Getting Started with Biml

Making more SSIS with fewer clicks

Who am I?

- Bill Fellows

- Database developer

- 10 years SSIS

- Lazy

- BI Consultant

(local sports team)!

Who are you?

- Developer

- Built some SSIS packages

- Frustrated with monotony

- Worn out your mouse

Why are you here?

- Want to build packages faster

- Consistent approach

- Cost effective

Free - everybody loves free

What is Biml?

- Business Intelligence Markup Language

- Domain Specific Language for describing business intelligence objects

Why Biml?

- Shorten development time

- Metadata driven solutions

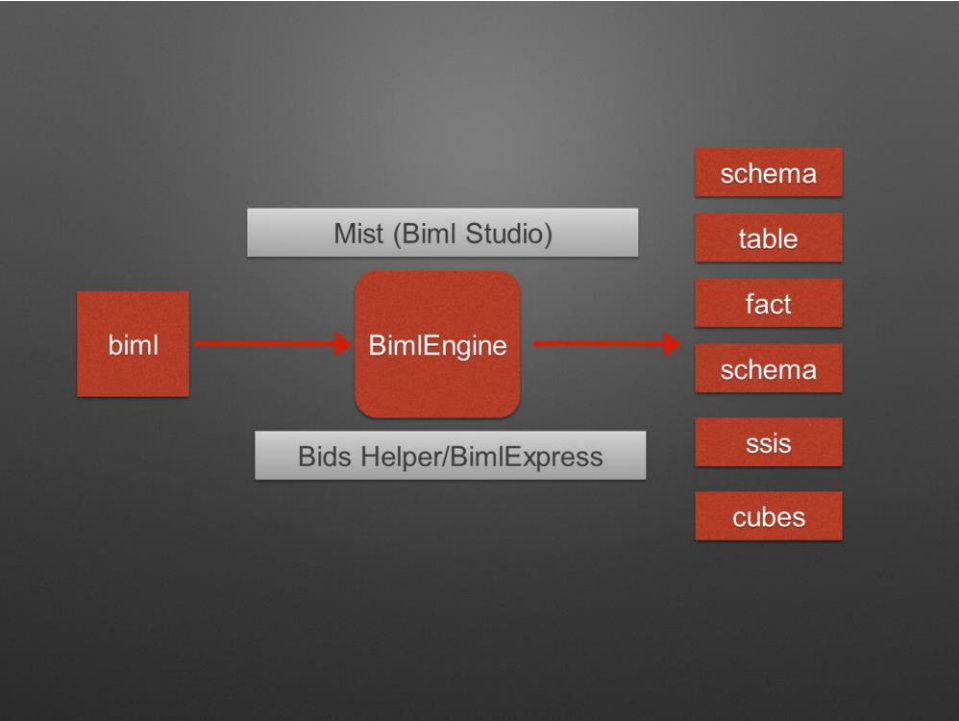- Alternatives: .NET, EzAPI, BIxPress

Pre-requisites

- Basic SSIS knowledge

  - Visual Studio/BIDS/SSDT 2005/2008/2010/2012/2014/2016

  - BIDS Helper or BimlExpress

- or

  - Mist or BimlOnline

Hello World

```xml
<Biml xmlns="http://schemas.varigence.com/biml.xsd">
    <Packages>
        <Package Name="SimpleBimlPackage"
            ConstraintMode="Linear"
        />
    </Packages>
</Biml>
```

Demo Hello world

Basic Data Flow

```xml
<Package Name="BasicDataFlow" ConstraintMode="Linear">
    <Variables>
        <Variable Name="RowCountNew" DataType="Int32" Namespace="User">0</Variable>
    </Variables>
    <Tasks>
        <Dataflow Name="DFT Basic Dataflow">
            <Transformations>
                <OleDbSource Name="OLE_SRC Demo"
                    ConnectionName="AdventureWorks" >
                    <DirectInput>
                        SELECT SC.CurrencyCode, SC.Name
                        FROM Sales.Currency AS SC;
                    </DirectInput>
                </OleDbSource>
                <RowCount Name="CNT New"
                    VariableName="User.RowCountNew"/>
                <OleDbDestination
                    Name="OLE_DST RAW_SalesCurrency"
                    ConnectionName="TypeMoreClickLessLocal"
                    KeepIdentity="false"
                    TableLock="true"
                    UseFastLoadIfAvailable="true"
                    KeepNulls="true">
                    <ExternalTableOutput Table="[RAW].[SalesCurrency]"/>
                    <Columns>
                        <Column SourceColumn="CurrencyCode" TargetColumn="CurrencyCode" />
                        <Column SourceColumn="Name" TargetColumn="CurrencyName" />
                    </Columns>
                </OleDbDestination>
            </Transformations>
        </Dataflow>
    </Tasks>
</Package>
```
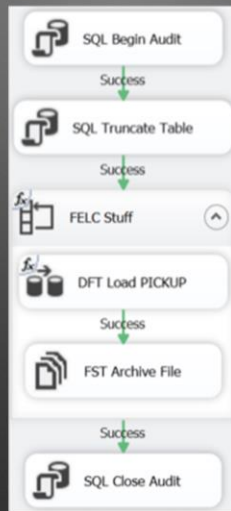
Demo Data Flow

Real World Biml

BimlScript

- Biml + .NET Scripting

- Classic ASP for Biml

- Painful in Visual Studio, better with BimlExpress

Beware Copy & Paste (before)

```xml
<Biml xmlns="http://schemas.varigence.com/biml.xsd">
    <Packages>
        <# for(int i = 1; i <= 5; i++) { #>
        <Package Name="MyPackage<#=i#>"
            ConstraintMode="Linear">
            <Tasks>
                <Dataflow Name="My Dataflow">
                </Dataflow>
            </Tasks>
        </Package>
        <# } #>
    </Packages>
</Biml>
```

Beware Copy & Paste (after)

```xml
<Biml xmlns="http://schemas.varigence.com/biml.xsd">
    <Packages>
        <# for(int i = 1; i <= 5; i++) { #>
        <Package Name="MyPackage
            <#=i#>" ConstraintMode="Linear">
            <Tasks>
                <Dataflow Name="My Dataflow">
                </Dataflow>
            </Tasks>
        </Package>
        <# } #>
    </Packages>
</Biml>
```

Includes

- <#@ include file="inc_Connections.biml" #>

Useful bimlscript

- GetTableSql
- ExternalDataAccess.GetDataTable
- CallBimlScript

Quick Reference: Biml Extensions

http://bimlscript.com/Develop/Resources

Mist only

- Transformers

- Reverse engineering

- Cubes

- CI

Resources

- BimlScript Resources
  http://bimlscript.com/Develop/Resources

- Biml Forum
  http://www.varigence.com/Forums?forumName=Biml

- StackExchange
  http://stackoverflow.com/questions/tagged/biml?sort=newest&pageSize=50

More biml resources

- Stairway to Biml
  http://www.sqlservercentral.com/articles/BIML/100552/

- http://www.sqlservercentral.com/articles/Stairway+Series/100585/

- Stairway to Biml http://www.sqlservercentral.com/stairway/100550/

- What is Biml? - Level
  1 http://www.sqlservercentral.com/articles/BIML/100552/

- Biml Basics - Level 2
  http://www.sqlservercentral.com/articles/Stairway+Series/100585/

https://datasavvy.wordpress.com/2015/07/22/biml-for-a-type-1-slowly-changing-dimension/

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Thank you!

More Biml @ Introduction to Ensemble Modeling
with Jeff Renz & Leslie Weed at 11:00

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KC SQL Sat
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