



**Business
Intelligence**

- Tools
- Training
- Services

SQL Server Integration Services for Developers

Robert C. Cain, MVP



**Business
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Your Presenter



- Robert C. Cain, MVP, MCTS
- Microsoft MVP SQL Server since 2008
- Senior Consultant with Pragmatic Works
- Technical Contributor to PluralSight
- Co-Author SQL Server MVP Deep Dives
- Contributor to SQL Share
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- <http://twitter.com/arcanecode>



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Today

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



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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



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Many more uses

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



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How to get SSIS?

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



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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



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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



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Enough!

Let's see some

CODE!



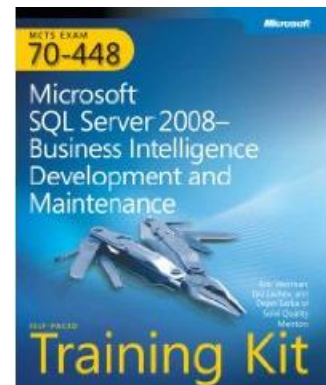
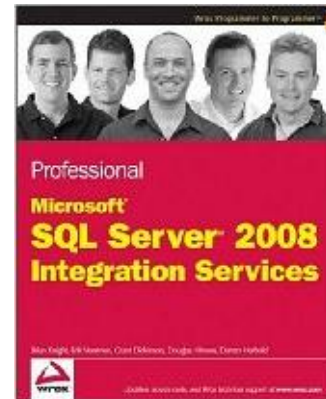
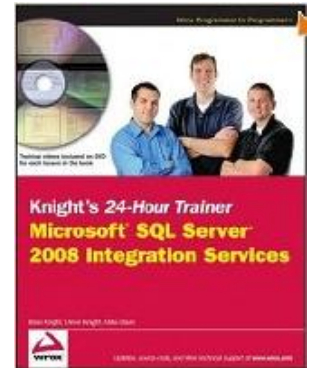
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Resources

- Erik Veerman /
Brian Knight Books

- 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-70-448/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_f&page=1#reader





Adventure Works Demos

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- 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/MSFTRSPProdSamples/>



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Resources

- **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**

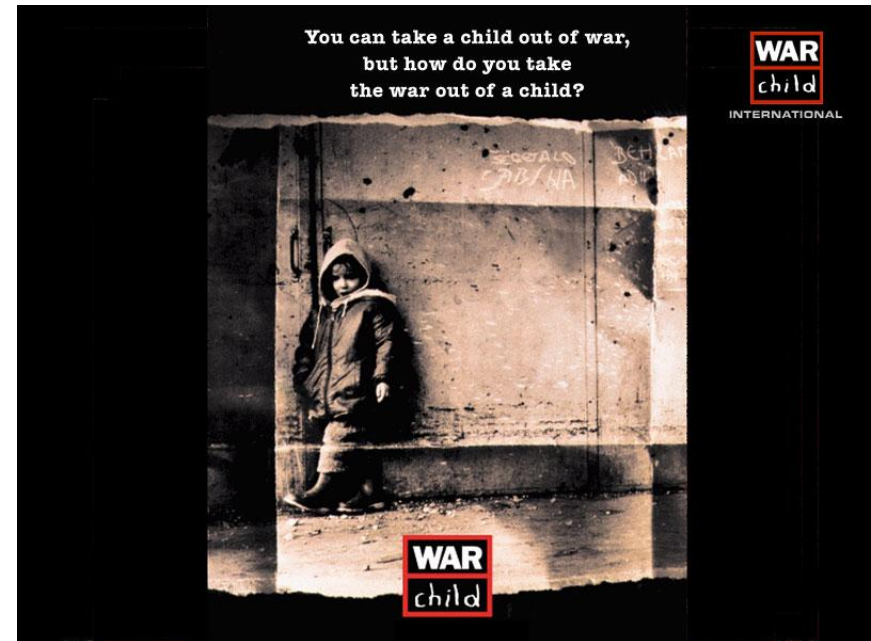
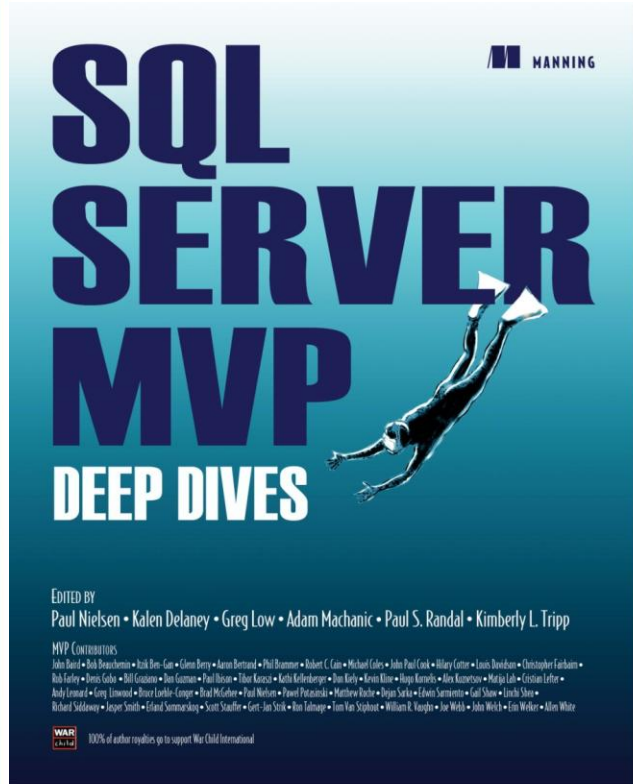
- Microsoft BI Site - <http://www.microsoft.com/events/series/bi.aspx>
- SQL Serverpedia - <http://sqlserverpedia.com/>
- BIDN - <http://www.bidn.com/>
- Pragmatic Works – <http://pragmaticworks.com/>



Children in need

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<http://www.warchild.org>
www.SQLServerMVPDeepDives.com



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Where I'm At Next...

- SQL Saturday Birmingham, AL
July 30, 2011
<http://sqlsaturday.com/>
- DevLink
Thursday Aug 17-19, 2011
 - The Decoder Ring for Data Warehousing / Business Intelligence with SQL Server SQL Server
 - Searching Unstructured Text Data - SQL Server Full Text Searching for DBAs and Developers
 - Overview of the Microsoft SQL Server Business Intelligence Toolset SQL Server Beginner<http://devlink.net>



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Thanks!

- Questions?
- All material available at either
<http://arcanecode.com>
- rcain@pragmaticworks.com