Copy Data from On-Premises SQL Server to ADLS using Self-Hosted IR

Self-Hosted Integration Runtime

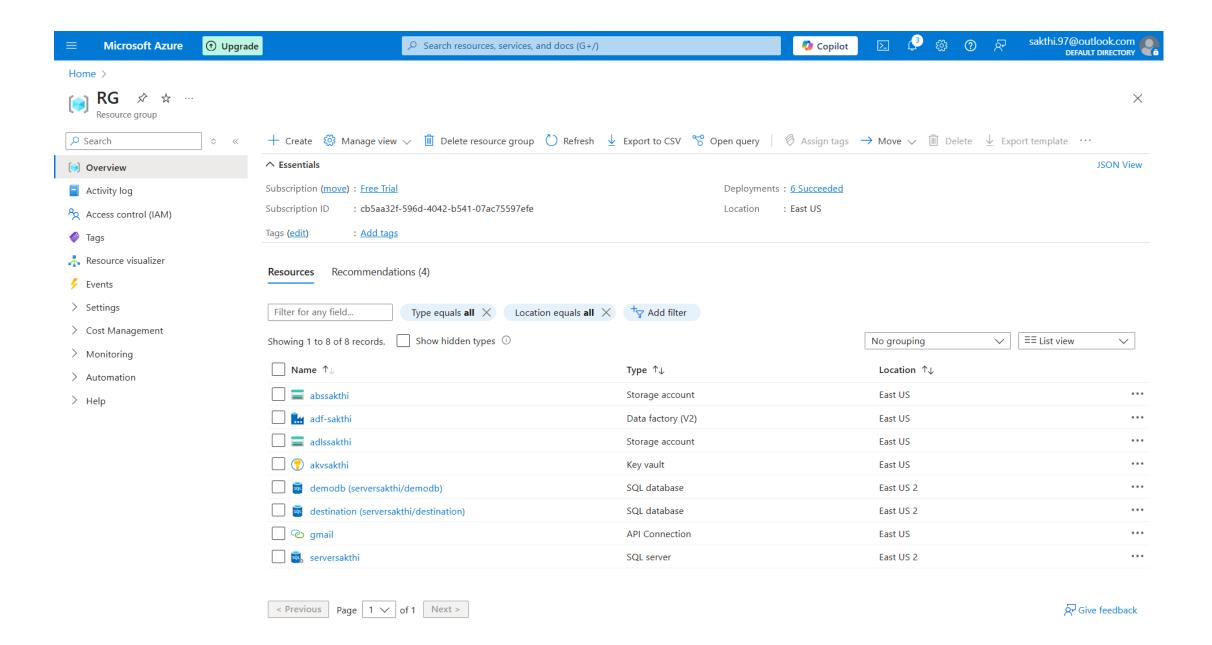


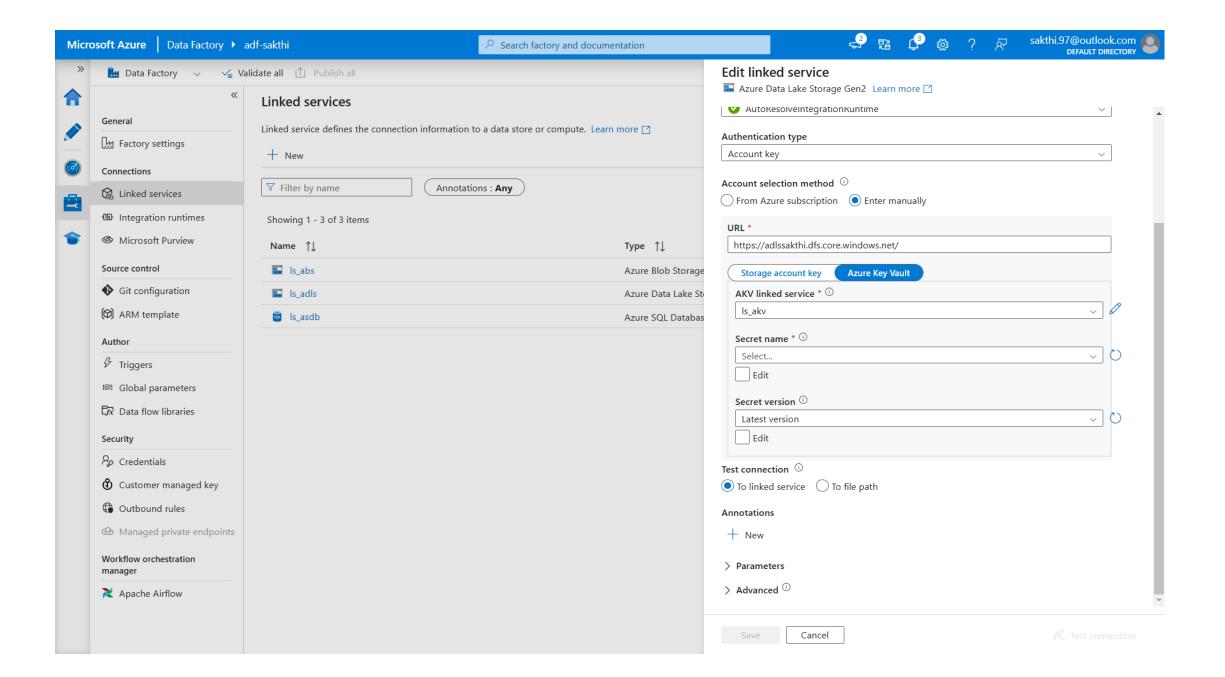
Copy DataBetween Cloud and On-Premises Stores

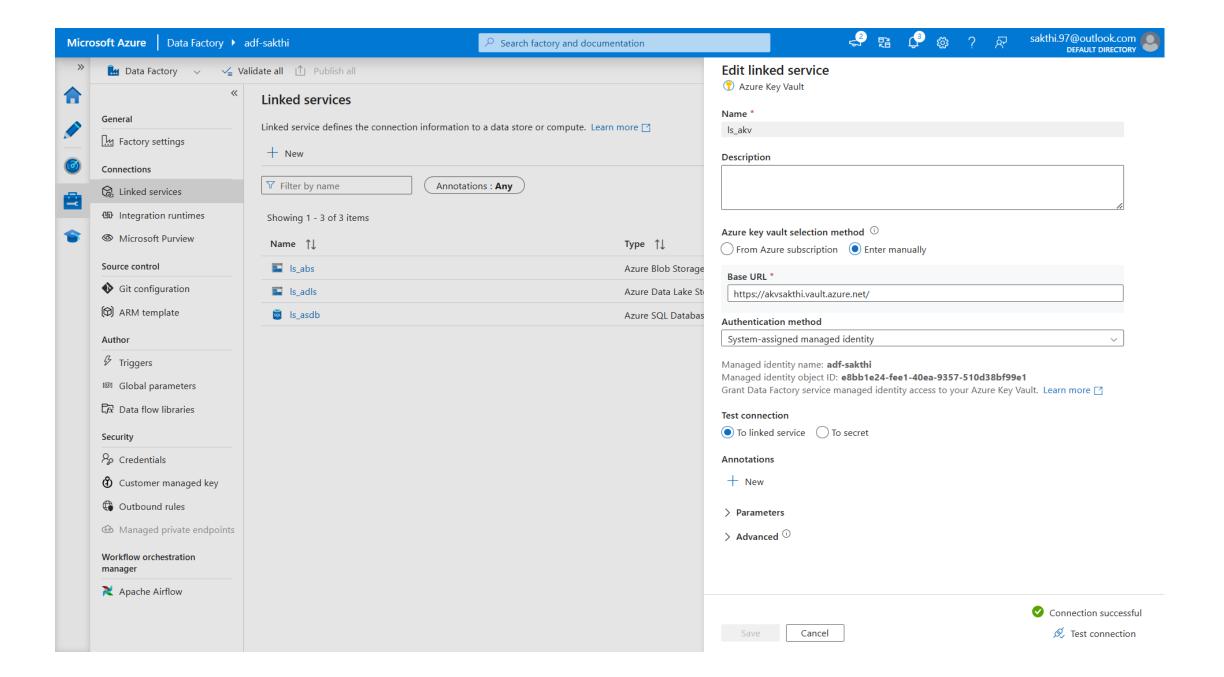
(Public Network <--> Private Network)

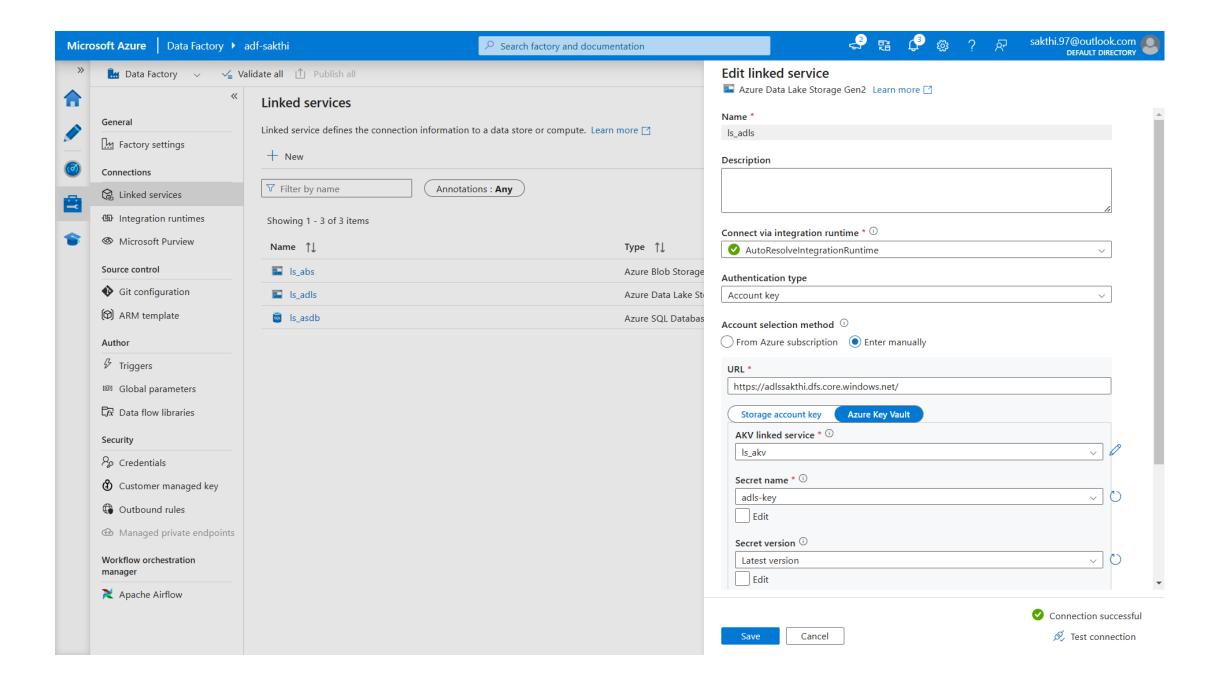
Key Points

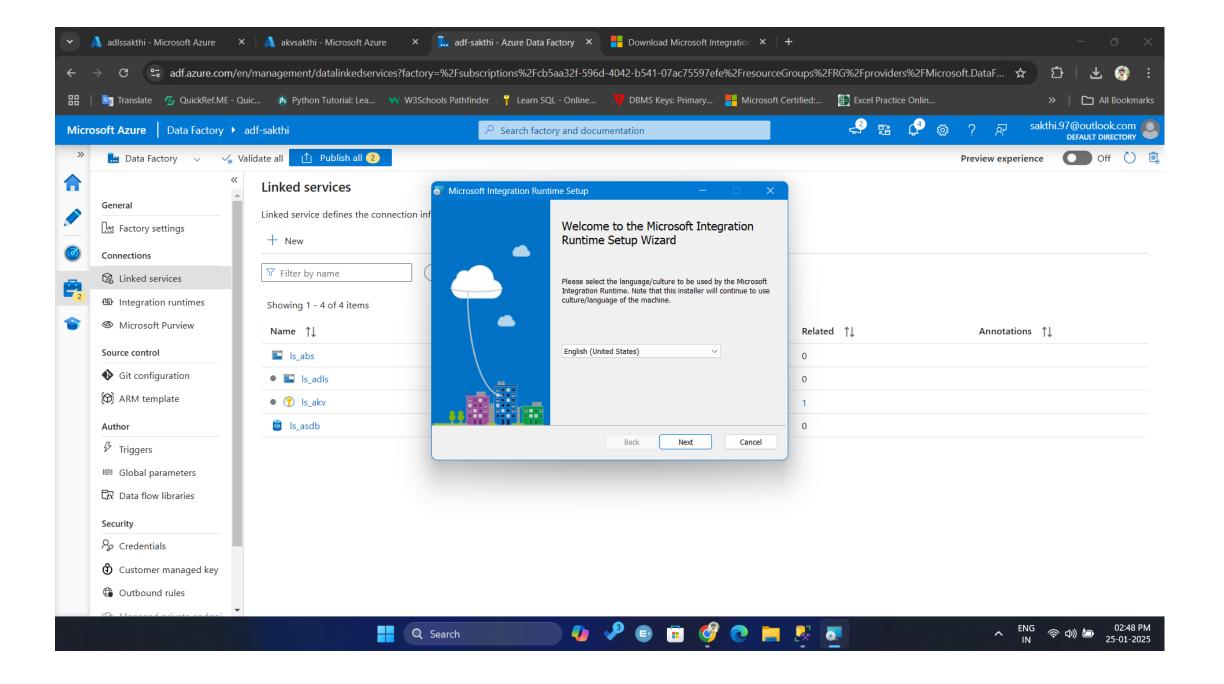
- 1. **Setting Up Self-Hosted IR**: Installed and configured a Self-Hosted Integration Runtime (IR) to enable secure data integration between on-premises and cloud environments.
- 2. **Configuring On-Premises SQL Server**: Set up an on-premises SQL Server for seamless data extraction and integration with Azure services.
- 3. **Creating Linked Services**: Established secure connections using linked services for Azure Key Vault, Azure Data Lake Storage gen 2 (ADLS), file system, and on-premises SQL Server.
- 4. **Creating Datasets**: Defined datasets for ADLS Gen2, local file systems, and on-premises SQL Server to manage and process data effectively.
- 5. Creating a Dynamic Pipeline for Data Copy: Designed a dynamic Azure Data Factory pipeline to copy data across multiple sources and destinations.
 - ✓ Copying Data from On-Premises SQL to ADLS Gen2: Implemented a pipeline to securely transfer data from on-premises SQL Server to ADLS Gen2.
 - ✓ Copying Data from ADLS Gen2 to On-Premises SQL: Automated the reverse data flow from ADLS Gen2 back to the onpremises SQL Server.
 - ✓ Copying Data from Local File System to ADLS Gen2: Created a data pipeline to move local file system data into Azure Data Lake Storage Gen2.

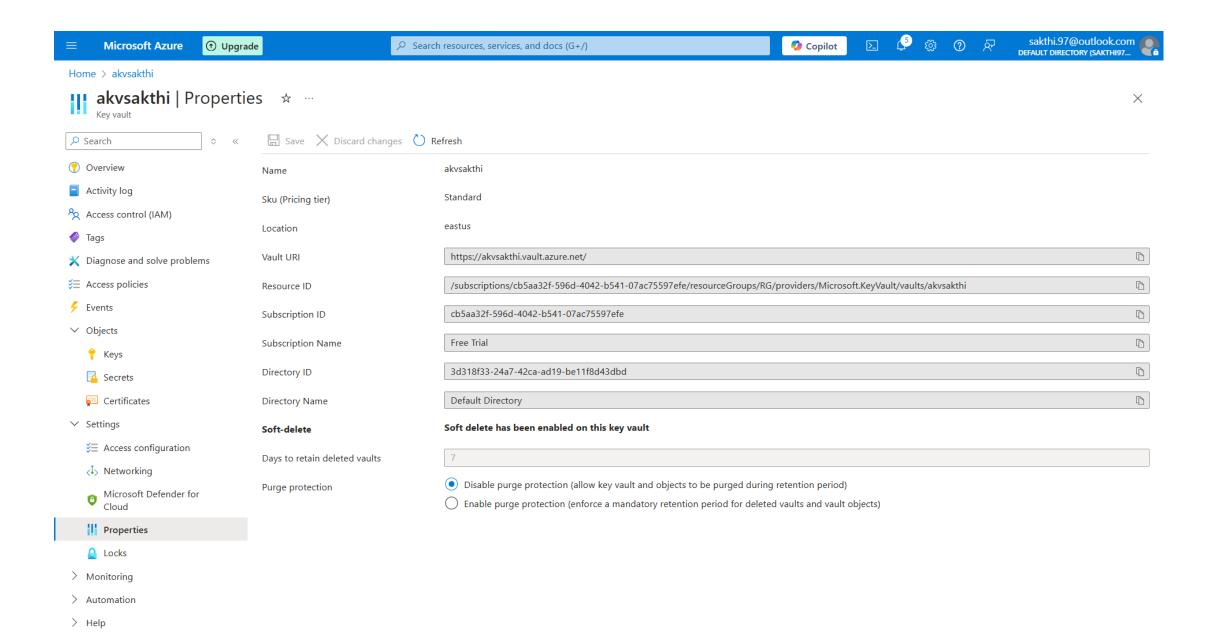


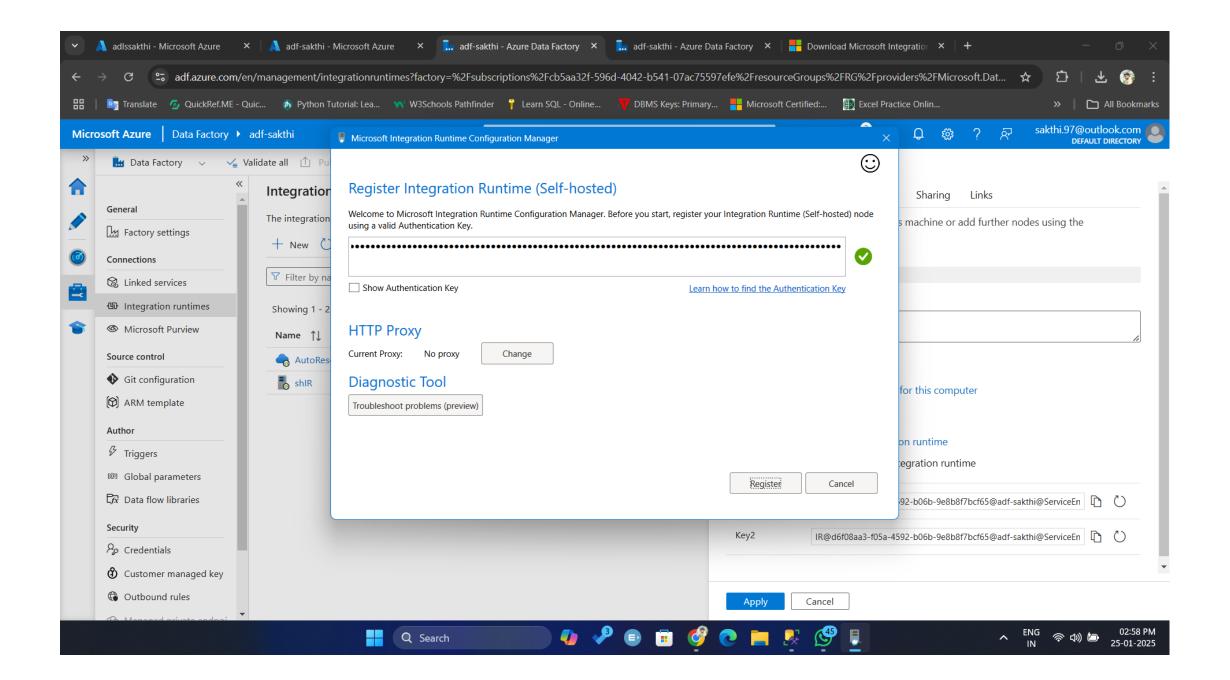


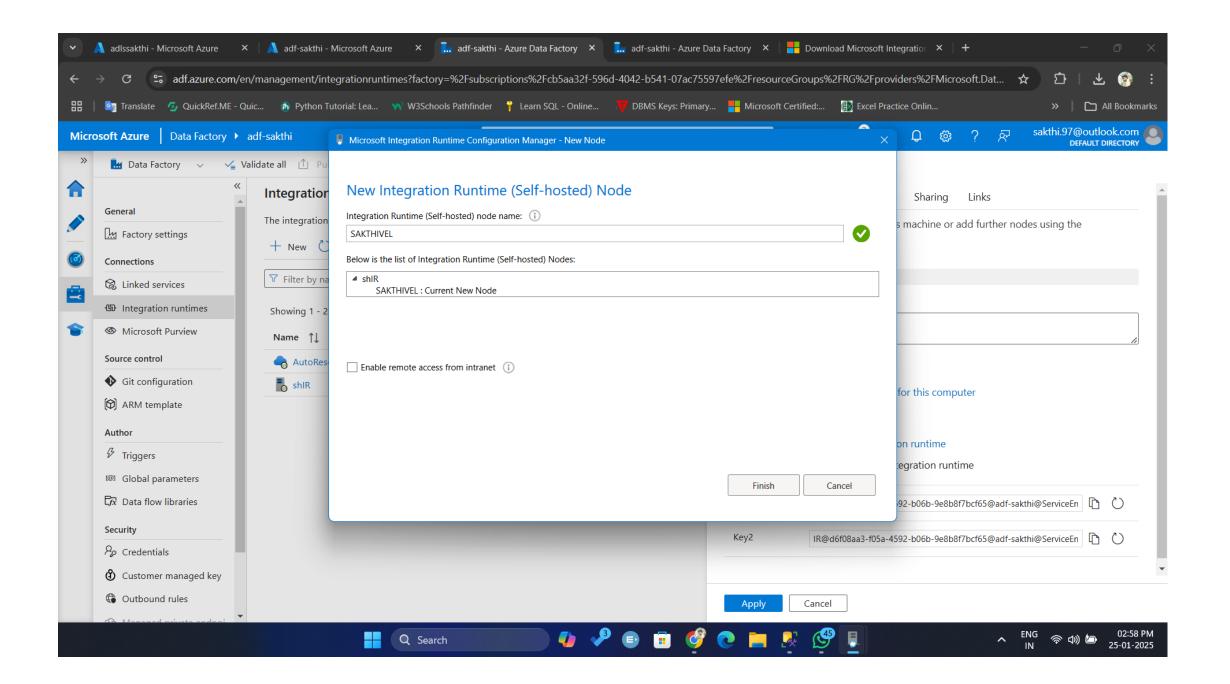


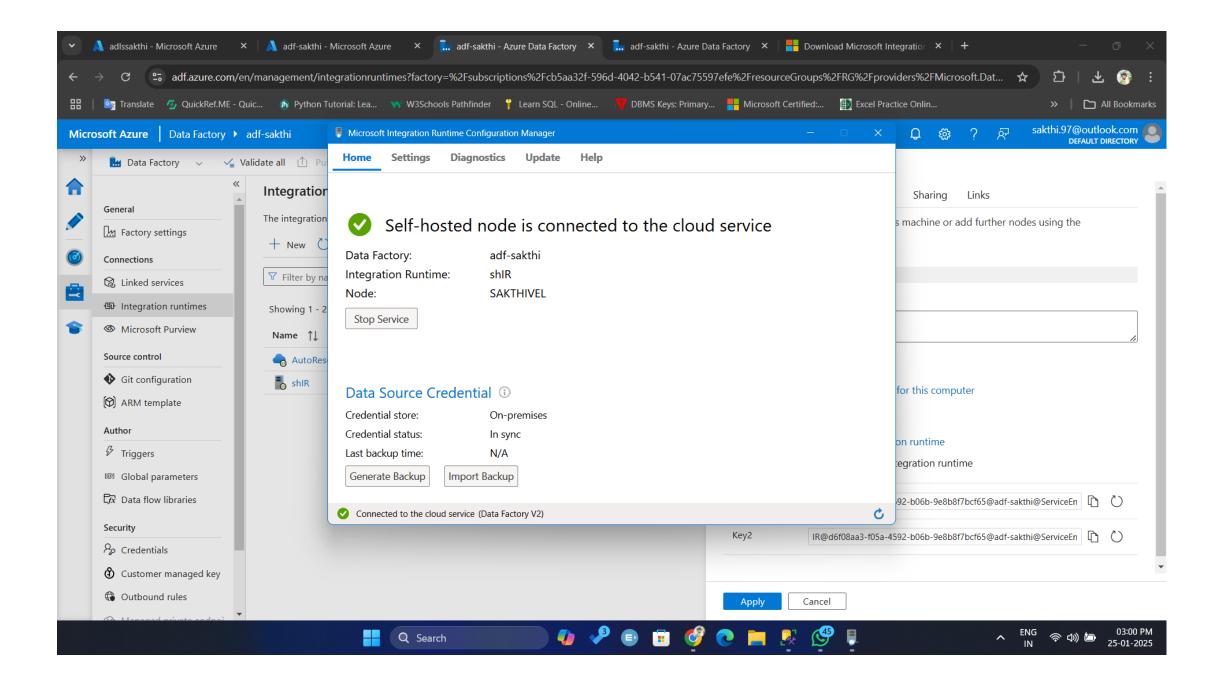


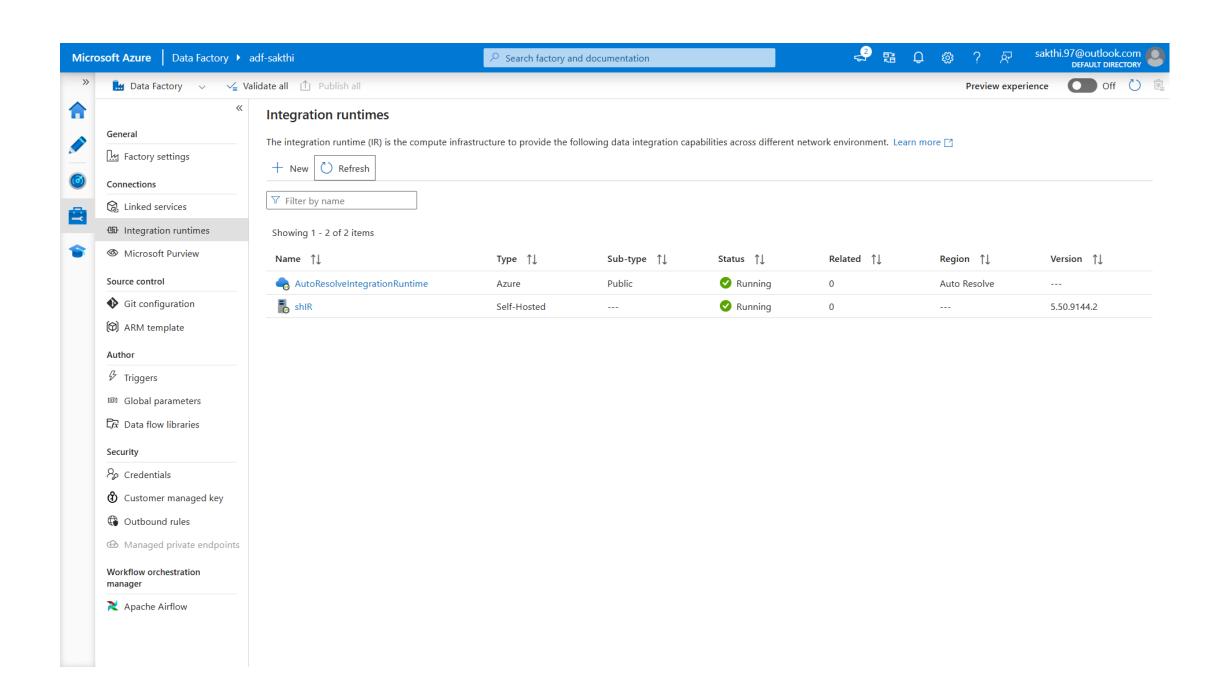


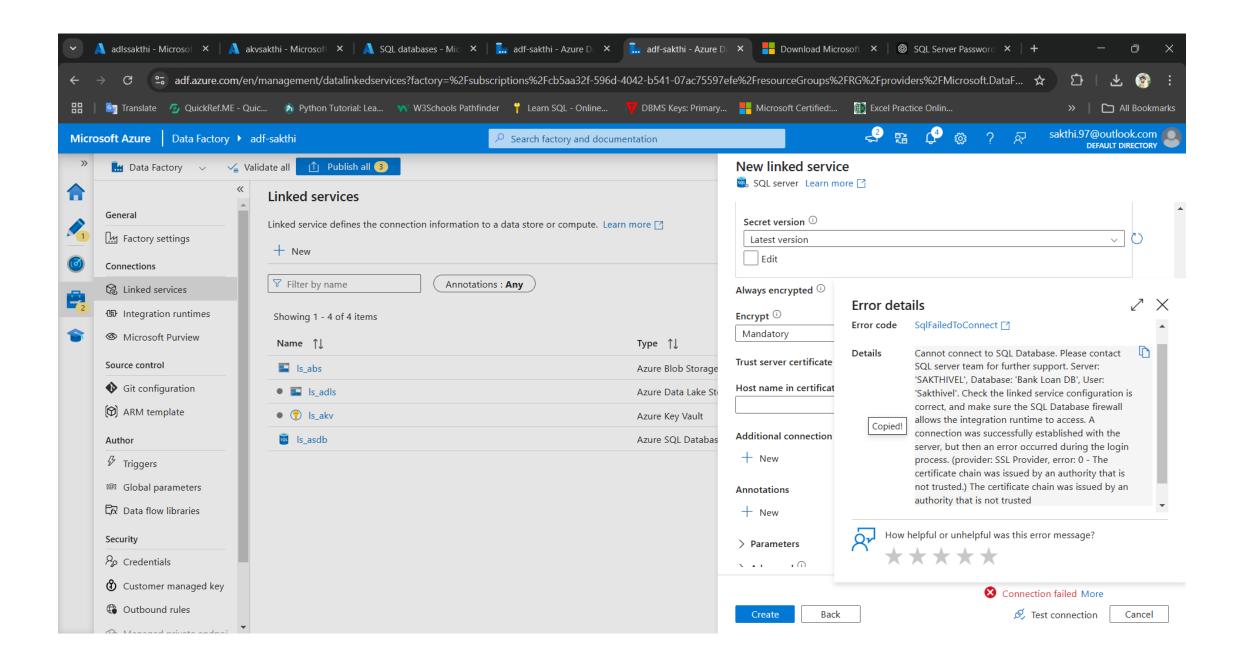


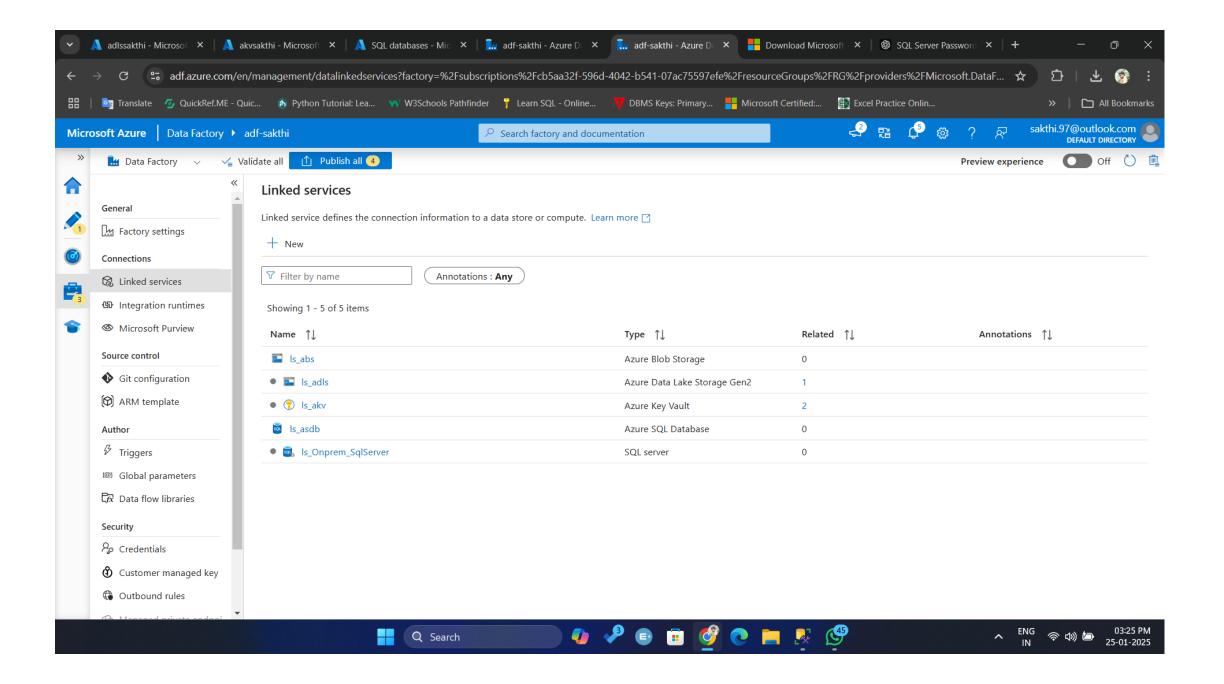


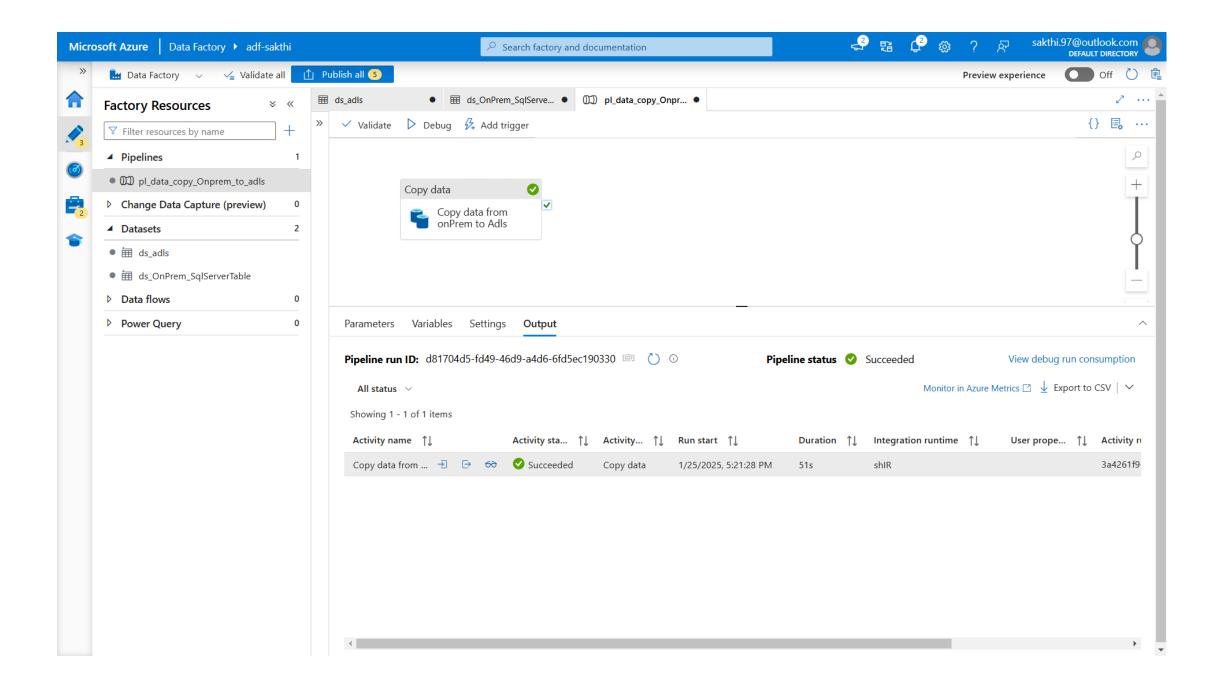


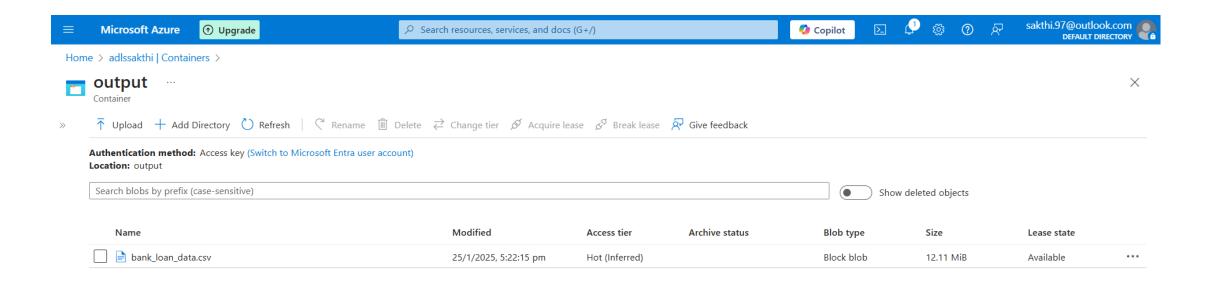


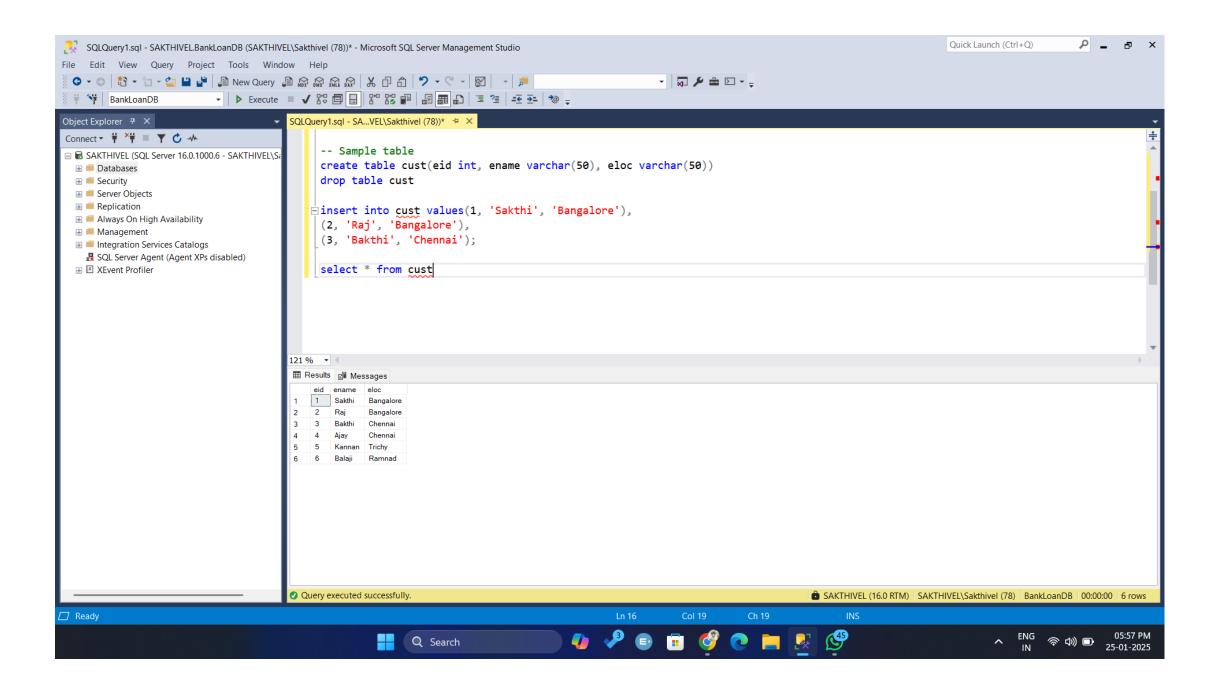


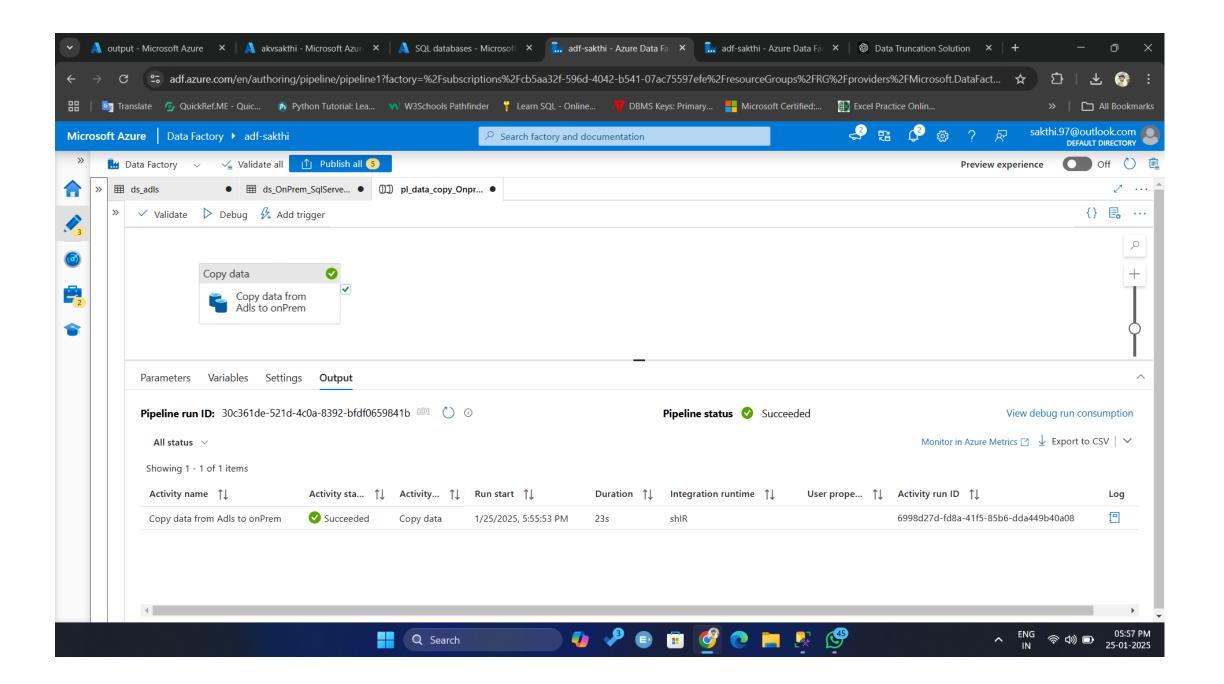


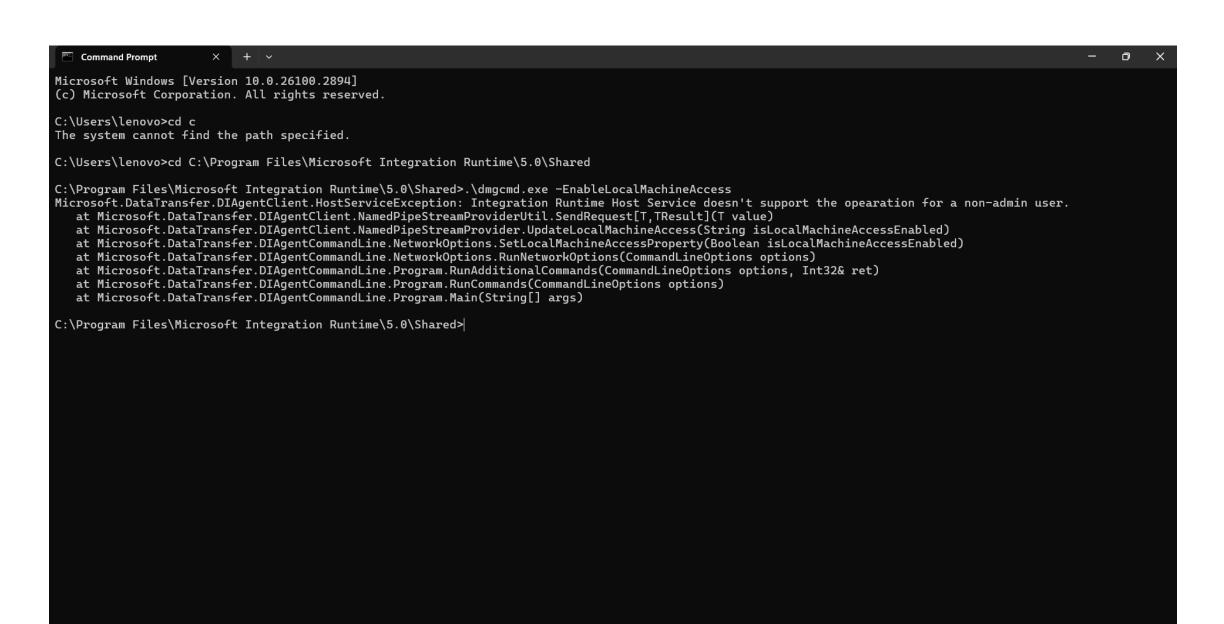












Administrator: Command Prompt C:\Program Files\Microsoft Integration Runtime\5.0\Shared>.\dmgcmd.exe -EnableloaclMachineAccess Failed to parse the command line options (The option "EnableloaclMachineAccess" is not a valid option)! Please check your input. Usage: lConnectionStringPropertyAllowlist -EnableRemoteAccess "<port>" ["<thumbprint>"] -EnableRemoteAccessInContainer "<port>" ["<thumbprint>"] -DisableRemoteAccess -Key "<AuthenticationKey>" -GenerateBackupFile "<fil ePath>" "<password>" -ImportBackupFile "<filePath>" "<password>" -SwitchServiceAccount "<domain\user>" ["password"] -Loglevel <logLevel> -EventLogVerboseSetting <On/Off> -EnableExecuteSsisPackage -DisableExecute SsisPackage -GetExecuteSsisPackage] Detail: -EnableLocalMachineAccess Enable access to localhost and private IP of the machine. -DisableLocalMachineAccess Disable access to localhost and private IP of the machine. -EnableLocalFolderPathValidation Enable validation against local folder paths of the machine. -DisableLocalFolderPathValidation Disable validation against local folder paths of the machine. -SetAdditionalConnectionStringPropertyAllowlist <allow list> Set additional connection string property allow list for ODBC drivers. -GetAdditionalConnectionStringPropertyAllowlist Get additional connection string property allow list for ODBC drivers. -EnableRemoteAccess "<port>" ["<thumbprint>"] Enable remote access to current node from High Availability nodes and/or Credential Manager -EnableRemoteAccessInContainer "<port>" ["<thumbprint>"] Enable remote access to current node when the node is running in Container -DisableRemoteAccess Disable remote access to current node -Key "<AuthenticationKey>" Renew the Authentication Key -GenerateBackupFile "<filePath>" "<password>" Generate a backup file for current node, including the node authentication key and data store credentials -ImportBackupFile "<filePath>" "<password>" Restore the node from a backup file -SwitchServiceAccount "<domain\user>" ["password"] Set DIAHostService to run as a new account. Use empty password ("") for system account or virtual account. -Loglevel <logLevel> Set ETW log level (Off, Error, Verbose or All)

Set Event Log Verbose level (Off, On)

-GetExecuteSsisPackage Get the value if ExecuteSsisPackage is enabled on Self-hosted Integration Runtime machine.

Enable SSIS package execution on local Self-hosted Integration Runtime machine.

Disable SSIS package execution on local Self-hosted Integration Runtime machine.

-EventLogVerboseSetting <0n/0ff>

-EnableExecuteSsisPackage

-DisableExecuteSsisPackage

