

Chapter 2. Federated Databases: **WEB REST Model**

Federated Database Object Study Case: source directory structure

- Support Software and configuration
 - fdbo_study_case/support/3_WebModel
- Web REST Model Structures with ORDS
 - fdbo_study_case/3_WebModel

PREPARE Web ORDS Platform

- **Instal** Oracle REST Data Service (ORDS) platform
 - a1) Create/define ORDS HOME directory, e.g. %ORDS_HOME% could be D:\ORDS
 - a2) Create/define ORDS configuration directory, e.g. D:\ORDS\config
 - a3) Download Oracle REST Data services (aka ORDS) kit form [OTN-link](#) or from [Link Source Code Teams](#) (fdbo_study_case/support/3_WebModel) and unzip the file into %ORDS_HOME%:
 - a4) First install and run ords app from ORDS_HOME/bin and follow command line instructions:
 - Change current directory to %ORDS_HOME% directory:
 - CD %ORDS_HOME%/bin (replace %ORDS_HOME% with actual ORDS path)
 - **ords --config %ORDS_HOME%/config install**
 - e.g.: ords --config ../config install

Oracle REST Data Services - Interactive Install

Enter a number to select the database connection type to use

- [1] **Basic (host name, port, service name)**
- [2] TNS (TNS alias, TNS directory)
- [3] Custom database URL

Choose [1]:

Enter the database host name [**localhost**]:

Enter the database listen port [**1521**]:

Enter the database service name [**XEPDB1**]:

Provide database user name with administrator privileges.

Enter the administrator username: **SYS**

Enter the database **password** for SYS AS SYSDBA:

Retrieving information.

Enter a number to update the value or select option A to Accept and Continue

- [1] Connection Type: Basic
- [2] Basic Connection: `HOST=localhost PORT=1521 SERVICE_NAME=XEPDB1`
Administrator User: SYS AS SYSDBA
- [3] Database password for ORDS runtime user (ORDS_PUBLIC_USER): <generate>
- [4] Additional Feature: Database Actions
- [5] Configure and start ORDS in Standalone Mode: Yes
- [6] Protocol: `HTTP`
- [7] HTTP Port: `8080`
- [8] APEX static resources location:
- [A] Accept and Continue - Create configuration and Upgrade ORDS in the database
- [Q] Quit - Do not proceed. No changes

Choose [A]: A

- **Launch** ORDS runtime in standalone mode:
 - `ords --config %ORDS_HOME%/config serve`
 - e.g.: `ords --config ../config config serve`
- **Check** the landing page from the browser: <http://localhost:8080/ords/>
 - Explore SQL Developer Web version
 - <http://localhost:8080/ords/sql-developer>
 - Connect with FDBO user (after enabling FDBO schema, see below 32_FDBO_REST_WebViews.sql script).

CASE STUDY 1: Case Study: SQL ROLAP Multidimensional Database

- Create Web View REST endpoints on FDBO schema
 - SQL Developer (Connect with FDBO on XEPDB1 service)
 - `fdbo_study_case/3_WebModel/`
 - **32_FDBO_REST_WebViews.sql**
 - Create *REST View*
 - *Analytical Views*
 - `OLAP_VIEW_SALES_DEP_CIT_CUST`
 - `OLAP_VIEW_SALES_CALENDAR`
 - `OLAP_VIEW_SALES_CTG_CUST_EMP`
 - *Endpoint Views*
 - http://localhost:8080/ords/fdbo/OLAP_VIEW_SALES_DEP_CIT_CUST/
 - http://localhost:8080/ords/fdbo/OLAP_VIEW_SALES_CALENDAR/
 - http://localhost:8080/ords/fdbo/OLAP_VIEW_SALES_CTG_CUST_TO/
 - http://localhost:8080/ords/fdbo/OLAP_VIEW_SALES_CTG_CUST_EMP/