**-----------------------------------------------------------------------**

**FILES < 100MB**

CBA - encryption/decryption key (key1)

CFS/3rd party will generation encryption/decryption key (key2) – confirm who will generate this key with John

**ADF Pipelines**

**Internal usage (Flow1)**

{

1. call StartShirAzureFunction {start SHIR VM} {creating function with PowerShell code is infra}

2. Read file from SFTP- CBA location (CBA will provide access to it)

3. Call Azurefunctions to read decryption key (key1) from key vault {creation of keyvault and store key is infra}

4.Unzip and decrypt using the key (step2)

5. Stored this file Data Lake Gen2 (Storage Account) as a Destination {create DataLake Gen2 is infra)

6. call a PowerShell script which will write logs to SQLServer {create SQL Servers is infra} + update jira for success/failure + trigger step7

7. StopShirAzure function/powershell which will shut down the vm {creating function with powershell code is infra}

}

**External usage (Flow2)**

{

1. call StartShirAzureFunction {start SHIR VM}

2. Read file from SFTP- CBA location (CBA will provide access to it)

3. Call Azure functions to read decryption key (key1) from keyvault {creation of keyvault and store key is infra}

4.unzip and decrypt using the key (step2)

5. call azure function to read encryption key (key2) {creation of keyvault and store key is infra}

6. encrypt file (in step4) with key2

7. Store encrypted file (step6) in SFTP (Storage Account) Destination

8. Powershell script which will write logs to SQLServer + update Jira for success/failure + trigger step9

9. StopShirAzure function/powershell which shutdown the vm{creating function with powerhsell code is infra}

}

🡨----------------------------end of ADF Pipeline---------------------------------------🡪

Infra team

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A) Azure function - 2 set of azure functions

1. EncryptionAzureFunctionKeyCFS (data team/CFS) -- Query pending for John

2. DecryptionAzureFunctionKeyCBA (CBA will provide us)

Powershell script which can read keys from keyvault and return it to the caller (Github)

B) create a powershell script to import keys in keyvault

**--------------------------------------**

**Large Files (> 100 MB)**

**<start of Azure DevOps Pipeline >**

1. Spin either Small or Large VM within existing Resource group, subnet from ImageGallery
2. Create Managed Disks (8) and attach it to VM using PowerShell Script
3. Stripe these Disks S: (4 disks) and T: (4 disks) – powershell
4. Pull Powershell scripts (potentially 4) from github
5. Trigger scripts

🡨--- end of Azure DevOps Pipeline -------------🡪

**Take help from PowerShell Person**

1. Script1 will copy zip/encrypted file from Blob storage to S: (created in step3)
2. Script2 will decrypt/unzip (key1) file on S: and store it in T:
3. If external usage

Script3 will encrypt file on T: (key2) and store it in SFTP location

1. Else

Copy T: file to DataLake Gen2 using Script4

1. Script5 will write logs to SQL server and write Success/Failure in Jira
2. Trigger stopVMAZureFunction

----------PowerShell game-----------------

---------------------------------------------END OF LARGE FILES -------------------------------------------

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**HouseKeeping Activities – All tasks below are Infra team responsibilities**

**-------------------------------------**

Azure DevOps to Use Bicep templates to spin ADF, SHIR VM, AzureFunctions with PowerShell, Azure SQL Server, Azure KEyVault, Azure Data Lake Gen2, Azure SFTP, VNET, Subnet, Resource groups and any other components or PowerShell which is required.

Kick off – Azure Function

It will read SQLServer for endDate Column

If DeleteVM and managed disks associated with the vm (which we created in Azure DevOps)

If endDate+ 90 days happened – we will delete files from Azure Data Lake Gen2Storage /Azure sFtp location