



Sage Partner Cloud

Sage 100 Migration Guide for SQL Server Data

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Migrating Sage 100 SQL Server data into Sage Partner Cloud

This guide outlines the process to migrate data from an on-premises Sage 100 Premium installation to a Sage 100 SQL site in Sage Partner Cloud.

Note: Keep in mind the following about the migration process:

- These instructions are written for a server running Microsoft SQL Server 2022. Steps may vary when using a different version of SQL Server.
- Data drive references in this migration use drive E.
- These steps can also be used to migrate data to any new server where access to the source server is not available.

About the migration process

This migration process:

- Uses database backup files from the on-premises source SQL Server
- Removes requirement for the Parallel Migration Wizard to access the database on the source SQL Server
- Allows migration to occur using only the Sage 100 SQL Server on Sage Partner Cloud
- Creates a second SQL Server database instance to use as the source database server

Before you start the SQL migration process

Before you start the SQL migration process

Complete the following prerequisites before starting the migration process.

- [Prepare the data in the source installation](#)
- [Prepare source server backup files](#)
- [Verify administrator access in Sage Partner Cloud](#)

Prepare the data in the source installation

In the on-premises source installation, follow the steps in the Upgrade Checklist.

1. Go to the [Sage 100 Documents page](#).
2. Select the version of Sage 100 that you're migrating to.
3. Select **Checklists** and then click the **Upgrade Checklist** link.
4. In the document, locate the section for the version that you're migrating from.
5. Follow the steps in the **Pre-Upgrade Checklist** section.
6. Review all users and update their email addresses to match the ones used when creating the users in the Sage Provisioning Portal. This will simplify the user merge process.

Prepare source server backup files

In the on-premises source installation, prepare backup files of the source server.

Note: The backup files must be compatible with Microsoft SQL Server 2022.

1. The source server backup files must include the following:
 - ZIP file of the backup files for each of the databases on the source server
 - ZIP file of the MAS90 folder from the source server
2. Upload the backup files to a container in the Microsoft Azure portal. For instructions, see [Using AZCopy to copy data](#).

Verify administrator access in Sage Partner Cloud

To perform the migration process, you must have administrator access to the following:

Before you start the SQL migration process

- Sage 100 SQL site on Sage Partner Cloud
- Microsoft SQL Server database running on the Sage Partner Cloud server

After completing the prerequisites, you're ready to [perform the SQL migration process](#).

Performing the SQL migration process

After completing the [prerequisites](#), you're ready to perform the SQL migration process.

Log in as a user with administrator rights to the Sage 100 SQL site on Sage Partner Cloud, and complete the following procedures.

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Completing setup for the SQL migration process

Complete the following setup work.

- [Download source server backup files from Azure](#)
- [Create folders in File Explorer](#)

Download source server backup files from Azure

1. In a browser, open portal.azure.com and log in.
2. In the Resources list, select the storage container where you uploaded the backup files.
3. In the container, select the ZIP file for the backup database files from the source server, and click **Download** at the top of the page.
4. In the container, select the ZIP file for the backup MAS90 folder from the source server, and click **Download** at the top of the page.

Create folders in File Explorer

1. Open File Explorer and browse to data drive E.
2. Create two new folders in the root of the data drive:
 - E:\SourceData
 - E:\SourceDB

Creating second SQL Server database instance

After [completing setup work](#) for the migration process, create a second SQL Server database instance to store the Sage 100 company data from the on-premises source server. This allows all data to reside on the Sage Partner Cloud SQL Server and eliminates the need for access to the on-premises source server.

To create a second SQL Server database instance

1. In File Explorer, browse to C:\SQLServerFull.
2. Double-click **setup.exe** to start the SQL Server Installation Center.
3. In the SQL Server Installation Center, click **Installation** on the left side of the screen.
4. At the top of the screen, click **New SQL Server standalone installation or add features to existing installation**.
5. In the SQL Server 2022 Setup window, at the Product Update screen, install the SQL Server updates if necessary and click **Next**.
6. At the Install Rules screen, click **Next**.
7. At the Installation Type screen, select the **Perform a new installation of SQL Server 2022** option and click **Next**.
8. At the Edition screen, select the edition to install. If you're entering a product key, select the applicable SQL Server license check box. Click **Next**.
9. At the License Terms screen, select the **I accept the license terms and Privacy Statement** check box, and click **Next**.
10. At the Feature Selection screen:
 - a. Select the **Database Engine Services** check box.
 - b. At the **Instance root directory** field, click the ellipsis (...) button and browse

to data drive **E:\SourceDB** in the Browse for Folder window and click **OK**.

c. Click **Next**.

11. At the Instance Configuration screen:

a. At the **Named instance** field, enter **SourceDB**.

b. The **Instance ID** field defaults to **SourceDB** and data drive E:\SourceDB is populated. Click **Next**.

12. At the Server Configuration screen, click **Next**.

13. At the Database Engine Configuration screen:

a. In the **Authentication Mode** section, select the **Mixed Mode (SQL Server authentication and Windows authentication)** option.

b. Enter a password for the SQL Server system administrator (sa) account and confirm the password.

Note: We recommend using the same password as the Sage Partner Cloud SQL Server password. Take note of the password because you will enter it when running the Parallel Migration Wizard.

c. At the **Specify SQL Server administrators** section, click **Add Current User**.

d. Click **Next**.

14. At the Ready to Install screen, review your selections and then click **Install**. The installation process can take over 5 minutes.

15. The Complete screen notifies you of the successful installation. Click **Close** to exit the SQL Server Installation Center.

Extracting backup ZIP files from the source server

After [creating the second SQL Server database instance](#), complete the following.

- [Extract ZIP file of backup MAS90 folder](#)
- [Extract ZIP file of backup database files](#)

Extract ZIP file of backup MAS90 folder

To extract the ZIP file to E:\SourceData

1. In File Explorer, browse to your Downloads folder.
2. Copy the ZIP file containing the backup of the MAS90 folder you downloaded from the Azure portal, and paste the ZIP file to E:\SourceData.
3. Right-click the ZIP file in E:\SourceData and select **7-Zip > Extract Here** to unpack the file at E:\SourceData.
4. Delete the ZIP file.

Extract ZIP file of backup database files

To extract the ZIP file to E:\SourceDB

1. In File Explorer, browse to your Downloads folder.
2. Create a temporary folder named **DB_Backup_Files**, and copy the ZIP file to the folder.
3. Right-click the ZIP file containing the backup database files in the **DB_Backup_Files** folder, and select **7-Zip > Extract Here** to unpack the files.
4. Copy the database files to the Backup folder of the second SQL Server database instance you created at: E:\SourceDB\MSSQL16.SOURCEDB\MSSQL\Backup

Note: If a message appears prompting to allow access to the Backup folder, click **Continue**.

5. Delete the ZIP file and temporary **DB_Backup_Files** folder, and then close File Explorer.

Restoring database backup files

After [extracting the backup ZIP files](#) from the source server, you need to restore the database backup files.

To restore the database backup files

1. Open Microsoft SQL Server Management Studio.
2. In the Connect to Server window, select **<Browse for more...>** at the **Server name** field.
3. In the Browse for Servers window, expand the **Database Engine** option, select the new **SOURCEDB** database instance you created (this is the second SQL Server instance), and click **OK**.

Note: Take note of the names for both SQL Server instances because you will enter the names when running the Parallel Migration Wizard.

4. In the Connect to Server window, select **SQL Server Authentication** at the **Authentication** field.
5. Enter **sa** at the **Login** field.
6. Enter the password you created for the new SQL Server database instance, and then click **Connect**.
7. In Microsoft SQL Server Management Studio, in the Object Explorer, right-click **Databases** and select **Restore Database**.
8. In the Restore Database window, click the ellipsis (...) button.
9. In the Select backup devices window, click **Add**.
10. In the Backup File window, select **MAS_SYSTEM.bak** and click **OK**.
11. In the Select backup devices window, click **OK**.
12. In the Restore Database window, click **OK** to start restoring the database file.
13. At the message that the database has been successfully restored, click **OK**. The restored database appears in the Object Explorer.
14. Repeat steps 7-13 to restore each database file from the source server.
15. In the Object Explorer, disconnect from the database instance and then close SQL Server Management Studio.

Running the Parallel Migration Wizard

After [restoring the database backup files](#) from the source server, you're ready to run the Parallel Migration Wizard.

To run the wizard

1. Select the Start menu > Sage > Sage 100 Parallel Migration Wizard.
2. In the Parallel Migration Wizard, click **Next** at the Welcome screen.
3. At the Copy Database screen:
 - a. Select the **Sage 100 Client Server MS SQL** option.
 - b. Select the **Above step is complete** check box, and click **Next**.
4. At the Database Server Login screen, enter the following for the target SQL Server instance:
 - a. Enter the name of the SQL Server database instance you're migrating to.

Note: The SQL Server instance names are noted at [step 3 in Restoring database backup files](#). For example, the target database instance name: tfty8bovh7

- b. Enter **SageAdmin** at the **Login ID** field.
 - c. Enter the Sage 100 SQL Server Sage Partner Cloud administrator password, and click **Next**.
5. At the Administrator Password for New Installation screen, enter the same Sage 100 SQL Server Sage Partner Cloud administrator password and click **Next**.
6. At the Select Source Folder screen, click **Browse** to select the path to the source MAS90 folder on the data drive: E:\SourceData\Sage 100 Premium\MAS90 and click **Next**.
7. At the Database Server Login screen, enter the following for the source SQL Server database instance:
 - a. Enter the name of the SQL Server database instance you're migrating from (this is the second SQL Server database instance you created).

Note: The SQL Server instance names are noted at [step 3 in Restoring database backup files](#). For example, the source database instance name: tfty8bovh7\SOURCEDB

- b. Enter **sa** at the **Login ID** field.
 - c. Enter the password used when creating the second SQL Server instance, and click **Next**.

Note: This is the password noted at [step 13b in Creating second SQL Server database instance](#).

8. At the Administrator Password of the Source Installation screen, enter the administrator password for the source Sage 100 installation and click **Next**.
9. At the Migrate System Files screen, click **Next**. If a message appears about modules in the source install need to be reinstalled after the migration, click **OK**.
10. At the Migrate Companies screen, select the **No** option and click **Next**.
11. At the Select Companies screen, all the companies you restored databases for are selected by default. Click **Next**.
12. At the Start Migrating Files screen, review the settings and then click **Next** to start the migration. Depending on the size of the databases, the migration can take several minutes.
13. Click **Finish** to exit the wizard when the migration completes.

Performing user migration

After [running the Parallel Migration Wizard](#), you're ready to map users.

Use the User Merge Utility to map users added in the Sage Provisioning Portal to users created in Sage 100.

To perform user migration

1. Start Sage 100.
2. In the Administrator Authentication window, enter the password.
3. If this is the first time you've started Sage 100 after completing migration, at the message "Do you want to map the Administrator user to an existing user from the source system or add a new user", select one of the following options:
 - Click **Map User** if there is an existing user who was system administrator on the source on-premises Sage 100 installation. In the User Mapping List window that appears, select the existing user to be mapped to the Sage Partner Cloud site administrator (_U1) user and click **Select**. In the User Merge Utility, the selected user is displayed in the **Sage 100 Admin User (U1)** field and the **User Mapping** grid displays a list of users created in the Sage Provisioning Portal.

Note: If your existing source user is from Sage 100 version 2021 or earlier, update the role associated with this user to include access to the Administrative Tools window on the Library Master Security menu.

- Click **New User** if there is no existing system administrator on the source on-premises Sage 100 installation. The User Merge Utility starts, a new _U1 user is created and appears in the **Sage 100 Admin User (U1)** field, and the **User Mapping** grid displays a list of users created in the Sage Provisioning Portal.
4. The User Merge Utility automatically selects source users for each Sage Partner Cloud user based on names and email addresses entered in the Sage Provisioning Portal and in User Maintenance. To map any remaining Sage Partner Cloud users or to make changes to users automatically mapped, click the Lookup button in the **Source - User Logon** field and select the source user in the User Mapping List window.

Note: You do not have to map all of the users now. To map other users later, start the User Merge Utility from the Administrative Tools window on the Library Master Security menu.

5. Click **Proceed** to map the users.

Completing the Data Conversion Checklist

After [performing user migration](#), complete the steps in the Data Conversion Checklist to convert Sage 100 company data and install additional components as necessary.

To complete the Data Conversion Checklist

1. Start Sage 100.
2. Go to the [Sage 100 Documents page](#).
3. Select the version of Sage 100 that you're migrating to.
4. Select **Checklists** and then click the **Upgrade Checklist** link.
5. In the document, locate the section for the version that you're migrating to.
6. Follow the steps in the Data Conversion Checklist section.

After completing the steps above, see [Cleaning up post-migration](#).

Cleaning up post-migration

After performing the SQL migration process and verifying Sage 100 is working properly, perform the following cleanup steps.

- [Delete source server backup application data](#)
- [Delete second SQL Server database instance](#)
- [Delete source server backup database files](#)

Delete source server backup application data

To delete the backup application data

1. Open File Explorer and browse to data drive E.
2. Delete the following folder: E:\SourceData
3. Close File Explorer.

Delete second SQL Server database instance

The second SQL Server database instance created for the source server database backup files can now be deleted.

To delete the second database instance

1. Select the Start menu > Microsoft SQL Server 2022 > SQL Server 2022 Configuration Manager.
2. In the SQL Server Configuration Manager window, select **SQL Server Services** on the left side.
3. Stop all services.
4. Exit SQL Server Configuration Manager.
5. Select the Start menu > Settings > Apps.
6. Select **Microsoft SQL Server 2022** and click **Uninstall**, and when prompted to confirm, click **Uninstall** again.

Delete source server backup database files

7. At the prompt in the User Account Control window, click **Yes**.
8. In the SQL Server 2002 window, click **Remove**.
9. In the Select Instance screen, select **SOURCEDB** in the **Instance to remove features from** field and click **Next**.
10. In the Select Features screen, after SOURCEDB, select the **Database Engine Services** check box and click **Next**.

Warning! Do not select any of the shared services check boxes because that will break the SQL Server database for the main instance on the server.

11. In the Ready to Remove screen, verify the features to be removed and click **Remove**.
12. When the removal is complete, click **Close**.
13. Exit Settings.
14. Restart the server.

Delete source server backup database files

After the server has restarted, delete the backup database files.

To delete the backup database files

1. Open File Explorer and browse to data drive E.
2. Delete the following folder: E:\SourceDB
3. Close File Explorer.

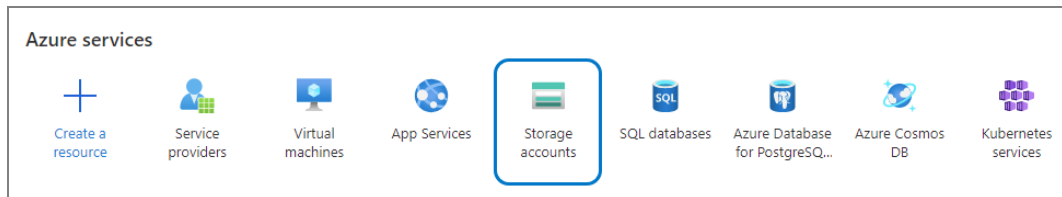
After completing the steps above, you've successfully migrated data from the on-premises Sage 100 Premium installation to the Sage 100 SQL site in Sage Partner Cloud.

Appendix A: Using AZCopy to copy data

We recommend using the AZCopy utility to copy data files from the on-premises system to the one in the cloud. The utility is optimized for performance and can restart and recover from a failed data transfer.

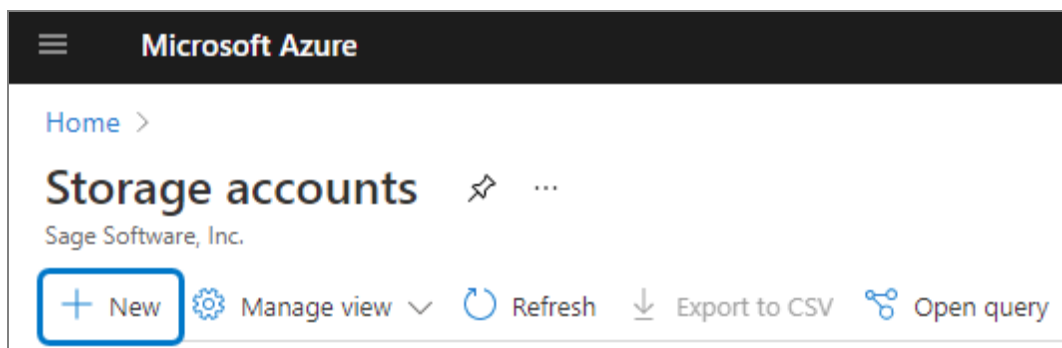
Create a storage account in Azure

1. Log into your Microsoft Azure Portal.
2. Create a new storage account:
 - a. If necessary, select your subscription.
 - b. Under **Azure services**, click **Storage accounts**.



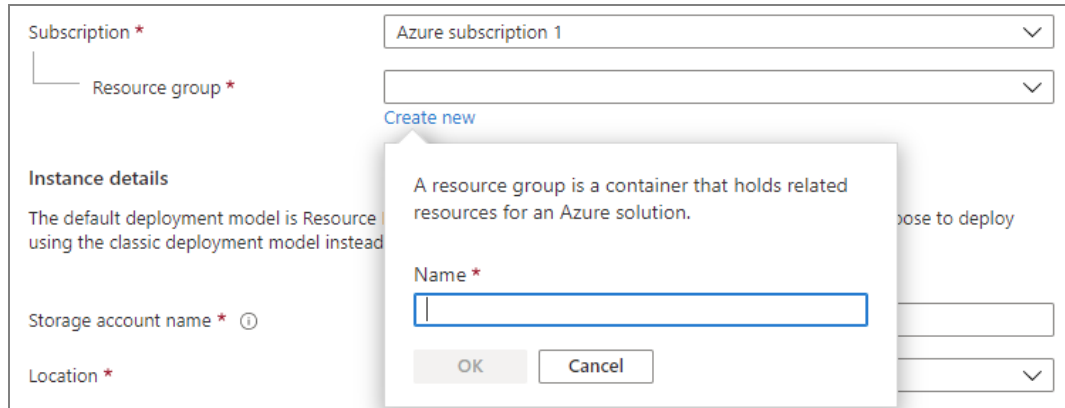
Note: The layout of the portal may change as Microsoft releases updates. If you don't see the Storage accounts button, type **Storage accounts** in the search field.

-
-
- c. Click **New** or, if you already have another storage account, click **Add**.



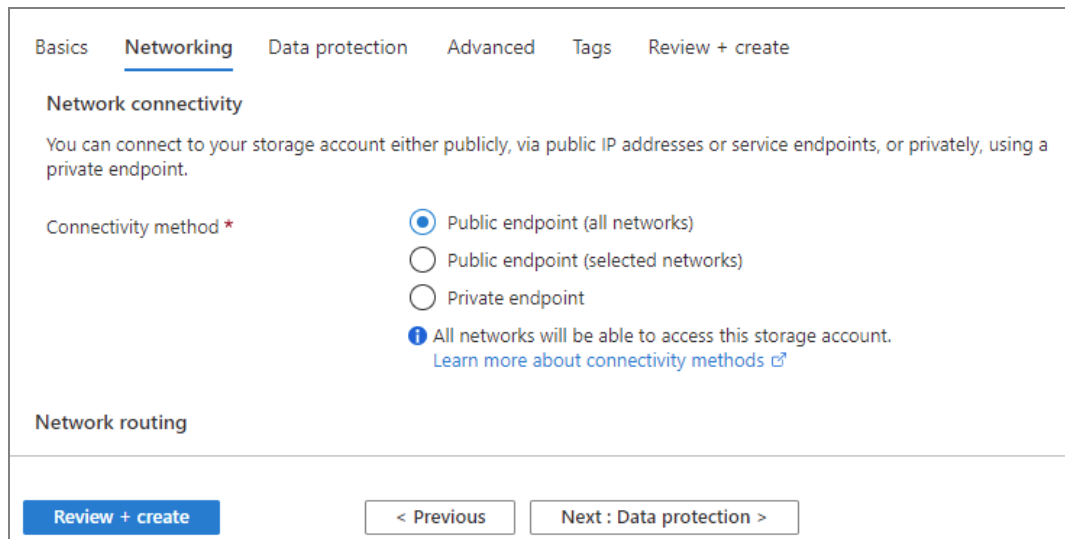
Create a storage account in Azure

- d. Under the **Resource group** field, click **Create new** and enter a name for the resource group.



The screenshot shows the 'Resource group' field in the Azure portal. The 'Subscription' is set to 'Azure subscription 1'. The 'Resource group' field is empty, and a 'Create new' link is visible below it. A dialog box is open, explaining that a resource group is a container for related resources. The dialog box has a 'Name' field and 'OK' and 'Cancel' buttons.

- e. Enter a storage account name.
- f. Select any location.
- g. Click **Next: Networking**.
- h. In the **Connectivity method** area, select the **Public endpoint (all networks)** option.

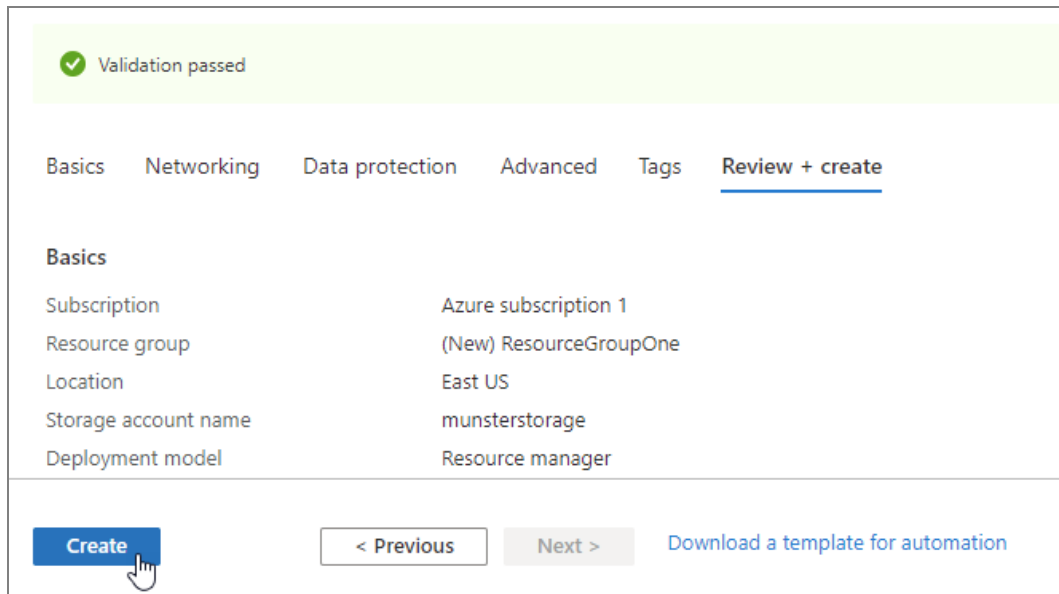


The screenshot shows the 'Networking' tab in the Azure Storage account creation wizard. The 'Connectivity method' section is active, and the 'Public endpoint (all networks)' option is selected. The text below the options states: 'All networks will be able to access this storage account. Learn more about connectivity methods'. The 'Review + create' button is visible at the bottom left, and the 'Next: Data protection >' button is visible at the bottom right.

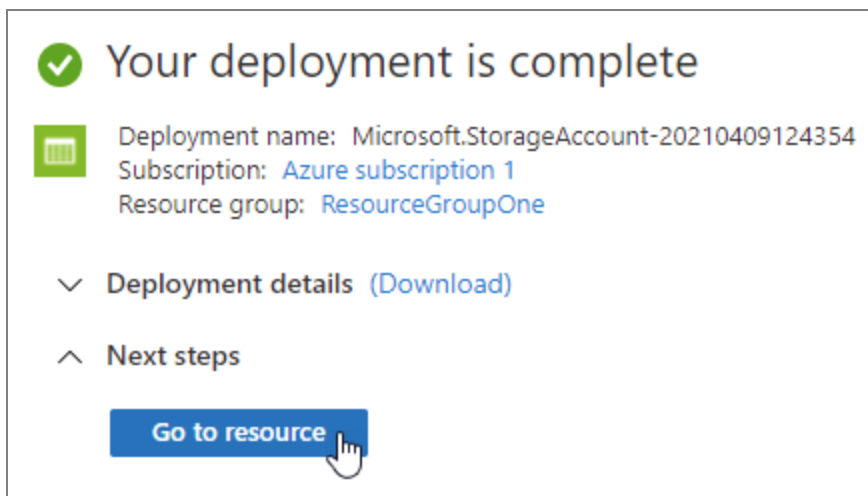
- i. Click **Review + Create**.

Create a storage account in Azure

j. When you see the "Validation passed" message, click **Create**.



3. When you receive the message letting you know that the deployment was successful, click **Go to resource**.



4. Grant access to the storage account by setting up a shared access signature (SAS):

- a. On the left side of the screen, click **Shared access signature**.
- b. Under **Allowed services**, select the following check boxes:
 - **Blob**
 - **File**

Create a storage account in Azure

Allowed services ⓘ
 Blob File Queue Table

Allowed resource types ⓘ
 Service Container Object

Allowed permissions ⓘ
 Read Write Delete List Add Create Update Process

Blob versioning permissions ⓘ
 Enables deletion of versions

Start and expiry date/time ⓘ

| | | |
|-------|---|---|
| Start | <input type="text" value="04/09/2021"/> | <input type="text" value="1:47:45 PM"/> |
| End | <input type="text" value="04/09/2021"/> | <input type="text" value="9:47:45 PM"/> |

Allowed IP addresses ⓘ

Allowed protocols ⓘ
 HTTPS only HTTPS and HTTP

Preferred routing tier ⓘ
 Basic (default) Microsoft network routing Internet routing

i Some routing options are disabled because the endpoints are not published.

Signing key ⓘ

Generate SAS and connection string

- Under **Allowed resource types**, select the **Container** check box.
- Under **Allowed permissions**, select the **Write** check box and any other permissions that you want to allow.
- Under **Start and expiry date/time**, in the **End** field, enter an expiration date for the access key. For security purposes be sure the date is no further in the future than what is needed to complete the migration.
- Under **Allowed protocols**, select the **HTTPS only** option.


Create a container in the storage account

- g. Click **Generate SAS and connection string**.
- h. Copy the SAS token to a Notepad file or other location for later use.

Important! You must make note of the SAS token before leaving the setup page; otherwise, you will have to generate a new one.

Create a container in the storage account

This container will be used for the file transfer.

1. On the left side of the screen, click **Overview** to return to the storage account information page.
2. Click the **Containers** tile.
3. Click the **New containers** button.  Container
4. Enter a name for the container and then click **Create**.

Upload the source MAS90 folder into the Azure storage account

1. On the computer where your source MAS90 folder is located, download AzCopy V10 from the [Microsoft website](#).
2. Create a new folder: C:\Sage\utils
3. Extract the file in the utils folder created in the previous step.
4. Open a text editor, such as Notepad, and copy the following text into the file. (You'll then replace the sections that are highlighted in the next step.)

Upload the source MAS90 folder into the Azure storage account

```
@REM
=====
=====
@REM Location of AzCopy v10
@set AZCOPY="<Path-to-AZCOPY-V10>"
@REM
=====
=====
@REM lowercase letter and numbers only
@set AZAccount="<StorageAccount>"
@REM **** The SAS Token - make sure to add % before each % so
you end up with %%
@set SASToken="<SAS-Token>"
@REM
=====
=====

@REM -----
-----
@set sourceDir="<SourceFolder>"
@REM lowercase letter and numbers only
@set AZContainer="<BLOB-Container>"
@REM -----
-----

@echo Copy Folder Contents to Azure Blob Storage
@echo Source folder: %sourceDir%
@echo Azure Storage Account: %AZAccount%
@echo Azure Storage Container: %AZContainer%

%AZCOPY% copy %sourceDir%
https://%AZAccount%.blob.core.windows.net/%AZContainer%/%SASTok
en% --recursive --from-to=LocalBlob
```

Download the MAS90 folder from the storage account to site

```
:DONE  
ECHO Done.  
PAUSE  
exit 0
```

5. Replace the highlighted values:

- **<Path-to-AZCOPY-V10>**: Replace with the full path to the azcopy.exe file.
Example: C:\Sage\utils\azcopy-10.9.0\azcopy.exe
- **<StorageAccount>**: Replace with the name of the storage account that you setup in Azure.
- **<SAS-Token>**: Replace with the SAS token generated when you set up the storage account in Azure.
After copying the SAS token, add a percent symbol (%) before each existing percent symbol. For example: %%sastoken%%
- **<SourceFolder>**: Replace with the full path to the source MAS90 folder that you are migrating data from.
- **<Blob-Container>**: Replace with the name of the container created in Azure Blob storage. This container is where the MAS90 files will be copied.

6. Save the file using a batch (.bat) file extension. For example: filename.bat

7. Run the .bat file that you created.

The MAS90 folder is uploaded to the Azure Blob storage.

Download the MAS90 folder from the storage account to site

1. Go to the Sage Partner Cloud site that you provisioned and connect using the **Virtual Machine Access** option.
2. Download the latest version of AzCopy version 10 from the [Microsoft website](#).
3. Create a new folder: C:\Sage\utils
4. Extract the file in the utils folder created in the previous step.

Download the MAS90 folder from the storage account to site

5. Open Notepad and copy the following text into the file. (You'll then replace the sections that are highlighted in the next step.)

```
@REM
=====
=====
@REM Location of AzCopy v10
@set AZCOPY="<Path-to-AZCOPY-V10>"
@REM
@REM Adjust TRANSFER CAP for slower internet connections (in
megabits per second); 0 for no cap
@set AZCAP="0"
@REM
=====
=====

@REM
=====
=====
@REM lowercase letter and numbers only
@set AZAccount="<StorageAccount>"
@REM **** The SAS Token - make sure to add % before each % so
you end up with %%
@set SASToken="<SAS-Token>"
@REM
=====
=====

@REM Change location to local folder for the build downloads
@REM -----
-----

@set LocalDestFolder="<DestinationFolder>"
@REM lowercase letter and numbers only
@set AZContainer="<BLOB-Container>"
```


Download the MAS90 folder from the storage account to site

```
@REM -----  
-----  
@echo Download from Azure Blob Storage to Local Folder  
@echo Destination folder: %LocalDestFolder%  
@echo Azure Storage Account: %AZAccount%  
@echo Azure Storage Container: %AZContainer%  
  
@%AZCOPY% cp  
https://%AZAccount%.blob.core.windows.net/%AZContainer%/*%SASToken% %LocalDestFolder% --recursive=true --cap-mbps %AZCAP%  
  
@REM Pause is here to see the results of the copy in the  
command window  
@PAUSE
```

6. Replace the highlighted values:

- **<Path-to-AZCOPY-V10>**: Replace with the full path to the location of the the AZcopy file.
Example: C:\Sage\utils\azcopy-10.9.0\azcopy.exe
- **<StorageAccount>**: Replace with the name of the storage account that you setup in Azure.
- **<SAS-Token>**: Replace with the SAS token generated after setting up the storage account in Azure.
After copying the SAS token, add a percent symbol (%) before each existing percent symbol. For example: %%sastoken%%
- **<DestinationFolder>**: Replace with the path to the folder in which the data will be saved.
- **<BLOB-Container>**: Replace with the name of the container in Azure Blob storage, which should now contain the data.

7. Save the file with a batch (.bat) file extension. For example: filename.bat

8. Run the .bat file that you created.

The MAS90 folder is downloaded from Azure to the Sage Partner Cloud site.