

# Getting Started with Biml

Making more SSIS with fewer clicks

# Who am I?

- Bill Fellows
- Database developer
- 10 years SSIS
- Lazy
- BI Consultant



# Who are you?

- Developer
- Built some SSIS packages
- Frustrated with monotony
- Worn out your mouse

# Why are you here?

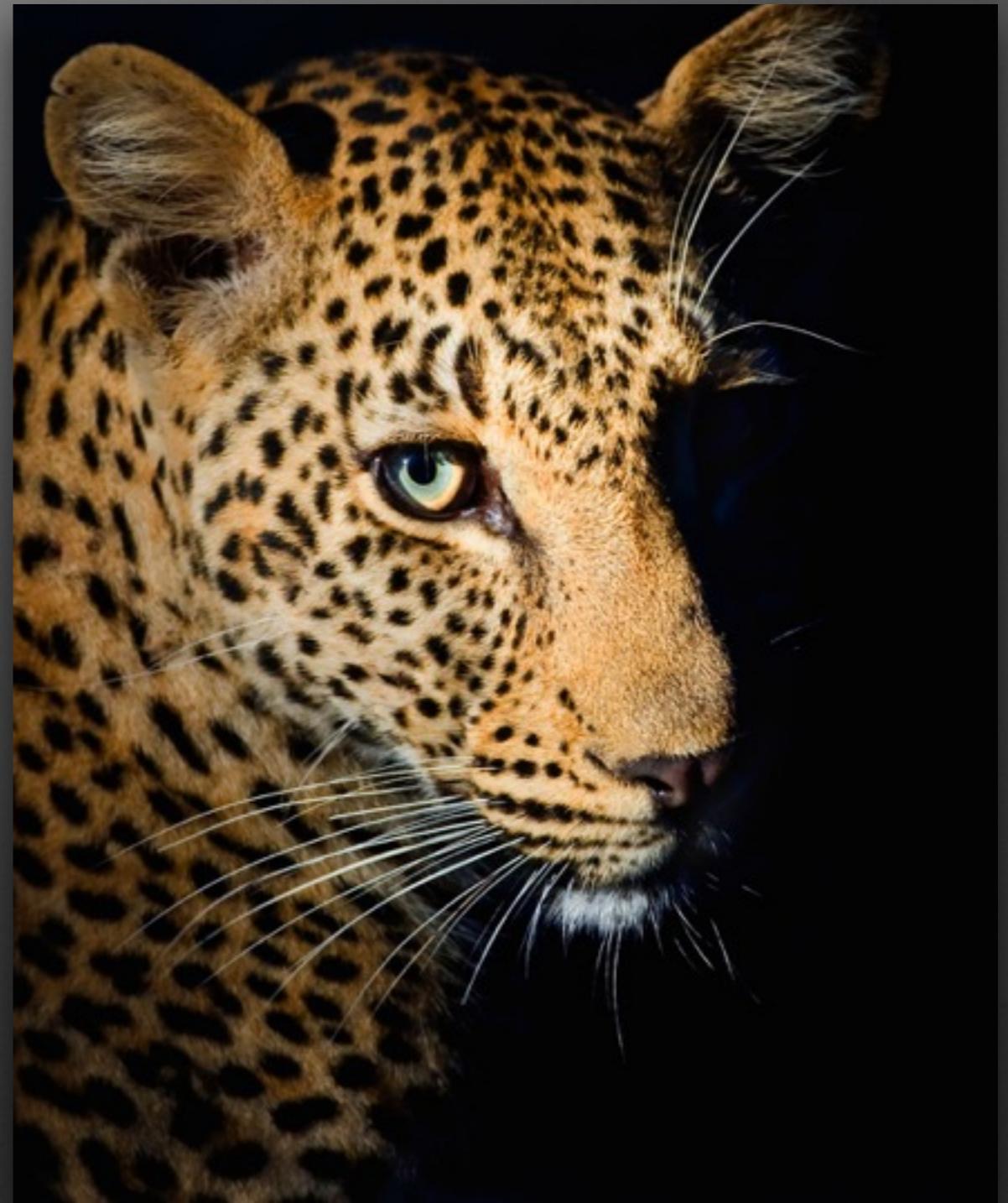
- Want to build packages faster
- Consistent approach
- Cost effective

# 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,  
BlxPress



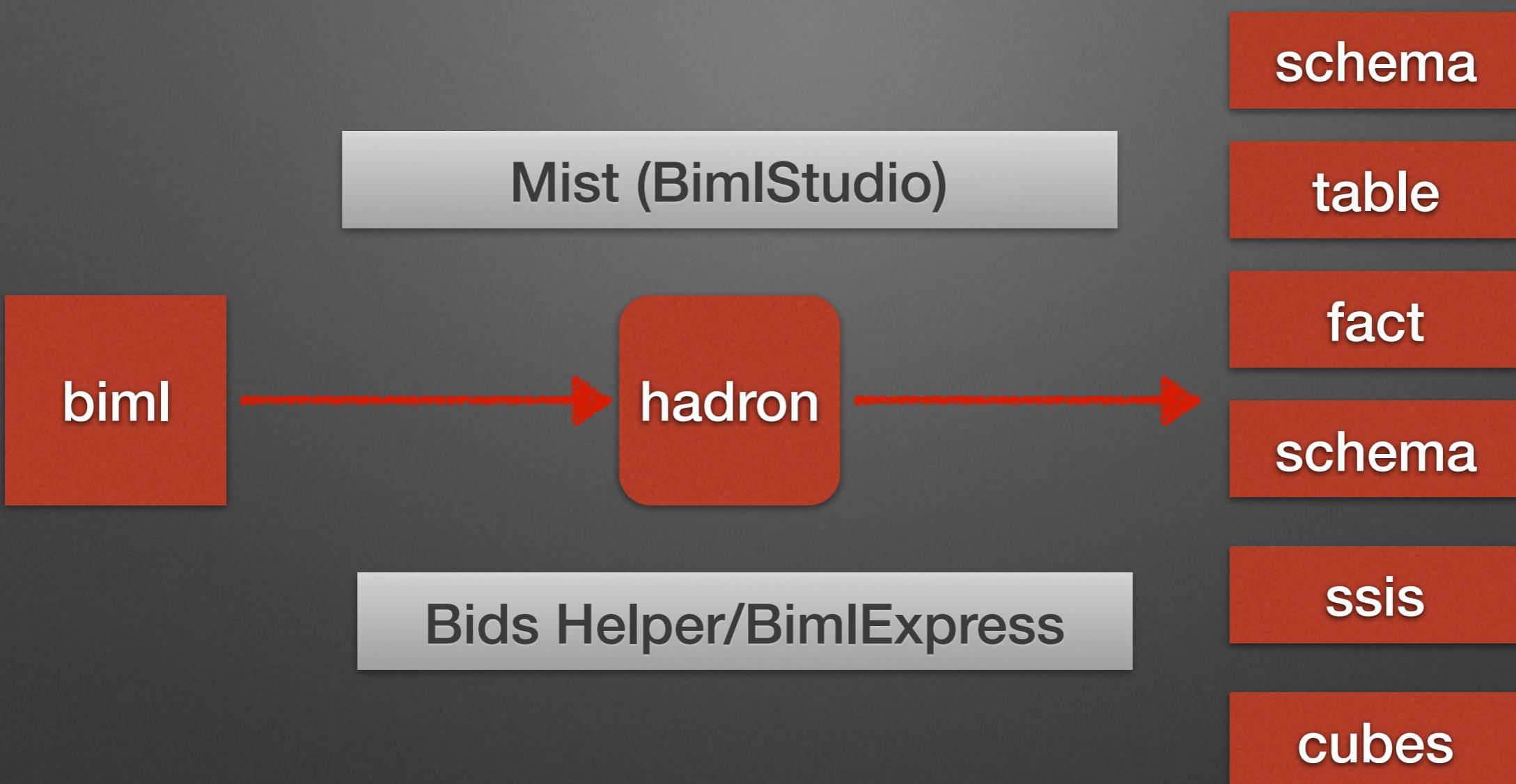
# Pre-requisites

- Basic SSIS knowledge
  - Visual Studio/BIDS/SSDT  
2005/2008/2010/2012/2014/2016
  - BIDS Helper or BimlExpress
- or
  - Mist/BimlStudio or BimlOnline

# Hello World

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

# Demo Hello world

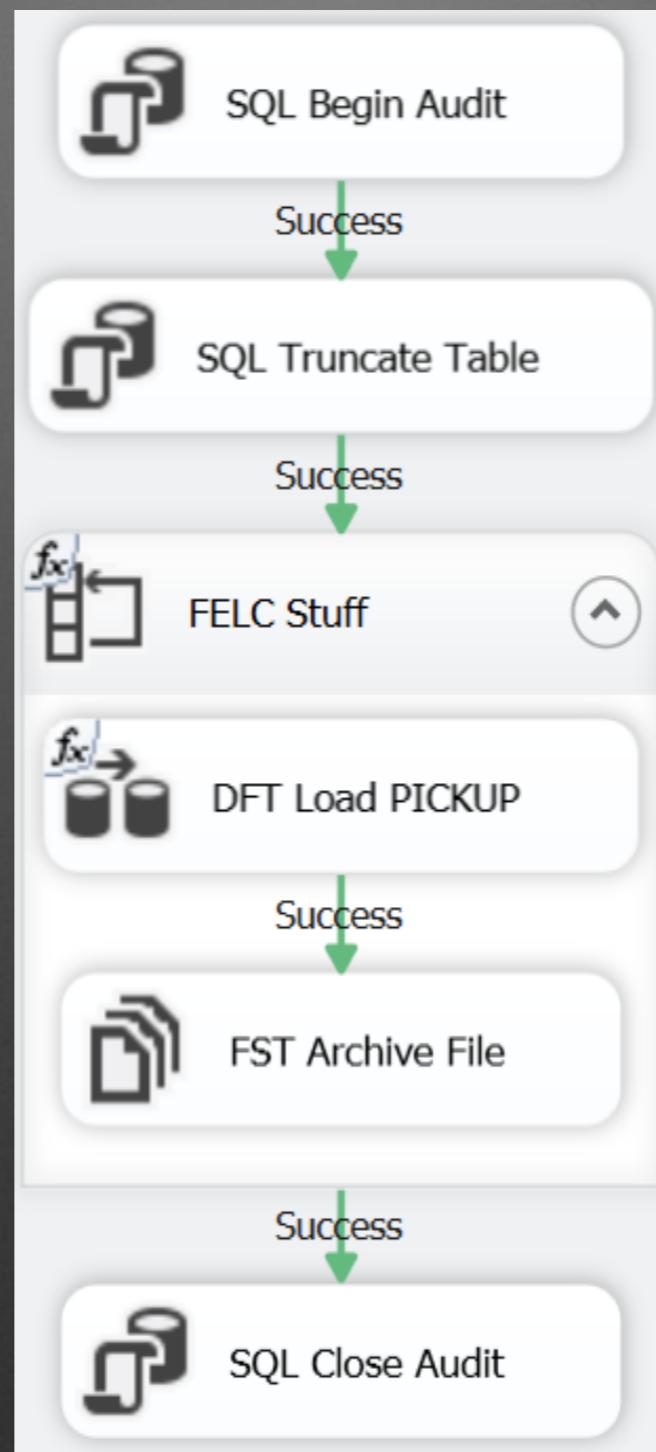


# Basic Data Flow

```
<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)

```
<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)

```
<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`

# Mist only

- Transformers
- Reverse engineering
- Cubes
- CI

# Resources

- BimlScript Resources [http://bimlscript.com/Develop/  
Resources](http://bimlscript.com/Develop/Resources)
- Biml Forum [http://www.varigence.com/Forums?  
forumName=Biml](http://www.varigence.com/Forums?forumName=Biml)
- StackExchange [http://stackoverflow.com/questions/  
tagged/biml?sort=newest&pageSize=50](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/>

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