Cel szkolenia:

This Oracle Database 12c: Use XML DB training allows you to deep dive into the key features of Oracle XML DB. Through interactive instructions and hands-on exercises, expert Oracle University instructors will teach you how to use Oracle XML DB to store, access, manipulate, validate, search, update, annotate, transform, generate, import and export XML data.

Plan szkolenia:

- Introduction
  - Questions About You
  - Course Objectives
  - Course Prerequisites
  - Suggested Course Agenda
  - Database Schema
  - Appendices
  - Class Account Information
  - Course Environments

- Introduction to Oracle XML
  - What is XML?
  - Example: A Simple XML Document
  - Markup Rules for Elements
XML Attributes
Well-Formed XML Documents
Document Type Definitions (DTD) and XML Schemas
Why Validate an XML Document
XPath and XQuery

Introduction to Oracle XML DB
Oracle XML DB
Oracle XML DB: Benefit
Oracle XML DB: Features

Storing XML Data in Oracle XML DB
XMLType: Overview
Describe XMLType storage options
Create objects of XMLType
Declaring an XMLType
Insert data into XMLType
XMLType Storage Characteristics
XMLType Storage Models
Specifying SQL Constraints

Using XML Schema with Oracle XML DB
Using XML Schema with Oracle XML DB: Overview
XMLType and XML Schema
XML Schema Management
Creating XML Schema-Based XMLType Tables and Columns
Specifying Unstructured Storage of XML Schema-Based Data
Managing Changes in an XML Schema

Oracle XML DB Manageability
Oracle XML Schema Annotations
Common Uses of XML Schema Annotations
Annotations Methods
Purchase-Order XML Schema: purchaseOrder.xsd
Annotated Purchase-Order XML Schema: purchaseOrder.xsd
Annotating an XML Schema by Using DBMS_XMLSCHEMA_ANNOTATE
Annotation Subprogram Parameters
Some of the Available Oracle XML DB XML Schema Elements Annotations

Partitioning XMLType Tables
Partitioning concepts
- Ordered collection tables
- Partitioning XMLType tables and columns stored object-relationally
- Specifying partitioning information for an XMLType base table
- Partition maintenance
- Online partition redefinition for ordered collection tables
- Partitioning Binary XML Tables
- Using XQuery to Retrieve XML Data in Oracle XML DB
  - Retrieving XML content
  - Using FLWOR expressions: review
  - XQuery support in Oracle Database
  - Querying the database: relational data
  - Querying the database: XMLType data
  - Querying XMLType data by using SQL/XML standard functions
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  - Migrating from Oracle Functions for Updating XML Data to XQuery Update
  - XQuery Update Snapshots
  - Updating XML Data
  - Updating an Entire XML Document
  - General Syntax for an XQuery Update
  - Replacing XML Nodes (Current State)
  - Replacing XML Nodes (Updated State)
  - Updating XML Data to NULL Values Considerations
- Search XML Content Using XQuery Full-Text
  - Full-Text Search Capabilities
  - Available Documentation
  - Full-Text contains Expression
  - Indexing for XQuery Full Text
  - Requirements for Creating XQuery Full Text Index
  - Indexing for XQuery Full Text: Best Performance
  - Using XML Schema-Based Data with XQuery Full Text
  - Error ORA-18177: Using XML Schema-Based Data with XQuery Full Text
- Indexing XMLType Data
  - Indexing XMLType data
  - Using XMLIndex index
  - What is XMLIndex?
  - XMLIndex Unstructured Component
○ New: XMLIndex Structured Component
○ Guidelines

○ Generating XML Data
  ○ Generating XML data by using XQuery
  ○ Generating XML data by using the SQL/XML standard functions
  ○ Generating XML data by using the DBMS_XMLGEN PL/SQL package

○ Transforming XML Data
  ○ Creating XMLType views
  ○ Transforming XML
  ○ Use XQuery to transform XML

○ Creating Relational Views over XML Data
  ○ Introduction to Creating and Using Relational Views over XML Data
  ○ Creating a Relational View over XML: One Row for Each XML Document
  ○ Creating a Relational View over XML: Mapping XML Nodes to Columns
  ○ Examining the View in Oracle SQL Developer
  ○ Indexing Binary XML Data Exposed Using a Relational View
  ○ Querying XML Content As Relational Data

○ Accessing Resources in Oracle XML DB Repository
  ○ XML DB Repository: overview
  ○ Creating folders and resources using PL/SQL
  ○ Accessing resources
  ○ Access control lists
  ○ Compound documents
  ○ Repository events

○ Using Native Oracle XML DB Web Services
  ○ Overview of Web Services
  ○ Overview of Native Oracle XML DB Web Services
  ○ Configuring Web Services for Oracle XML DB
  ○ Enabling Web Services for Oracle XML DB
  ○ Querying Oracle XML DB using a Web Service
  ○ Accessing PL/SQL Stored Procedures using a Web Service

○ Exporting and Importing XML Data
  ○ SQL*Loader
  ○ Loading XMLType data
  ○ Oracle Data Pump
Wymagania:

Wymagane prerekwizyty:

- Basic experience with SQL and PL/SQL
- XML Fundamentals Ed 1.1
- Oracle Database: Develop PL/SQL Program Units

Sugerowane prerekwizyty:

- Familiarity with Oracle SQL Developer
- Familiarity with SQL*Plus
- Familiarity with PL/SQL

Poziom trudności

Certyfikaty:

Uczestnicy szkoleń otrzymają zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.