Pentaho Training Course Catalog

2009-2010 Edition

Last Modified on Lynn Yarbrough

Contents

Introduction to Pentaho Training

Thank you for your interest in Pentaho Training! By investing in training, you have taken a significant step in becoming productive in your implementation of Pentaho products. Even seasoned professionals benefit from regular training to remain up-to-date with the latest Pentaho BI technologies and techniques. Pentaho Training offers industry leading, high value, and actionable instruction designed to give you a high return on your investment, to increase your probability of success, and to teach you the skills to take full advantage of Pentaho's BI technology.

Choosing the Right Course

One size definitely does not fit all. We understand that different users require different knowledge and skills. Each Pentaho Training course is targeted to match knowledge areas and skills to specific audiences. Use the course numbers (described below) and the description of each course to choose the best courses for you.

Course Numbers

Course numbers uniquely identify each course and can be used to quickly discover the content of the course, the experience level of its targeted audience, and its delivery mode. For example, the course number of the Reporting Solution Development course (SLN 2101C) identifies this classroom course as a member of the *solution* knowledge area and an entry-level course.

Knowledge Areas	Description
SLN Knowledge	**Solutions** Overview courses that present a broad and conceptual view of the tools of the Pentaho BI Suite. These courses are designed for solution architects and business analysts interested in learning the methodologies and tools involved in end-to-end solution development.
ADM Leading	**Administration** Product courses designed to teach the skills and tools involved in installing, configuring, and maintaining the Pentaho BI Suite. These courses are designed for administrators and system integrators.
ANALY Area	**Analysis** Product courses targeted at teaching the functionality and use of the tools associated with Pentaho Analysis. These courses are designed for OLAP developers.
PDI Area	**Data Integration** Product courses targeted at teaching the functionality and use of the tools associated with Pentaho Data Integration. These courses are designed for ETL developers.
RPT Source	**Reporting** Product courses targeted at teaching the functionality and use of the tools associated with Pentaho Reporting. These courses are designed for report authors and developers.

courses are organized into knowledge areas to help you choose the right course. In terms of content, there are two types of courses: solution courses and product courses. Solution courses teach concepts and methodologies, present a broad view of the Pentaho BI Suite, and involve several products. They are intended to teach the skills to architect entire BI solutions. The product courses, however, are more task-

focused and are targeted for specific product areas such as reporting, administration, data integration, and analysis. They present a more comprehensive exploration of specific tools of the Pentaho BI Suite.

Class Level

The numerical part of each course number identifies the course level. The first digit of the course level indicates the experience level of the targeted audience. Beginning with entry-level courses in the 1000s, the higher the class level the more experience and knowledge is required to maximize the impact of the content.

Class Delivery

The last character of the course number indicates the delivery mode: classroom (C) or web\on-line (W). All courses are instructor-led to maximize instruction through lectures, instructor-led demonstrations, and interaction with Pentaho Certified Instructors. Classroom delivered courses also use hands-on exercises to reinforce the instruction and are scheduled at various locations worldwide. On-line courses are scheduled for various time zones and are offered as a series of 3-hour sessions.

Tailored On-site Courses

Although Pentaho Training courses address different audiences, project requirements and constraints may require specialized training or limited disruption. For that reason, our courses can also be tailored and delivered as on-site. That is, we can partner with you to tailor a course to meet your specific needs and teach the course at your location!

Course Requirements

Students will need a Microsoft® Windows XP or Vista computer with a 1GHz CPU, 1 GB RAM, and a DVD drive, and 750 MB of available hard drive space in order to fully participate in the classroom delivered courses. We suggest the computer have at least a 1.3 GHz CPU, 2 GB of memory, and 1 GB of available hard drive space. A text editor such as Notepad may be needed for some of the exercises. On-line courses require a broadband Internet connection and a modern web browser such as Microsoft® Internet Explorer™ 7 or Mozilla Firefox® 3.0. Visit http://developers.webex.com/api/jointest/index.php to verify your connection speed and browser compatibility for on-line courses.

The Pentaho Training team is here to partner with you in realizing the power of the Pentaho BI Suite. Feel free to contact us if you have any questions or if you would like to suggest additional courses or training locations. Visit the Pentaho Training site to register for one of the scheduled courses or to begin the process of tailoring your on-site course. We look forward to meeting your training needs!

Pentaho Training team

http://www.pentaho.com/services/training
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Foundation Courses

Business Intelligence with the Pentaho BI Suite

Course Information

Course No	Instruction Format	Delivery Mode	
EVL1000	Instructor-led lecture\lab	Web	9 Hours /3 days

Course Benefits

Business intelligence (BI) is a valuable tool to gain visibility into the health of departments, business, and business processes. The Pentaho BI Suite is provides a platform—including a server, client tools, and technologies—that enable the full spectrum of BI. This course provides a overview of the Pentaho BI Suite for anyone wanting to learn more about how Pentaho solves Business Intelligence Issues.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the architecture of the Pentaho Business Intelligence (BI) Suite
- Discern the four different ways to get data to users with Pentaho BI and which best suits the needs of your users.
- Describe and Demonstrate the reporting end-user experience with the Pentaho BI Server
- Describe what Metadata is and how to create a Metadata layer with the Pentaho Metadata Editor.
- Build and deploy simple reports with the Pentaho Report Designer
- Understand ETL concepts and the Advantages of Using Pentaho Data Integration

Who Should Attend

This course is designed for anyone who is needs to find out more about Business Intelligence and the Pentaho BI Suite.

Course Prerequisites

This course has no Pentaho Training course prerequisites.

Course Requirements

Students will need a Microsoft® Windows XP or Vista computer with a 1GHz CPU, 1 GB RAM, and a DVD drive, and 750 MB of available hard drive space in order to fully participate in the classroom delivered courses. We suggest the computer have at least 1.3 GHz CPU, 2 GB of memory, and 1 GB of available hard drive space. Make sure you have a text editor such as Notepad; you may need it for some of the exercises.

Course Outline

Day 1

Module	Est. Duration (hours)
Pentaho Platform Concepts Discusses the concepts of Business Intelligence and the architecture of the Pentaho BI platform.	1
Installation of the Pentaho BI Suite A review of the steps involved in installing the Pentaho BI Suite.	1
Management and User Consoles The Pentaho Management Console assists in the Installation and Set-up of the Pentaho BI Suite. The User Console manages the End User Experience. Both will be discussed and demonstrated.	1

Day 2

Module	Est. Duration (hours)
Ad Hoc The concept of a Metadata Layer will be covered along with Ad Hoc Reporting and the Metadata Editor.	1
Analysis Slice and Dice, Drill, and Pivot. Understand OLAP concepts and Mondrian	1
Report Designer Learn how to use the Report Wizard, Query Builder and how to create a simple report in the Report Designer.	1

Day 3

Module	Est. Duration (hours)
Dashboard Builder A demonstration of the new Pentaho Dashboard Builders.	1
ETL and Pentaho Data Integration Overview Explores the concepts and basics of extract, transform, and load tools. The Pentaho Data Integration tool Spoon will be demonstrated.	1
Solutions Covers where to find more information about the tools shown in this class. The Wiki, knowledge base, and Pentaho Support	1

Pentaho BI Suite Bootcamp

Course Information

Course No	Instruction Format	Delivery Mode	Duration
SLN5000	Instructor-led lecture\lab	Classroom	5 days

Course Benefits

Business intelligence (BI) is a valuable tool to gain visibility into the health of departments, business, and business processes. The Pentaho BI Suite is provides a platform—including a server, client tools, and technologies—that enable the full spectrum of BI. This course provides a hands-on overview of the Pentaho BI Suite for consultants and those experienced with BI.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the architecture of the Pentaho Business Intelligence (BI) Suite
- Describe and Demonstrate the reporting end-user experience with the Pentaho BI Server
- Perform multiple data transformations
- Use PDI and ETL design patterns to populate a data warehouse star schema
- Develop basic OLAP schemas for and using Pentaho Analysis
- Build and deploy reports

Who Should Attend

This course is designed for system administrators, system integrators, content developers, software developers, and BI consults; however, it is valuable to anyone with a basic understanding of SQL and relational database concepts.

Course Prerequisites

This course has no Pentaho Training course prerequisites. It is, however, a fast paced course intended for technical consults or those experienced in BI.

Course Requirements

Students will need a Microsoft® Windows XP or Vista computer with a 1GHz CPU, 1 GB RAM, and a DVD drive, and 750 MB of available hard drive space in order to fully participate in the classroom delivered courses. We suggest the computer have at least 1.3 GHz CPU, 2 GB of memory, and 1 GB of available hard drive space. Make sure you have a text editor such as Notepad; you may need it for some of the exercises.

Course Outline

Day 1

Module	Est. Duration (hours)
Pentaho Platform Concepts Discusses the concepts of Business Intelligence and architecture of the Pentaho BI platform.	2
Installation of the Pentaho BI Suite Provides experience installing the Pentaho BI Suite.	1
Analysis Solutions Overview Presents an overview of the concepts and typical architecture of analysis solutions, including star schemas, fact tables and dimensions.	1
Dimensional Modeling Describes and provides hands-on experience with dimensional modeling and building star schemas.	2
ETL and Pentaho Data Integration Overview Explores the concepts and basics of extract, transform, and load tools and Pentaho Data Integration.	2

Day 2

Module	Est. Duration (hours)
Pentaho Data Integration Provides hands on experience with the techniques to pull data from a data source (flat file, relational table, etc) and move it to another. Labs will load relational Star Schema designed on Day 1.	4
Look-ups and Field Transformations Provides experience with the techniques for performing look-ups, joining various sources of data, and transforming individual fields during transformations.	2
Set and Pivot Transformations Builds on the Look-ups and Field Transformations module by exploring for sorting and manipulating sets of data.	2
Jobs and Transformations Explores techniques for arranging transformations into jobs including the scheduling of jobs.	

Day 3

Module	Est. Duration (hours)
Pentaho Analysis Introduces the tools, concepts, and architecture of Pentaho Analysis. Students create a Mondrian cube against the star schema created on Day 2, then drill and pivot the data using the User Console.	1
Schema Workbench Students will learn how to use Schema Workbench to create their first Analysis xml schema.	7

Day 4

Module	Est. Duration (hours)
Introduction to the Reporting Concepts Introduction of the Report Designer to produce high fidelity reports, including calculations and expressions.	1
Report Wizard Explores techniques for creating and publishing a report using the Report Wizard.	1
Report Designer Provides hands on experience with connecting to a dataset, Design Elements, the use of Hyperlinks, Report Functions and Groupings.	6

Day 5

Module	Est. Duration (hours)
Design Studio Covers Design Studio, Report Calculations, Charts and Style Expressions.	6
Dashboard Designer Detailed demonstration of the new Dashboard Designer	2

Installation and Administration of the Pentaho BI Suite

Course Information

Course No	Audience	Delivery Mode	Duration
ADM 2050C	Administrators and System Integrators	Classroom	3 days

Course Benefits

A complex system requires routine monitoring and tuning to maintain optimal performance and continued benefits. Additionally, successful BI solutions must grow and scale with the organization. This course prepares system administers to install, configure, tune for performance, monitor, and troubleshoot the Pentaho BI Platform. The focus is on the techniques, tools, and concepts that help to ensure optimal scalability of the Pentaho BI Suite through proper installation and administration. Additionally, this course helps prepare students for the Pentaho Platform Consultant Certification Exam.

Who Should Attend

This course is designed for system administrators and system integrators who are responsible for installing and\or administering the Pentaho BI Suite; however, it is valuable to anyone with a basic understanding of SQL, relational database concepts, directory services such as LDAP, and Web application administration techniques.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the basic architecture of Pentaho BI Platform and clients
- Install and configure the Pentaho BI Suite
- Understand the typical workflow of solution development
- Use Pentaho Management Services to monitor and administer the Pentaho BI Suite
- Integrate the Pentaho BI Suite security with external sources such as LDAP
- Use proper techniques to secure solutions
- Understand and explain the factors that impact the performance of the Pentaho BI Platform

Course Prerequisites

There are no Pentaho Training prerequisites for this course. The course is designed for students with a basic understanding of SQL, relational database concepts, directory services, and Web application administration.

Course Outline

Day 1

Module	Est. Duration (hours)
Pentaho Suite Overview Presents the concepts, capabilities, and evolution of the Pentaho BI Suite.	2
Pentaho Platform Concepts Discusses the concepts and architecture of the Pentaho BI platform.	2
Installation and Configuration of the Pentaho BI Suite Provides experience installing and configuring the Pentaho BI Suite.	3

Day 2

Module	Est. Duration (hours)
Advanced Deployment Techniques Teaches the techniques for deploying the Pentaho BI Platform in more advanced configurations.	2
Pentaho Security: Overview, Architecture, and Configuration Details the capabilities, configuration, and architecture of the security layer of the Pentaho BI platform.	3
Solution Development and Workflow Explores the concepts, client tools, and workflow used in the creation of solutions and content for the Pentaho BI platform.	1
Information Delivery Options Discusses the techniques used to deliver content via the Pentaho BI Suite.	1

Day 3

Module	Est. Duration (hours)
Administration Techniques Surveys the tasks involved in the administration of the Pentaho BI Suite.	1
Maintenance and Performance Considerations Discusses the factors that may impact the performance of the Pentaho BI platform.	2
Management Services Explores the management services features available in the Pentaho BI Suite Subscription Edition.	2

Analysis

Introduction to Pentaho Analytics

Course Information

Course No	Instruction Format	Delivery Mode	Duration
EVL1100	Instructor-led lecture\lab	Web	9 Hours /3 days

Course Benefits

Online analytical processing (OLAP) is one of the most powerful technologies to use within Business Intelligence applications and systems. OLAP allows fast, interactive analysis of large volumes of data. The power to explore large amounts of data at the stream of thought, allows employees throughout the enterprise, to answer critical business questions and make better decisions. This course explores the architecture, concepts, and features of Pentaho Analysis (Mondrian) to harness the power of OLAP to solve your Business Intelligence Challenges.

Who Should Attend

This course is designed for anyone who needs to understand more about developing cubes for online analytical processing (OLAP).

Learning Objectives

At the completion of this course, you should be able to:

- Demonstrate the ability to Pivot, Drill and Slice and Dice data using the Pentaho Analysis Client tools
- Understand the basic concepts of OLAP
- Understand the basic architecture of Pentaho Analysis and its modules
- Understand dimension sharing to build more expressive and maintainable cubes
- Grasp the basics of MDX
- Explain the life cycle of Pentaho Analysis cubes
- Understand the integration of Pentaho Analysis with the Pentaho BI Platform

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Course Requirements

Students will need a Microsoft® Windows XP or Vista computer with a 1GHz CPU, 1 GB RAM, and a DVD drive, and 750 MB of available hard drive space in order to fully participate in the classroom delivered courses. We suggest the computer have at least 1.3 GHz CPU, 2 GB of memory, and 1 GB of available hard drive space.

Course Prerequisites

There are no Pentaho Training prerequisites for this course. The course is designed for students with a strong understanding of SQL and relational database concepts and with experience creating and editing XML files.

Course Outline

Day 1

Module	Est. Duration (hours)
Introduction to OLAP and Mondrian (Pentaho Analysis) Introduces the features and use cases for online analytical processing and Mondrian (Pentaho Analysis).	1
Dimensional Concepts Explores the concepts of dimensions and dimensional modeling.	1.5
OLAP Tools and Clients An in depth demonstration of the various Pentaho tools and clients for OLAP.	.5

Day 2

Module	Est. Duration (hours)
Basic Schema Design Puts the concepts taught the first day into code. Introduces the Pentaho Schema Workbench to create a basic OLAP schema.	3
LAB After class follow step-by-step lab designed to create a basic cube.	.5

Day 3

Module	Est. Duration (hours)
Introduction to MDX Teaches the basic use and syntax of multidimensional expression (MDX) query language for OLAP schemas	1
Advanced Schema Design Demonstrates time dimensions, calculated members, member properties, and format strings into schema design.	2
Pentaho Deployment Teaches the techniques involved in and benefits of deploying schemas to the Pentaho BI Platform.	2

Pentaho Analysis for OLAP Developers

Course Information

Course No	Audience	Delivery Mode	Duration
ALY 3050C	OLAP Developers	Classroom	3 days

Course Benefits

Online analytical processing (OLAP) is one of the most powerful technologies to use within Business Intelligence applications and systems. OLAP allows fast, interactive analysis of large volumes of data. The power to explore large amounts of data at the stream of thought allows employees throughout the enterprise to answer critical business questions and make better decisions. This course explores the architecture, concepts, and features of Pentaho Analysis (Mondrian) to harness the power of OLAP, including the use of star and snowflake schemas, the use of aggregate tables, and the integration of Pentaho Analysis and the remainder of the Pentaho BI Suite.

Who Should Attend

This course is designed for BI developers and analysts tasked with developing cubes for online analytical processing (OLAP).

Learning Objectives

At the completion of this course, you should be able to:

- Understand the basic concepts of OLAP
- Employ industry standard BI development methodologies
- Explain the life cycle of Pentaho Analysis cubes
- Understand the basic architecture of Pentaho Analysis and its modules
- Understand the integration of Pentaho Analysis with the Pentaho BI Platform
- Develop star and snowflake OLAP schemas for use with Pentaho Analysis
- Employ OLAP security including cell-level access control
- Utilize aggregates and other techniques to improve Pentaho Analysis performance
- Use dimension sharing to build more expressive and maintainable cubes
- Understand the factors that impact performance

Course Prerequisites

There are no Pentaho Training prerequisites for this course. The course is designed for students with a strong understanding of SQL and relational database concepts and with experience creating and editing XML files. Basic knowledge of ETL and of web-application administration is also suggested.

Course Outline

Day 1

Module	Est. Duration (hours)
Introduction to OLAP and Mondrian (Pentaho Analysis) Introduces the features and use cases for online analytical processing and Mondrian (Pentaho Analysis).	2
Dimensional Concepts Explores the concepts of dimensions and dimensional modeling.	1
Basic Schema Design Uses the Pentaho Schema Workbench to create a basic OLAP schema.	2
OLAP Tools and Clients Demonstrates the various Pentaho tools and clients for OLAP.	2

Day 2

Module	Est. Duration (hours)
Intermediate Schema Design Explores the use of hierarchies, levels, conformed dimensions, and dimension references in schema design.	3
Introduction to MDX Teaches the basic use and syntax of multidimensional expression (MDX) query language for OLAP schemas.	1
Advanced Schema Design Incorporates time dimensions, calculated members, member properties, and format strings into schema design.	3

Day 3

Module	Est. Duration (hours)
Virtual Cubes Introduces the concepts and use cases of virtual cubes.	1
OLAP Security Explores the use of security in OLAP schemas.	2
Performance Considerations Discusses the issues, factors, and techniques for impacting performance.	2
Pentaho Deployment Teaches the techniques involved in and benefits of deploying schemas to the Pentaho BI Platform.	2

Data Integration

Introduction to ETL and Pentaho Data Integration

Course Information

Course No	Audience	Delivery Mode	Duration
PDI 1300W	Evaluators and Business Analysts	Web\on-line	3 hours

Course Benefits

Rarely is the data in transactional systems organized for effective aggregation and analysis. Thus, the movement and manipulation of data is often essential to building successful business intelligence solutions. Designed for those new to ETL or needing to understand the basics of Pentaho Data Integration, this course presents an overview of extract, transform, and load (ETL) concepts and introduces Pentaho Data Integration.

Who Should Attend

This course is designed for those new to ETL or needing to understand the basics of Pentaho Data Integration. Those already familiar with ETL should attend the Pentaho Data Integration for Database Developers (PDI 2000C) course.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the concepts and topics of ETL
- Use Pentaho Data Integration to build simple transformations
- Employ troubleshooting techniques for debugging transformations
- Retrieve and write data to text files and database tables
- Join data from two different sources

Course Prerequisites

There are no Pentaho Training prerequisites for this course. The course is designed for students with a basic understanding of SQL and relational database concepts.

Course Outline

Session	Est. Duration (hours)
Introduction to ETL and Pentaho Data Integration Explores the foundational ETL concepts, transformation design techniques, and troubleshooting tools employed by Pentaho Data Integration.	3

Pentaho Data Integration for Database Developers

Course Information

Course No	Audience	Delivery Mode	Duration
PDI 2000C	Database Developers	Classroom	4 days

Course Benefits

Data is increasingly becoming the currency of business. Efficiently moving and transforming data between business systems and processes are keys to maximizing the use of data to make informed decisions. This course provides foundational theory, best practices, design patterns, and hands-on exercises utilizing Pentaho Data Integration to maximize the value of data to the organization.

Who Should Attend

This course is designed for database developers and administrators; however, it is valuable to anyone with at least two years of experience with SQL and relational database design/implementation.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the basic architecture of Pentaho Data Integration (PDI) and its modules
- Load and write data from and to different data sources
- Join data from different sources
- Perform multiple data transformations
- Use PDI and ETL design patterns to populate a data warehouse
- Influence the performance aspects of databases and PDI
- Develop advanced transformations and jobs
- Build portable and flexible jobs
- Use the logging, monitoring and error handling features
- Use JavaScript and Java classes into transformations
- Load, transform and create complex XML structures
- Retrieve and serve data via web services using PDI and the Pentaho BI Server
- Understand the integration in the Pentaho BI Suite

Course Prerequisites

There are no Pentaho Training prerequisites for this course. This course is designed for students with at least two years of experience with SQL and relational database design/implementation.

Course Outline

Day 1

Module	Est. Duration (hours)
Pentaho Data Integration Overview Presents the purpose, capabilities, and history of Pentaho Data Integration.	3
Introduction to the Training Data and Platform Installs and describes the software and data used in the course.	1
Inputs and Outputs Explores the techniques for retrieving and outputting data within transformations.	3

Day 2

Module	Est. Duration (hours)
Look-ups and Field Transformations Provides hands-on experience with the techniques for performing look-ups, joining various sources of data, and transforming individual fields during transformations.	3
Set and Pivot Transformations Builds on the Look-ups and Field Transformations module by exploring transformation techniques for sorting and manipulating sets of data.	3

Day 3

Module	Est. Duration (hours)
Jobs and Advanced Job Concepts Teaches the techniques for creating jobs that orchestrate transformations as ETL workflows.	3
XML and Web Services Explores using web services to retrieve data and the use of XML as input sources and output destinations.	2
JavaScript and Transformations Teaches the use of JavaScript in transformations.	1
Building Portable Transformations and Jobs Presents techniques for and principles of authoring more portable transformations.	1

Day 4

Module	Est. Duration (hours)
ETL Patterns Discusses the use of common ETL patterns to accelerate transformation authoring.	2
Logging and Error Handling Presents techniques for detecting and handling errors.	2
Performance Tuning Explores topics related to building high performing transformations.	2

Plug-in Development for Pentaho Data Integration

Course Information

Course No	Audience	Delivery Mode	Duration
PDI 6050W	Java Developers	On-line	3 hours

Course Benefits

Out of the box, Pentaho Data Integration (PDI) is a powerful tool for transforming data. Its many transformation steps handle common and complex extract, transform, and load (ETL) tasks without additional programming. However, PDI's open architecture allows custom plug-ins to be written to connect to proprietary systems, perform custom transformations, read\write custom data formats, etc. This course teaches the techniques, architecture, and interfaces involved in developing custom plug-ins for Pentaho Data Integration.

Who Should Attend

This course is designed for Java developers with a strong foundation in ETL and the concepts of Pentaho Data Integration.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the plug-in architecture of Pentaho Data Integration
- Use the core interfaces involved in the development of plug-ins
- Build and deploy custom plug-ins

Course Prerequisites

This course requires intermediate understanding of Java software development, including Java interfaces and application packaging. A Java IDE such as Eclipse and a Subversion client are also required.

Course Outline

Session	Est. Duration (hours)
Plug-in Development for Pentaho Data Integration Explores the architecture and techniques for developing and deploying custom plug-ins for Pentaho Data Integration.	3

Reporting

Pentaho Report Design Techniques

Course Information

Course No	Audience	Delivery Mode	Duration
RPT 1175W	Report Authors	Online\Classroom	12 hrs\4 days

Course Benefits

Reporting needs vary from simple tabular data to financial statements to highly interactive reports. This course teaches the report design techniques to meet almost any reporting need. The course begins with a session that will help users create and publish their first report in less than two hours. The next three sessions build upon that foundation and teach report parameterization, design techniques with sub reports, report functions and calculations, and conditional formatting.

Who Should Attend

This course is designed for report authors and designers with a strong understanding of SQL and relational database concepts.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the basic architecture and tools of Pentaho Reporting and the Pentaho BI Platform
- Author complex and dynamic reports using the Pentaho Report Designer
- Use the Pentaho Design Studio to parameterize reports
- Construct reports against relational data sources
- Include charts and subreports in reports
- Use hyperlinks within reports to build a network of reports
- Employ calculations and grouping techniques within a report
- Dynamically build the SQL for a report

Course Prerequisites

There are no Pentaho Training prerequisites for this course. The course is designed for students with an understanding of SQL and relational database. Basic knowledge of web-applications is also suggested.

Course Outline

Session	Est. Duration (hours)
Getting Started Explores the foundational skills involved in designing and publishing reports with Pentaho Report Designer and the Pentaho BI Platform.	3
Designing Reports Teaches the skills to design high fidelity reports with charts, hyper linking, sub reports, and bands using the Pentaho Report Designer.	3
Parameterizing Reports Introduces the Pentaho Design Studio and techniques for parameterizing reports, dynamically constructing the data queries, and manipulating the report data.	3
Authoring Dynamic Reports Uses functions, calculations, and style expressions to design dynamic reports that include traffic lighting and conditional formatting.	3

Pentaho Report Design Techniques (Classroom)

Course Information

Course No	Audience	Delivery Mode	Duration
RPT 1175C	Report Authors	Classroom	3 Days

Course Benefits

Reporting needs vary from simple tabular data to financial statements to highly interactive reports. This lab intensive course teaches report design techniques to meet almost any reporting need. The course begins with a review of Pentaho Business Intelligence and the 3 different types of reporting that Pentaho provides. The students create several complex reports within the Report Designer. Parameterizing reports using Design Studio is also covered in depth.

Who Should Attend

This course is designed for report authors and designers with a strong understanding of SQL and relational database concepts.

Learning Objectives

At the completion of this course, you should be able to:

- Understand the basic architecture and tools of Pentaho Reporting and the Pentaho BI Platform
- Author complex and dynamic reports using the Pentaho Report Designer
- Use the Pentaho Design Studio to create parameterize reports
- Construct reports against relational data sources
- Include charts and subreports in reports
- Use hyperlinks within reports to build a network of reports
- Employ calculations and grouping techniques within a report
- Dynamically build the SQL for a report
- Place the output of reports in a Dashboard

Course Prerequisites

There are no Pentaho Training prerequisites for this course. The course is designed for students with an understanding of SQL and relational database. Basic knowledge of web-applications is also suggested.

Course Outline

Day 1

Session	Est. Duration (hours)
Getting Started Explore the Pentaho Bi Platform and understand the 3 different types of Reporting Pentaho has to offer. Teaches the foundational skills involved in designing and publishing reports with Pentaho Report Designer and the Pentaho BI Platform.	4
Report Wizard Teaches the Reporting Wizard and the SQL Query Designer .	2
Data Sources and Simple Reporting Objects Demonstrates adding a Data Source to the report along with Basic Reporting objects like Lines, Rectangles Message Fields, Grid Lines. And Hyperlinks	2

Day 2

Session	Est. Duration (hours)
Parameterizing Reports Demonstrates how to Publish a report to use in the User Console. Discusses Pentaho Architecture and the importance of .xaction files. Introduces the Pentaho Design Studio and techniques for Parameterizing reports, dynamically constructing the data queries, and manipulating the report data.	4
High Fidelity Reports Teaches the skills to design high fidelity reports with charts, hyper linking, sub reports, and bands using the Pentaho Report Designer.	4

Day 3

Session	Est. Duration (hours)
Authoring Dynamic Reports Uses functions, calculations, and style expressions to design dynamic reports that include traffic lighting and conditional formatting.	7
Dashboard Designer An in-depth demonstration of the new Dashboard Designer	1