Setup - Repositories

Introduction

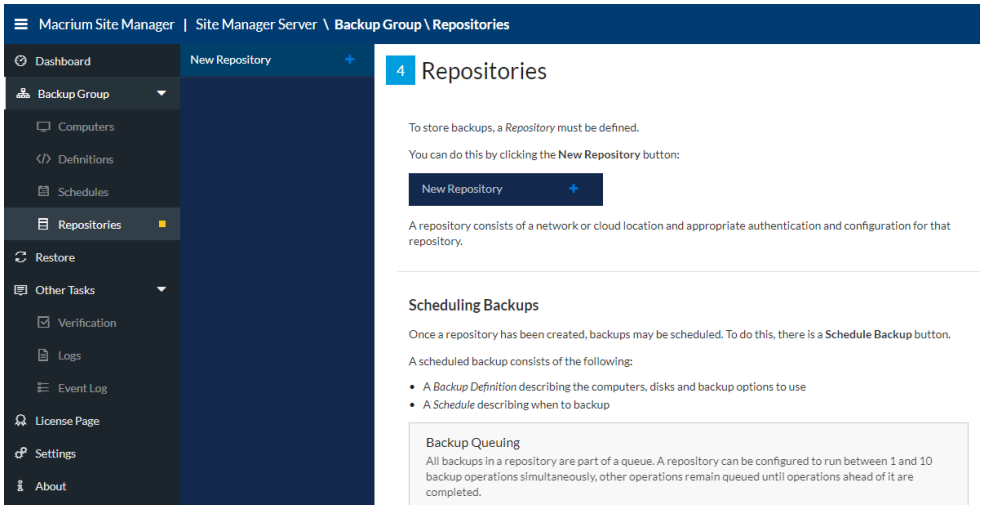
Repositories are required in order to use the central backup scheduling and queuing facilities in Site Manager. Once a repository has been set up, a Backup Definition can be configured to back up to the Repository according to a Schedule.

A repository is a storage location with a standardized folder layout and some tracking information. Each repository contains backup information such as, storage location, network access information, credentials required to access the resource and other basic storage management.

The following types of Repository backend are available:

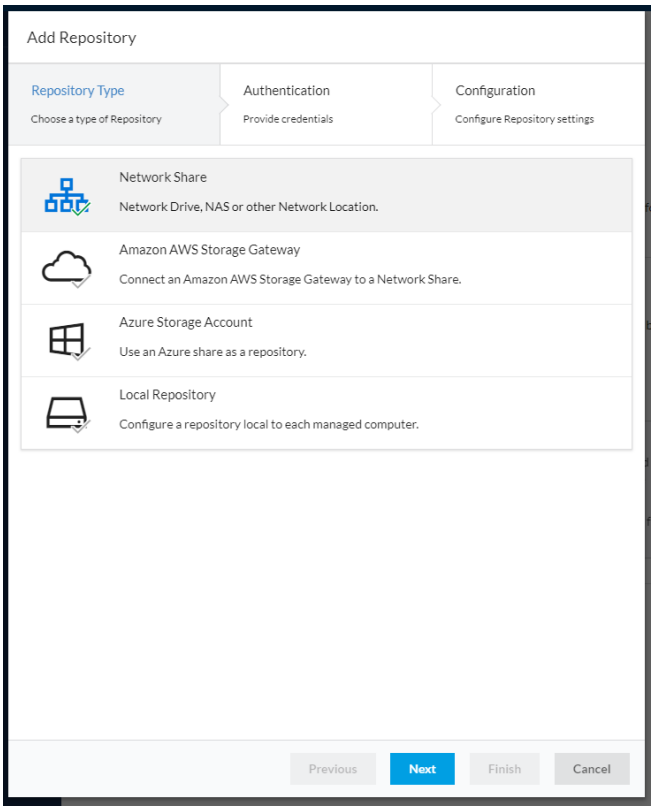
- **Network Share** - Any Windows or SMB network share may be used as Repository storage
- **Amazon AWS Storage Gateway** - if an AWS Storage Gateway is available, it can be used as a Repository backend.
- **Azure Storage Account** - if Azure storage is exposed as an SMB share in Azure, it can be used as a Repository directly.
- **Local Repository** - Storage which is directly attached to a managed computer can be used as a Repository

Adding a Repository



Repositories are managed by selecting the '**Repositories**' link from the main interface under the **'Setup'** main category. Initially the **Repository** interface will have no saved repositories and show some quick help notes.

To create a new Repository, click the '**New Repository**' link in the upper left, as seen in the image above. This will display the 'Add Repository' wizard shown below:

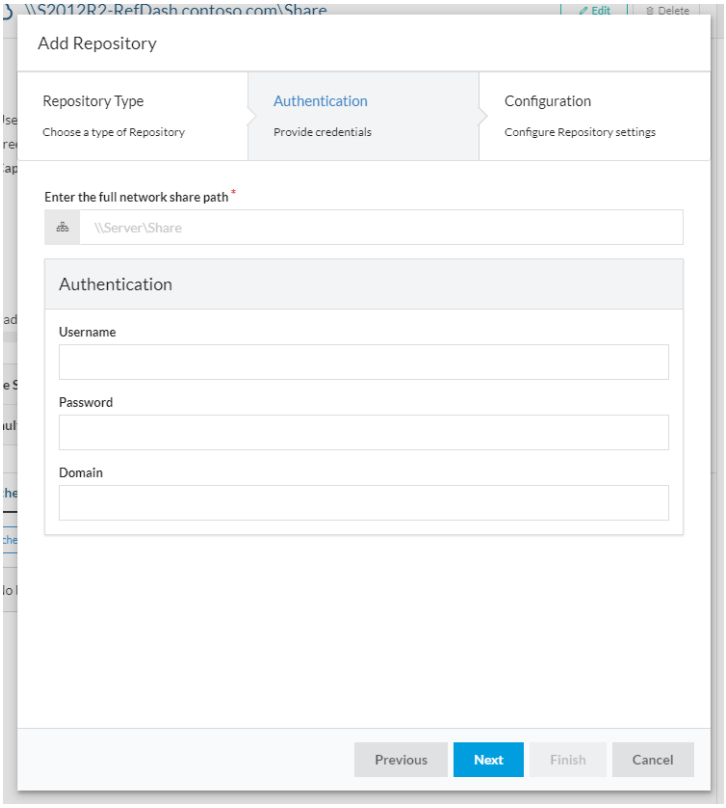


The initial repository wizard page allows the type of Repository to be selected. Once the appropriate type has been selected, click '**Next**' to move to the next step.

Depending on the Repository type chosen, the next stage will be different. See the appropriate section for details.

Network Share Repository

For a **Network Share** type repository, the next stage of the wizard is shown below:



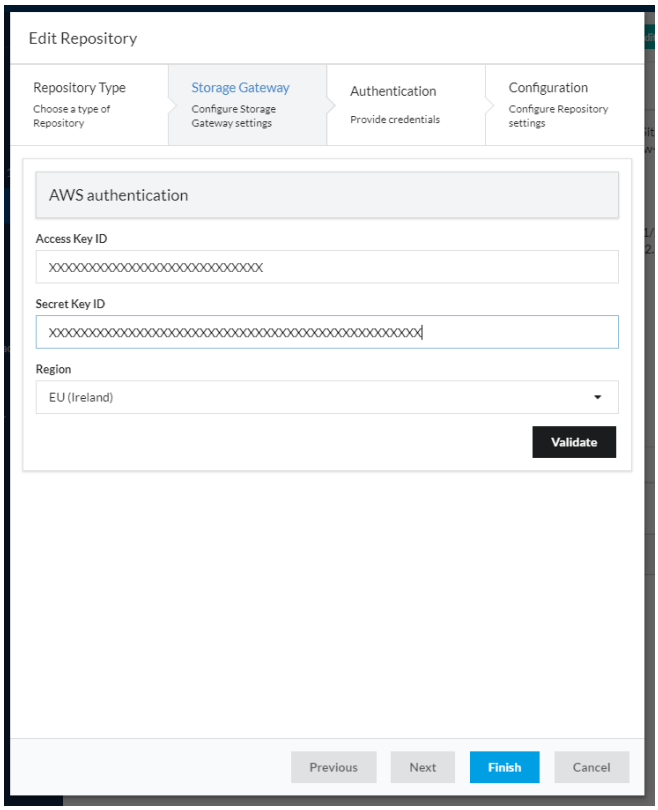
This stage of the wizard allows you to configure the network path and access credentials for the Repository. The available options are as follows:

Option	Description
Path	This option will let you select the path to the network share in Windows UNC format. Example: \\SERVERNAME\Share
Authentication	Here you will input the authentication credentials that are needed to access the repository. The user requires to have **Read and Write** access to the repository so that the backup may be created and retention rules can be applied. **If the field is left blank anonymous access will be used.** When performing a backup, this authentication information is transmitted to managed computers so that they can directly access the share. To avoid problems at the client end, it is recommended that the Domain part of the authentication is always filled in. If the share is on a computer or NAS which is not joined to a domain, the host name of the computer or NAS should be used instead

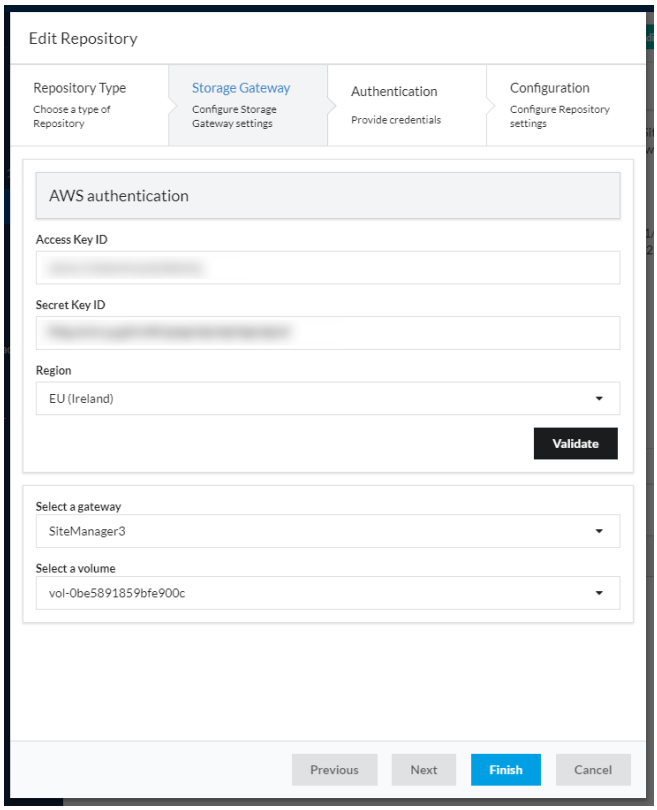
Once this step has been completed, the next step is the final configuration page, described here.

Amazon AWS Storage Gateway

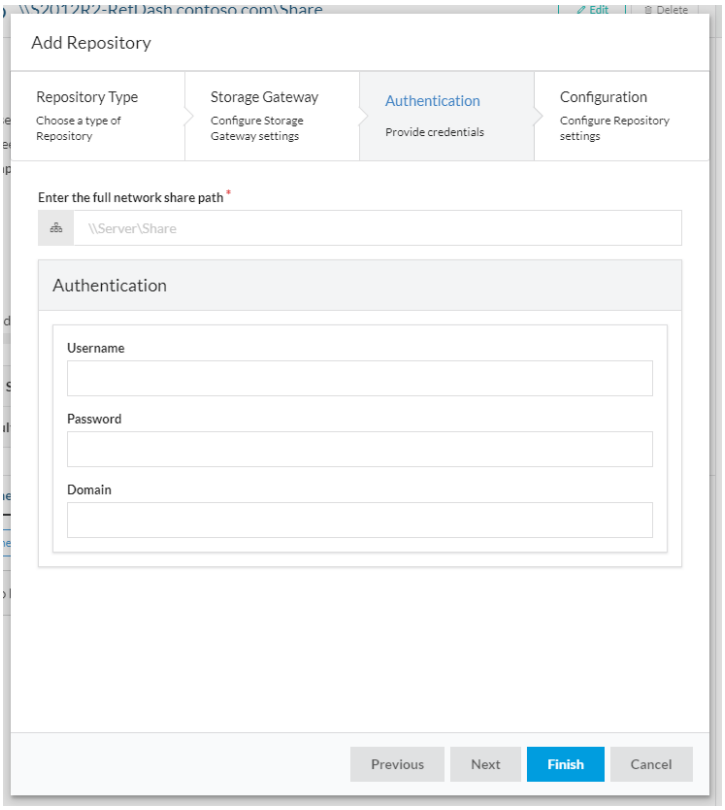
See Configuring AWS Storage Gateway for information on configuring an on-premises gateway to the Amazon cloud.
Once setup, the next stage is add the AWS Storage Gateway settings. After adding a new repository and selecting Amazon AWS Storage Gateway, the following wizard page is shown:



Once the Access Key ID and Secret Key ID of the Storage Gateway have been entered, press **Validate** to get a list of gateway names and volumes to select.



Once the correct gateway name and volume have been selected, press next to move to the next step, configuring the local share and authentication options.



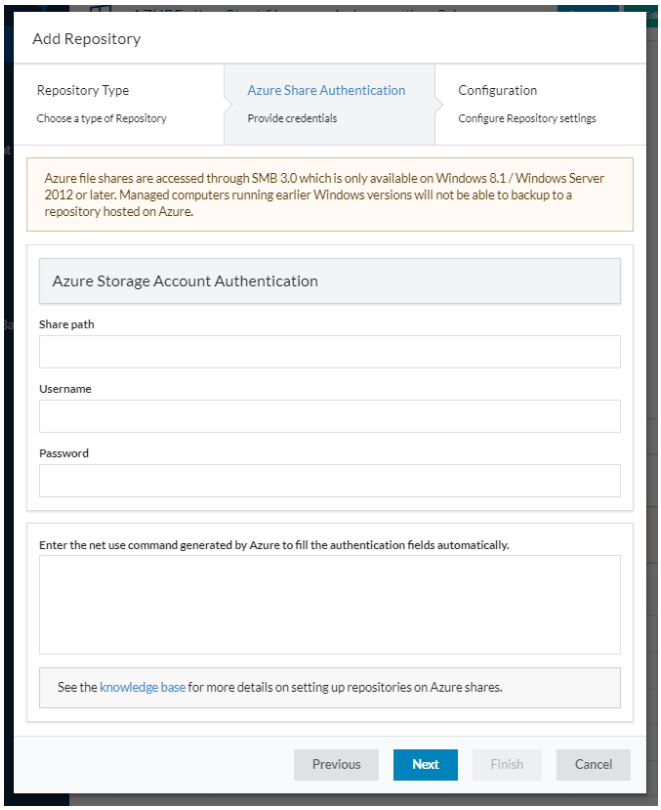
This stage of the wizard allows you to configure the network path and access credentials for the Repository. The share entered must be mapped to the AWS Storage Gateway volume selected. The available options are as follows:

Option	Description
Path	This option will let you select the path to the network share in Windows UNC format. Example: \\SERVERNAME\Share
Authentication	Here you will input the authentication credentials that are needed to access the repository.

Once this step has been completed, the next step is the final configuration page, described here.

Azure Storage Account

This repository type connects to an Azure storage account which has been configured to be accessible over the SMB protocol.



Detailing information on configuring Azure to enable share access is available here - Backup to the cloud with Azure File Shares

Azure Repository Limitations

Azure shares use the SMB version 3.0 protocol. This requires that the computer accessing the share is running a version of Windows which supports this on both the Site Manager server and each managed computer which backs up to the Repository. Versions of Windows which support SMB 3.0 are:

- Windows 8 or later
- Windows Server 2012 or later

The wizard page has fields for the **share path**, **username** and **password** of the Azure share. These can be filled in directly, or the **net use** command generated by the Azure portal can be pasted directly into the box below to extract the share information and automatically fill in the other fields.

Once this step has been completed, the next step is the final configuration page, described here.

Local Repository

A local repository is a path which is evaluated on each individual managed computer such as a Windows file path.

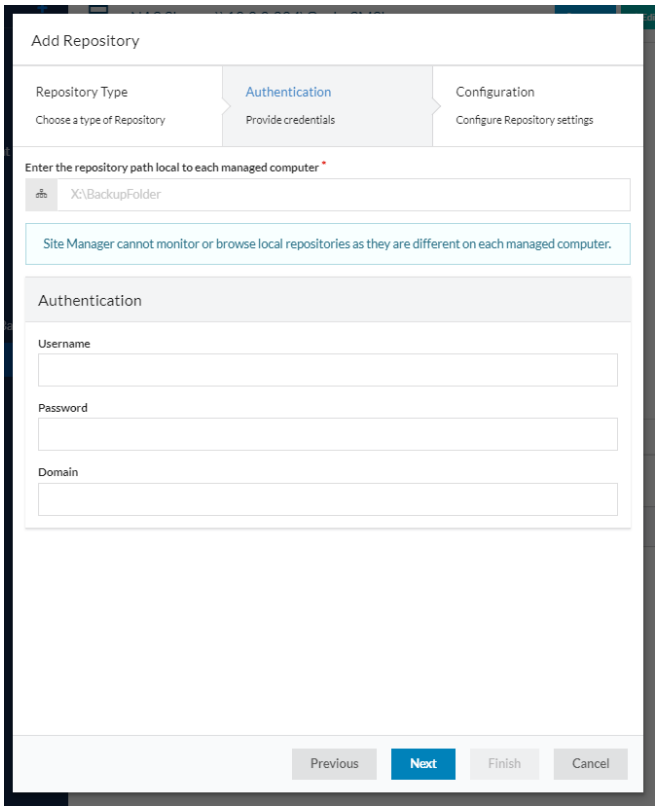
This allows scenarios where some computers may be backed up to locally attached storage (USB drives, iSCSI, Windows Shares which are not visible to the Site Manager server etc) but still centrally managed.

Local Repository Limitations

Because each computer evaluates the Local Repository path separately, the Site Manager server cannot provide most management features for a Local Repository.

This includes browsing, image verification, free space and status monitoring, Site Manager initiated restore and remote synchronization.

Repository browsing and restore should be done from the managed computer



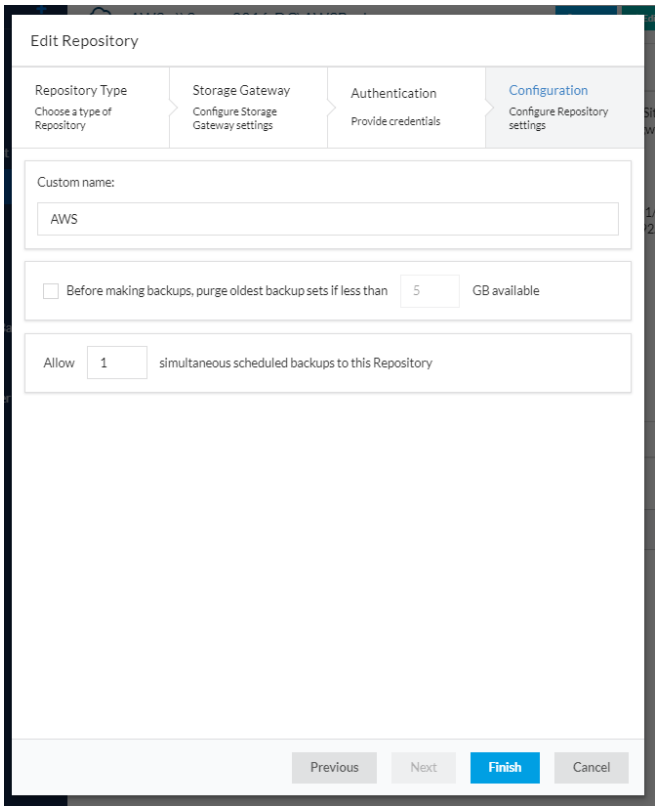
The Local Repository configuration consists of a path to be evaluated on the managed computer - e.g. **X:** which will backup to the local X: drive on each computer, not the Site Manager server's X: drive.

Optionally authentication information can be entered. This will be used for paths which require authentication such as Windows share paths.

Once this step has been completed, the next step is the final configuration page, described here.

Adding a new Repository - Final Steps

This page contains configuration options for how the Repository will be used by the scheduled backup system. This step is the same for all Repository types.

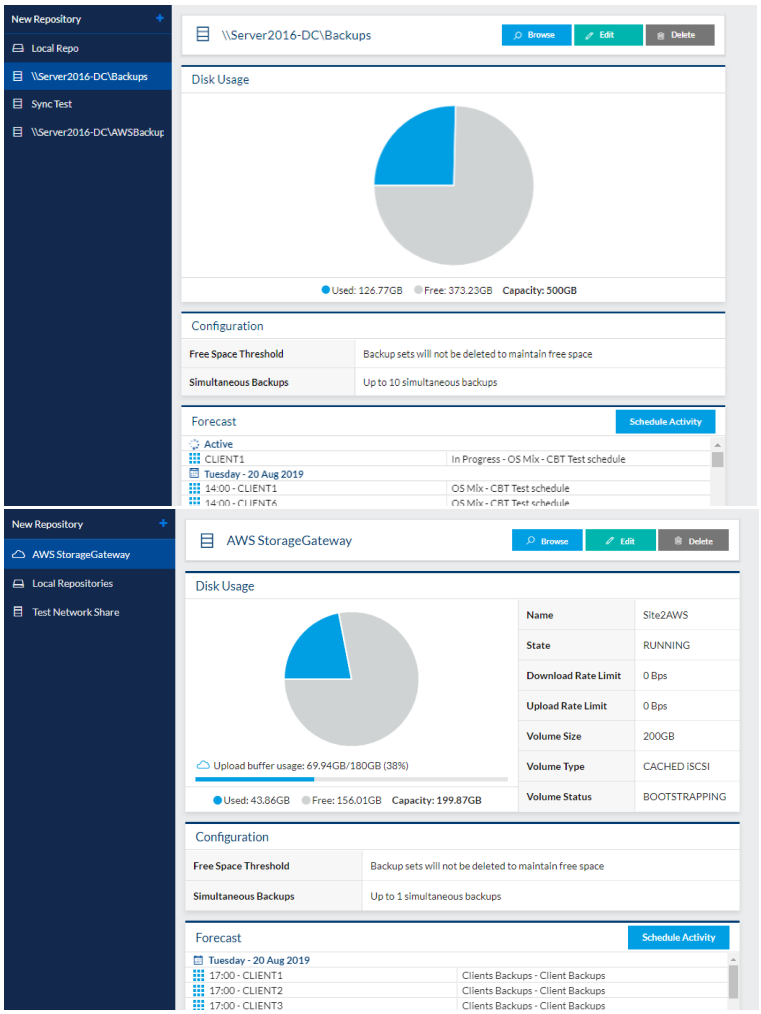


The available options are:

Option	Description
Custom Name	A name which will be displayed in the Site Manager interface for this repository. If left blank, it will default to the network path of the repository
Purge oldest backup set(s)	An optional value that will delete your old backups once the free space has reached a defined threshold. This setting is independent of any retention rules configured in Backup Definitions and applies to all activity to this repository.
Simultaneous Scheduled Backups	This value sets the number of backups which can be performed to the repository simultaneously. The default value is 1, but it can be increased to a maximum of 10.

Once completed, the **Repository** can be saved by clicking the '**Finish**' button, which will return to the Repository list.

Once **Repositories** have been created, the interface shows the **Repository** list, as seen below



For the **Amazon AWS Storage Gateway** Repository, the following additional data is available:

- Free space on the volume as a pie chart
- Upload buffer used/free
- Gateway information and statistics
- Volume information and statistics

Viewing Repository Information

The Repository view shows information on the Repository which has been selected in the list on the left-hand side of the screen. This information consists of:

- **Repository Status** - Disk space used and any specific information for the selected repository.
- **Forecast** - A forecast of upcoming activity configured on the Scheduled Activity page is shown.