

Robert C. Cain, MVP

**COMFRAME**  
precision software innovation

# SQL Server Integration Services for Developers

**Microsoft**  
**GOLD CERTIFIED**

*Partner*

Data Management Solutions  
Information Worker Solutions  
Business Intelligence  
Custom Development Solutions

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# Your Presenter

- Robert C. Cain
- Microsoft MVP SQL Server since 2008
- Senior BI Architect COMFRAME
- Technical Contributor to PluralSight
- Co-Author SQL Server MVP Deep Dives
- Contributor to SQL Share
- <http://arcancode.com>
- <http://twitter.com/arcancode>



# Today

- 100 Level Introduction to SSIS
- Overview of SSIS
- Simple tasks every dev must do
- Calling SSIS from .Net



# What is SSIS?

- SSIS is a tool for pulling data from a source, transforming that data, then putting into another location
- Database to Database
- Flat file to Database
- Database to Flat file
- Flat file to Flat File
- SSIS is most commonly used in Data Warehousing / Business Intelligence



# Many more uses

- Legacy data conversion to new systems
- Data exports
- Move massive data processing to the server



# How to get SSIS?

- SQL Server Standard
- SQL Server Enterprise
- SQL Server DEVELOPER!



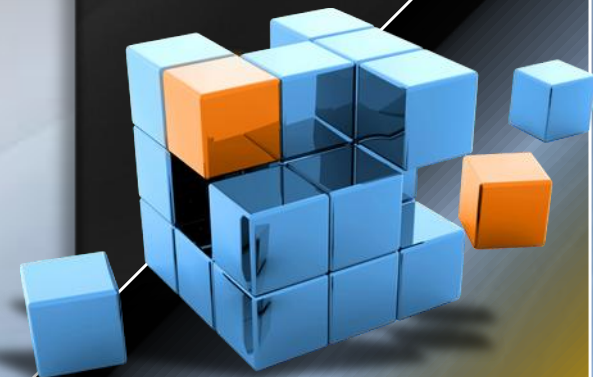
# SSIS is Full Featured

- Variables
- Debugging
- Logging
- Configurations
- Error Handling
- SQL Scripting
- VB.Net or C# code



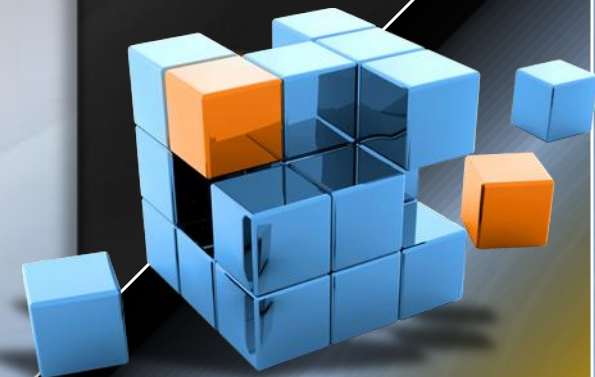
# SSIS Concepts – Control Flow

- The control flow orchestrates the work, the **Tasks** that get things done
- Does not work on individual rows
- Works on “sets” of data, or coordinates the items that do work at the row level



# SSIS Concepts – Data Flow

- Data Flow does the work at the individual row level
- Reads a row, processes row, writes the row
- Data Flows have three main items:
  - Data Source
  - Transformation
  - Data Destination



Enough!

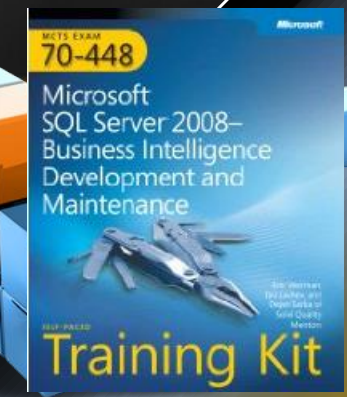
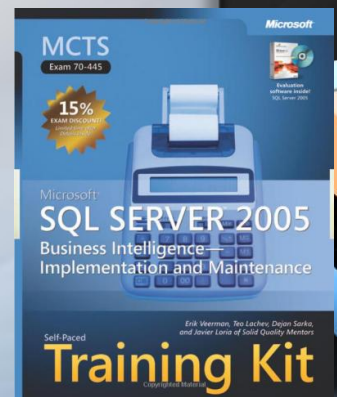
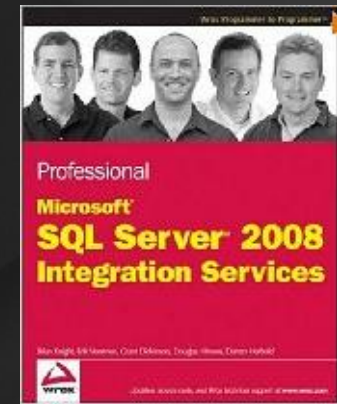
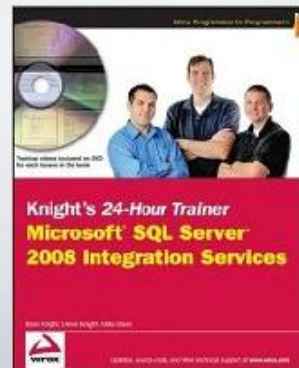
Let's see some

**CODE!**



- Erik Veerman /  
Brian Knight Books

- [http://www.amazon.com/Expert-Server-Integration-Services-Programmer/dp/0470134119/ref=sr\\_1\\_5?ie=UTF8&s=books&qid=1239833324&sr=8-5](http://www.amazon.com/Expert-Server-Integration-Services-Programmer/dp/0470134119/ref=sr_1_5?ie=UTF8&s=books&qid=1239833324&sr=8-5)
- [http://www.amazon.com/Professional-Microsoft-Integration-Services-Programmer/dp/0470247959/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1239833324&sr=8-1](http://www.amazon.com/Professional-Microsoft-Integration-Services-Programmer/dp/0470247959/ref=sr_1_1?ie=UTF8&s=books&qid=1239833324&sr=8-1)
- [http://www.amazon.com/MCTS-Self-Paced-Training-Exam-70-445/dp/0735623414/ref=sr\\_1\\_7?ie=UTF8&s=books&qid=1239833324&sr=8-7#](http://www.amazon.com/MCTS-Self-Paced-Training-Exam-70-445/dp/0735623414/ref=sr_1_7?ie=UTF8&s=books&qid=1239833324&sr=8-7#)
- [http://www.amazon.com/MCTS-Self-Paced-Training-Exam-70-448/dp/0735626367/ref=sr\\_1\\_4?ie=UTF8&s=books&qid=1239833324&sr=8-4](http://www.amazon.com/MCTS-Self-Paced-Training-Exam-70-448/dp/0735626367/ref=sr_1_4?ie=UTF8&s=books&qid=1239833324&sr=8-4)
- [http://www.amazon.com/reader/0470496924?\\_encoding=UTF8&ref=sib\\_dp\\_pop\\_fc&page=1#reader](http://www.amazon.com/reader/0470496924?_encoding=UTF8&ref=sib_dp_pop_fc&page=1#reader)



# Adventure Works Demos

- Demo Site -  
<http://www.codeplex.com/Wiki/View.aspx?ProjectName=SqlServerSamples>
- Sample DBs -  
<http://www.codeplex.com/MSFTDBProdSamples/>
- SSIS -  
<http://www.codeplex.com/MSFTISProdSamples/>
- SSAS -  
<http://msftasprodsamples.codeplex.com/Release/ProjectReleases.aspx?ReleaseId=18652>
- SSRS -  
<http://www.codeplex.com/MSFTRSProdSamples/>



- **Blogs**

- SSIS Junkie - <http://blogs.conchango.com/jamiethomson/default.aspx>
- Brian Knight - <http://pragmaticworks.com/community/blogs/brianknight/default.aspx>

- **Podcast**

- SQL Down Under - <http://www.sqldownunder.com/PreviousShows/tabid/98/Default.aspx>
- SQL Share (formerly JumpstartTV) - <http://sqlshare.com/>

- **Forums**

- MSDN SSIS Forum - <http://forums.microsoft.com/MSDN/ShowForum.aspx?ForumID=80&SiteID=1>

- **Arcane Samples**

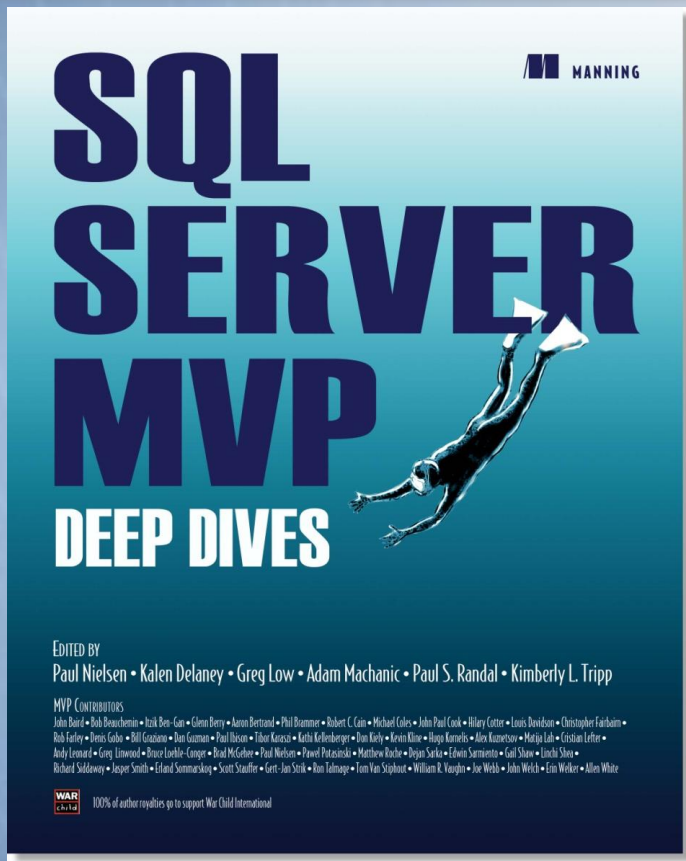
- Calling SSIS from .Net Application - <http://code.msdn.microsoft.com/ssisfromnet>

- **Other**

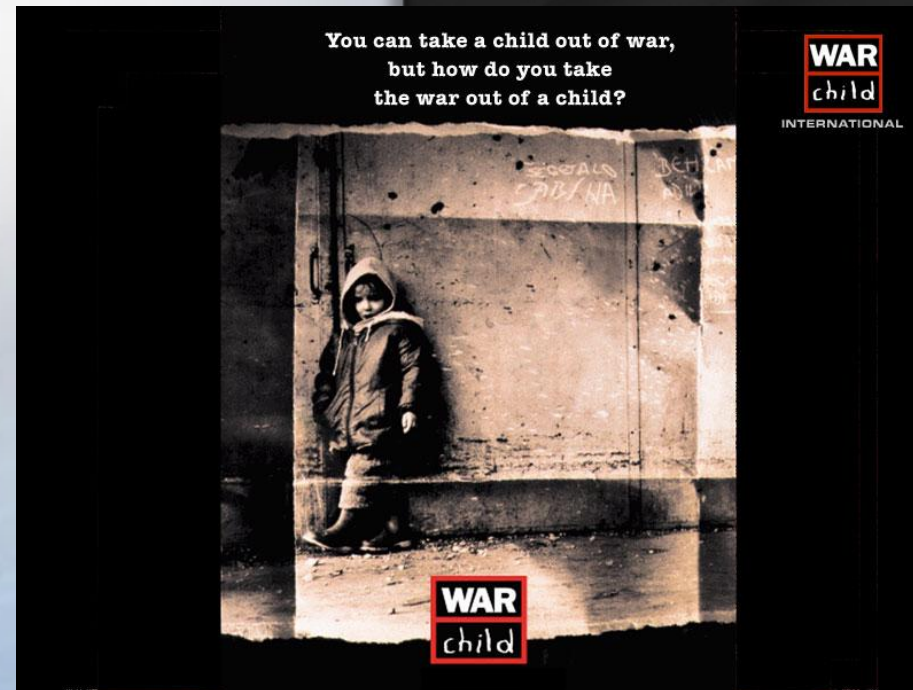
- Microsoft BI Site - <http://www.microsoft.com/events/series/bi.aspx>
- SQL Serverpedia - <http://sqlserverpedia.com/>
- COMFRAME BI <http://www.comframe.com/bi/>



# Children in need



<http://www.warchild.org>  
[www.SQLServerMVPDeepDives.com](http://www.SQLServerMVPDeepDives.com)



# Where I'm At Next...

- Webinar for Pluralsight on PowerPivot  
Thursday Aug 12, 2010 10:00 am CST  
<http://pluralsight.com>
- SQL Saturday Nashville – “Data Dude”  
Aug 21, 2010  
<http://sqlsaturday.com/>



# Thanks!

- Questions?
- All material available at either <http://arcanecode.com> or <http://www.comframe.com/bi>
- [rcain@comframe.com](mailto:rcain@comframe.com)

