

Schulung Historian 2017

Beschreibung des Kurses



Schulung Historian 2017

Dauer : 4 Tage

Zeitplan:

Montag 8h30 - 17h30

Dienstag - Donnerstag 8h15 - 17h30

Preis:

CHF 3'000 / Person (20% Rabatt mit gültigem Support-Vertrag)
das tägliche Mittagessen ist im Schulungspreis inklusive.



Course Description

The Wonderware Historian Server 2017 course is a 2-day, instructor-led class designed to provide a fundamental understanding of the features and functionality of Wonderware Historian Server for both Application Server and InTouch tag-based applications.

The course provides lectures and hands-on labs to supply and reinforce the knowledge necessary to use Wonderware Historian Server for SCADA and factory data. This includes how to configure, historize, and retrieve data using multiple retrieval modes, local and remote summarization, replication, event monitoring, and other features.

The Wonderware Historian Client 2017 course is a 2-day, instructor-led class designed to provide a fundamental understanding of the features and functionality of the Wonderware Historian Client software. The course provides lectures and hands-on labs to supply and reinforce the knowledge necessary to use Wonderware Historian Client. The Wonderware Historian Client trending, analysis, and reporting software offers a suite of data analysis and reporting clients that maximize the value of data stored on Wonderware Historian. Wonderware Historian Client enables individuals at all levels of an organization to easily access plant- and process-related data through simple point-and-click dialog boxes.

Objectives

Upon completion of this course, you will be able to:

- Start and configure Historian Server
- Configure and historize Application Server and InTouch data
- Distinguish between retrieval modes
- Retrieve data with SQL queries
- Use time domain extensions in SQL queries
- Update and insert history data
- Create and configure events and retrieve event data
- Configure Historian tags for local summarization
- Use a Tier-2 Historian for replication and summarization
- Backup and restore Historian data

Upon completion of this course, you will be able to:

- Retrieve Wonderware Historian data with the help of Wonderware Historian Client





- Use the data in its appropriate context, including historical and real-time trend manipulation, and production-related reporting within Microsoft Excel and Word

Audience

Application developers, engineers, system integrators, consultants, and other individuals who need to historize, analyze, and maintain data from Application Server or from a tag-based InTouch application

Audience for this course includes Plant floor operators, managers, and other individuals whose jobs include using Wonderware Historian data for assessment and reporting within production or administrative environments.

Prerequisites

The prerequisites for this course are:

Completion of the Wonderware Application Server or an InTouch course

Manufacturing industry experience

Knowledge of Transact-SQL would be helpful

- Knowledge of InTouch
- Knowledge of Wonderware Historian
- Knowledge of Microsoft Office Excel and Microsoft Word
- Experience in manufacturing industry



Tag	Inhalt
1	<p>Module 1 – Introduction</p> <p>Section 1 – Course Introduction This section describes the Wonderware Historian Server course and outlines Wonderware software solutions.</p> <p>Section 2 – Introduction to Historian Server This section describes the main functions and features of Historian Server.</p> <p>Section 3 – System Requirements and Licensing This section provides an overview of the general hardware recommendations and software requirements for Historian. It also introduces the licensing model.</p> <p>Module 2 – Historian Configuration</p> <p>Section 1 – Arcestra System Management Console This section describes the Arcestra System Management Console. It provides an overview of its interface and explains how to use it to register and start Historians. It also describes Historian options and system parameters.</p> <p>Section 2 – Historian and Application Server This section explains the basics of how Historian Server integrates with the Galaxy. It also describes how to configure platforms, engines, and object attributes for historization.</p> <p>Section 3 – IDAS - Historian and InTouch This section explains the basics of historizing data from tag-based InTouch applications. It describes the Tag Importer Wizard, defines storage options, and explains manual tag configuration.</p> <p>Module 3 – Data Retrieval</p> <p>Section 1 – Data Retrieval Subsystem This section describes the Historian Server data retrieval subsystem, the Wonderware Historian OLE DB provider, and extension tables for history data. It explains the syntax for basic SQL queries and those that include</p>



the OPENQUERY function. It also describes wide and narrow formats for retrieved data.

Section 2 – Retrieval Modes

This section describes Historian Server retrieval modes, with a focus on Cyclic, Delta, Full, and BestFit. It also explains how to specify retrieval modes in SQL queries.

Section 3 – Retrieval Options

This section describes Historian Server retrieval options, with a focus on wwCycleCount, wwResolution, wwEdgeDetection, and wwFilter.

Section 4 – Advanced Retrieval Modes

This section defines Historian Server advanced retrieval modes, including Average, Counter, Integral, Interpolated, Maximum, Minimum, RoundTrip, Slope, and ValueState retrieval modes.

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Module 4 – Manual Data

Section 1 – Data Definitions

This section defines Historian data categories. It also explains original versus revision data, as well as streamed versus non-streamed original data.

Section 2 – INSERT and UPDATE Query Syntax

This section describes data versioning and explains the INSERT and UPDATE query syntax.

Module 5 – Historian Events

Section 1 – Classic Event Subsystem

This section describes the Historian classic event subsystem and defines event tags, detectors, and actions. It explains how to configure event tags and latency in event configuration.

Section 2 – Event Data Retrieval

This section describes Historian tables related to the classic event subsystem. It also explains how to retrieve event data with SQL queries.

Section 3 – Active Event

This section describes the ActiveEvent ActiveX control and explains methods for triggering an external event using ActiveEvent.



Module 6 – Summaries and Data Replication

Section 1 – Data Summarization

This section defines the concept of summarizing data. It also describes analog and state summary replication and explains naming schemes for the replication process.

Section 2 – Tiered Historians

This section explains the concept of tiered Historians. It describes replication to a Tier-2 Historian, defines simple replication, and reviews naming schemes for the replication process.

Section 3 – Summarized and Replicated Data Retrieval

This section describes how to retrieve summarized and replicated data from Historian. It also reviews AnalogSummaryHistory and StateSummaryHistory views.

Module 7 – Historian Maintenance

Section 1 – History Block Maintenance

This section explains how to back up history blocks.

Section 2 – Historian Database Management

This section explains how and when to back up Historian Server databases.

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Module 1 – Introduction

Section 1 – Course Introduction

This section describes the fundamentals of the Wonderware Historian Client 2017 Software course, the objectives of the course, intended audience, prerequisites, and course agenda. It also includes a description of the Wonderware products.

Section 2 – Introduction to Wonderware Historian Client

This section introduces the Wonderware Historian Client applications, the main features, hardware requirements, and licensing.



Section 3 – Introduction to Wonderware Historian Server

This section introduces the main features of Wonderware Historian Server, network considerations, hardware and software requirements, and licensing strategies.

Section 4 – System Requirements, Licensing, and Support

This section explains the recommended system requirements and licensing information.

Module 2 – Wonderware Historian Client Trend

Section 1 – Introduction to Wonderware Historian Client Trend

This section describes the features of Wonderware Historian Client Trend and how to create and configure trends using Wonderware Historian Client Trend.

Section 2 – Public and Private Groups

This section describes the function of the Public and Private Groups folders that are used in Wonderware Historian Trend Client to store and share tags.

Section 3 – Time Offset and Target Regions

This section describes how to configure time offset and target region in a trend for tag configuration.

Section 4 – Retrieval Styles and Data Transformations in Trend

This section takes you through the steps necessary to configure Retrieval styles and create Custom Retrieval styles in Wonderware Historian Client Trend.

Module 3 – Wonderware Historian Client Workbook

Section 1 – Introduction to Wonderware Historian Client Workbook

This section explains the basic functionality of Wonderware Historian Client Workbook.

Section 2 – Historian Event Retrieval

This section explains the various event tag selection methods and the Historian event retrieval functionality.

Section 3 – Enhanced Workbook with Excel Functionality

This section explains how to use the features of the enhanced workbook with Excel functionality to create reports to get data for a specified shift.



Module 4 – Wonderware Historian Client Query

Section 1 – Introduction to Wonderware Historian Client Query

This section introduces Wonderware Historian Client Query uses and operation.

Module 5 – Wonderware Historian Client Report

Section 1 – Introduction to Wonderware Historian Client Report

This section introduces the uses and operation of Wonderware Historian Client Report.

Section 2 – Use of Wildcards in Reports

This section explains the use of wildcards for time options and report editing.

Module 6 – Wonderware Historian Client ActiveX Controls

Section 1 – Wonderware Historian Client Controls

This section explains the use, properties, methods, and events of the ActiveX controls. In particular, this section discusses the aaHistClientTrend and aaHistClientActiveDataGrid controls and their common configuration needs.

