Building a Package



Mike McQuillan
ARCHITECT, DEVELOPER, DATA SPECIALIST

@mcqtech www.mcqtech.com



Building a Package

Assess Data Files

Connection Managers

Containers

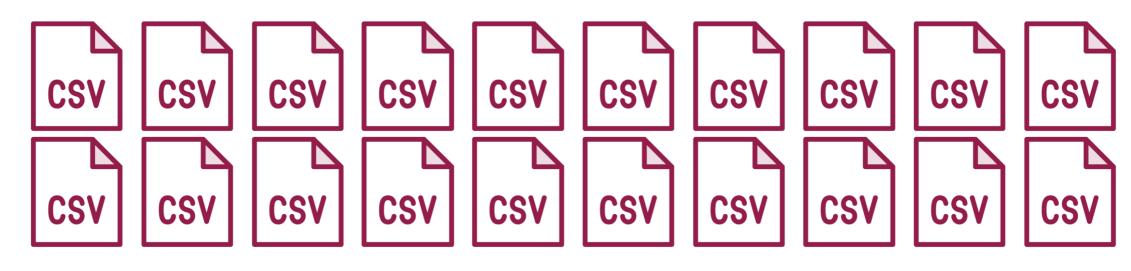
Variables

Parameters



Back from Lunch





Considering Columns



Does the column need to be imported?



What is the column's data type?



Is the column always populated?



Talking to a Colleague





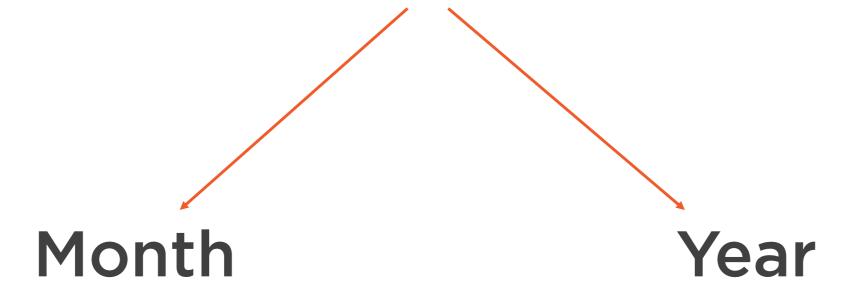
Crime ID





Month Column Split

Month Column





More Colleague Confirmation



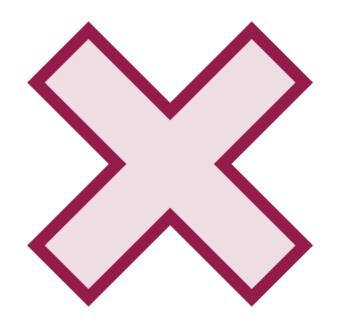


Numeric Month and Year



Last Outcome Category





Value Present

Empty Value



Brilliant Analysis





Migrating SSIS to Azure Data Factory

Migrating SSIS Packages to Azure Data Factory by Ravikiran Srinivasulu Lift and shift your SSIS Packages to the cloud. In this course, you will learn the benefits of cloud migration and how to run, schedule, secure and monitor your SSIS Packages with Azure Data Factory v2.

https://app.pluralsight.com/library/courses/ ssis-packages-azure-data-factory-migrating/table-of-contents



Boring Connection Managers





Connection Manager Types

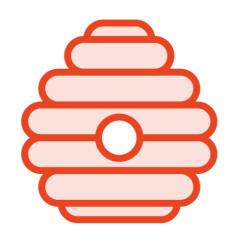


Write Your Own





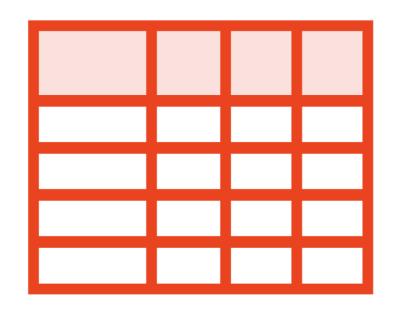
Other Import Tools

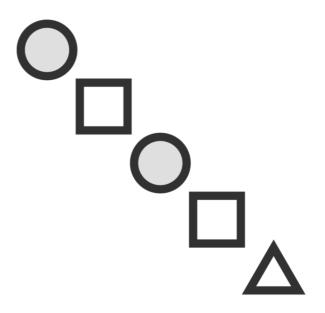






Horses for Courses



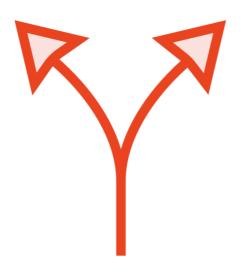


SSIS

Possible Alternative

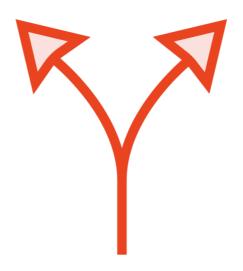


It Doesn't Depend





It Depends (Again)





Benchmarking





OLE DB vs. ADO.NET

OLE DB

Supports Lookup transformation

SQL authentication in Azure

Requires use of casting in scripts

EXEC Proc1 @Id = ?, @Name = ?

Performance testing required

ADO.NET

Does not support Lookup transformation

Supports Active Directory in Azure

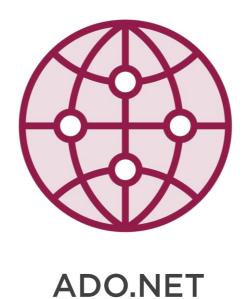
Use directly in scripts

EXEC Proc1 @Id = @Id, @Name = @Name

Performance testing required

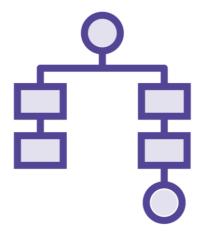


Bertie's Choice





Avoid Refactoring





Refactoring Takes Time





Be Confident





Project Connections Deployment

Project Connection

SSIS Catalog



Package Requirements



Handle Multiple Files



Maintain Audit Trail



Handle Exceptions



Archive Processed Files



Send Status Report E-mail When Errors Found



Package Requirements



Handle Multiple Files



Maintain Audit Trail



Handle Exceptions



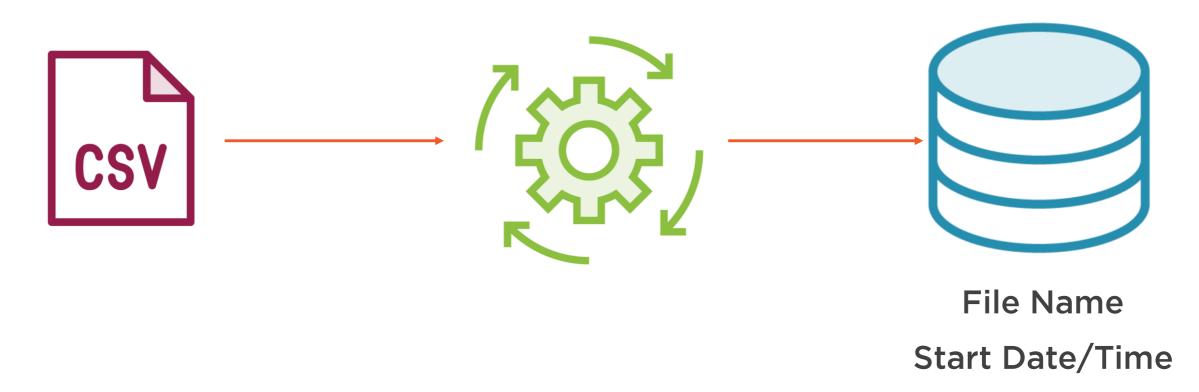
Archive Processed Files



Send Status Report E-mail When Errors Found

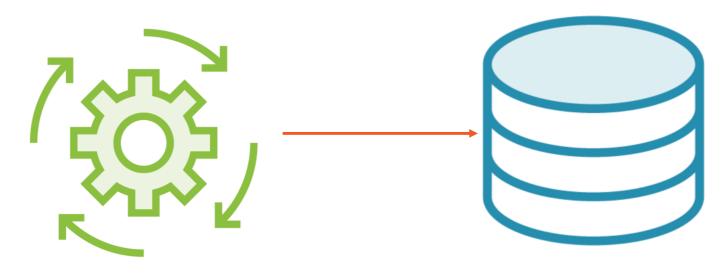


Capturing Metadata





Updating Metadata



Row Counts
End Date/Time



Variables





File Name Variable = File Litxtt



Two Things Left





Configure Folder

Check ID



Parameter Types



Parameters can be used with the SSIS catalog



Package parameters are specific to one package



Project parameters can be shared between packages



Parameters can be added to catalog configurations



Parameter Deployment Support



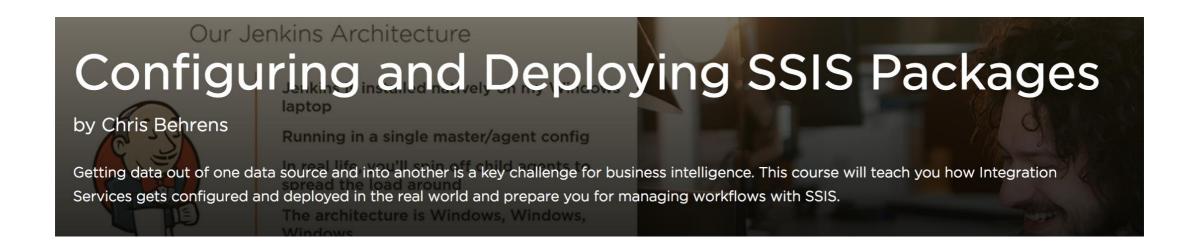
Cannot use parameters with package deployment



Use variables with package deployment



Configuring and Deploying SSIS



https://app.pluralsight.com/library/courses/configuring-deploying-ssis-packages/description



Flow vs. Parallel



No need to connect tasks if they can execute concurrently



Connect tasks when dependencies exist



Overview/ Summary



Creating the database
Creating the SSIS package
Connection managers
Control flow and containers

Variables and parameters
Script tasks

