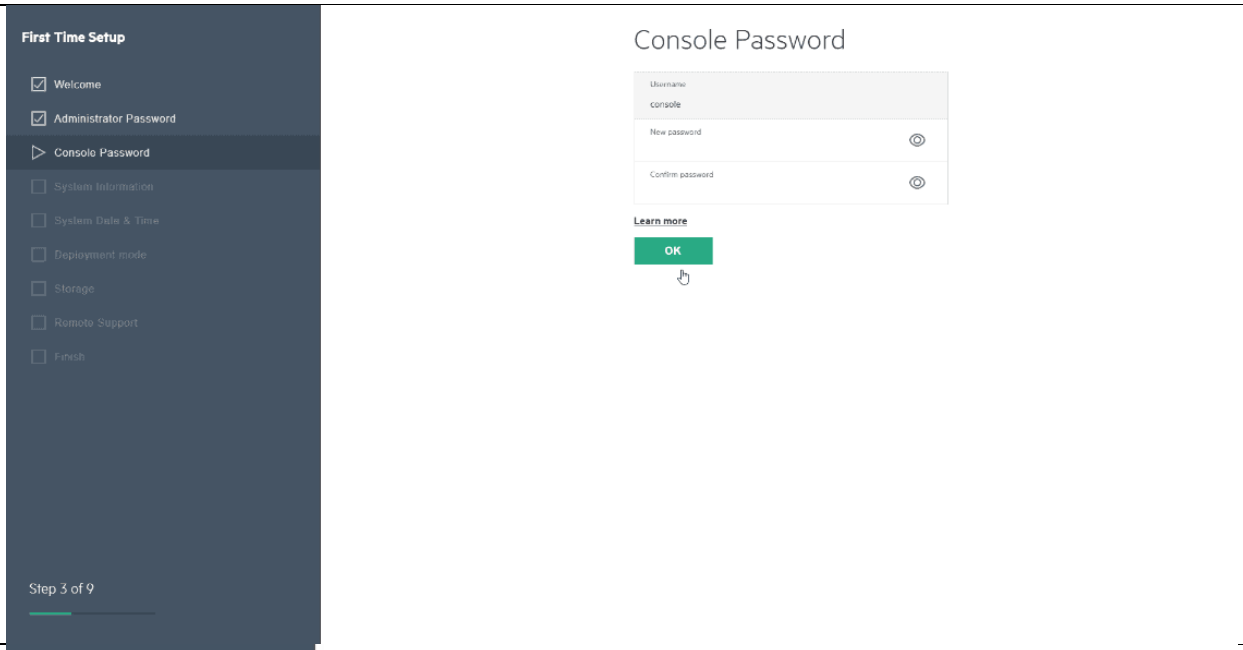
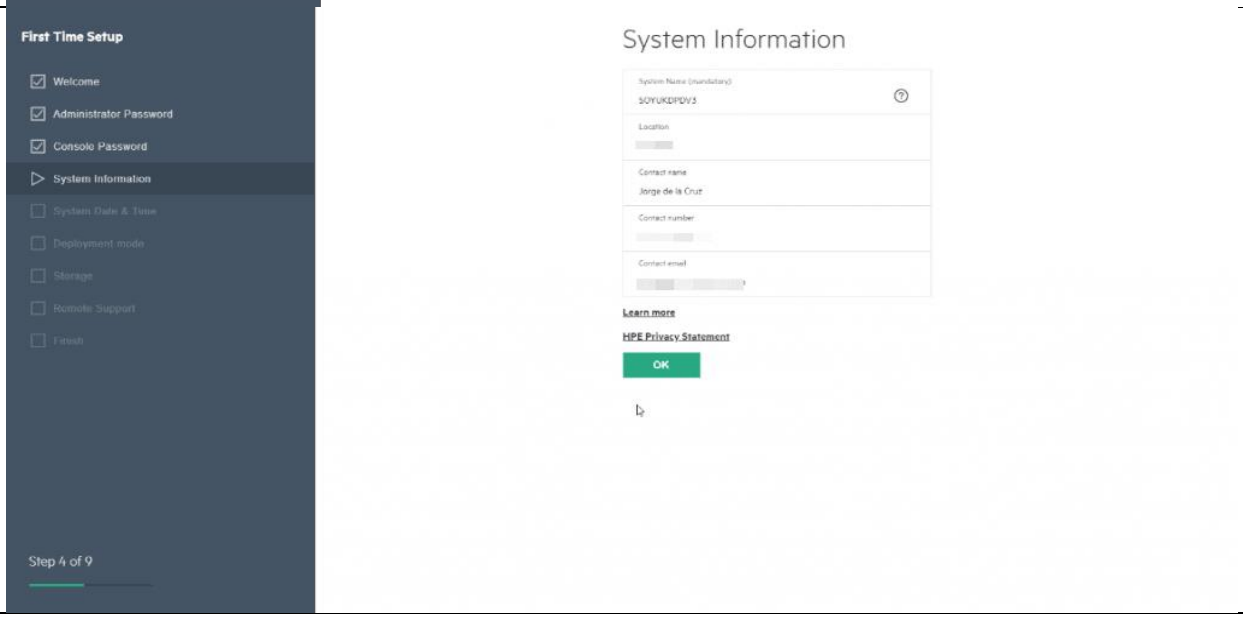
Open a browser enter the IP address of your iLO interface then access the administration web interface. Factory default access information: • Username: Administrator • Password: available on your server information tag	 
ILO Overview	

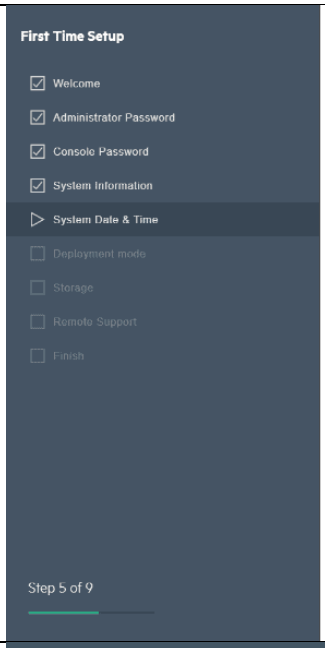
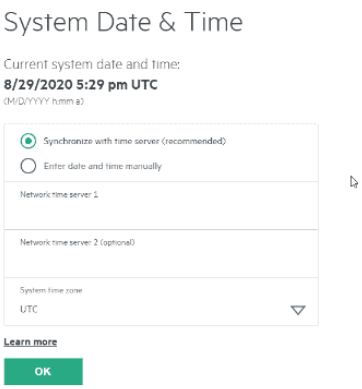
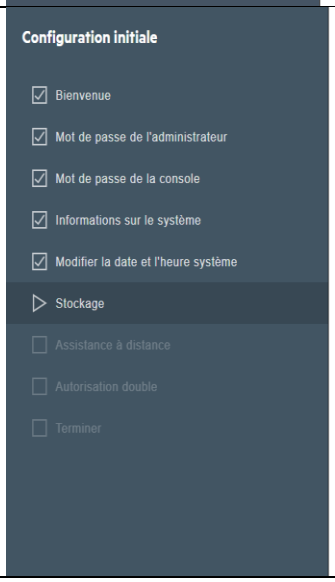
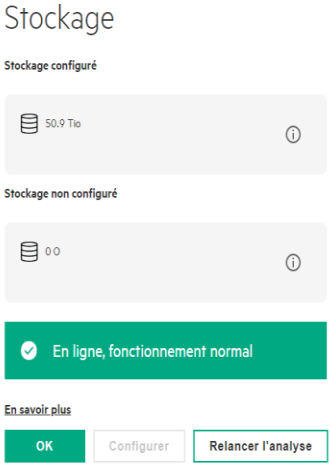
To configure the management port 1 ip address, open the console with 'HTML5 Console'	
Log in to the console using the default username and password. Username: console Password:changeme	

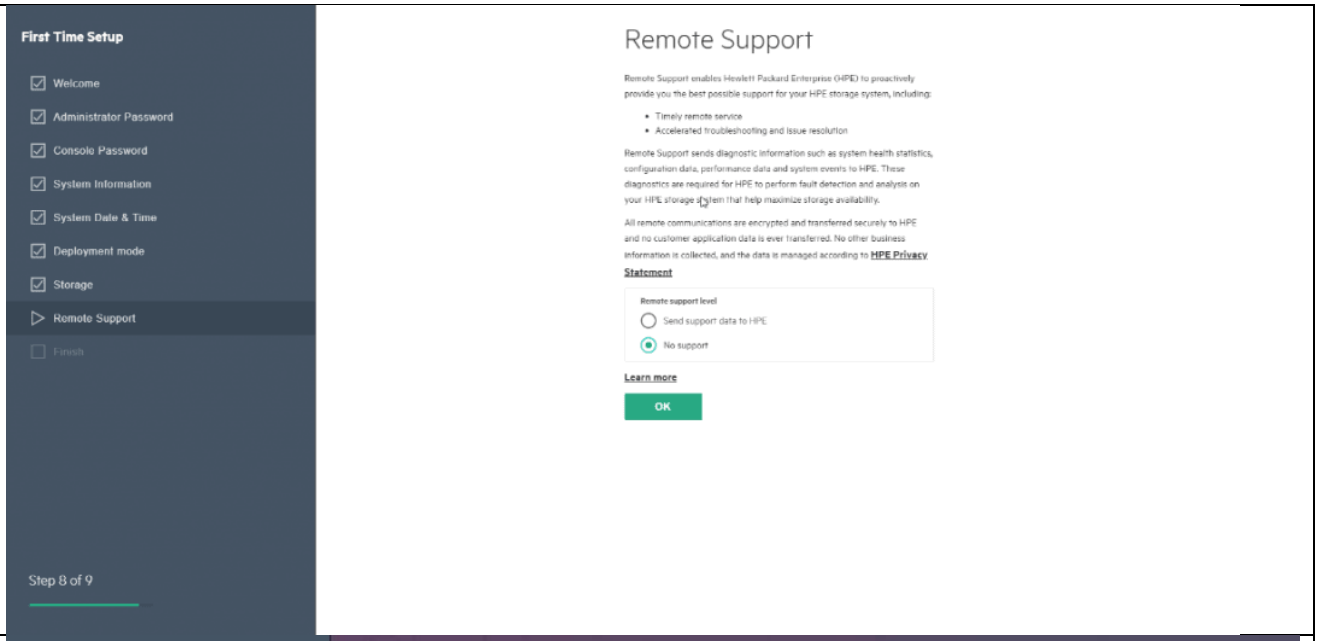
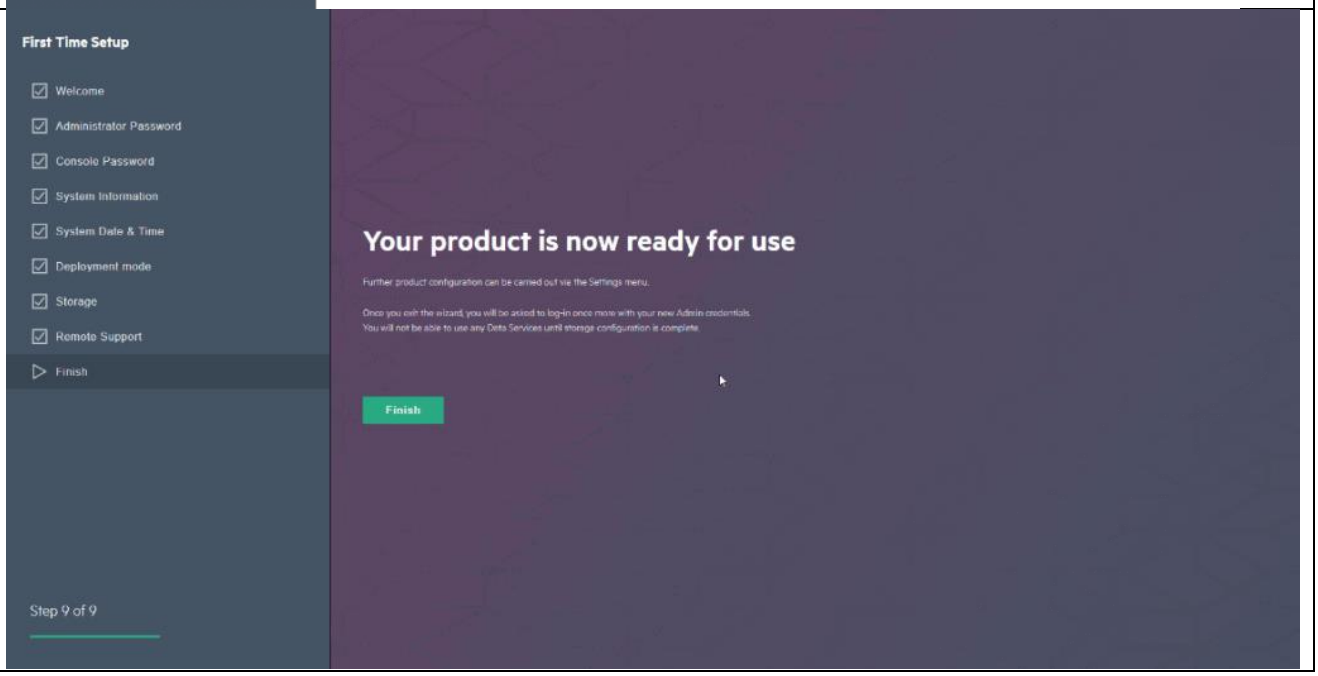
Change the console password to continue.	
To configure a static address for LAN port 1 (1 Gig), select the 'Configure initial network' option from the console menu. Open a web browser and use the IP address from the previous step to access the StoreOnce Management Console. Use 'First Time Setup' to configure the system	

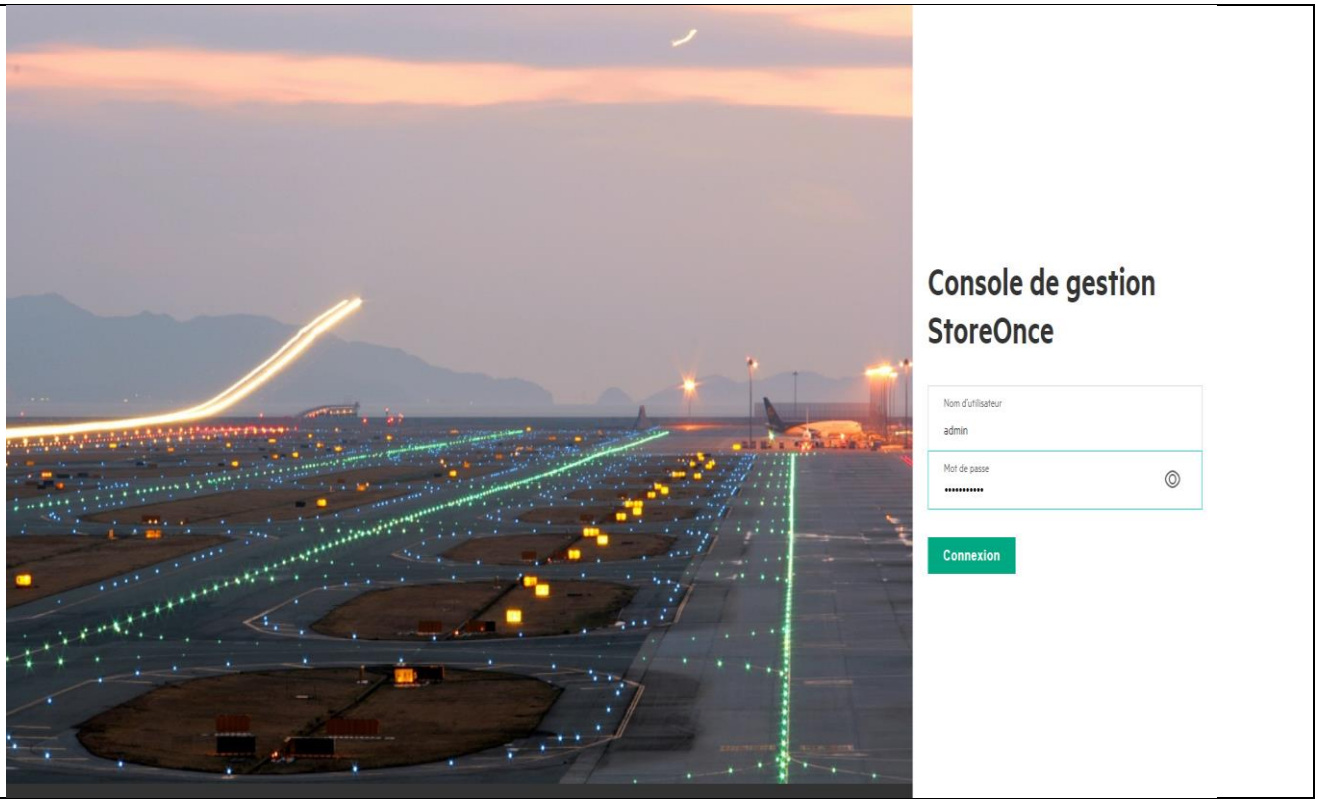
5. First time setup

Open a browser and navigate to https:// 172.16.1.64	
Assign new password	

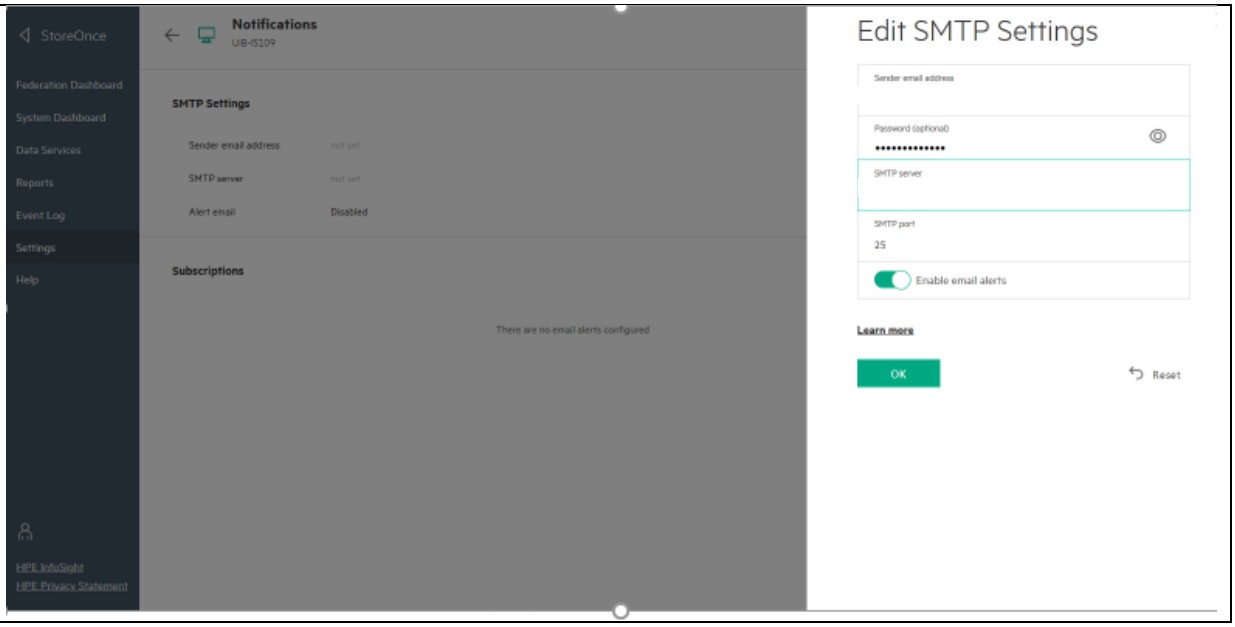
create a password for the Console	
Enter system information.	

We will configure now the time and timezone, we can use a NTP server in case we can access one, or select it manually		
The storage is successfully initialized and online		

Finally, we will be able to select if we want Remote Support from HPE or not, send metrics, feedback,	
The configuration is completed , click finish	

Log in with **Admin** and the **password**	

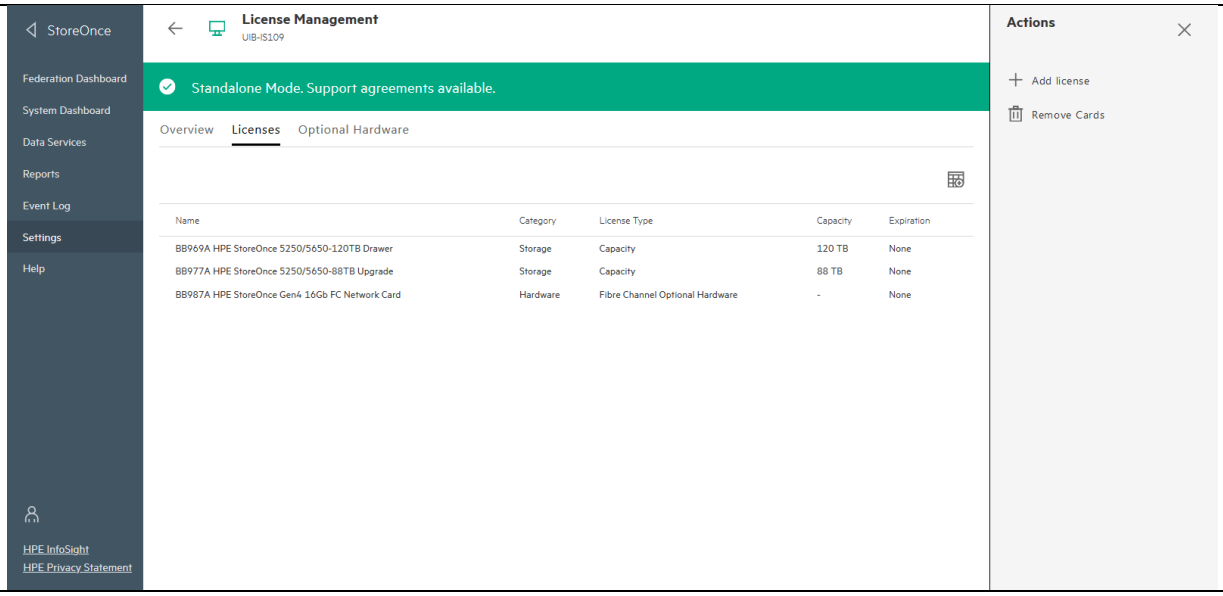
6. Configuration serveur SMTP

Pour configurer les notifications, **Settings → Notifications.**	

7. License Managment

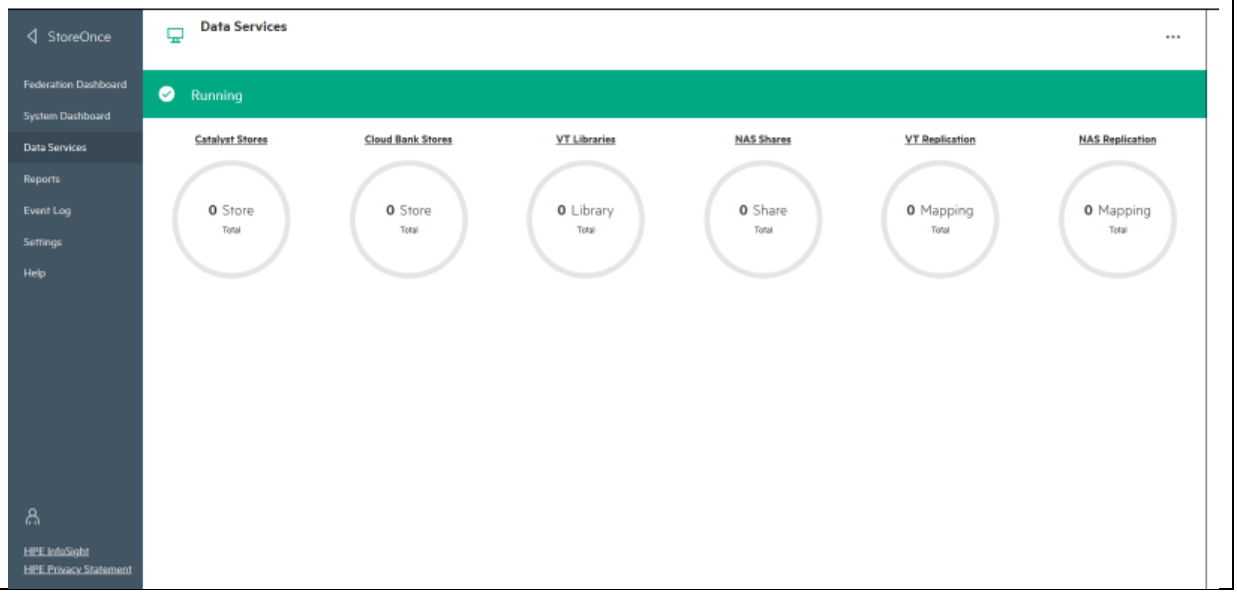
To check and manage licenses.

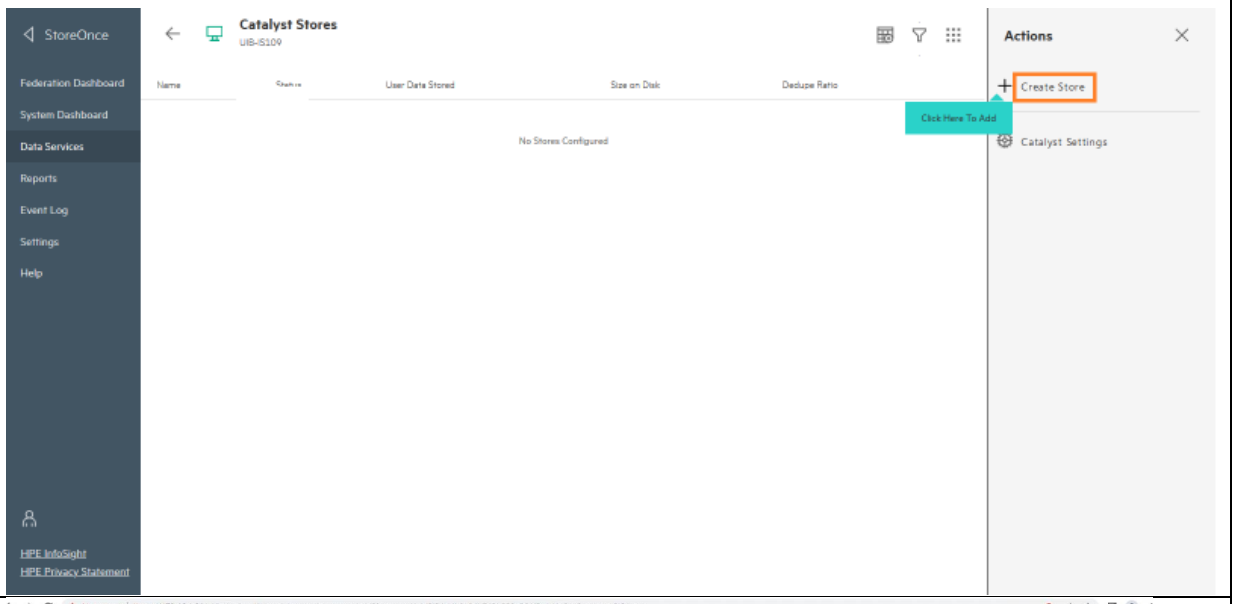
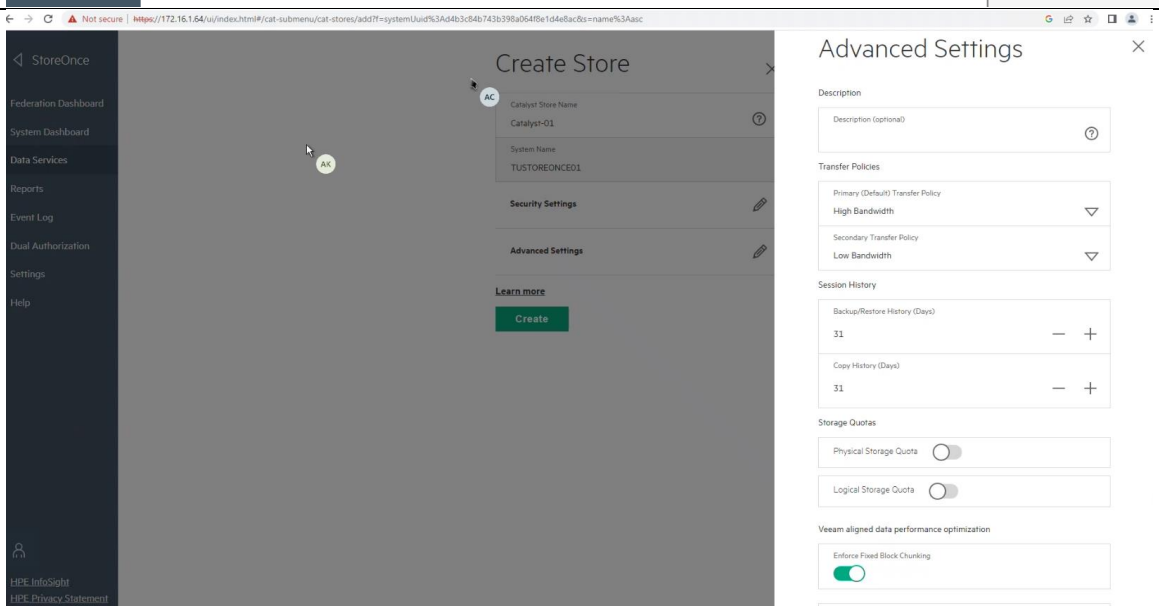
Settings ➔ License Management.

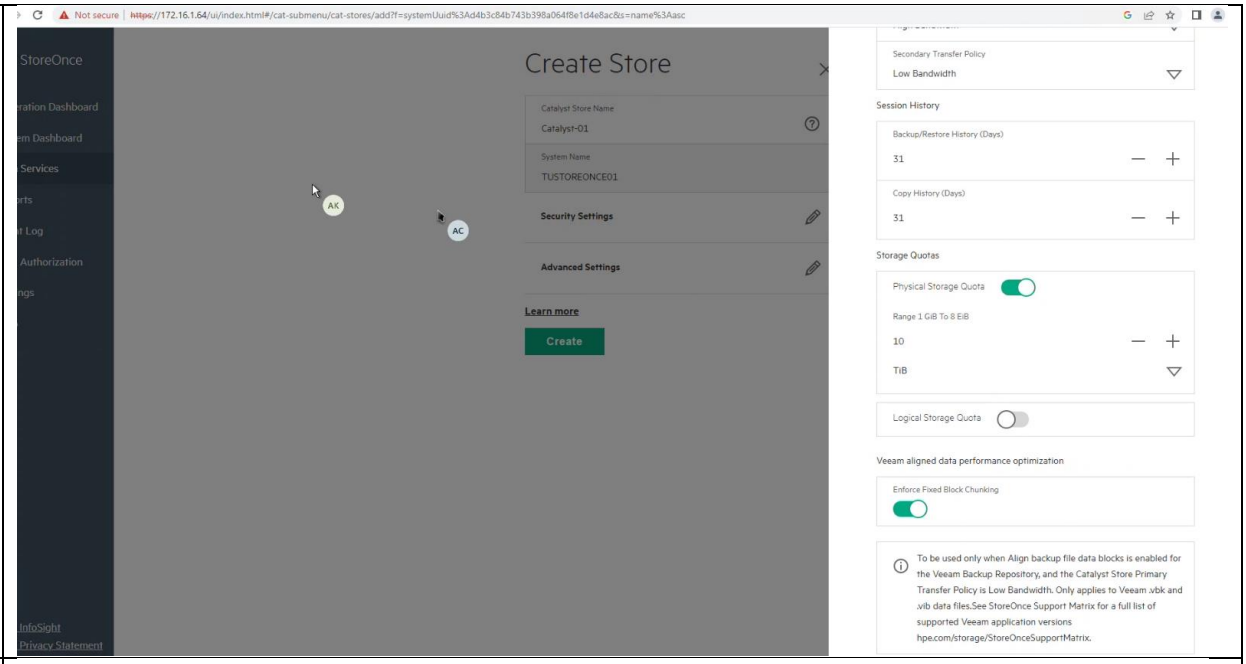
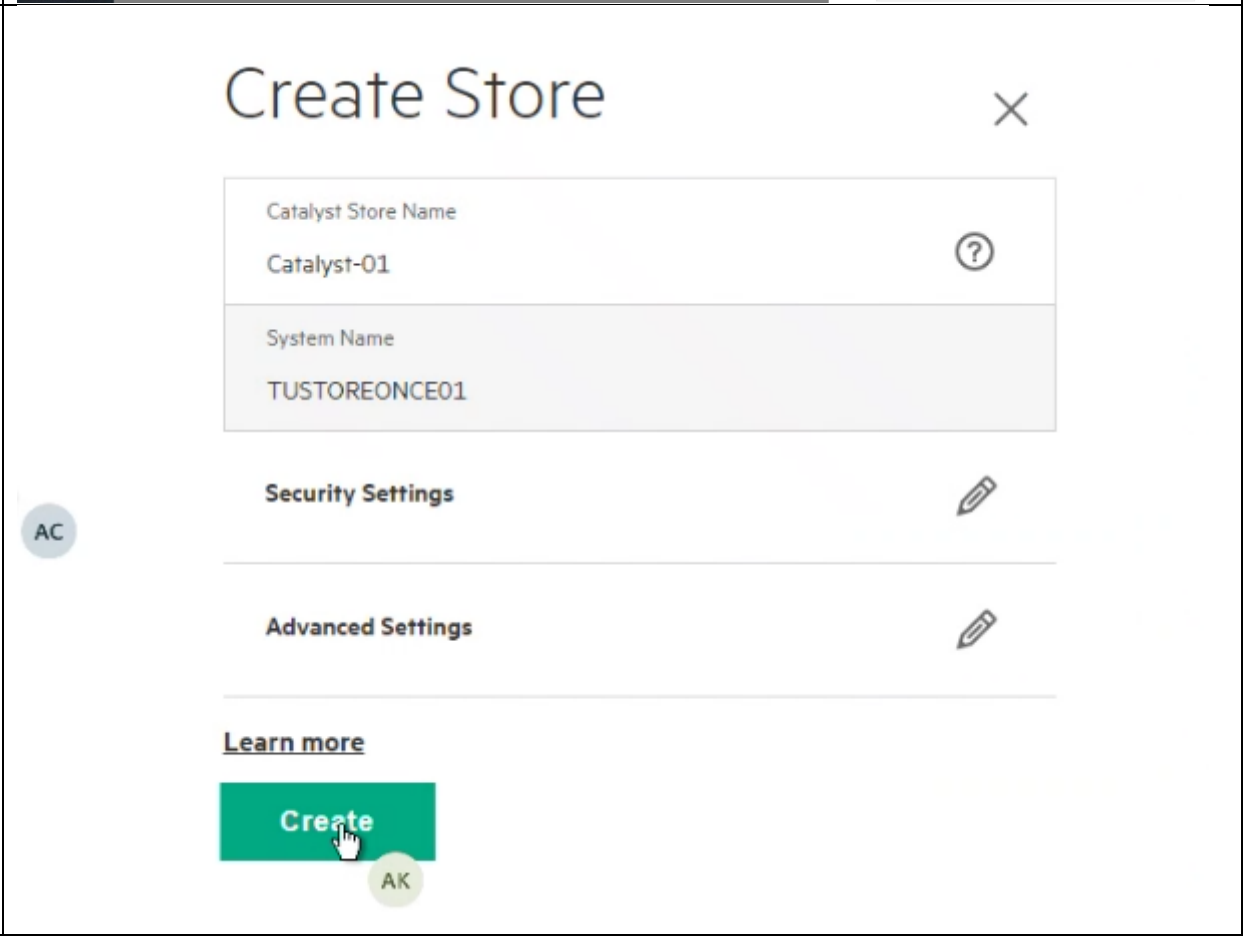


8. Catalyst Store Creation

To create catalyst stores
Data Services ➔ Catalyst Stores.



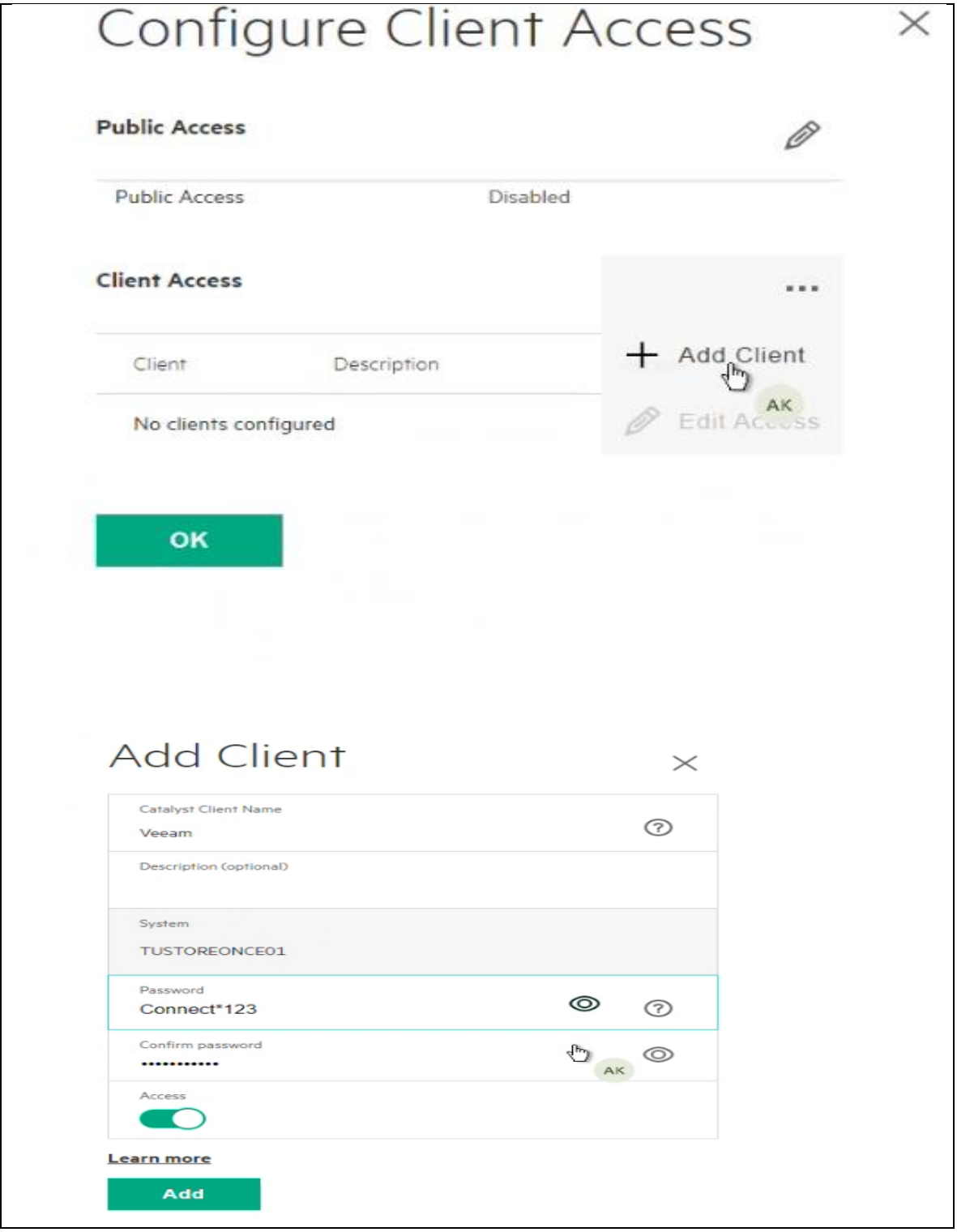
Cliquez **Create Store.**	
Enter the necessary information (Name, Session History, Storage Quotas).	

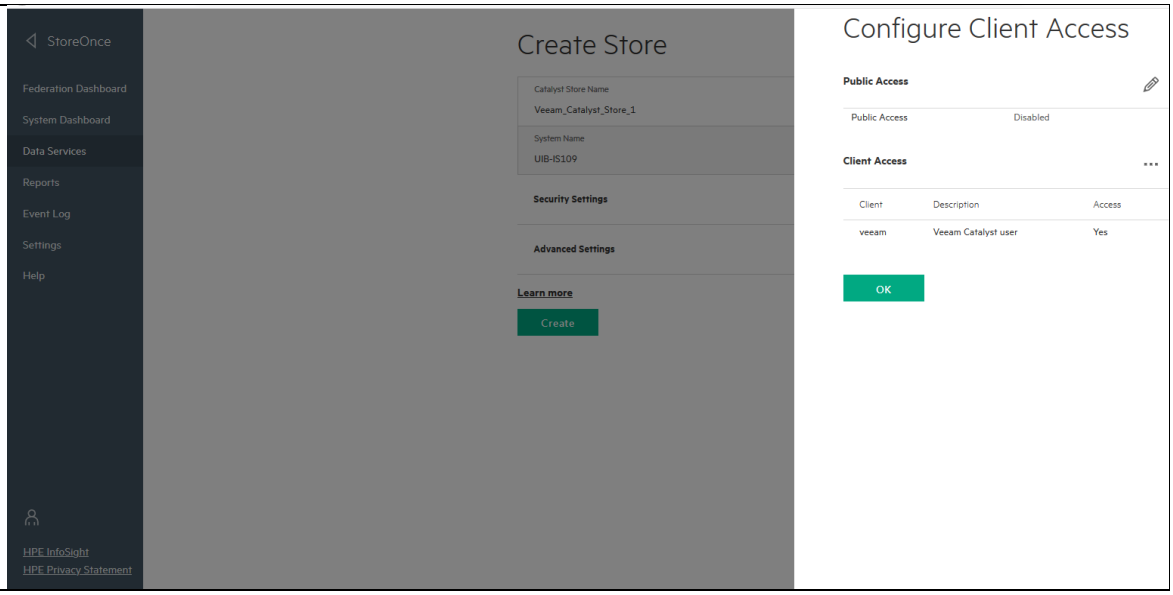
	
Click create	

9. Configuring access permissions to an HPE StoreOnce Catalyst Store

After a Catalyst Store is created, we configure Client Access to allow a selected group of client identifiers to have access to the HPE StoreOnce Catalyst Stores. Navigate to the **Permissions tab** of the required Catalyst Store and add a client.

These credentials are required when you create a backup repository using this Catalyst Store



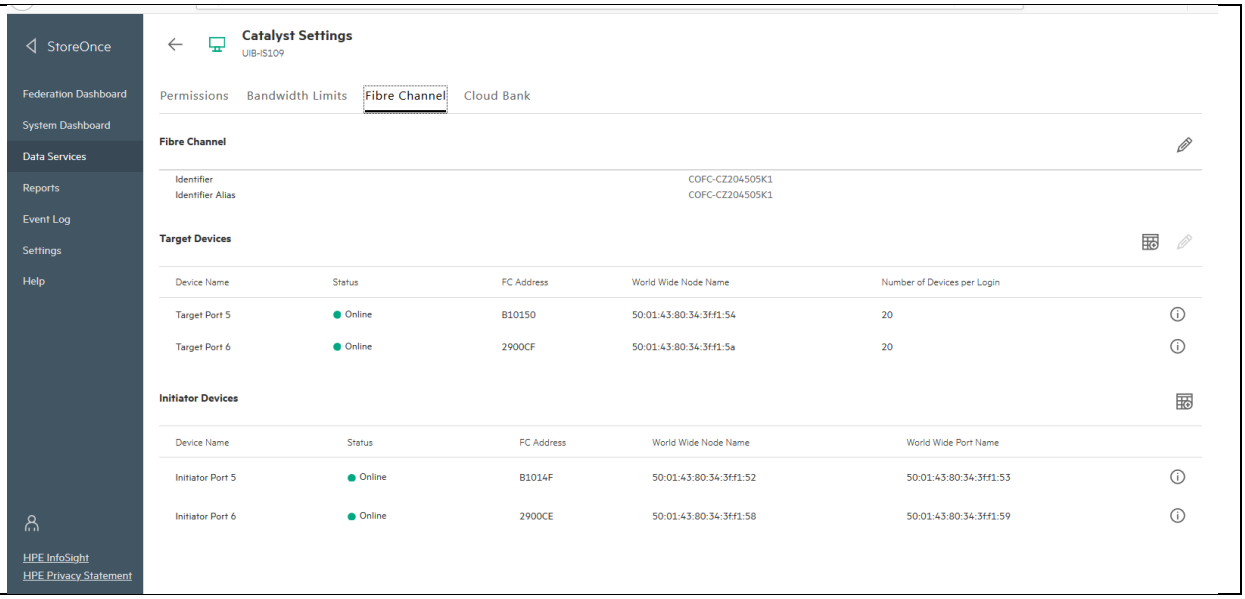
The client is configured with success	

10. Connect to an HPE StoreOnce Catalyst Store via IP or Fibre Channel

There are two options for connecting Veeam servers to an HPE StoreOnce Catalyst Store.

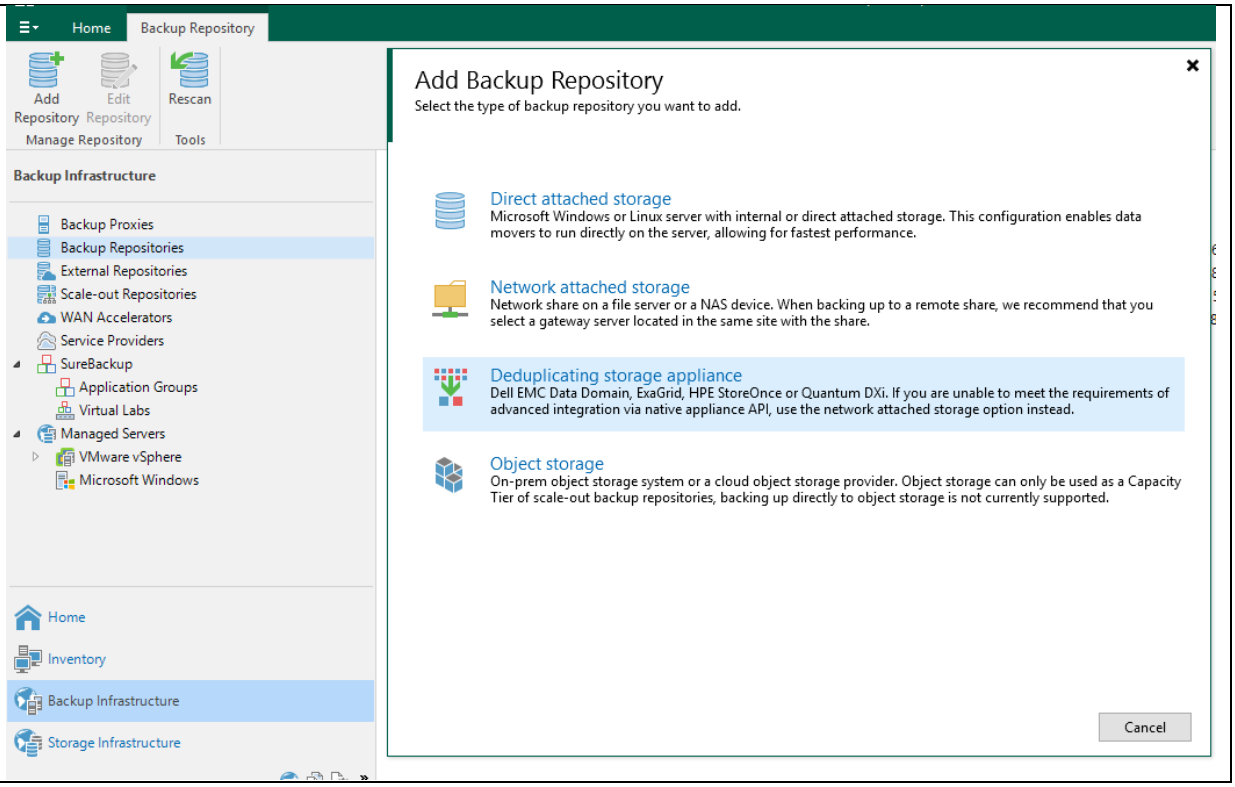
1. IP/Ethernet: Catalyst over Ethernet (CoE) is the most commonly used option, and it is available with minimal configuration. This configuration is supported by Veeam gateways running on both physical and virtual servers. Every Veeam proxy server can also run the gateway service and directly access HPE StoreOnce via Catalyst protocol, thereby avoiding an additional hop in LAN. CoE is generally slightly faster than Catalyst over FC (CoFC).

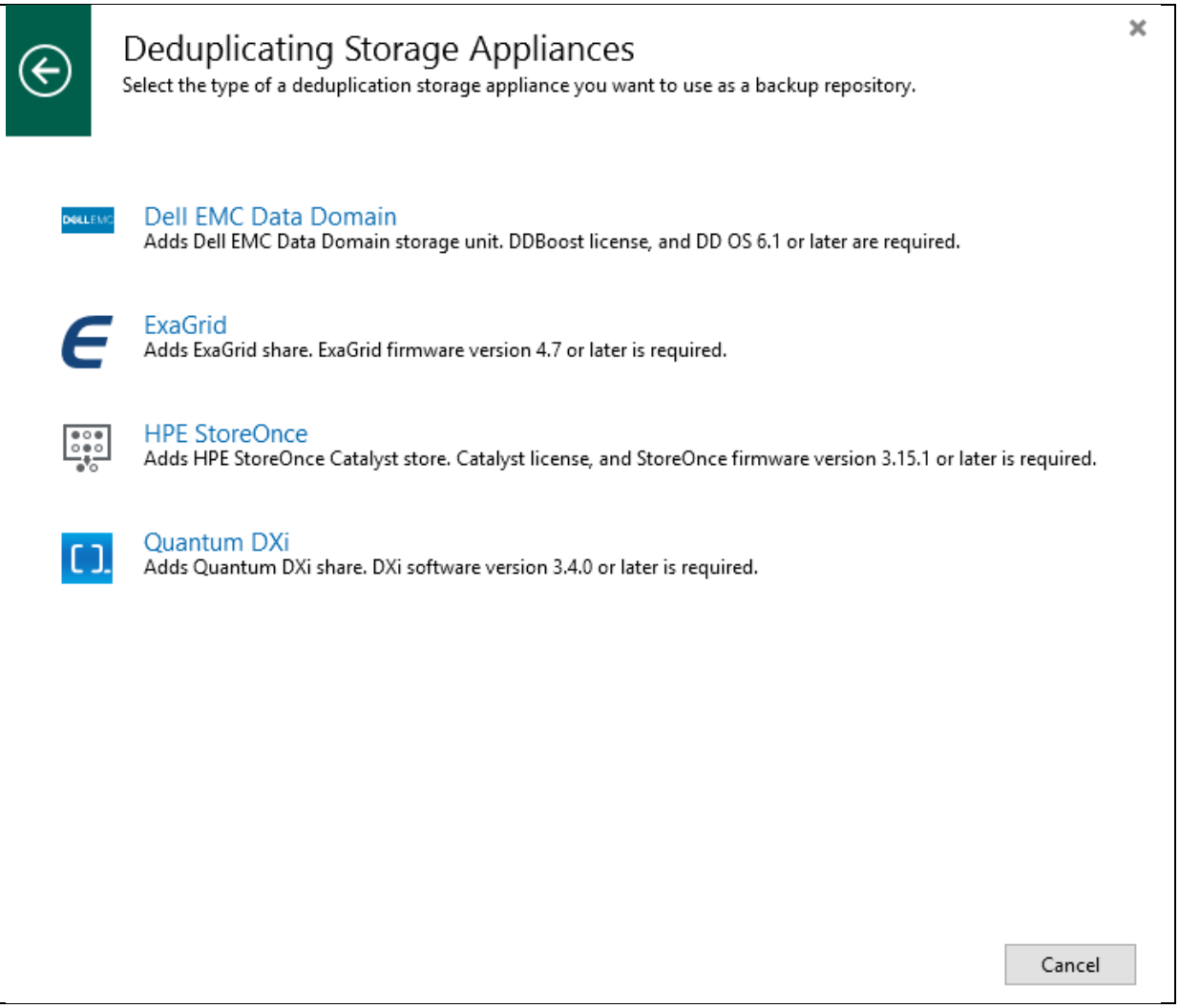
2. Fibre Channel (FC): CoFC functions the same way as HPE StoreOnce CoE. However, some additional configuration is required to set up the backup and restore connections between the ports on the HPE StoreOnce appliance and the ports on the client servers. This is done using the Fibre Channel settings tab in the HPE StoreOnce GUI, shown in Figure 7. This GUI page is only available if CoFC is enabled on the HPE StoreOnce appliance. CoFC is only supported by Veeam gateways running on Windows physical servers. The configuration is less flexible than Ethernet and it is generally recommended when there isn't enough Ethernet bandwidth, or when there is a requirement to use a dedicated and isolated connectivity.

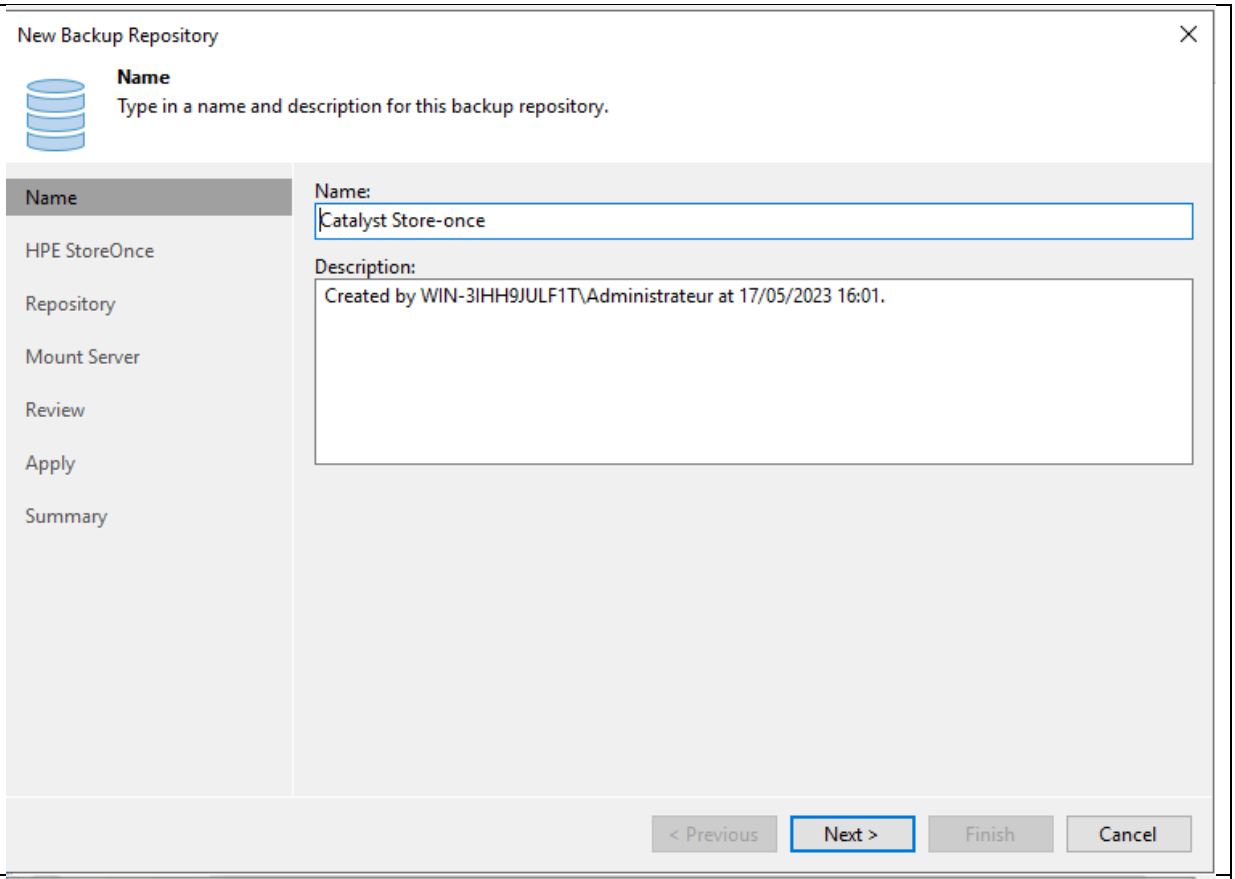
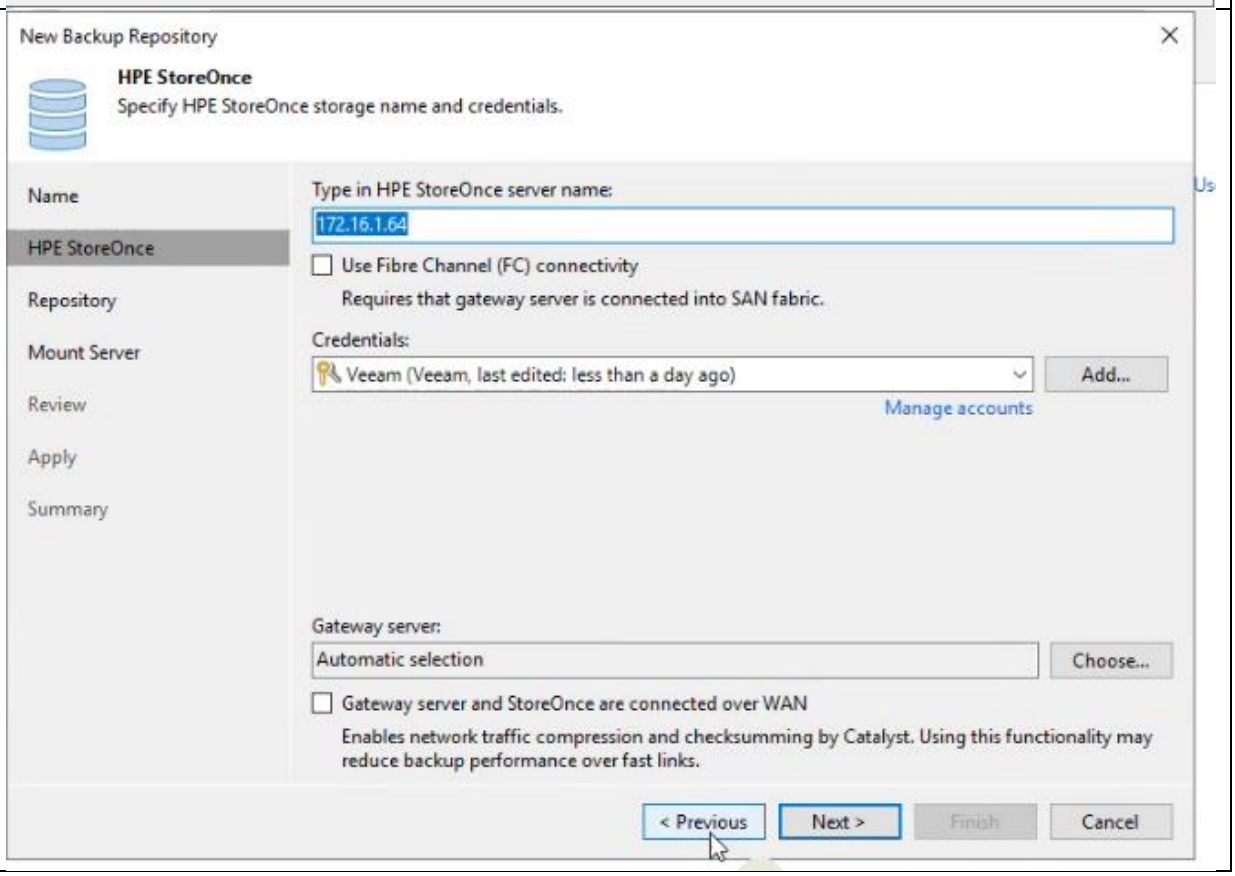
The FC settings of the HPE StoreOnce appliance are located at **Data Services → Catalyst Settings → Fibre Channel.**	

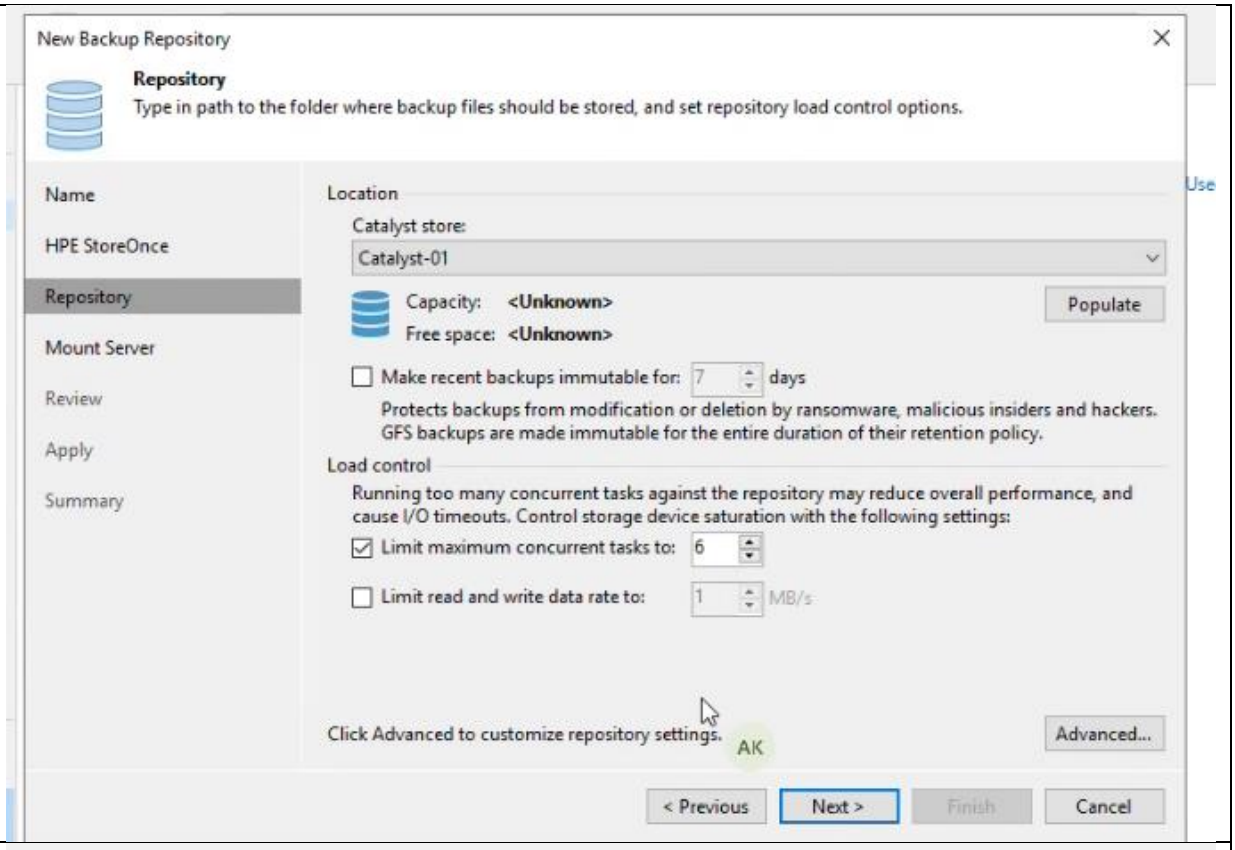
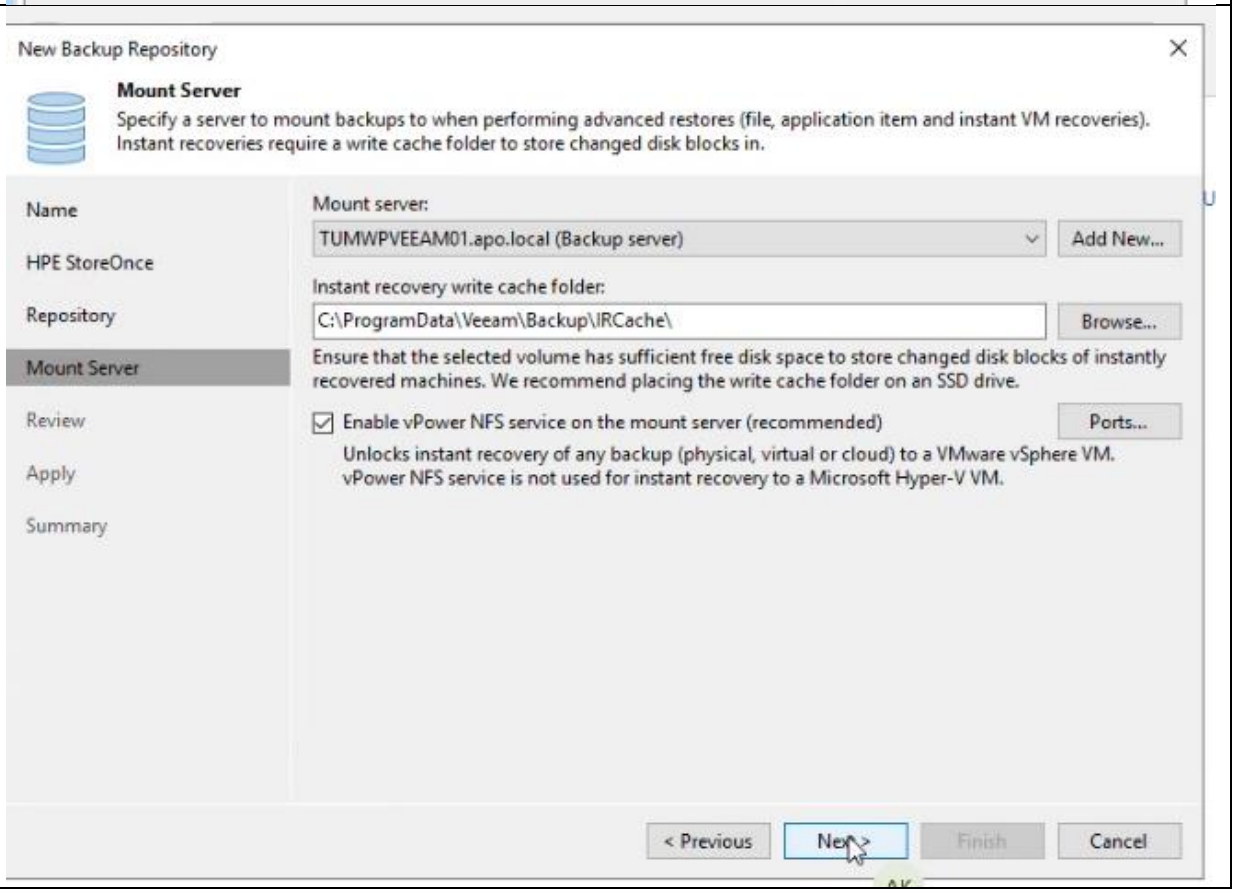
11. Creating an immutable HPE StoreOnce Catalyst-based Veeam backup repository

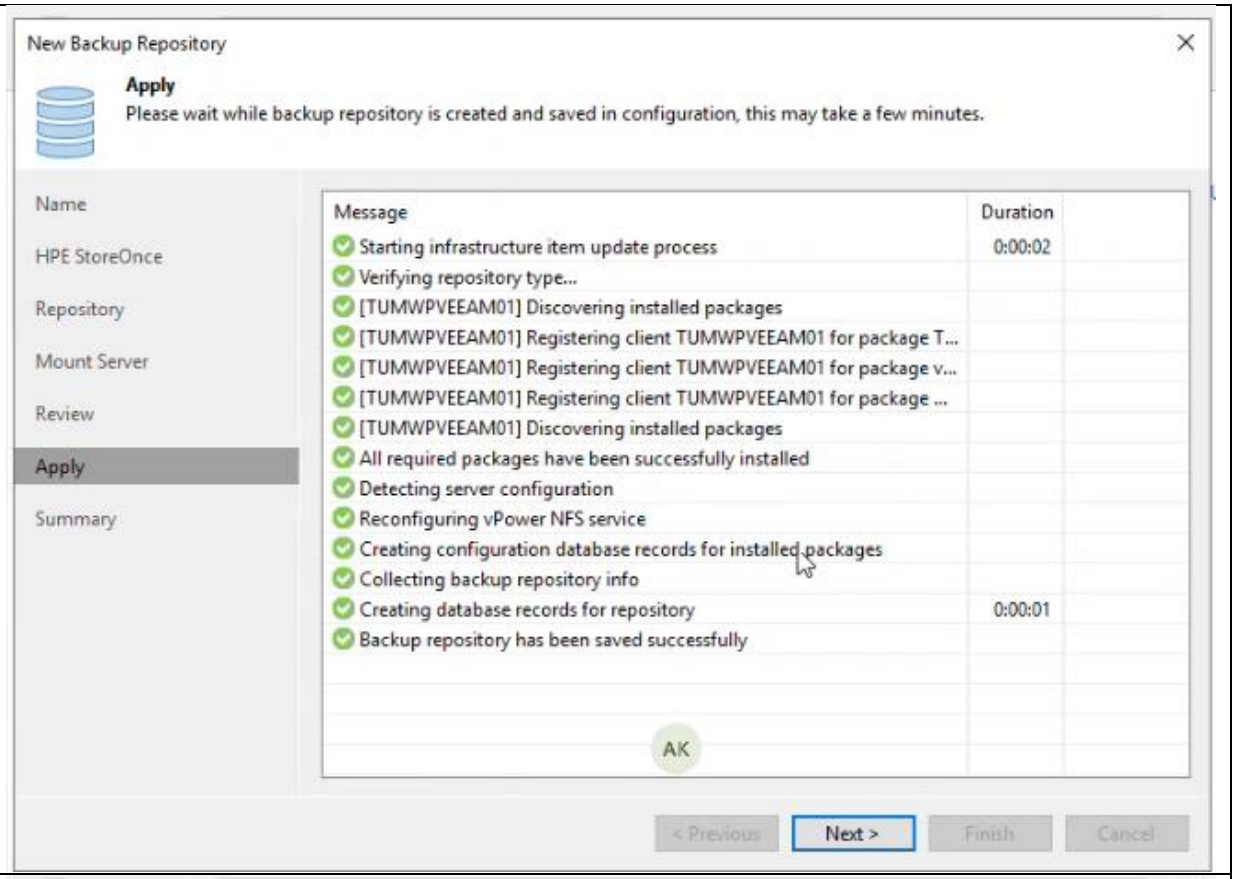
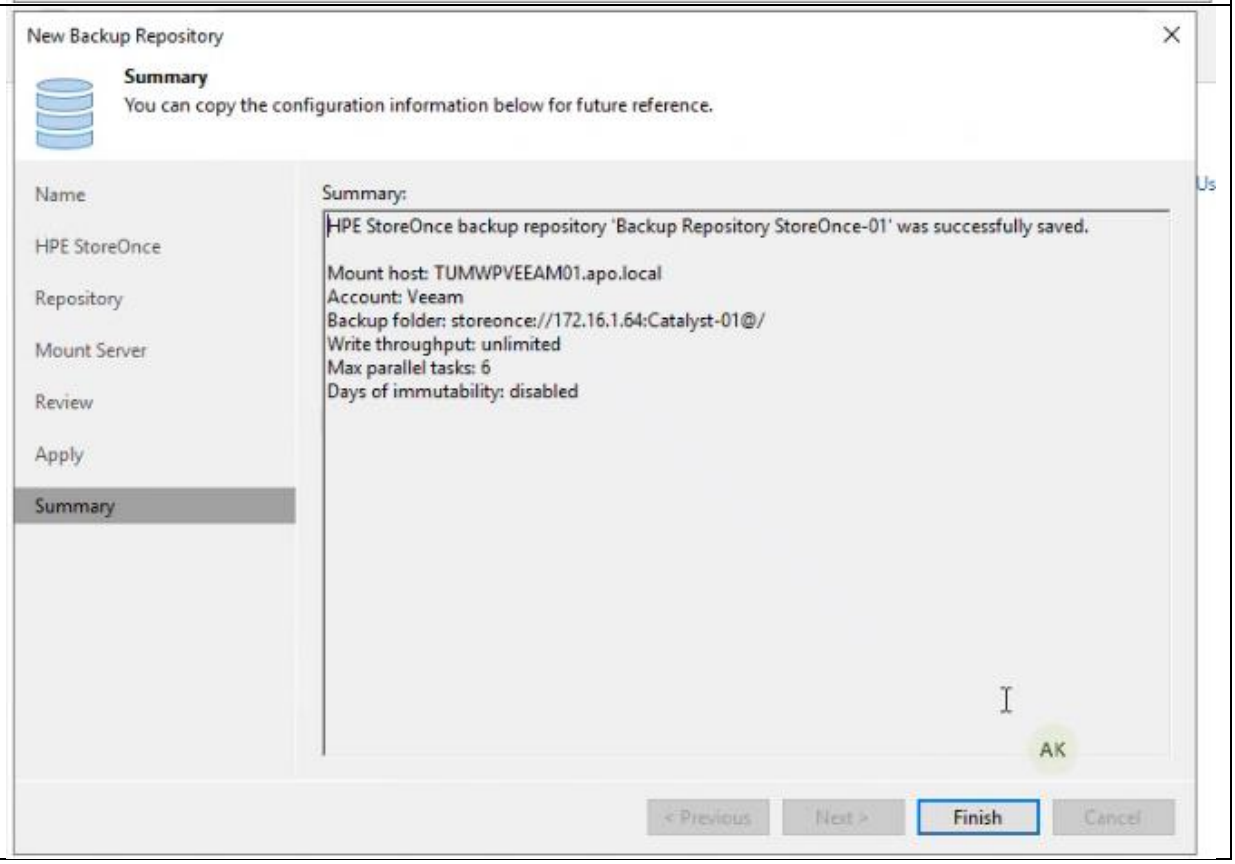
A Veeam backup repository is simply defined as storage for Veeam backup files created by Veeam Backup & Replication. In the case of an HPE StoreOnce Catalyst Store, the Veeam backup proxy reads backup data from the source infrastructure and moves it to the Catalyst Store via a Veeam gateway server

Click Backup Infrastructure in Veeam Backup & Replication. Right-click Backup Repositories and select Add backup repository. Select Deduplicating storage appliance	

Select HPE StoreOnce as the Deduplicating Storage Appliance	

Set a the Backup Repository Name	
HPE StoreOnce server name – The HPE StoreOnce server name can be specified in two forms for CoE and CoFC: • For CoE, type IP or DNS name – For the DNS name, use a FQDN to avoid potential errors. • For CoFC, type the HPE StoreOnce FC identifier, which has the format “COFC-”	

Select the Catalyst Store created in the Creating an Immutable Catalyst store for Veeam backups section to associate with this Veeam repository	
Sélectionner le serveur Mount server	

Click next	
Review all settings and then click Finish	

12. Conclusion

Veeam Backup & Replication provides a solid software package for backup, replication, and recovery; however, without effective storage infrastructure, meeting the demands of the business can be difficult. The HPE StoreOnce purpose-built backup appliance is a powerful storage solution with a carefully designed end-to-end functional integration with Veeam Backup & Replication to provide a wealth of benefits to an organization of any size or complexity. HPE StoreOnce is a mature solution that offers unbeatable reliability, huge consolidation, and highly simplified management. The integration process with HPE StoreOnce and Veeam Backup & Replication is based on co-developed code and APIs.