

Crimson and SolidQ present: Microsoft SQL Server Business Intelligence Bootcamp 5 day course

Written and presented by industry experts from Solid Quality, this intensive five-day workshop gives professional developers the information and hands-on experience they need to deliver state-of-the-art, integrated reporting and reporting solutions using Microsoft Business Intelligence.

Delivering the right information in the right format at the right time to all users in the organization—that is Microsoft's Business Intelligence (BI) strategy and vision for enterprise information management. Microsoft's integrated BI tools enable developers to create effective solutions that information workers use every day to find meaningful patterns in the vast sea of data they collect and to use that insight to quickly respond to changing business conditions.

On completion of this workshop attendees will be able to position different types of Business Intelligence solutions, from enterprise data warehousing to data marts to real-time operational reporting and analytics. Attendees will learn how to design and build powerful integrated solutions that provide users with rich reporting, analysis and visualization capabilities by targeting operational data from an existing line-of-business application using the Microsoft Business Intelligence platform.

Objectives

Through interactive presentations and concrete hands-on labs, attendees will learn:

- How to use Microsoft SQL Server 2008 to build and manage data marts which provide a consolidated view of organizational data.
- How to use dimensional modeling techniques and Visio 2007 database modeling tools to create data models in SQL Server 2008 for hosting consolidated BI information.
- How to build consolidated data marts using SQL Server 2008 Integration Services to extract, transform, and load business-critical information into SQL Server 2008 databases from disparate sources such as business applications and corporate databases.
- How to use SQL Server 2008 Reporting Services to develop predefined and ad hoc relational reports that simplify access to business-critical information.
- How to use SQL Server 2008 Analysis Services to create a Unified Dimensional Model that simplifies analytical access to business-critical information stored in SQL Server 2008, and how to publish and collaborate on findings using SQL Server 2008 Reporting Services.
- How to use SQL Server 2008 Analysis Services to create data mining models that explore, uncover and predict patterns in a BI solution

Prerequisites

Attendees should have a basic understanding of SQL Server and relational database technology. Some development experience with a .NET language is useful but not essential.

Audience

The presentations and labs have been designed specifically to give professional developers—those who work for an ISV, SI, or enterprise customer—the information they need to deliver integrated solutions on the Microsoft BI platform.

This course is also relevant and useful for those interested to understand and evaluate Microsoft's Business Intelligence offerings.

NOTE: This course is also very useful for those currently working with the SQL Server 2005 series of technologies. Differences between the releases are identified.

Location

Crimson Innovations
Unit 3
6 Catterthun Street
Winnellie
(see

www.crimson.com.au/contact_us.htm for details)



- Business Intelligence
- Data Management Solutions
- Custom Development Solutions
- Advanced Infrastructure Solutions

Schedule

MODULE ONE: SSIS	
Day one:	<ul style="list-style-type: none"> • Overview of SQL Server Integration Services • Working with SSIS Control Flow • Working with SSIS Data Flow • Optimising the Data Flow
Day two:	<ul style="list-style-type: none"> • Advanced Data Transformations • Loading Dimension Tables • Loading Fact Tables • SSIS Configuration, Logging, Deployment and Execution
MODULE TWO: AS	
Day three:	<ul style="list-style-type: none"> • Introduction to SQL Server Analysis Services • Designing Dimensions • Calculations, KPI's, Actions and Processing • Introduction to Analysis Services Data Mining
MODULE THREE: RS	
Day four:	<ul style="list-style-type: none"> • Introducing Reporting Services • Implementing Interactivity in Reports • Enhancing Reports through .NET Code • Managing Reporting Services
Day five:	<ul style="list-style-type: none"> • Implementing Report Builder • Deploying and Linking to Reports • Reporting from Analysis Services Cubes • Using Excel for Reporting

Flexible Participation

Attend an individual module, two modules or all three modules.

Technologies

The workshop will empower developers to exploit the BI functionality in the following technologies:

- SQL Server 2008 Database Services
- SQL Server 2008 Integration Services
- SQL Server 2008 Reporting Services
- SQL Server 2008 Analysis Services (OLAP and Data Mining)
- Office Visio 2007 Office Excel 2007

While based on SQL Server 2008 versions of SQL Server, this course is highly relevant for those working on SQL Server 2005 versions as well.

Early Bird Special Pricing

Early bird pricing applies only to bookings made and paid more than four weeks prior to course starting.

Module	Normal price (p/p)	Early bird price (p/p)
SSIS Day one & two	\$1400 + gst	\$1190 + gst
AS Day three	\$700 + gst	\$595 + gst
RS Day four & five	\$1400 + gst	\$1190 + gst
All Five days	\$3500 + gst	\$2975 + gst

Full course outline shown on next page...

Outline

Day 1

Course Introduction

Module IS201 Overview of SQL Server Integration Services

- Introduction to BI and dimensional modelling
- Integration Services features overview
- SQL Server 2008 BI tools
- LAB: Creating SSIS Projects and Packages

Module IS202 - Working with SSIS Control Flow

- Introducing and designing Control Flow
- Control flow features and concepts
- Containers
- Tasks and precedence constraints
- LAB: Working with SSIS Control Flow

Module IS203 - Working with SSIS Data Flow

- Introducing and designing Data Flow
- Working with data sources and destinations
- Transforming data
- Data viewers
- Data paths
- LAB: Working with SSIS Data Flow

Module IS301 - Optimizing the Data Flow

- Source adapter properties and best practices
- Optimizing data loads
- Handling errors
- LAB: Optimizing the Data Flow

Day 2

Module IS302 - Advanced Data Transformations

- Profiling Data
- Derived columns
- Lookup transformations
- Fuzzy transformations
- Script Components
- LAB: Advanced Data Flow Transformations

Module IS303 - Loading Dimension Tables

- Introduction to Dimensional Modelling
- Implementing slowly changing dimensions
- SCD Wizard
- Alternate SCD processing strategies
- LAB: Loading Dimension Tables

Module IS304 - Loading Fact Tables

- Fact table concepts
- Measures
- Fact table grain
- Dimension key lookups
- Implementing inferred members
- LAB: Loading Fact Tables

Module IS305 - SSIS Configuration, Logging, Deployment and Execution

- Package configurations
- Logging options
- Deployment manifests
- Deployment utility
- Scheduling SSIS package execution
- LAB: SSIS Configuration, Logging Deployment and Execution

Day 3

Module AS201: Introduction to SQL Server Analysis Services

- Introduction to OLAP
- Building Analysis Services cubes
- LAB: Creating a cube

Module AS202: Designing Dimensions

- Enhancing cube dimensions
- Implementing dimension hierarchies
- LAB: Enhancing cube dimensions

Module AS203: Calculations, KPIs, Actions and Processing

- Basic MDX Concepts
- Calculations
- Key Performance Indicators
- Actions
- LAB: Calculations, KPIs and Actions
- Cube processing concepts
- Incremental fact and dimension processing
- LAB: Cube processing
- Deploying Cubes
- LAB: Cube deployment

Module DM201: Introduction to Analysis Services Data Mining

- Introduction to Data Mining
- Business applications of data mining
- Data mining algorithm comparison
- LAB: Implementing Data Mining

Day 4

Module RS201: Introducing Reporting Services

- Introduction to SQL Server Reporting Services
- Designing reports
- LAB: Designing Reports

Module RS202: Implementing Interactivity in Reports

- Interactivity concepts
- Available interactivity options for rendering targets
- URLs
- Linking to reports
- Bookmarks
- LAB: Adding Interactivity to Reports

Module RS301: Enhancing Reports Through .NET Code

- Report code blocks
- Referencing .NET assemblies
- LAB: Enhancing Reports Through .NET Code

Module RS302: Managing Reporting Services

- Subscribing to reports
- Data-driven subscriptions
- Caching reports
- Report snapshots
- Report security
- Linked reports
- LAB: Managing Reporting Services

Day 5

Module RS303: Implementing Report Builder

- Introduction to Report Builder
- Creating report models
- Authoring reports with Report Builder
- LAB: Implementing Report Builder

Module RS304: Deploying and Linking to Reports

- Deploying reports
- Accessing reports via URLs
- Using reportviewer in .NET applications
- LAB: Deploying and Linking to Reports

Module RS203: Reporting from Analysis Services Cubes

- Analysis Services query designer
- LAB: Reporting from Analysis Services Cubes

Module RS204: Using Excel for Reporting

- Office Data Connections
- Connecting to Analysis Services
- Pivot Tables
- Pivot Charts
- Accessing Cube members
- LAB: Using Excel for Reporting