

Reading Data Tables, Page 2



 @mrpaulandrew



 purplefrogsystems.com/paul





Paul Andrew

About Me



Microsoft Data Platform [MVP](#)



Business Intelligence Consultant at [Purple Frog Systems](#)



STEM Ambassador with [STEM Learning UK](#)



PASS Chapter Leader for [Microsoft Data Platform Group](#)



Speaker & part of the [SQL Relay](#) team



Speaker & helper at [SQL Bits](#)



Speaker & helper at various [SQL Saturday](#) 's



[Stack Overflow](#)

● Unsung Hero

azure-data-factory

Many years' experience working with the complete on premises SQL Server stack in a variety of roles and industries. Now developing/consulting on hybrid business intelligence solutions using Microsoft Azure. Specialising in Data Factory, Data Lake Analytics, real-time data with the Internet of Things (IoT), Stream Analytics and Event Hubs.



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Session Agenda

Part 1

1. What is Azure Data Factory (ADF)?
 - What is an ADF Pipeline?
 - What is an ADF Dataset?
2. What is an ADF Activity?
3. What is an ADF Time Slice?
4. Developer tools for ADF.
5. The ADF Data Management Gateway.
6. Building a basic copy data factory.

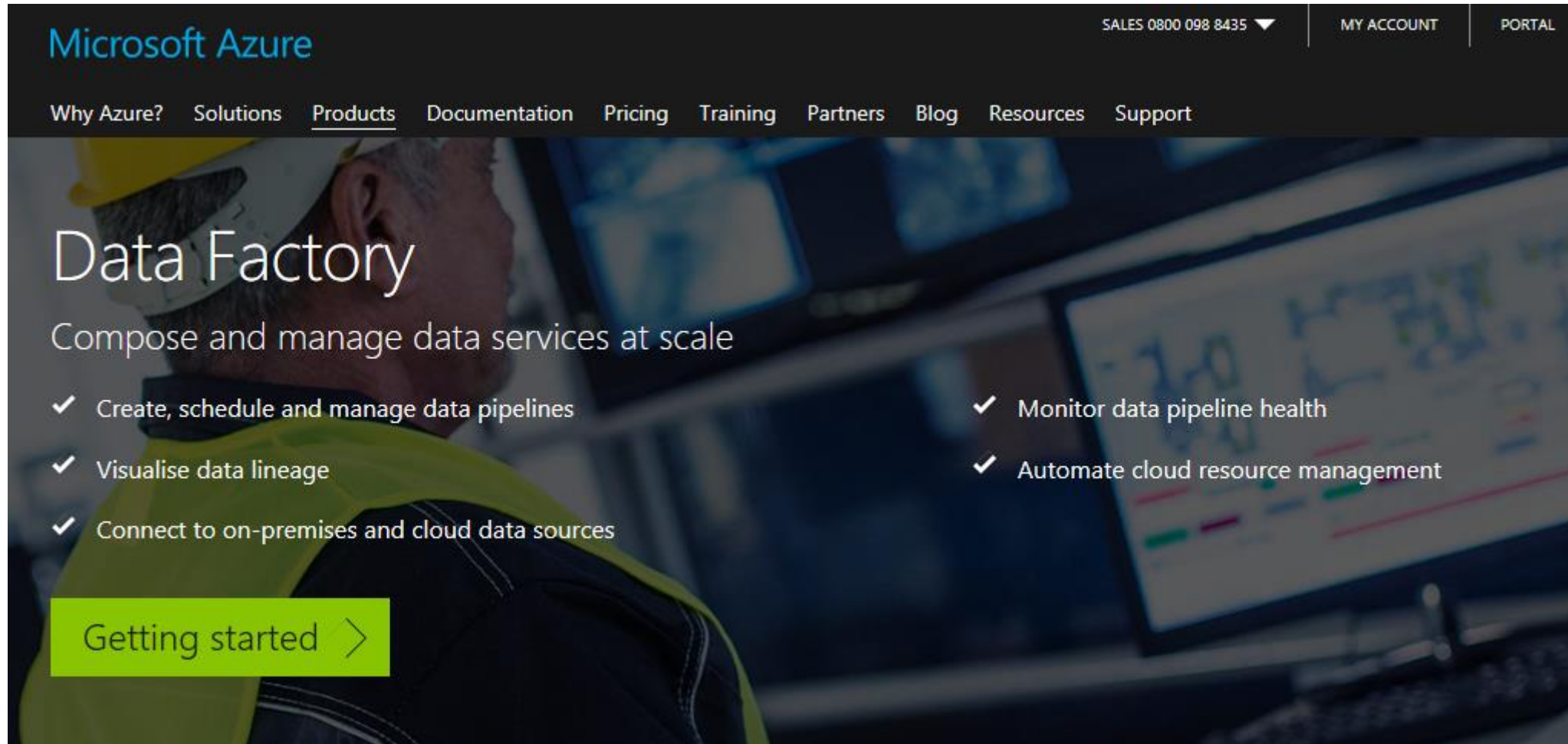
Part 2

7. What is a ADF Custom Activity?
8. Creating a custom activity.
9. Using Visual Studio ADF config files.
10. Monitoring your ADF pipelines.
11. Q&A



What is Azure Data Factory (ADF)?

<https://azure.microsoft.com/en-gb/services/data-factory/>



Microsoft Azure

SALES 0800 098 8435 ▼ MY ACCOUNT PORTAL

Why Azure? Solutions Products Documentation Pricing Training Partners Blog Resources Support

Data Factory

Compose and manage data services at scale

- ✓ Create, schedule and manage data pipelines
- ✓ Visualise data lineage
- ✓ Connect to on-premises and cloud data sources
- ✓ Monitor data pipeline health
- ✓ Automate cloud resource management

Getting started >



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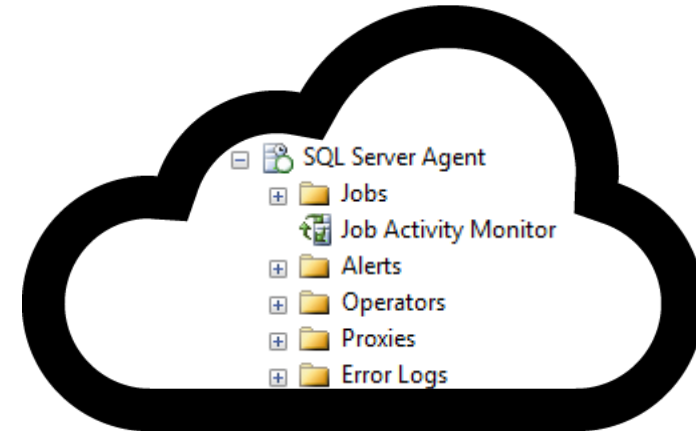


What is Azure Data Factory (ADF)?

What it is...



What it is **NOT**...

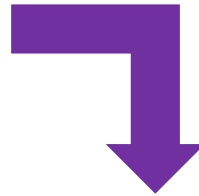
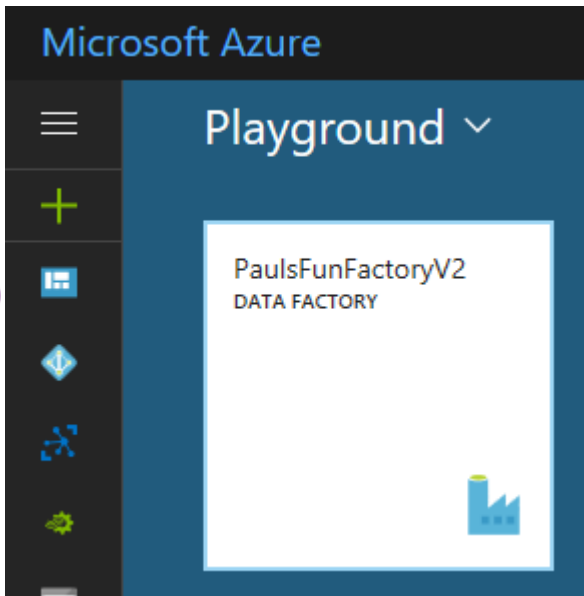


What is an ADF Pipeline and Dataset?



Blog post:

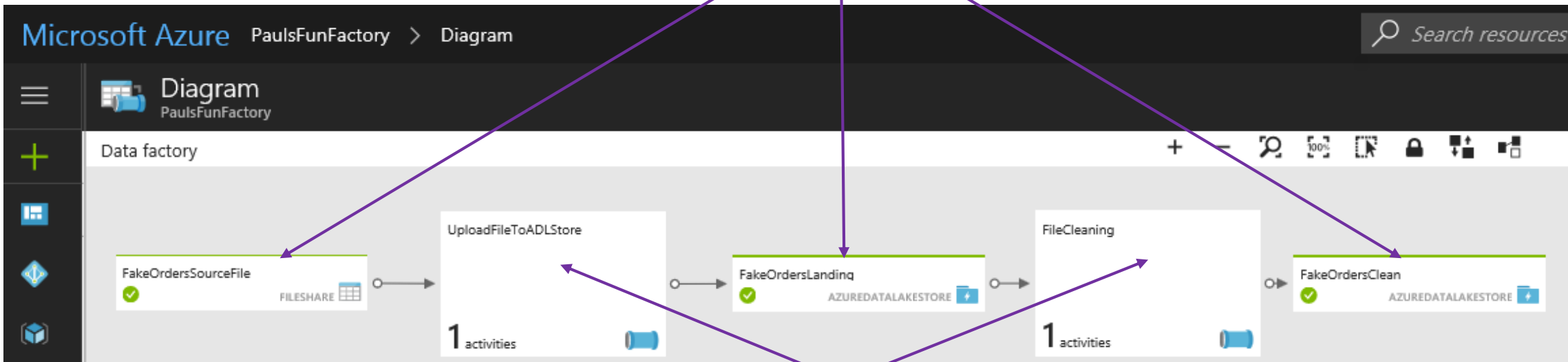
<https://www.purplefrogssystem.com/paul/2017/08/chaining-azure-data-factory-activities-and-datasets/>



1x File



Datasets



Pipelines



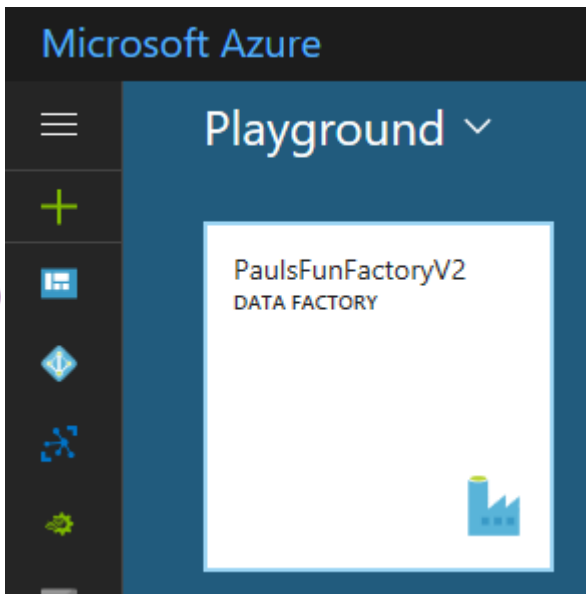
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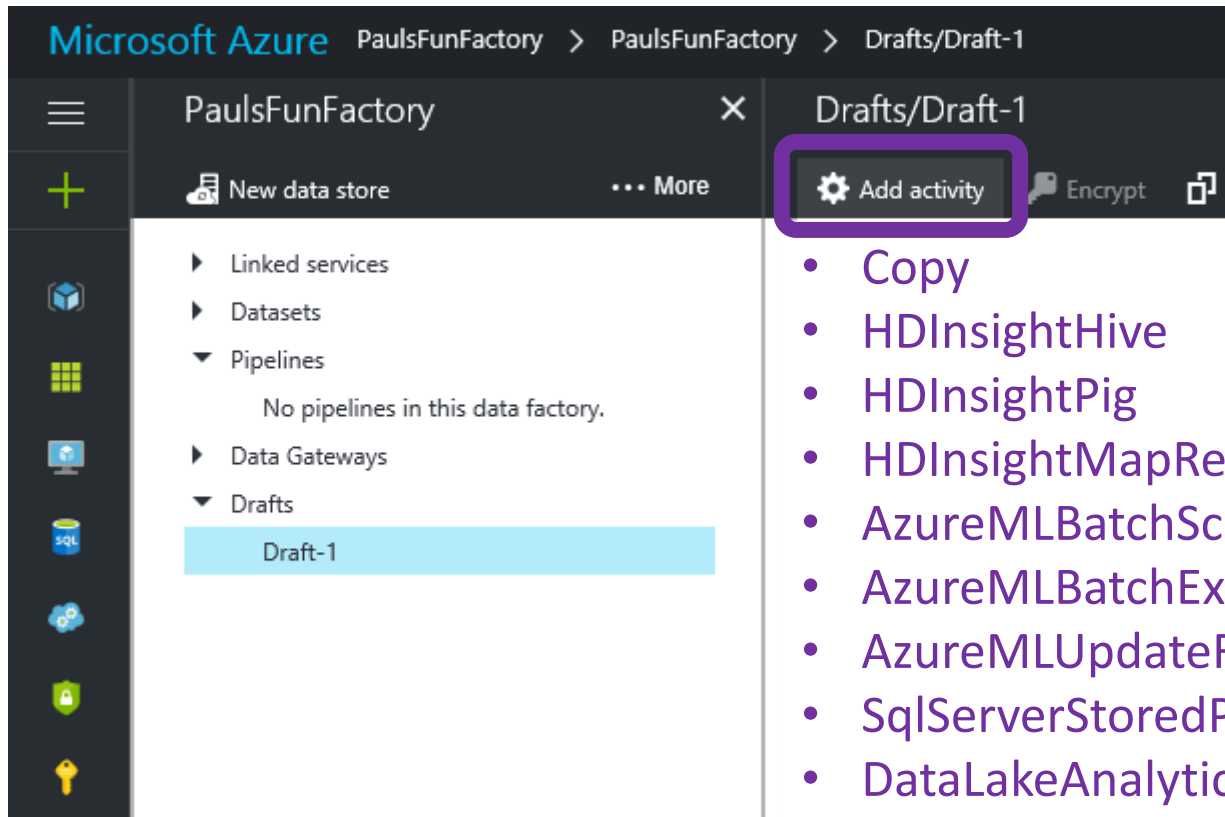
What is an ADF Activity?



Charging:

<https://azure.microsoft.com/en-gb/pricing/details/data-factory/>

	Low Frequency (per month)	High Frequency (per month)
Cloud to Cloud	£0.45 per activity	£0.75 per activity
On Premises to Cloud	£1.12 per activity	£1.86 per activity



- Copy
- HDInsightHive
- HDInsightPig
- HDInsightMapReduce
- AzureMLBatchScoring
- AzureMLBatchExecution
- AzureMLUpdateResource
- SqlServerStoredProcedure
- DataLakeAnalyticsU-SQL



Meet JSON

DataLakeUploads.json* X ExcelExtractor.json

Schema: <No Schema Selected>

```
{
  "$schema": "http://datafactories.schema.management.azure.com/schemas/2015-09-01/Microsoft.DataFactory.Pipeline.json",
  "name": "DataLakeUploads",
  "properties": {
    "activities": [
      ... , //Do Stuff One
      ... , //Do Stuff Two
      ... , //Do Stuff Three
      ... , //Do Stuff Four
      ... , //Do Stuff Five
      ... , //Do Stuff Six
      ... , //Do Stuff Seven
    ],
    "type": "Copy",
    "typeProperties": {
      "source": {
        "type": "FileSystemSource",
        "recursive": false
      },
      "sink": {
        "type": "FileSystemSink",
        "copyBehavior": "PreserveHierarchy",
        "writeBatchSize": 0,
        "writeBatchTimeout": "00:00:00"
      }
    },
    "inputs": [
      {
        "name": "File1OnPrem"
      }
    ],
    "outputs": [
      {
        "name": "File1ADFStore"
      }
    ]
  }
}
```



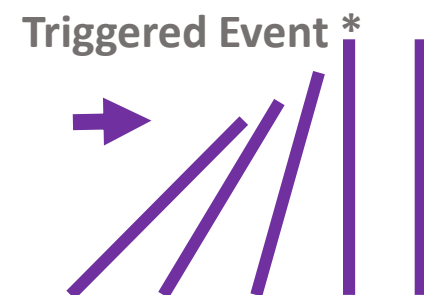
What is an ADF Time Slice?

What it is...



<https://docs.microsoft.com/en-us/azure/data-factory/data-factory-scheduling-and-execution>

What it is **NOT**...



* Unless you use another service, like Logic Apps.



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Time Slice Relationships in ADF and Provisioning

//Input Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Activity

```
"scheduler": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Pipeline

```
"start": "2017-05-04T00:00:00Z",  
"end": "2018-05-04T00:00:00Z",  
"isPaused": true,  
"pipelineMode": "Scheduled"  
}
```

//Output Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```



Time Slice Relationships in ADF and Provisioning

//Input Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Activity

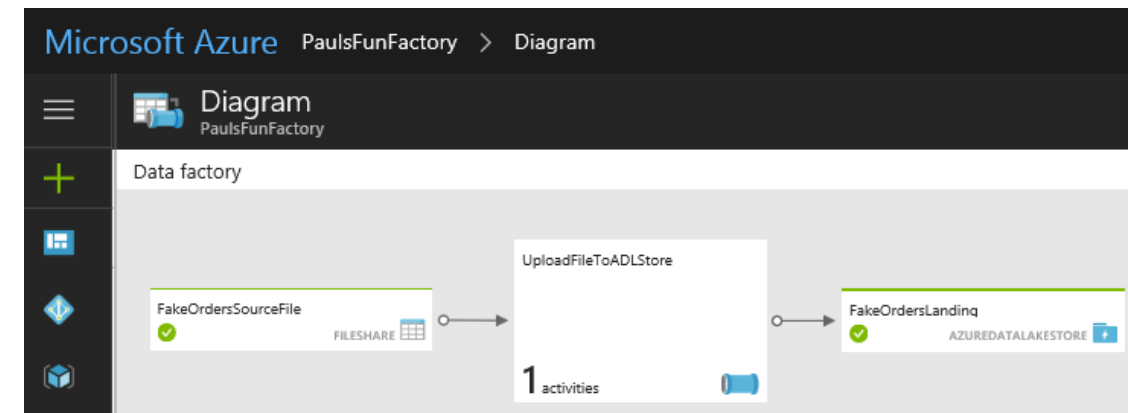
```
"scheduler": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Pipeline

```
"start": "2017-05-04T00:00:00Z",  
"end": "2018-05-04T00:00:00Z",  
"isPaused": true,  
"pipelineMode": "Scheduled"  
}
```

//Output Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```



Time Slice Relationships in ADF and Provisioning

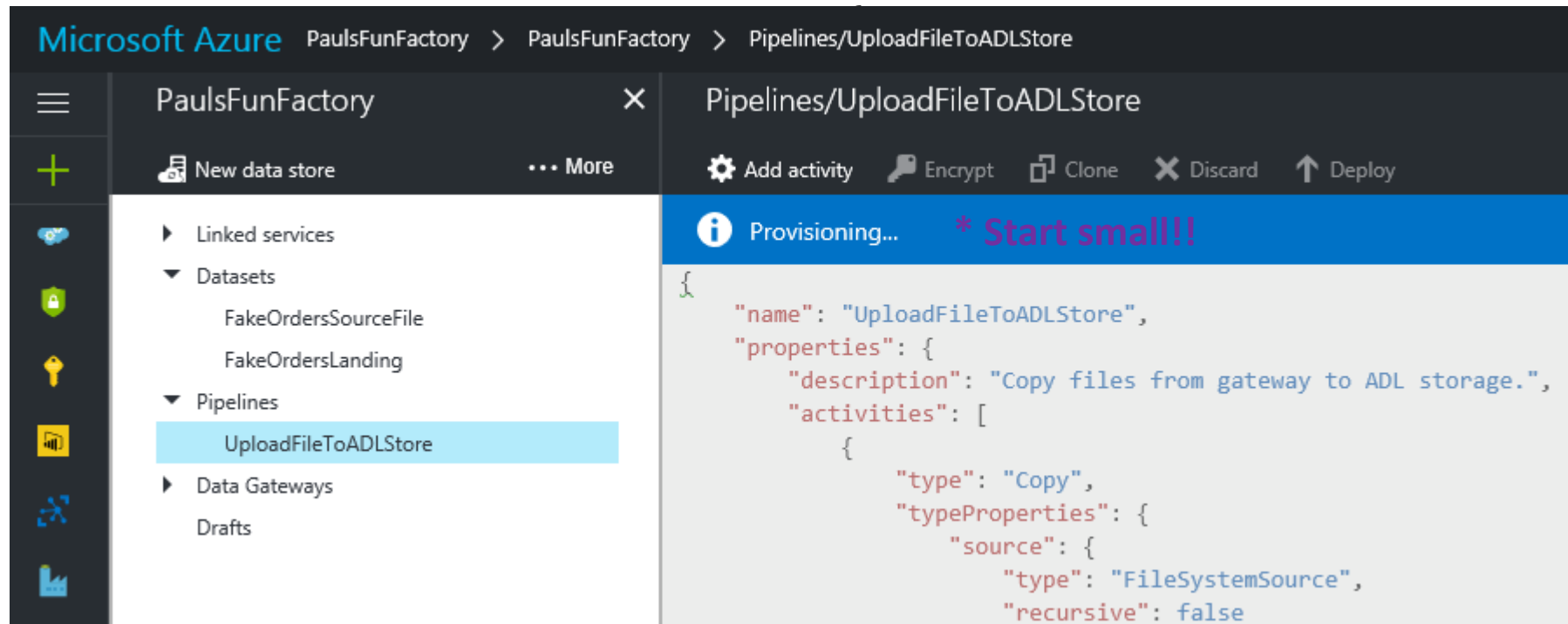
//Input Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Activity

//Output Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```



The screenshot shows the Microsoft Azure portal interface for configuring a pipeline activity. The breadcrumb navigation at the top reads: Microsoft Azure > PaulsFunFactory > PaulsFunFactory > Pipelines/UploadFileToADLStore. On the left, a sidebar menu shows the hierarchy: PaulsFunFactory (New data store, More), Linked services, Datasets (FakeOrdersSourceFile, FakeOrdersLanding), Pipelines (UploadFileToADLStore - selected), Data Gateways, and Drafts. The main panel is titled 'Pipelines/UploadFileToADLStore' and includes action buttons: Add activity, Encrypt, Clone, Discard, and Deploy. A blue banner at the top of the main panel says 'Provisioning... * Start small!!!'. Below this, the JSON configuration for the activity is displayed:

```
{  
  "name": "UploadFileToADLStore",  
  "properties": {  
    "description": "Copy files from gateway to ADL storage.",  
    "activities": [  
      {  
        "type": "Copy",  
        "typeProperties": {  
          "source": {  
            "type": "FileSystemSource",  
            "recursive": false  
          }  
        }  
      }  
    ]  
  }  
}
```



Time Slice Relationships in ADF and Provisioning

//Input Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Activity

```
"scheduler": {  
  "frequency": "Day",  
  "interval": 1  
}
```

//Output Dataset

```
"availability": {  
  "frequency": "Day",  
  "interval": 1  
}
```

Data slices (by slice time)
FakeOrdersSourceFile

Filter

SLICE START TIME	SLICE END TIME	STATUS
02/01/2017 12:00 AM UTC (Wed,...	03/01/2017 12:00 AM UTC (3/1/...	Pending validation
01/01/2017 12:00 AM UTC (1/1/2...	02/01/2017 12:00 AM UTC (Wed...	Ready

Data slices (by slice time)
FakeOrdersLanding

Filter

SLICE START TIME	SLICE END TIME	STATUS
02/01/2017 12:00 AM UTC (Wed,...	03/01/2017 12:00 AM UTC (3/1/...	Pending execution
01/01/2017 12:00 AM UTC (1/1/2...	02/01/2017 12:00 AM UTC (Wed...	Pending execution





Recap

1. What is Azure Data Factory (ADF)?
 - What is an ADF Pipeline?
 - What is an ADF Dataset?
2. What is an ADF Activity?
3. What is an ADF Time Slice?



What do you do next?



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Use The Copy Wizard?


PaulsFunFactoryV2


DATA FACTORY



Actions

 Author and deploy

 Copy data (PREVIEW)

 Monitor & Manage

...

Copy Data (PaulsFunFactory)

1 Properties
Recurring copy

2 Source

Connection

Dataset















3 Destination

4 Summary

Source data store

Specify the source data store for the copy task. You can use an existing data store connection (or) specify a new data store. Click [HERE](#) to suggest new copy sources or give comments.

FROM EXISTING CONNECTIONS CONNECT TO A DATA STORE

 Amazon Redshift	 Amazon S3	 Azure Blob Storage	 Azure Data Lake Store	 Azure DocumentDB	 Azure SQL Database	 Azure SQL Data Warehouse
 Azure Table Storage	 Cassandra	 DB2	 File System	 FTP	 HDFS	 MongoDB





Playground ▾


Use The Copy Wizard?

PaulsFunFactory V2
DATA FACTORY

Actions

 Author and deploy

 Copy data (PREVIEW)

 Monitor & Manage

Copy Data (PaulsFunFactory)

1 Properties
Recurring copy

2 Source
Connection
Dataset

3 Destination















4 Summary

Source data store

Specify the source data store for the copy task. You can use an existing data store connection (or) specify a new data store. Click [HERE](#) to suggest new copy sources or give comments.

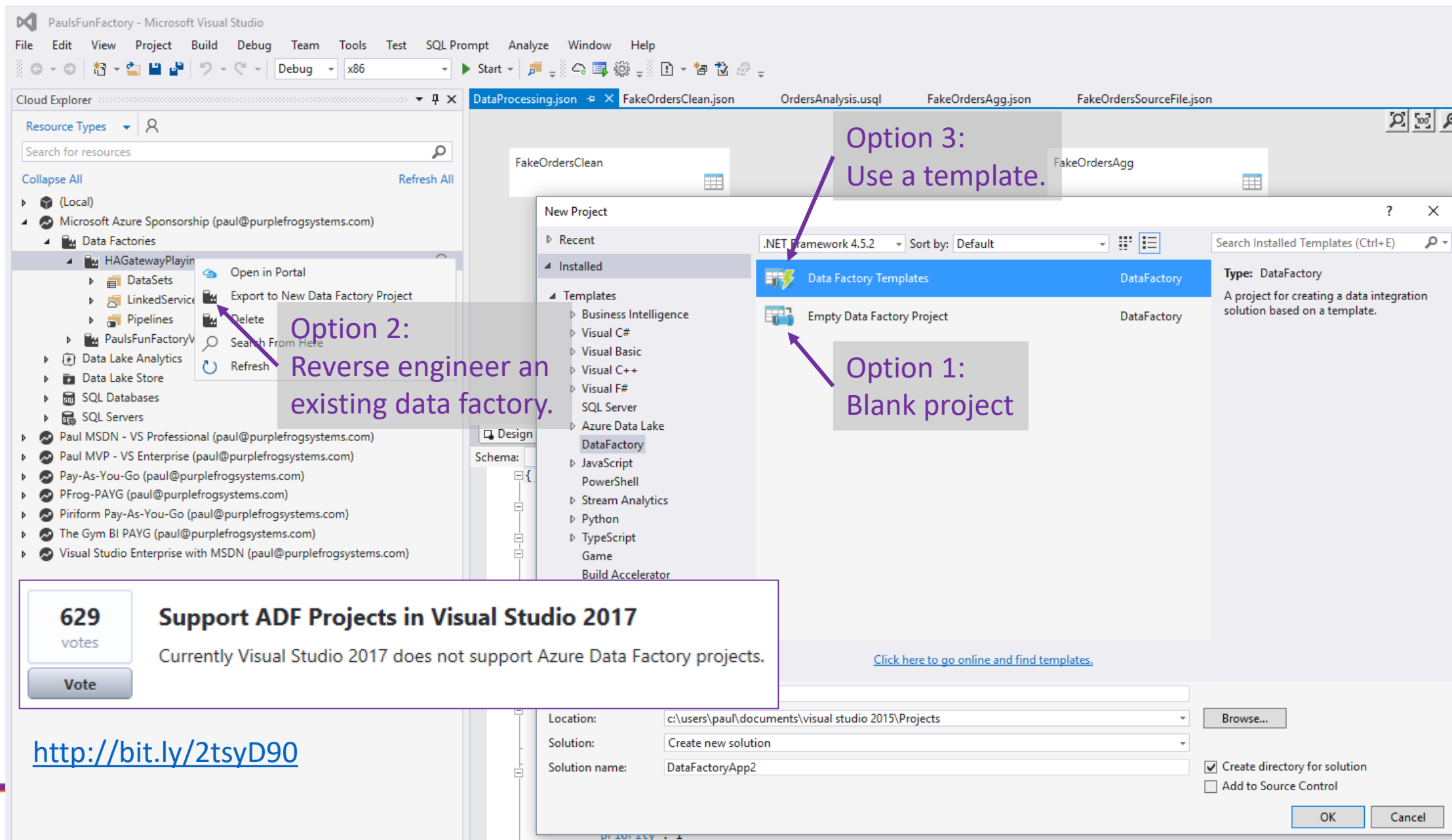
NO!

FROM EXISTING CONNECTIONS CONNECT TO A DATA STORE

						
Amazon Redshift	Amazon S3	Azure Blob Storage	Azure Data Lake Store	Azure DocumentDB	Azure SQL Database	Azure SQL Data Warehouse
						
Azure Table Storage	Cassandra	DB2	File System	FTP	HDFS	MongoDB



Use Visual Studio 2015



PaulsFunFactory - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test SQL Prompt Analyze Window Help

Cloud Explorer

Resource Types

Search for resources

Collapse All Refresh All

(Local)

Microsoft Azure Sponsorship (paul@purplefrogsystems.com)

Data Factories

HAGatewayPlayin

DataSets

LinkedService

Pipelines

PaulsFunFactoryV

Data Lake Analytics

Data Lake Store

SQL Databases

SQL Servers

Paul MSDN - VS Professional (paul@purplefrogsystems.com)

Paul MVP - VS Enterprise (paul@purplefrogsystems.com)

Pay-As-You-Go (paul@purplefrogsystems.com)

PFrog-PAYG (paul@purplefrogsystems.com)

Piriform Pay-As-You-Go (paul@purplefrogsystems.com)

The Gym BI PAYG (paul@purplefrogsystems.com)

Visual Studio Enterprise with MSDN (paul@purplefrogsystems.com)

Open in Portal

Export to New Data Factory Project

Delete

Search From Here

Refresh

New Project

Recent

Installed

Templates

Business Intelligence

Visual C#

Visual Basic

Visual C++

Visual F#

SQL Server

Azure Data Lake

DataFactory

JavaScript

PowerShell

Stream Analytics

Python

TypeScript

Game

Build Accelerator

.NET Framework 4.5.2

Sort by: Default

Search Installed Templates (Ctrl+E)

Data Factory Templates

Empty Data Factory Project

Type: DataFactory

A project for creating a data integration solution based on a template.

Option 3: Use a template.

Option 2: Reverse engineer an existing data factory.

Option 1: Blank project

629 votes

Support ADF Projects in Visual Studio 2017

Currently Visual Studio 2017 does not support Azure Data Factory projects.

Vote

<http://bit.ly/2tsyD90>

Location: c:\users\paul\documents\visual studio 2015\Projects

Solution: Create new solution

Solution name: DataFactoryApp2

Browse...

☒ Create directory for solution

☐ Add to Source Control

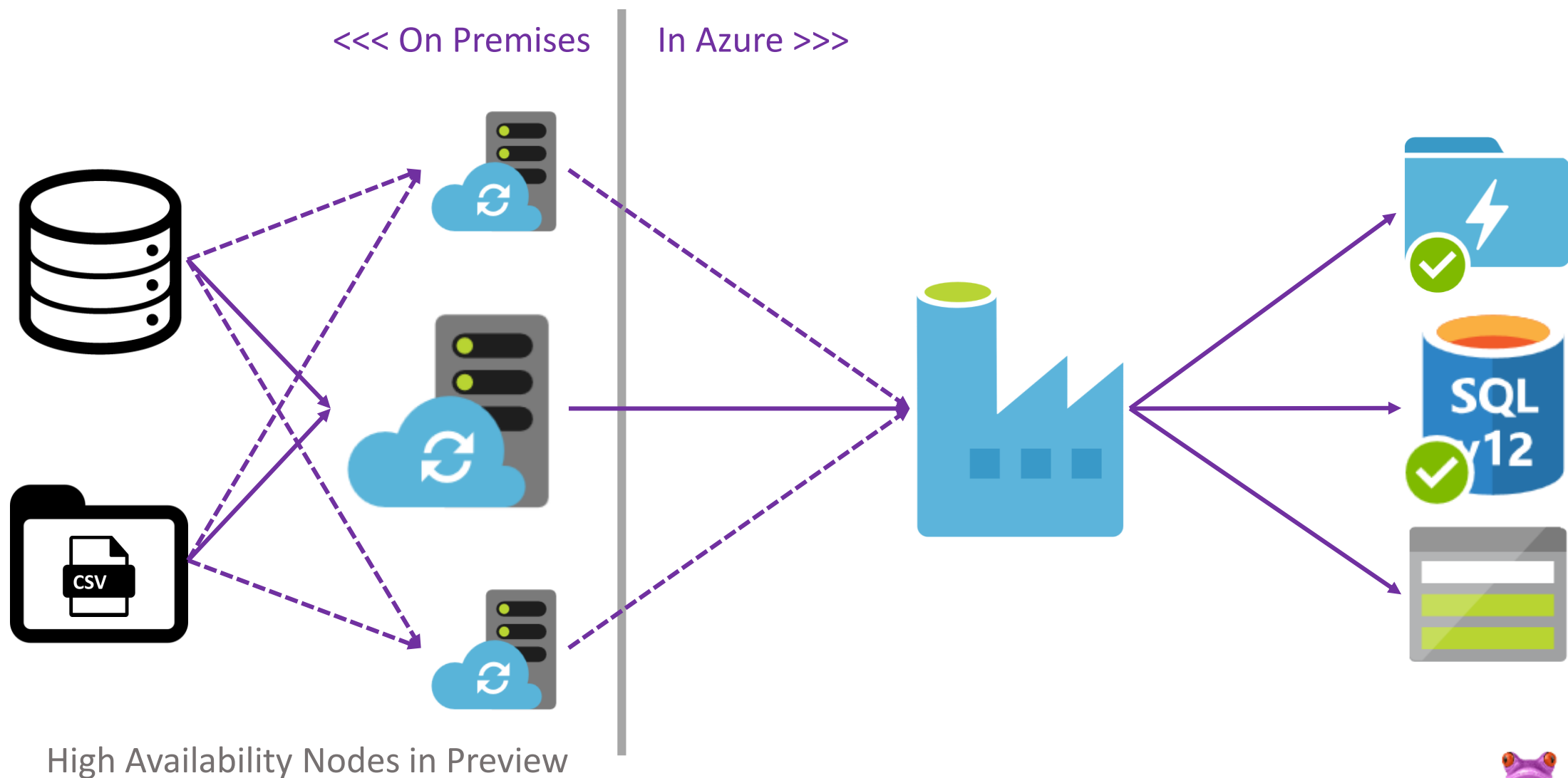
OK Cancel

Visual Studio
2015

Visual Studio
2017

The Data Management Gateway

... nothing to do with Power BI.



High Availability Nodes in Preview



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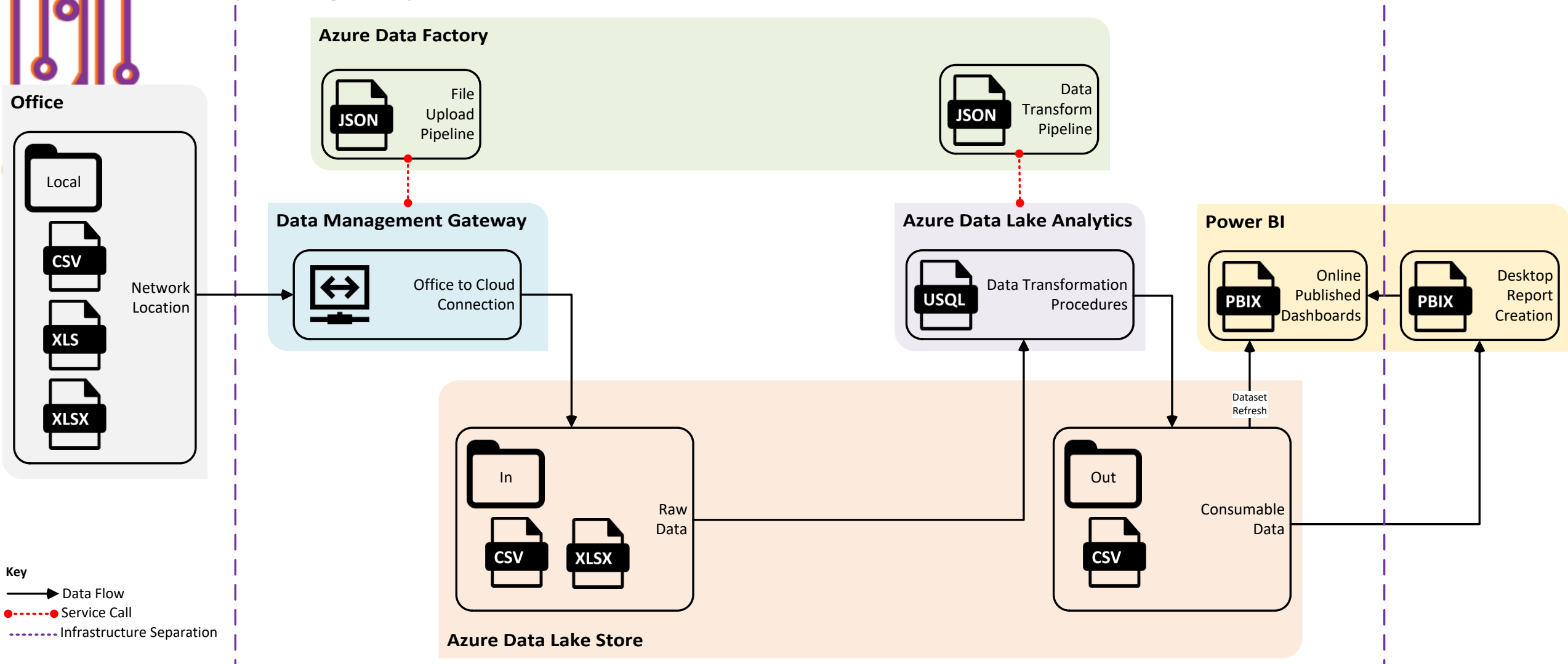


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Use Case Example One

A Purple Frog Story



* ELT – Extract Load Transform



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Demo Time



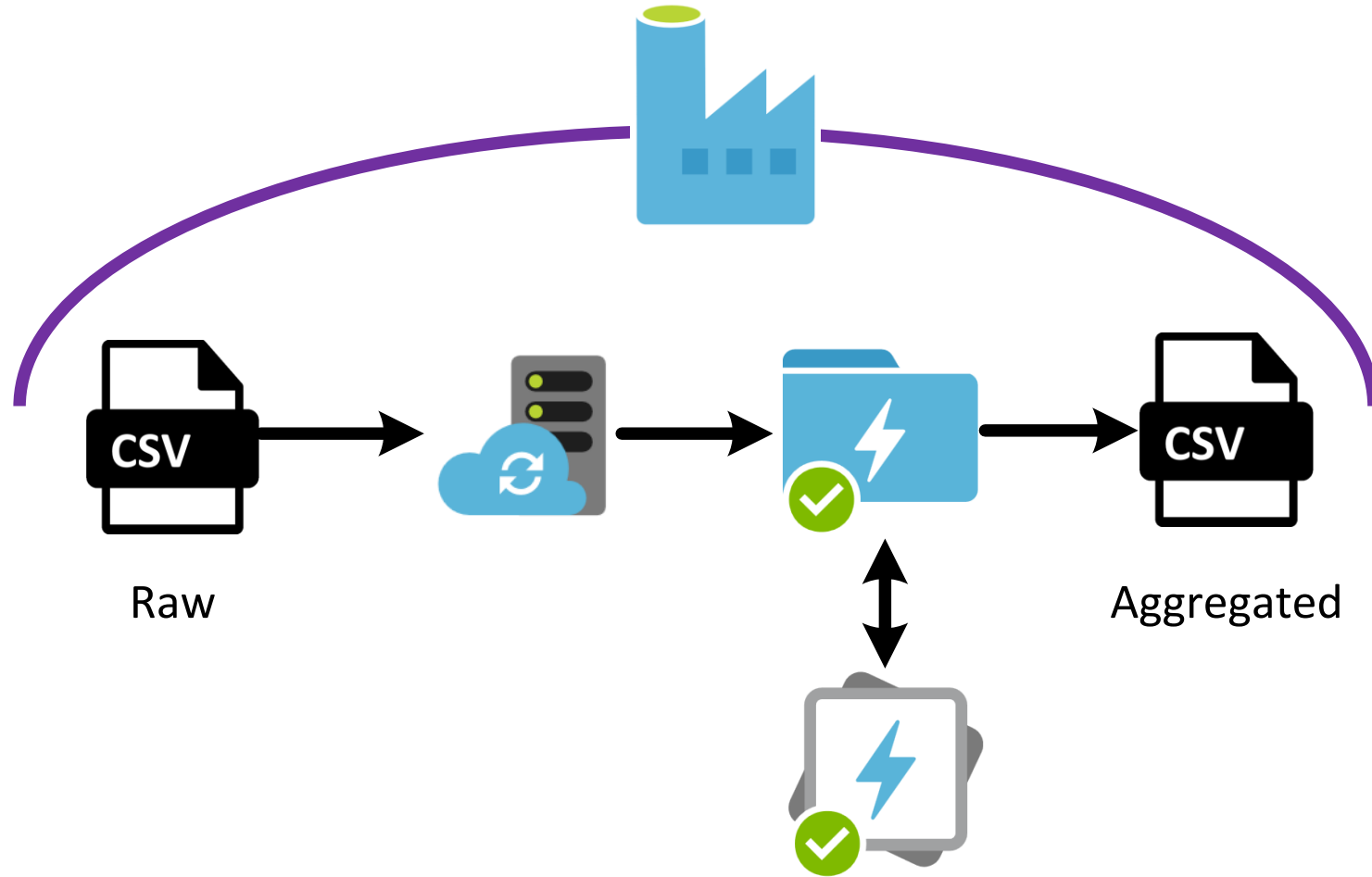
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Demo Architecture Version 1



A decorative graphic consisting of several vertical and horizontal lines in a light blue color, resembling a circuit board or a stylized tree structure. The lines are thin and have a slight shadow effect.

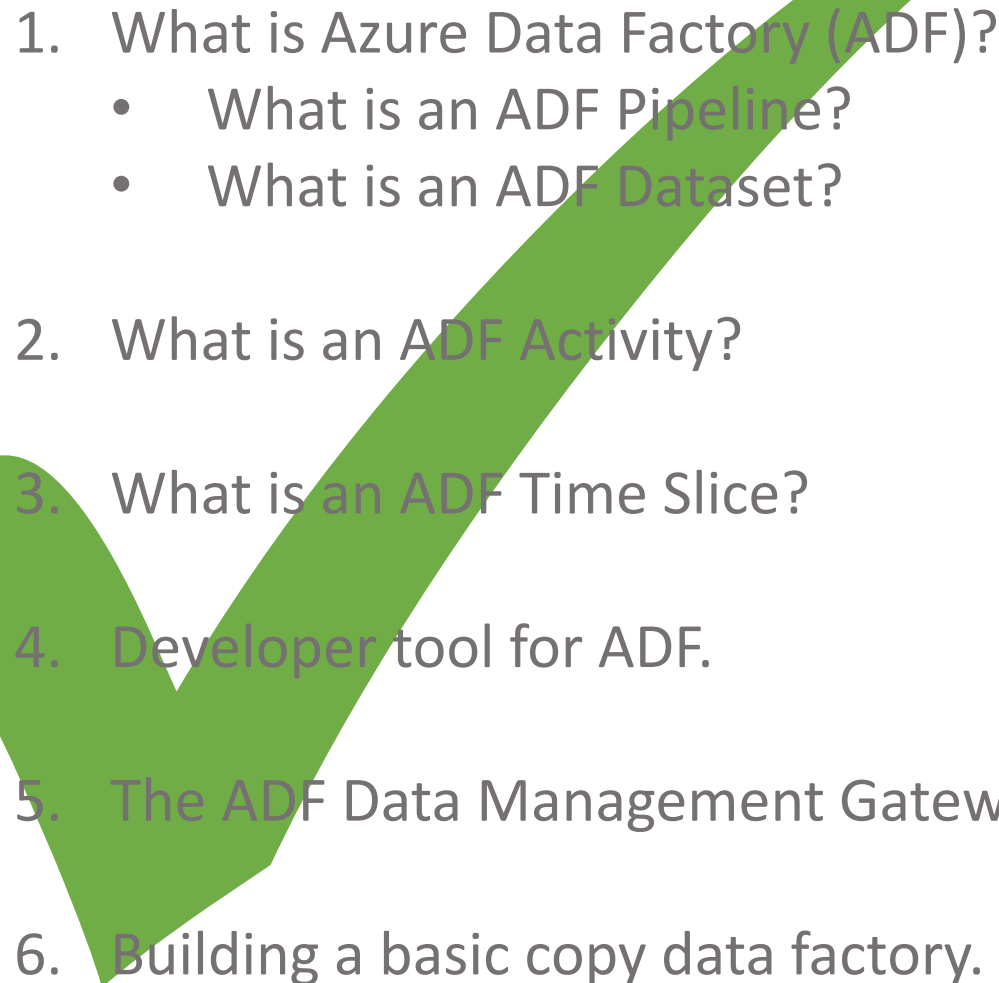
Reading Data Tables, Page 2





Session Agenda

Part 1

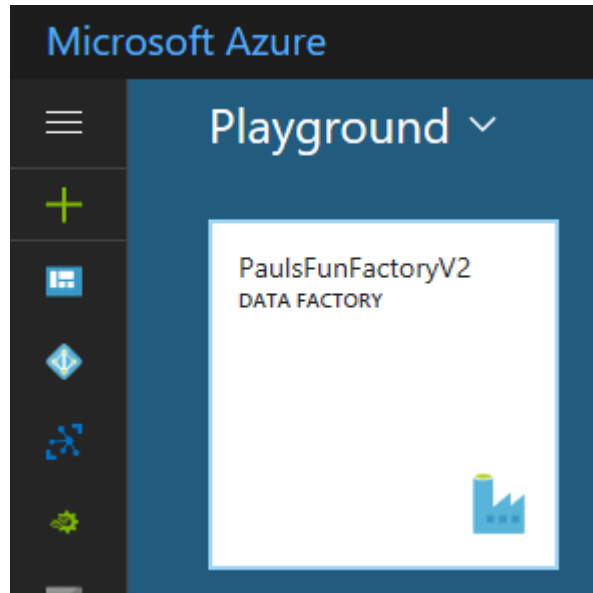
1. What is Azure Data Factory (ADF)?
 - What is an ADF Pipeline?
 - What is an ADF Dataset?
 2. What is an ADF Activity?
 3. What is an ADF Time Slice?
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 5. The ADF Data Management Gateway.
 6. Building a basic copy data factory.
- 

Part 2

7. What is a ADF Custom Activity?
8. Creating a custom activity.
9. Using Visual Studio ADF config files.
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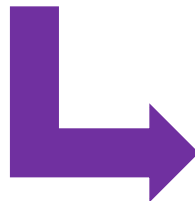


What is an ADF Custom Activity?



Blog post:

<https://www.purplefrogsystems.com/paul/2016/11/creating-azure-data-factory-custom-activities/>



```
{  
  "$schema": "http://datafactories.schema  
  "name": "CustomActivity01",  
  "properties": {  
    "description": "Going Beyond!",  
    "activities": [  
      {  
        "name": "The DLL Eater",  
        "type": "DotNetActivity",  
        "inputs": [  
          {  
            "name": "Input1",  
            "type": "String",  
            "defaultValue": "Input1",  
            "isOptional": true  
          },  
          {  
            "name": "Input2",  
            "type": "String",  
            "defaultValue": "Input2",  
            "isOptional": true  
          }  
        ]  
      }  
    ]  
  }  
}
```



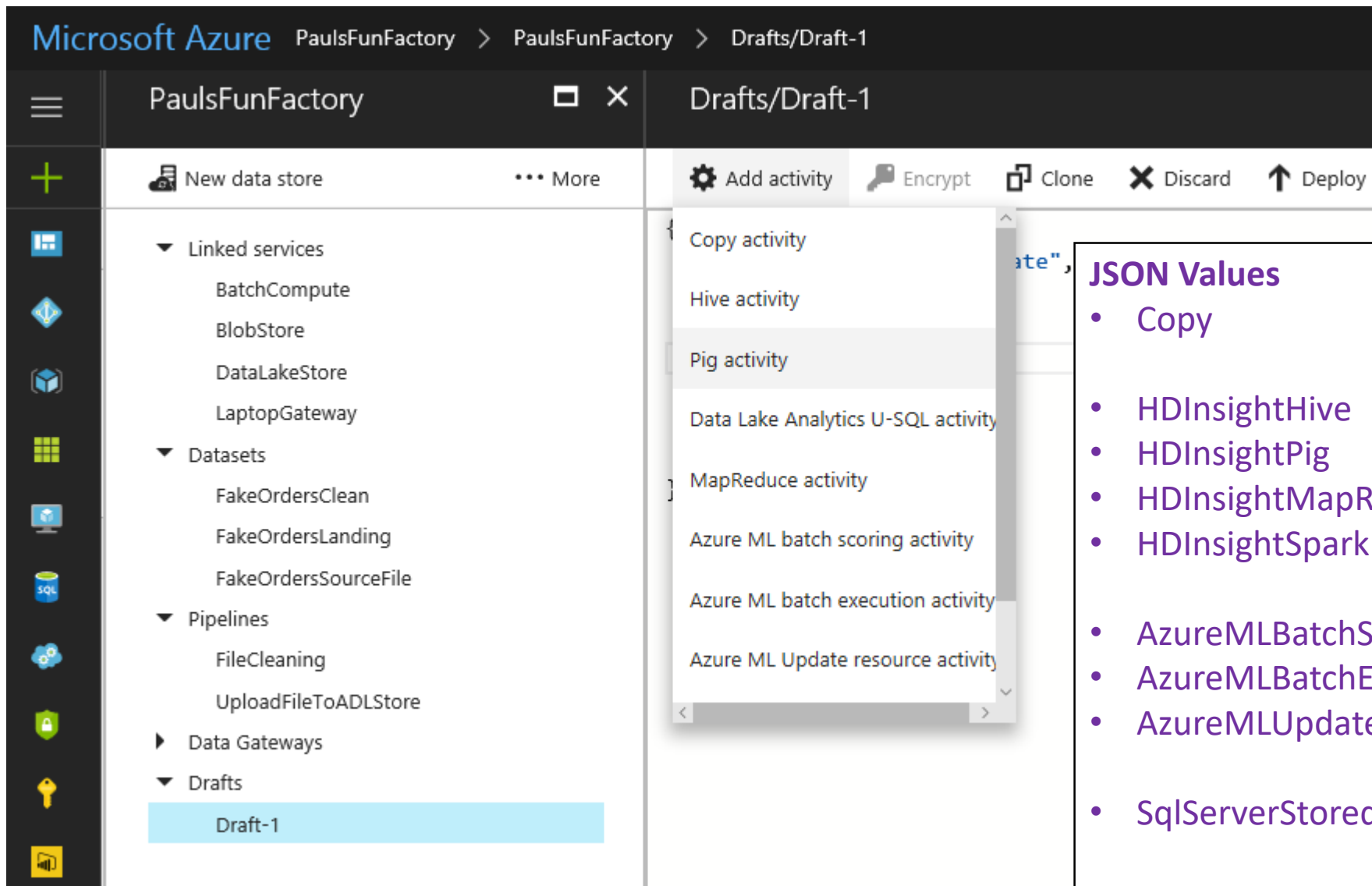
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How to Create an ADF Custom Activity?



Microsoft Azure PaulsFunFactory > PaulsFunFactory > Drafts/Draft-1

PaulsFunFactory Drafts/Draft-1

New data store ... More

Add activity Encrypt Clone Discard Deploy

Copy activity

Hive activity

Pig activity

Data Lake Analytics U-SQL activity

MapReduce activity

Azure ML batch scoring activity

Azure ML batch execution activity

Azure ML Update resource activity

Linked services

- BatchCompute
- BlobStore
- DataLakeStore
- LaptopGateway

Datasets

- FakeOrdersClean
- FakeOrdersLanding
- FakeOrdersSourceFile

Pipelines

- FileCleaning
- UploadFileToADLStore

Data Gateways

Drafts

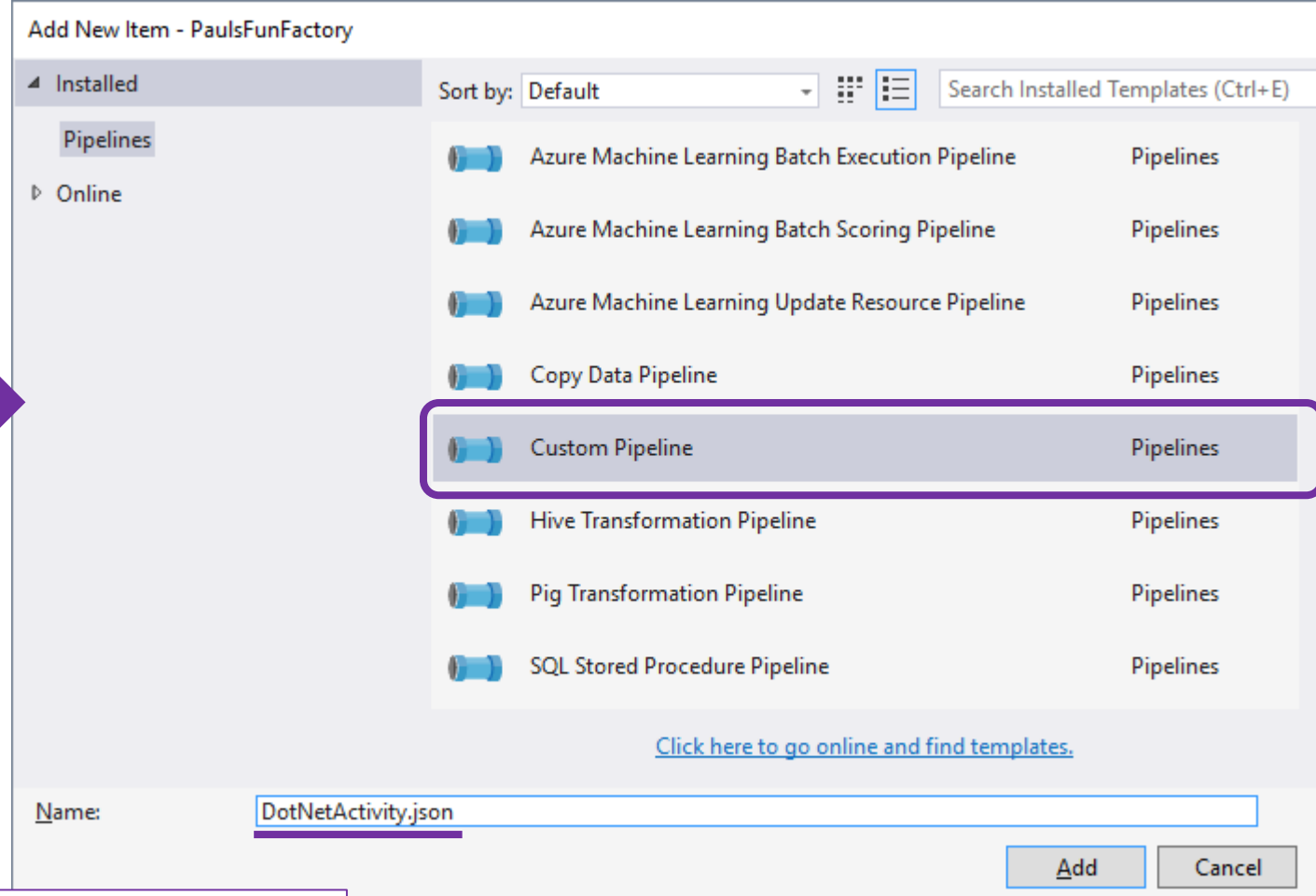
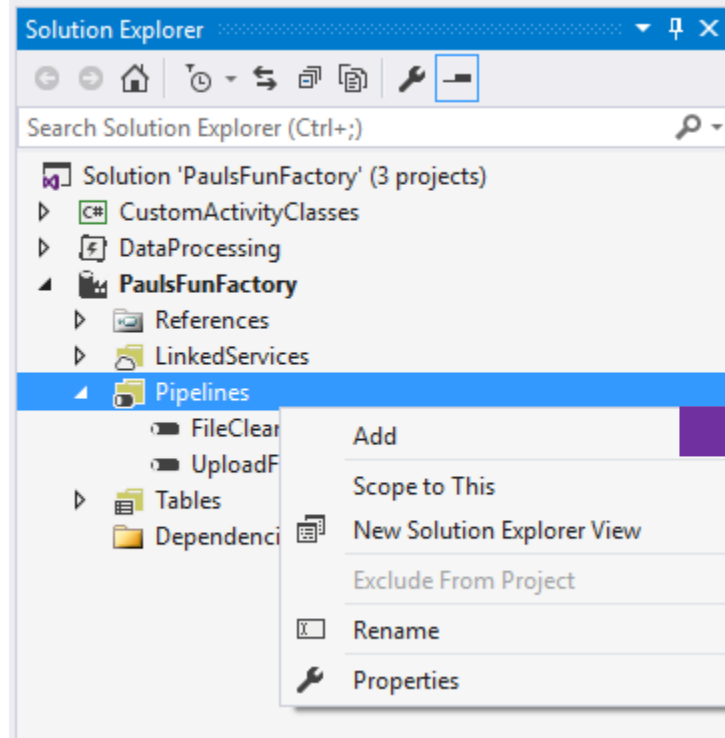
- Draft-1

JSON Values

- Copy
- HDInsightHive
- HDInsightPig
- HDInsightMapReduce
- HDInsightSpark
- AzureMLBatchScoring
- AzureMLBatchExecution
- AzureMLUpdateResource
- SqlServerStoredProcedure
- DataLakeAnalyticsU-SQL



How to Create an ADF Custom Activity?



<http://bit.ly/2tsyD90>

629

votes

Vote

Support ADF Projects in Visual Studio 2017

Currently Visual Studio 2017 does not support Azure Data Factory projects.



ADF Custom Activity Properties

```
{
  "$schema": "http://datafactories.schema.management.azure.com/schemas/2015-09-01/Microsoft.DataFactory.Pipeline.json",
  "name": "CustomActivity01",
  "properties": {
    "description": "Going Beyond!",
    "activities": [
      {
        "name": "The DLL Eater",
        "type": "DotNetActivity",
        "linkedServiceName": "BatchServiceCompute",
        "inputs": [
          {
            "name": "File1ADFStore"
          }
        ],
        "outputs": [
          {
            "name": "File1Cleaned"
          }
        ],
        "typeProperties": {
          "assemblyName": "The compiled class library DLL name.",
          "entryPoint": "The namespace and class to instantiate.",
          "packageLinkedService": "The blob storage account where the zipped up DLLs live.",
          "packageFile": "The blob storage container and zip file name.",
          "extendedProperties": {
            "TimeSliceStart": "$Text.Format('{0:yyyyMMdd}', SliceStart)"
          }
        }
      }
    ]
  }
}
```

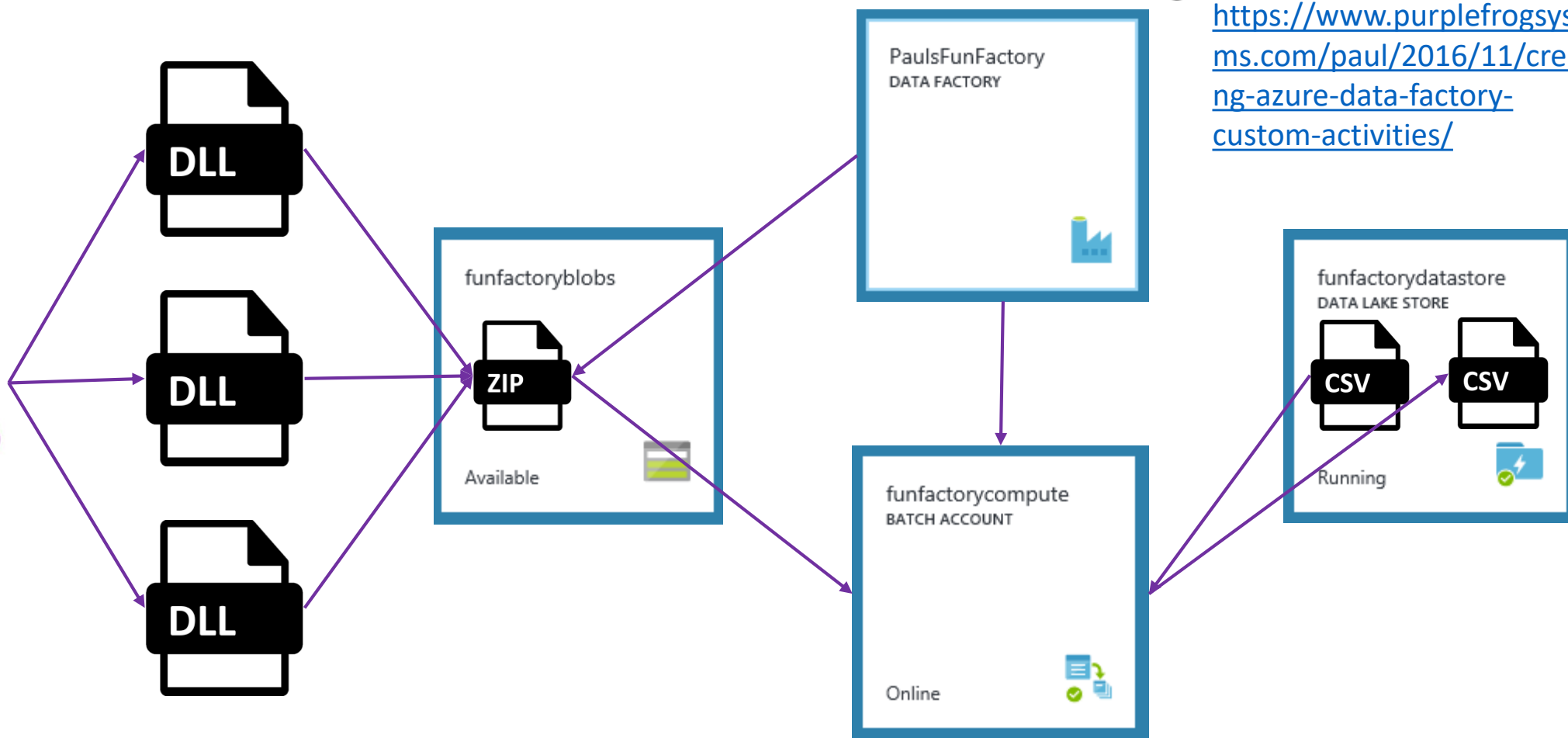


Developing an ADF Custom Activity End to End



Blog post:

<https://www.purplefrogssystems.com/paul/2016/11/creating-azure-data-factory-custom-activities/>



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[purplefrogssystems.com/paul](https://www.purplefrogssystems.com/paul)

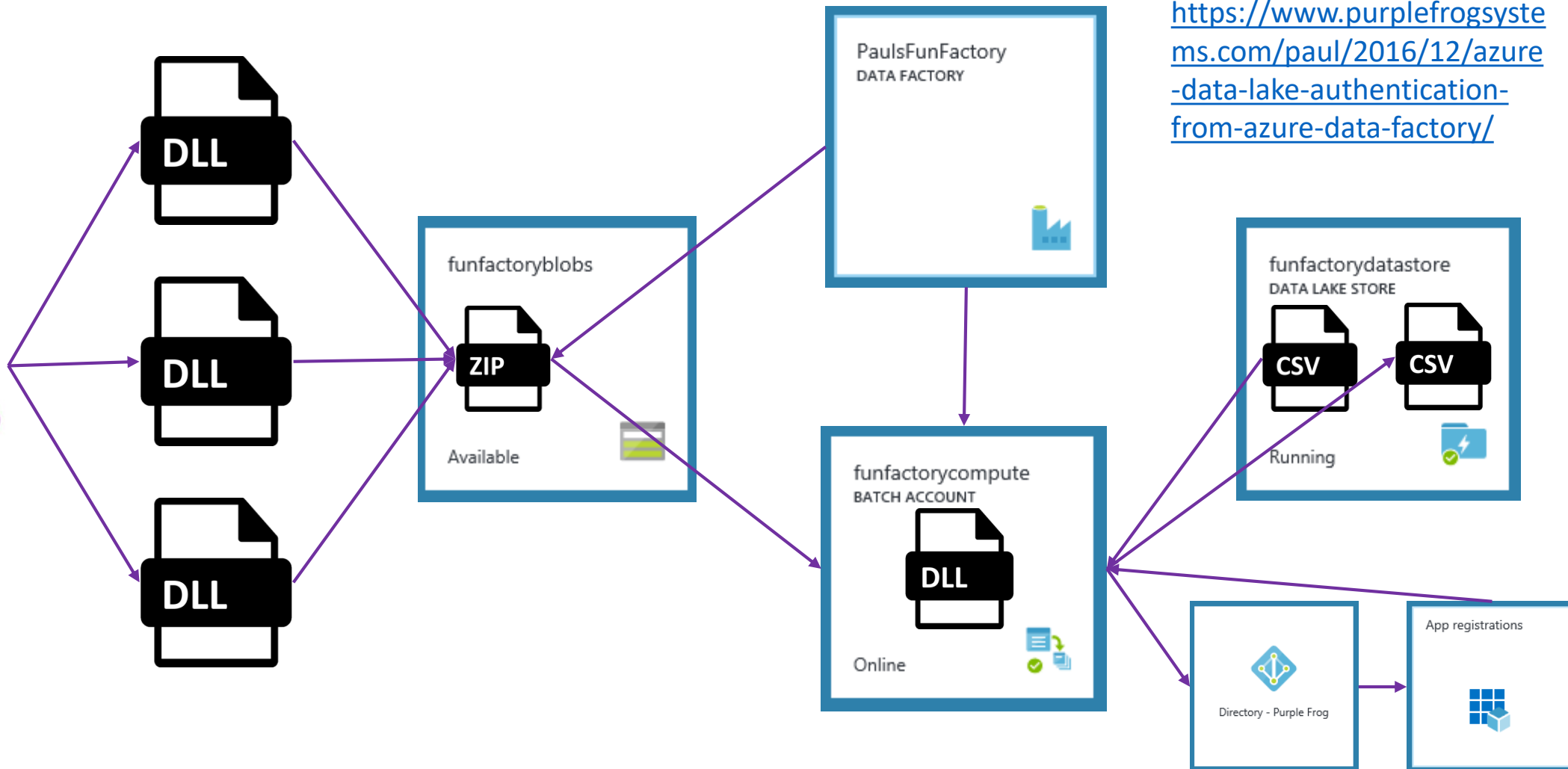


Developing an ADF Custom Activity End to End with Authentication



Blog post:

<https://www.purplefrogsystems.com/paul/2016/12/azure-data-lake-authentication-from-azure-data-factory/>



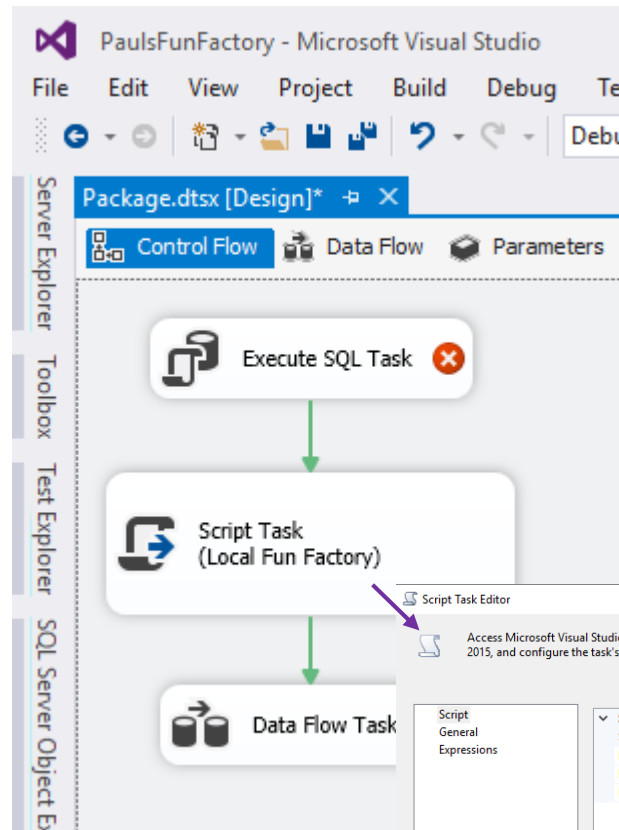
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ADF Custom Activity vs SSIS Control Flow Script Task



Script Task Editor

Access Microsoft Visual Studio Tools for Applications (VSTA) to write scripts using the Visual Basic 2015 or Visual C# 2015, and configure the task's properties.

Script	ScriptLanguage
EntryPoint	Microsoft Visual C# 2015
ReadOnlyVariables	
ReadWriteVariables	

ScriptLanguage
Specifies the programming language used by the script.

Edit Script...

OK Cancel Help

VstaProjects - Microsoft Visual Studio

ScriptMain.cs

```
namespace ST_1a6c1a8d9b364e77a9be0441e512f8ff
{
    /// <summary>
    /// ScriptMain is the entry point class of the script
    /// or parent of this class.
    /// </summary>
    [Microsoft.SqlServer.Dts.Tasks.ScriptTask.SSISScriptTask]
    0 references
    public partial class ScriptMain : Microsoft.SqlServer.Dts.Tasks.ScriptTask.SSISScriptTask
    {
        Help: Using Integration Services variables
        Help: Firing Integration Services events from
        Help: Using Integration Services connection

        /// <summary>
        /// This method is called when this script task is executed.
        /// Before returning from this method, set the Dts.TaskResult
        /// To open Help, press F1.
        /// </summary>
        0 references
        public void Main()
        {
            // TODO: Add your code here

            Dts.TaskResult = (int)ScriptResults.Success;
        }
    }
}
```

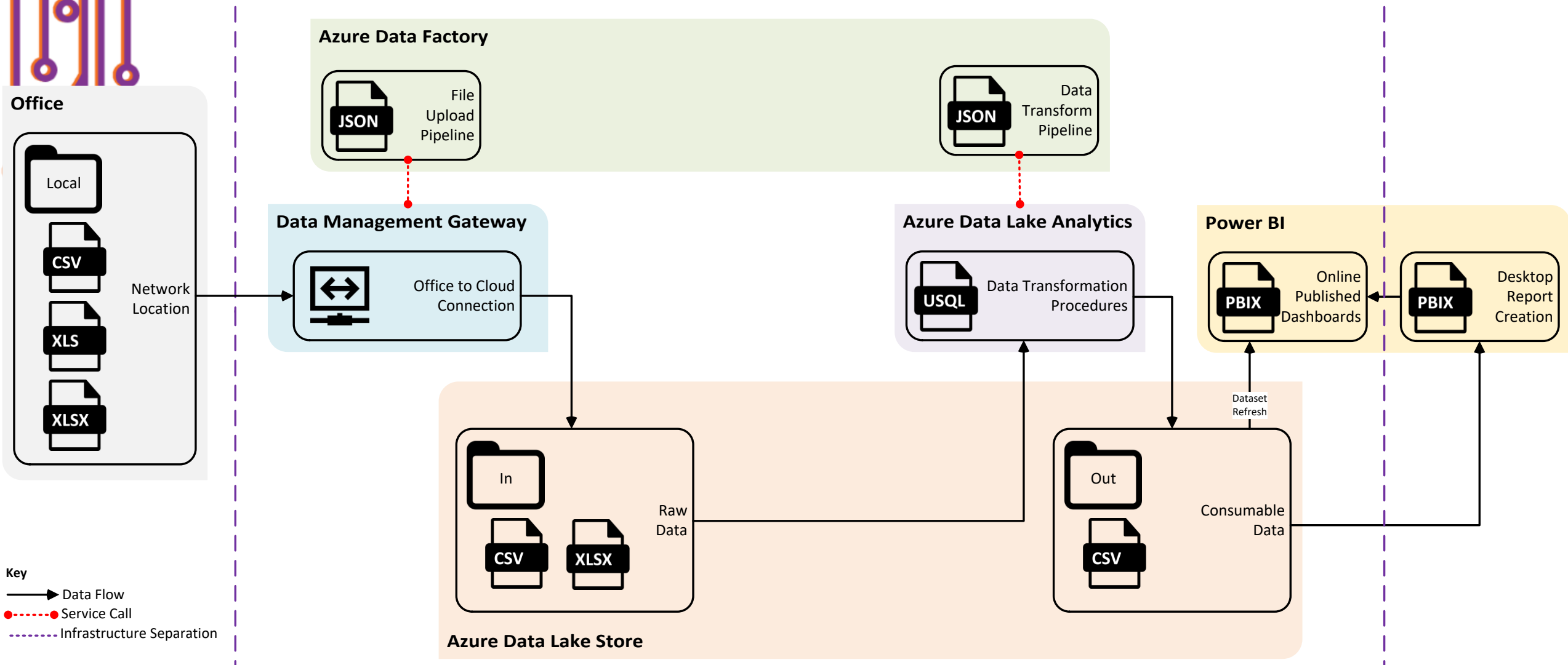
Solution Explorer

Solution 'VstaProjects' (1 project)

- ST_1a6c1a8d9b364e77a9be0441e512f8ff
- Properties
- References
- ScriptTask
- ScriptMain.cs



Why do we need an ADF Custom Activity? Example One (Before)



* ELT – Extract Load Transform



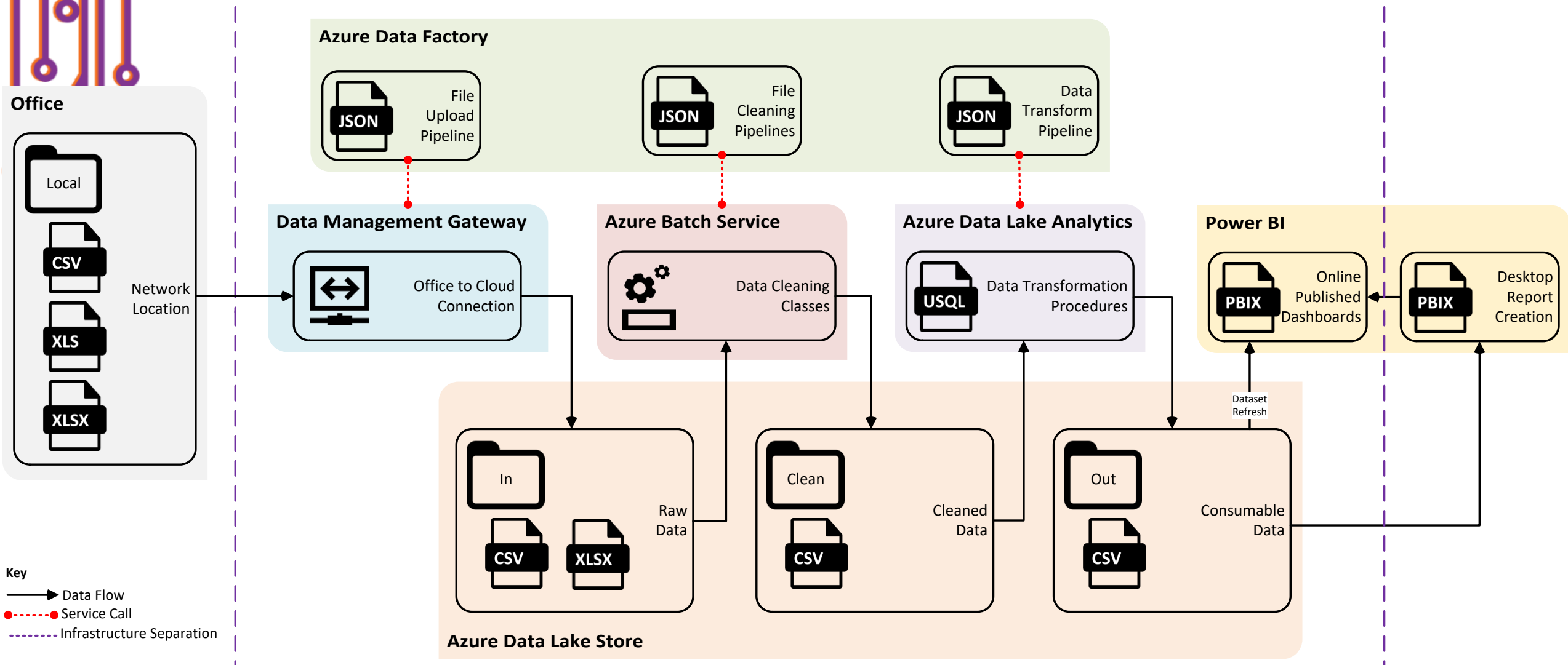
@mrpaulandrew



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Why do we need an ADF Custom Activity? Example One (After)



* ECLT – Extract Clean Load Transform



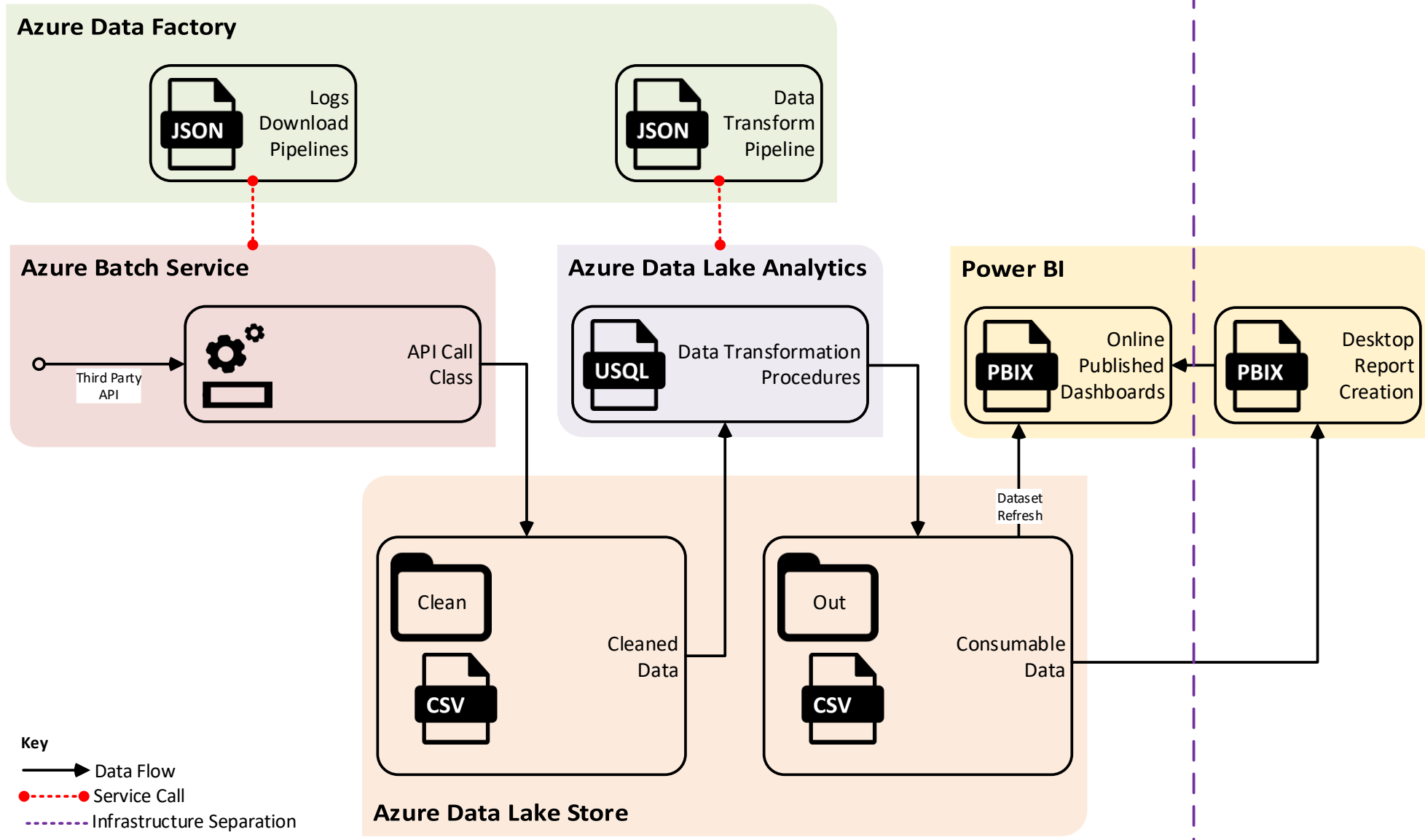
@mrpaulandrew



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Why do we need an ADF Custom Activity? Example Two



Demo Time



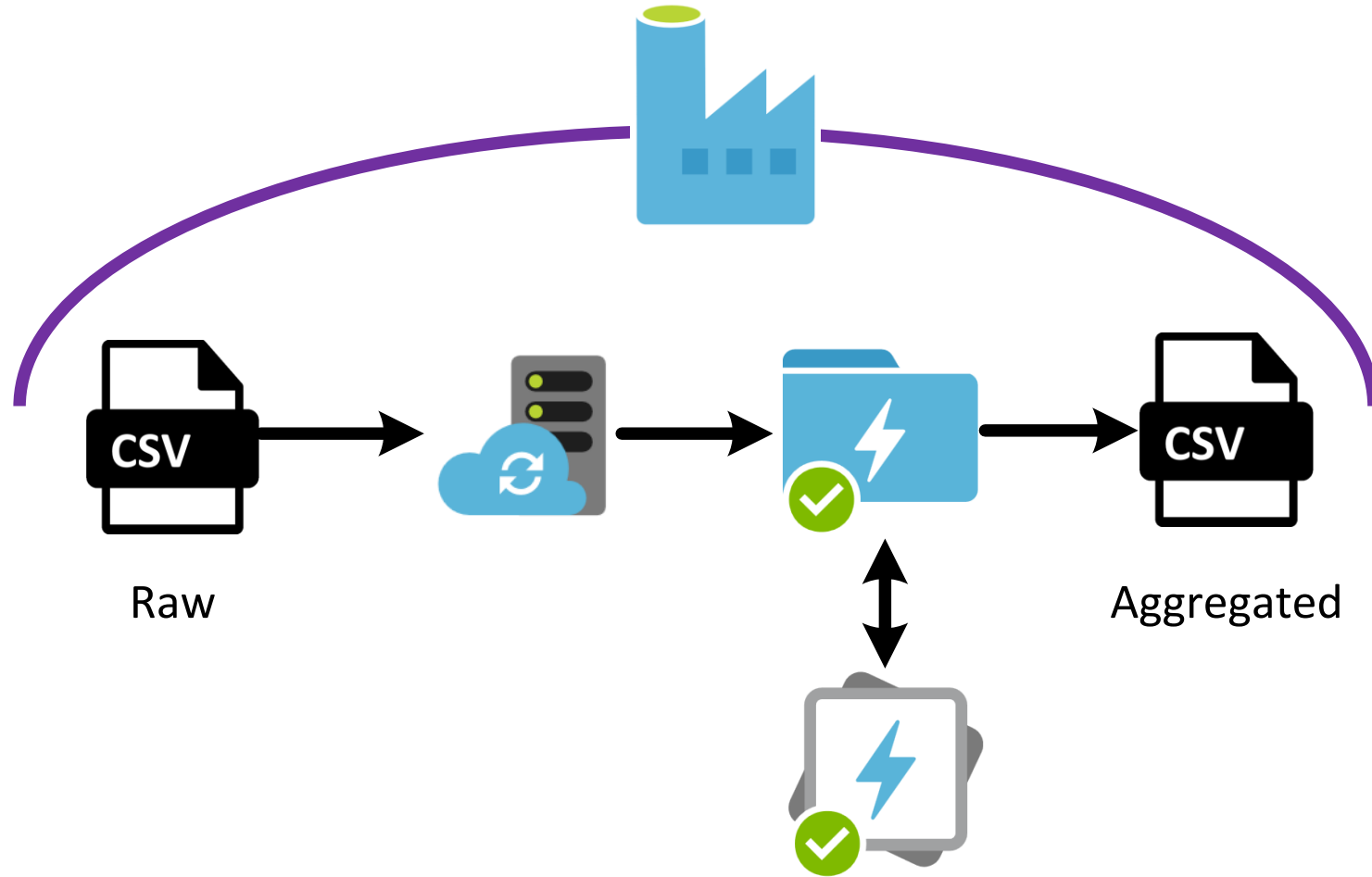
@mrpaulandrew



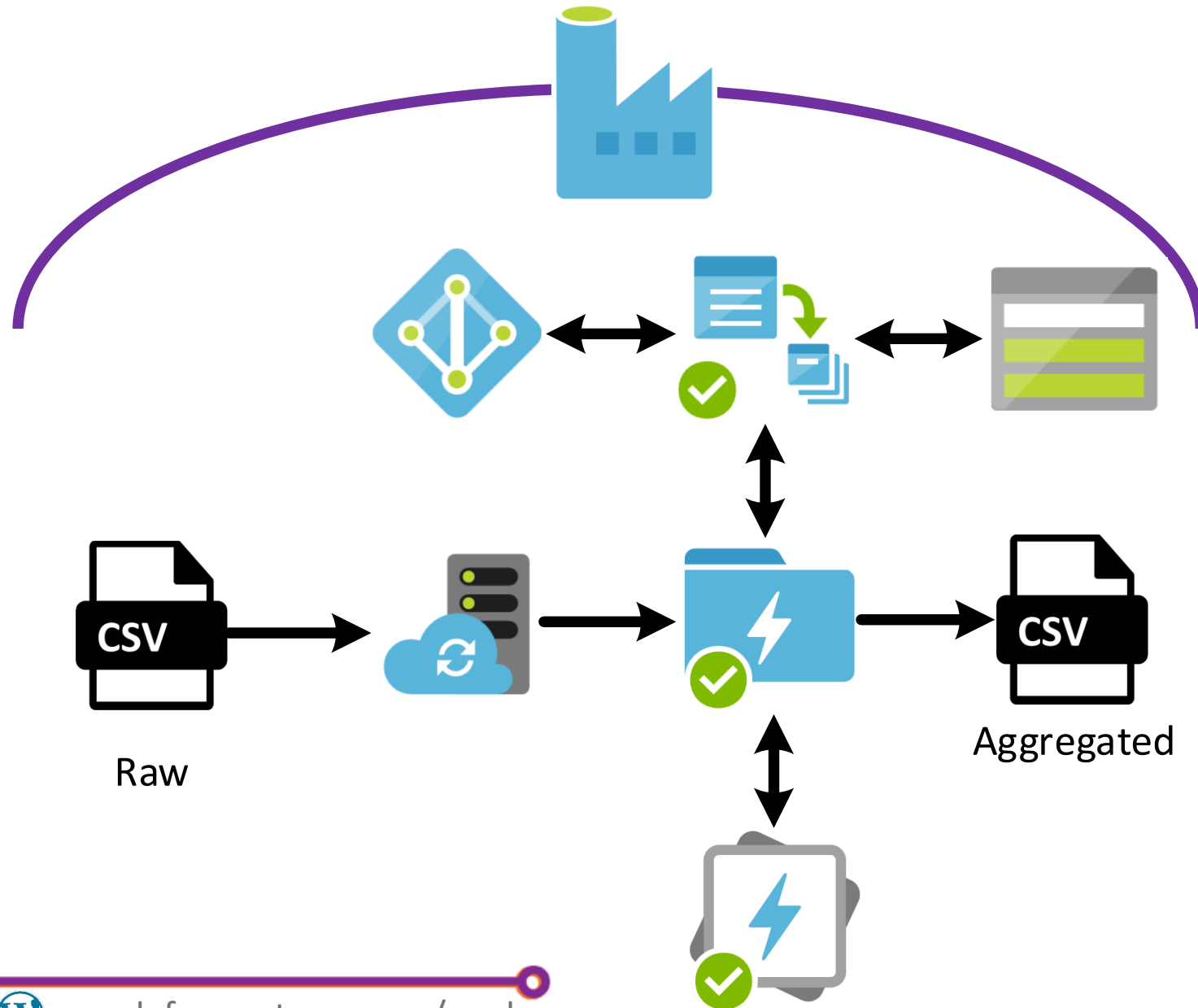
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Demo Architecture Version 1



Demo Architecture Version 2

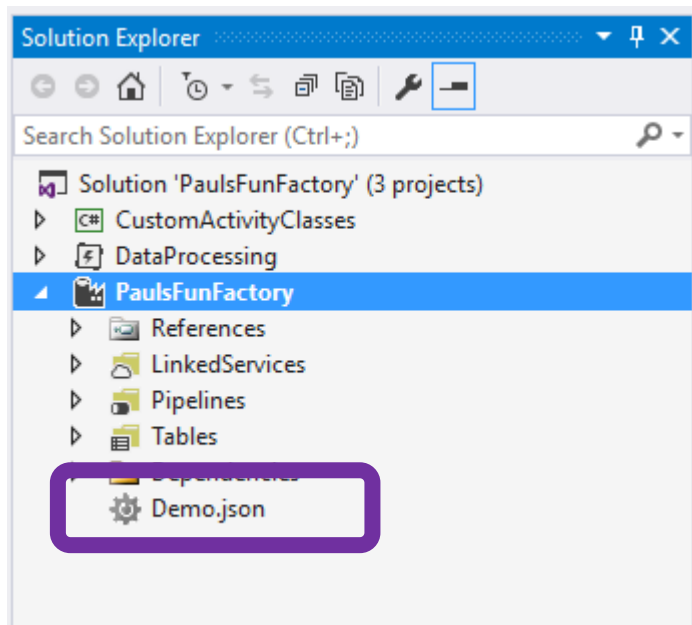
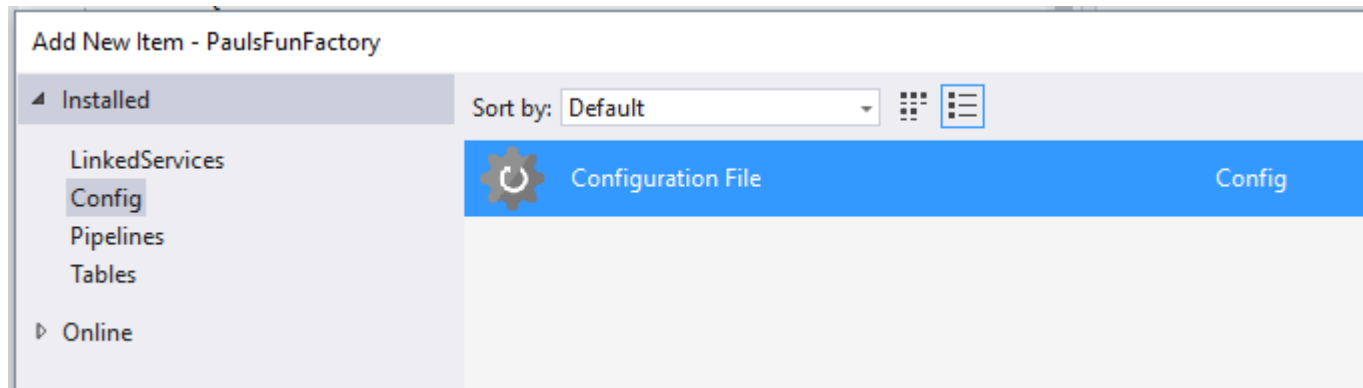


Visual Studio Configuration Files for ADF

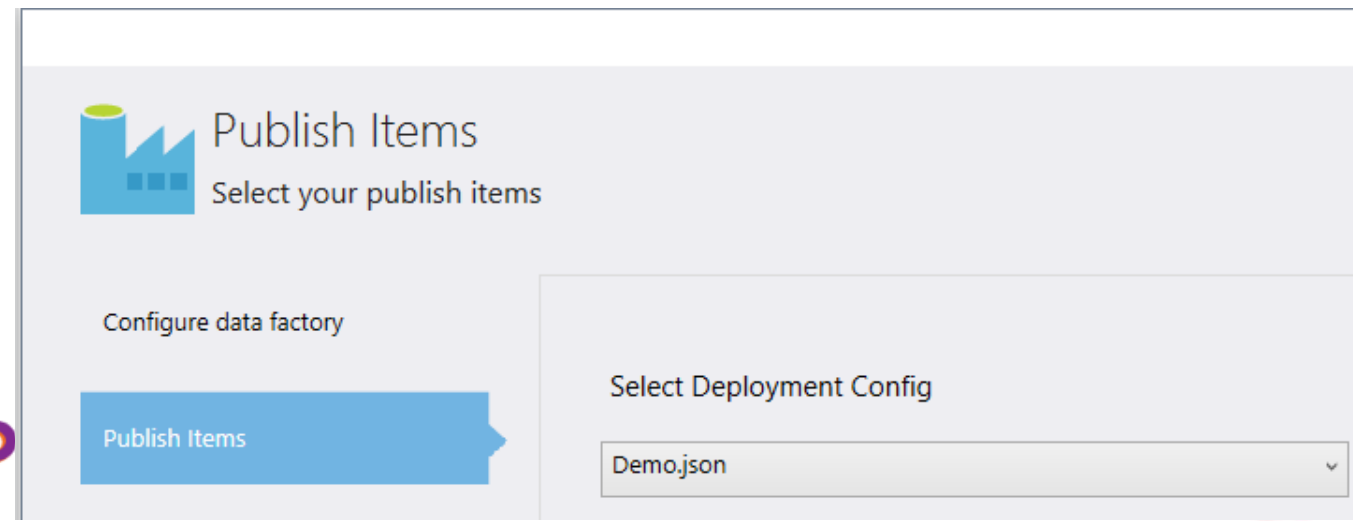


Blog post:

<https://www.purplefrogsystems.com/paul/2017/01/using-azure-data-factory-configuration-files/>



```
{
  "$schema": "",
  "<Table/Pipeline/LinkedService name>": [
    {
      "name": "$.JPath", //i.e $.properties.connectionString
      "value": "<value>"
    }
  ]
}
```



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Visual Studio Configuration Files for ADF

//Linked Service:

```
{
  "name": "DataLakeStore",
  "properties": {
    "type": "AzureDataLakeStore",
    "typeProperties": {
      "accountName": "<get from config file>",
      "resourceGroupName": "<get from config file>"
    }
  }
}
```

//Config:

```
{
  "DataLakeStore": [
    {
      "name": "$.properties.typeProperties.accountName",
      "value": "ccleanerdatalake01"
    },
    {
      "name": "$.properties.typeProperties.resourceGroupName",
      "value": "CCleaner"
    }
  ]
}
```

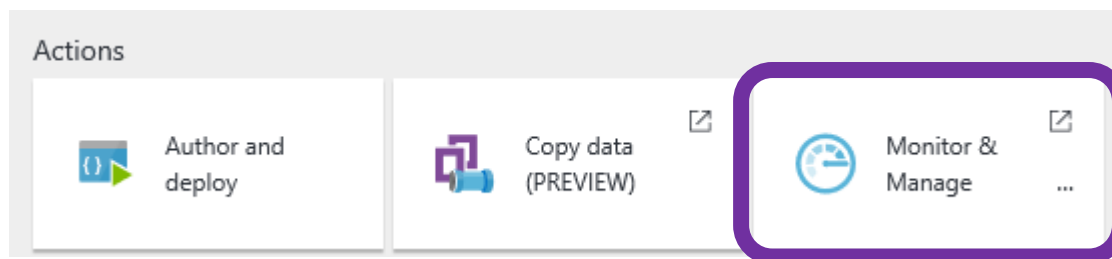


Blog post:

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Monitoring, Management and Alerting



Data factory

RESOURCE EXPLORER

- Data Factories
 - PaulsFunFactory
 - Pipelines
 - UploadFileToADLStore
 - Datasets
 - FakeOrdersLanding
 - FakeOrdersSourceFile
 - Linked services
 - BlobStore
 - DataLakeStore
 - LaptopGateway
 - Gateways
 - LaptopDemo

PaulsFunFactory

Start time (UTC): 01/29/2017 03:17 am End time (UTC): 02/06/2017 03:17 am Apply

Diagram: FakeOrdersSourceFile (FILESHARE) → UploadFileToADLStore PIPELINE (1 activities) → FakeOrdersLanding (FREQ: MONTH INTVL: 1, AZURE DATA LAKE...)

ACTIVITY WINDOWS

No filter applied. Last refreshed a few seconds ago.

Pipeline	Activity	Window Star...	Window End...	Status	Type	Last Attempt...	Last Attempt...	Duration	Retry Attem...
UploadFile...	FakeOrdersC...	01/01/2017 1...	02/01/2017 1...	Waiting: Ac	Copy	--	--	--	1

Activity Window Explorer

2017

Jan Feb Mar
Apr May Jun
Jul Aug Sep
Oct Nov Dec

01/01/2017 12:00 AM UTC - 02/01/2017 12:00 A...

Activity Window

Start & End Time
01/01/2017 12:00 AM UTC - 02/01/2017 12:00 AM

Status



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PowerShell

<https://docs.microsoft.com/en-us/powershell/resourcemanager/azurerm.datafactories/v2.5.0/azurerm.datafactories>

[Remove-AzureRmDataFactory](#)

[Set-AzureRmDataFactorySliceStatus](#)

[Set-AzureRmDataFactoryGateway](#)

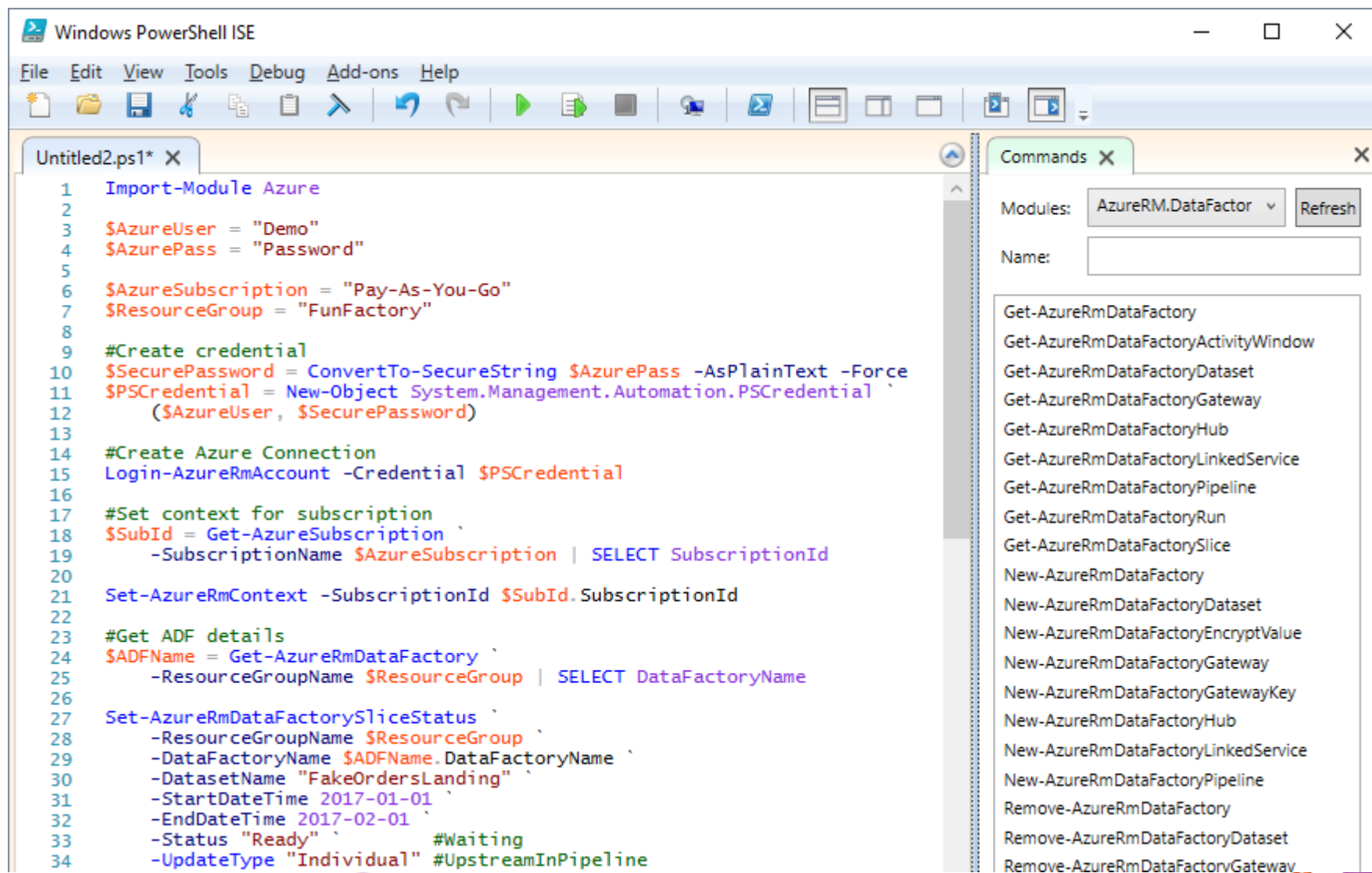
[Get-AzureRmDataFactoryActivityWindow](#)

[Get-AzureRmDataFactorySlice](#)

[Get-AzureRmDataFactoryRun](#)

[Resume-AzureRmDataFactoryPipeline](#)

[Suspend-AzureRmDataFactoryPipeline](#)



The screenshot shows the Windows PowerShell ISE interface. The main editor window displays a PowerShell script for managing Azure Data Factory resources. The script includes commands for importing the Azure module, setting credentials, creating a connection, and setting the context for a specific subscription. It then lists several cmdlets for interacting with Data Factories, such as Get-AzureRmDataFactory, Set-AzureRmDataFactorySliceStatus, and Remove-AzureRmDataFactory. The right-hand pane shows a list of available cmdlets for the AzureRM.DataFactor module.

```
1 Import-Module Azure
2
3 $AzureUser = "Demo"
4 $AzurePass = "Password"
5
6 $AzureSubscription = "Pay-As-You-Go"
7 $ResourceGroup = "FunFactory"
8
9 #Create credential
10 $SecurePassword = ConvertTo-SecureString $AzurePass -AsPlainText -Force
11 $PSCredential = New-Object System.Management.Automation.PSCredential `
12     ($AzureUser, $SecurePassword)
13
14 #Create Azure Connection
15 Login-AzureRmAccount -Credential $PSCredential
16
17 #Set context for subscription
18 $SubId = Get-AzureSubscription `
19     -SubscriptionName $AzureSubscription | SELECT SubscriptionId
20
21 Set-AzureRmContext -SubscriptionId $SubId.SubscriptionId
22
23 #Get ADF details
24 $ADFName = Get-AzureRmDataFactory `
25     -ResourceGroupName $ResourceGroup | SELECT DataFactoryName
26
27 Set-AzureRmDataFactorySliceStatus `
28     -ResourceGroupName $ResourceGroup `
29     -DataFactoryName $ADFName.DataFactoryName `
30     -DatasetName "FakeOrdersLanding" `
31     -StartDateTime 2017-01-01 `
32     -EndDateTime 2017-02-01 `
33     -Status "Ready" `
34     -UpdateType "Individual" #Waiting #UpstreamInPipeline
```

Commands pane:

Modules: AzureRM.DataFactor Refresh

Name:

- Get-AzureRmDataFactory
- Get-AzureRmDataFactoryActivityWindow
- Get-AzureRmDataFactoryDataset
- Get-AzureRmDataFactoryGateway
- Get-AzureRmDataFactoryHub
- Get-AzureRmDataFactoryLinkedService
- Get-AzureRmDataFactoryPipeline
- Get-AzureRmDataFactoryRun
- Get-AzureRmDataFactorySlice
- New-AzureRmDataFactory
- New-AzureRmDataFactoryDataset
- New-AzureRmDataFactoryEncryptValue
- New-AzureRmDataFactoryGateway
- New-AzureRmDataFactoryGatewayKey
- New-AzureRmDataFactoryHub
- New-AzureRmDataFactoryLinkedService
- New-AzureRmDataFactoryPipeline
- Remove-AzureRmDataFactory
- Remove-AzureRmDataFactoryDataset
- Remove-AzureRmDataFactoryGateway



Take Away Points

1. What is Azure Data Factory (ADF)?
 - What is an ADF Pipeline?
 - What is an ADF Dataset?
2. What is an ADF Activity?
3. What is an ADF Time Slice?
4. What is a ADF Custom Activity?
5. Don't fear the ADF diagrams!...

Orchestration tool.

Logical container of work.

Input/output.

Instructions for the service(s) invoked.

Way we control executions.

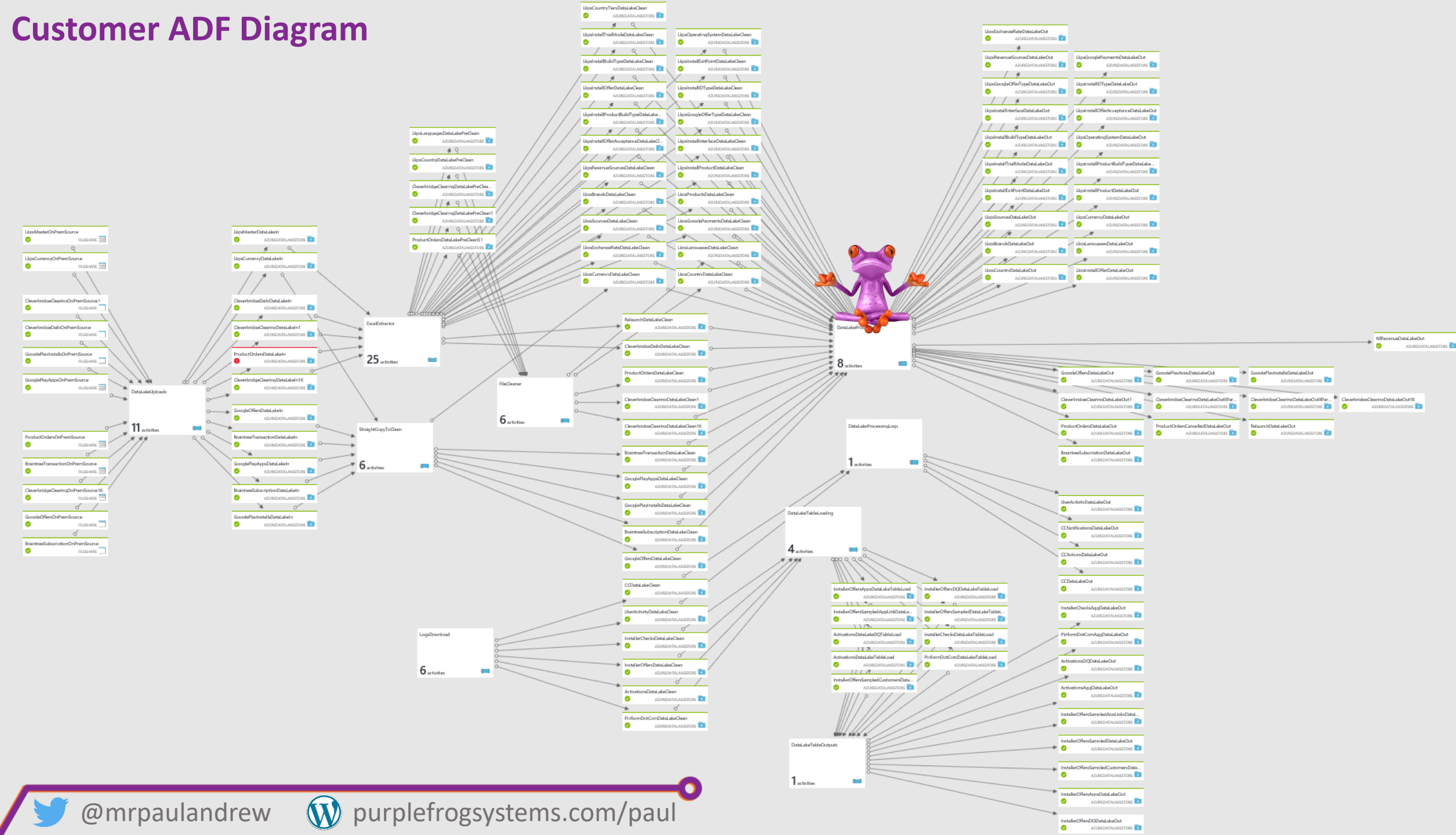
Equal across the time line. Bread!

Extensibility. Call .Net class library.

Compute provided by batch service.



Customer ADF Diagram





Thank You



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