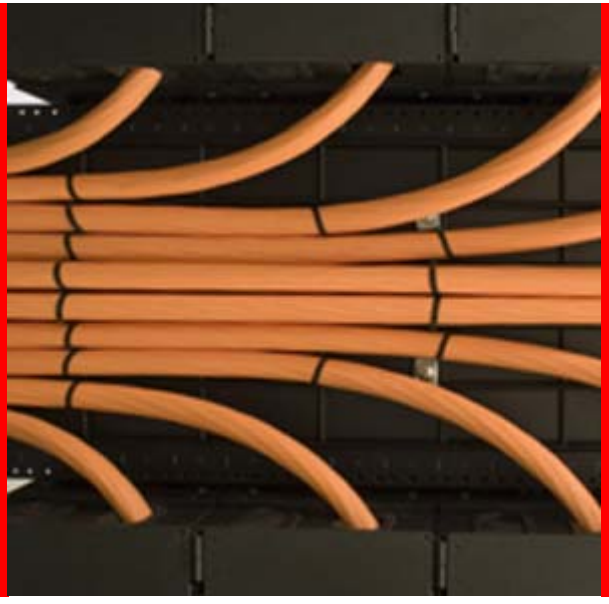


ORACLE

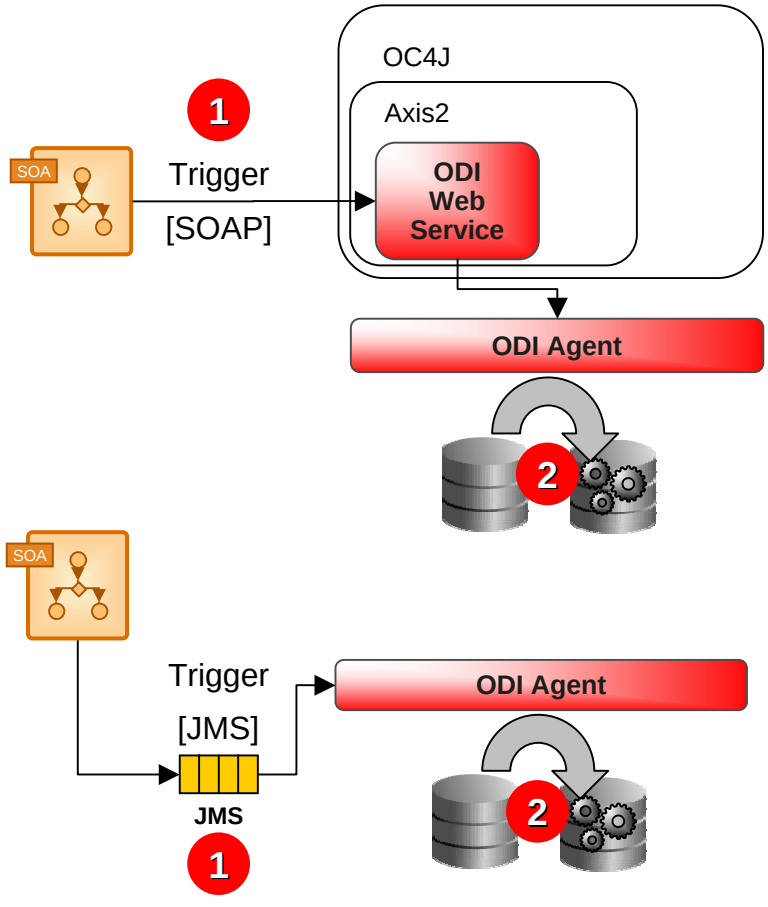
Oracle Data Integrator的Web Service扩展应用

议程

- Web Service技术在Oracle Data Integrator (ODI)的应用
- ODI Public Web Service和Data Service
- 演示: ODI Public Web Service

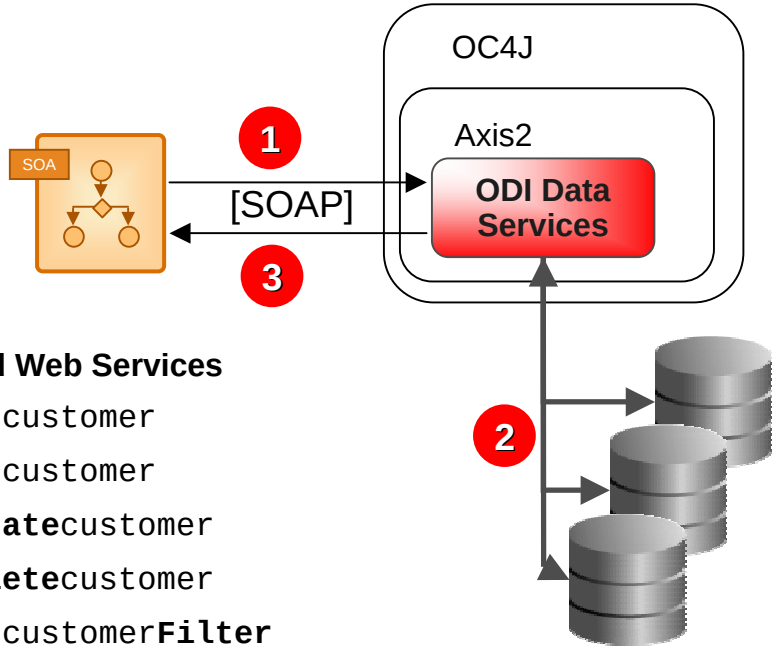
Web Service技术在ODI中的应用

通过Web Service调用ODI做批量数据更新



- ODI is better suited for bulk data transformation:
  - Large Data Volumes that could choke the messaging layers
  - Data Cleansing
  - Heterogeneous technologies support
- Batch jobs can be triggered using **SOAP** or **JMS**.

通过Web Service访问ODI数据

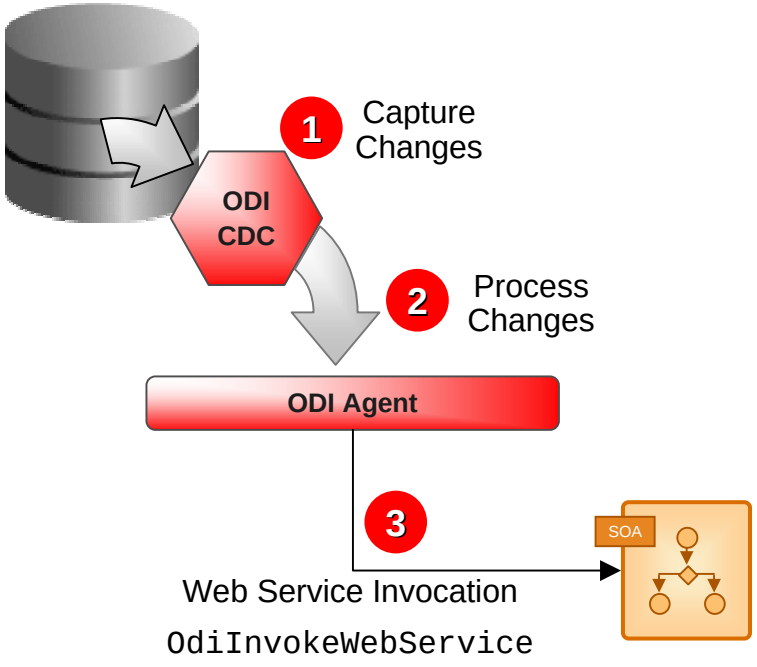


Generated Web Services

addcustomer
getcustomer
updatecustomer
deletecustomer
getcustomer**Filter**
getcustomer**List**
...
getChangedcustomer
consumeChangedcustomer

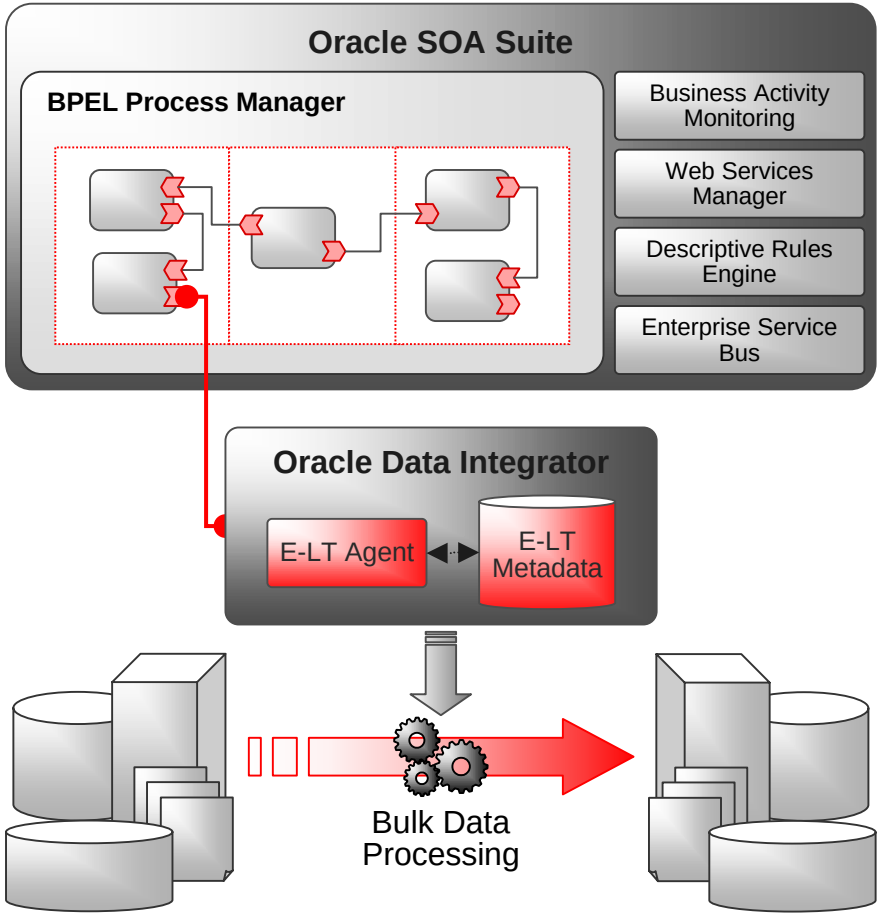
- ODI Data Services are <u>automatically generated</u> web services to access data or captured changes.
- They might be a better choice than the database or file adapters in a variety of situations:
  - Specific systems or platforms
  - Need for complex CDC data

通过Web Service获得ODI的CDC数据



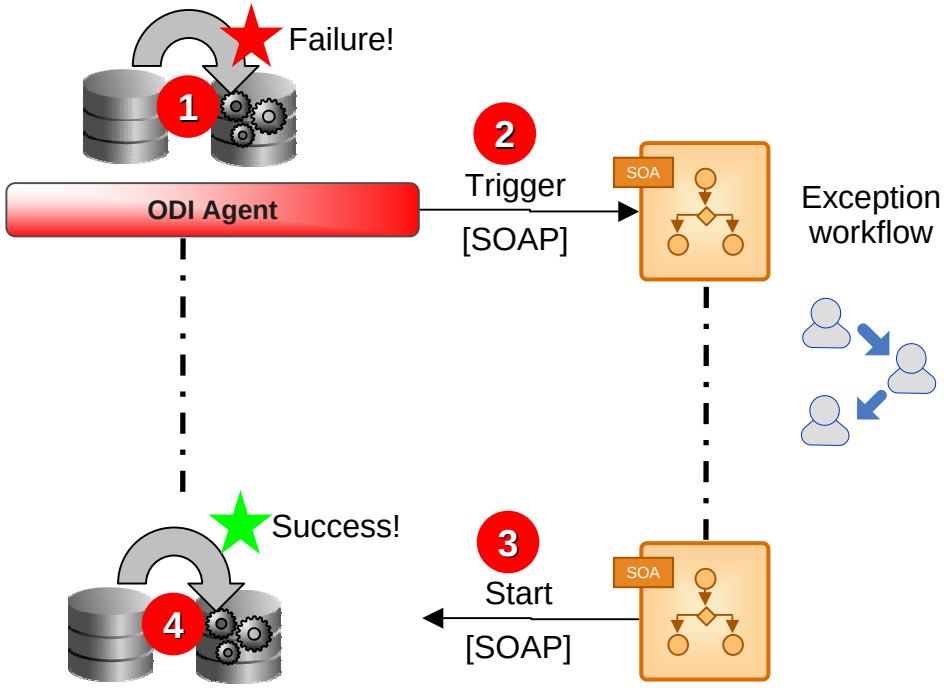
- While the SOA Suite database adapter can capture data changes, ODI has a few extra capabilities in this area, such as ability to use database logs instead of triggers.
- ODI can invoke ESB/BPEL flows with this changed data

通过Web Service启动ODI批量处理流程



- ODI as an underlying embedded ETL engine;
- Expose control as web service;
- Invoke scenario through ODI “Publich Web Service”

通过Web Service进一步补充ODI的功能



- Example: BPEL for exception handling;
- BPEL PM brings to ODI complex workflow capabilities and Human interaction
- Better handling of exceptions or events occurring during ODI flow

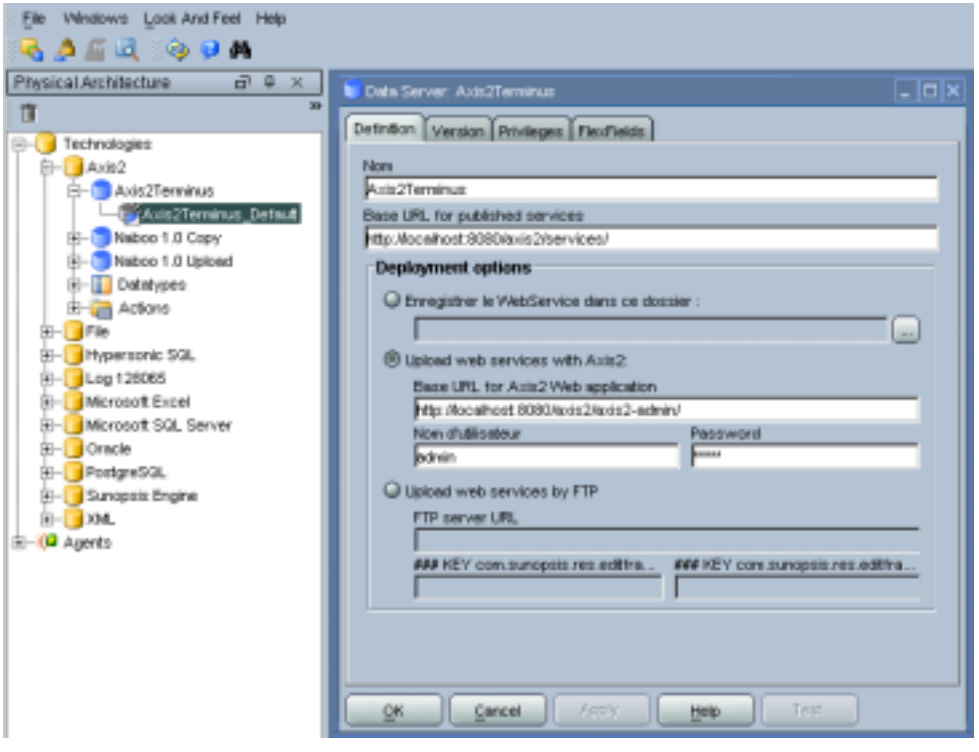
ODI Public Web Service和Data Service

Public Web Services

- 将ODI的一个scenario的执行，以Web Service的方式暴露出来，供调用执行；
- 需要启动Agent，由Agent接受Web Service调用；
- Public Web Service对应的“.aar”打包文件，ODI预先提供，需部署至Axis2 Web Service容器；
- 调用时，需提供相关参数；
- Public Web Service的成功执行，仅返回状态信息和session信息

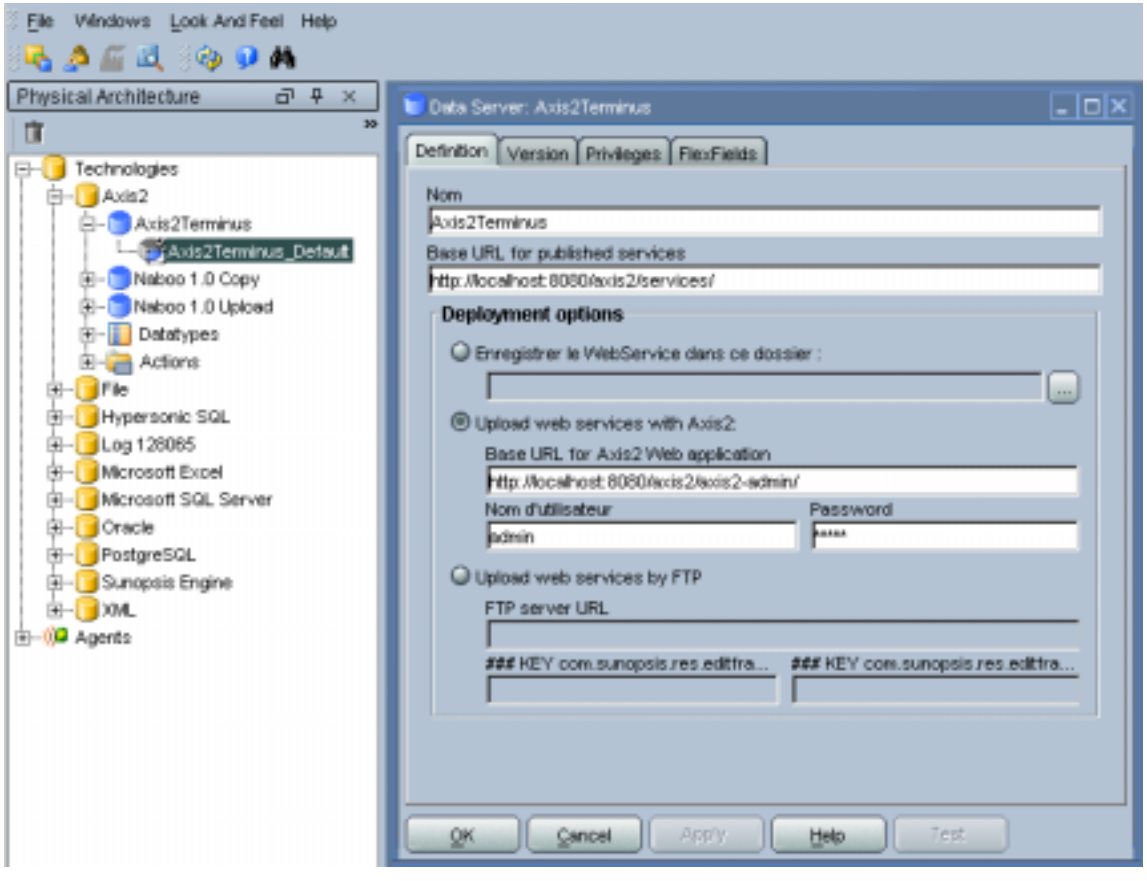
Data Services

- **ODI可以自动生成Data Service**
  - Requires Axis 2 on a web (or servlet) container (tested with Tomcat 5.5, OC4J)
  - Java JDK 1.5 is required
  - By default, only a JRE is embedded, enough for agent to run, but not for Web Service execution;
- **Data Service通过SKM生成**



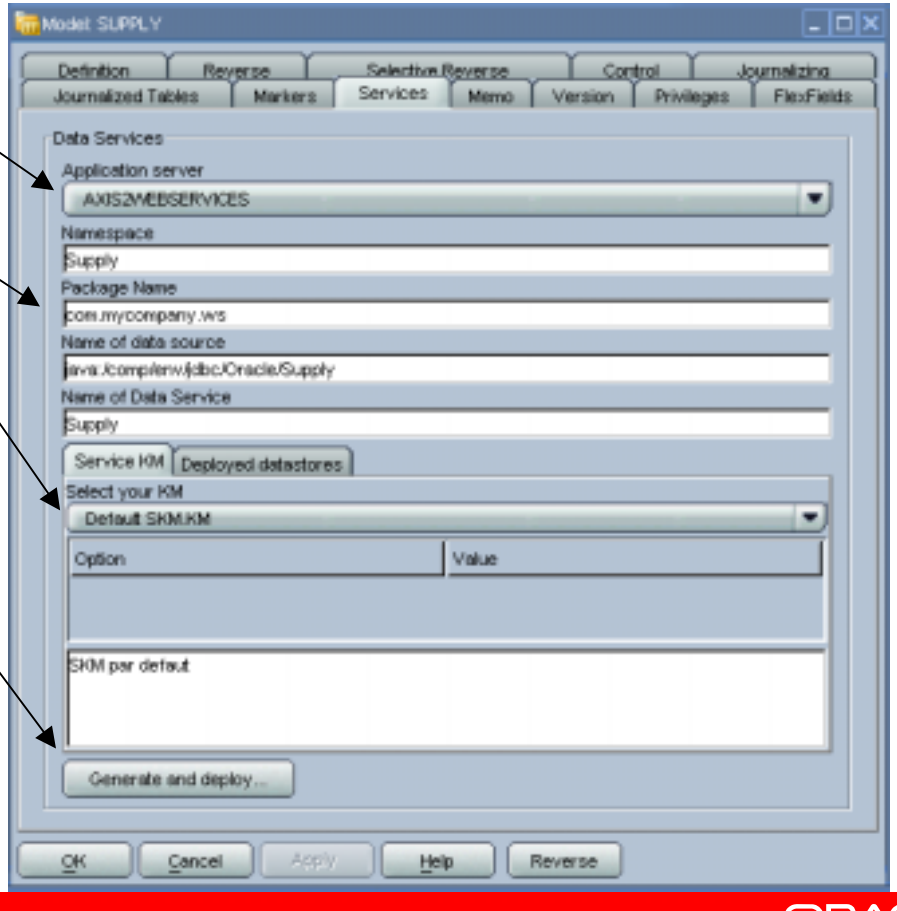
Data Services: Topology

- The Web Service Container is defined in the Topology



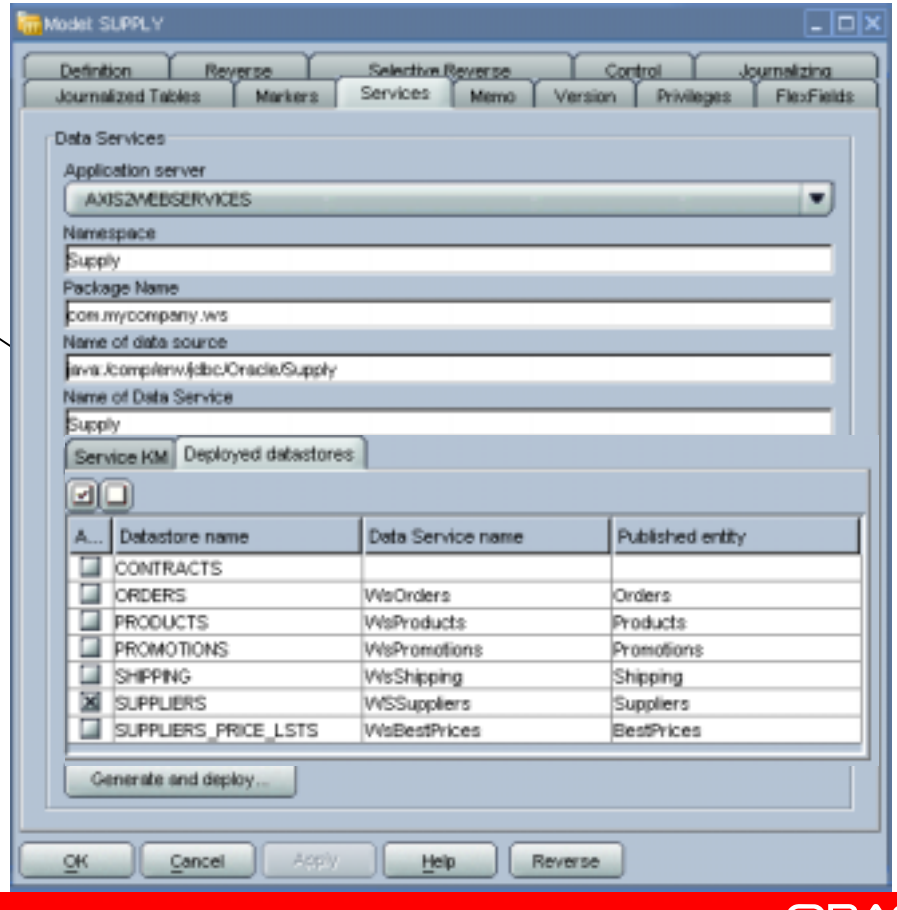
Data Services: Models

- 在“模型”（Model）的Service标签内定义相关参数
  - Name of the server
  - Parameters for this server
  - Name of the SKM
- And you can generate and deploy the web service



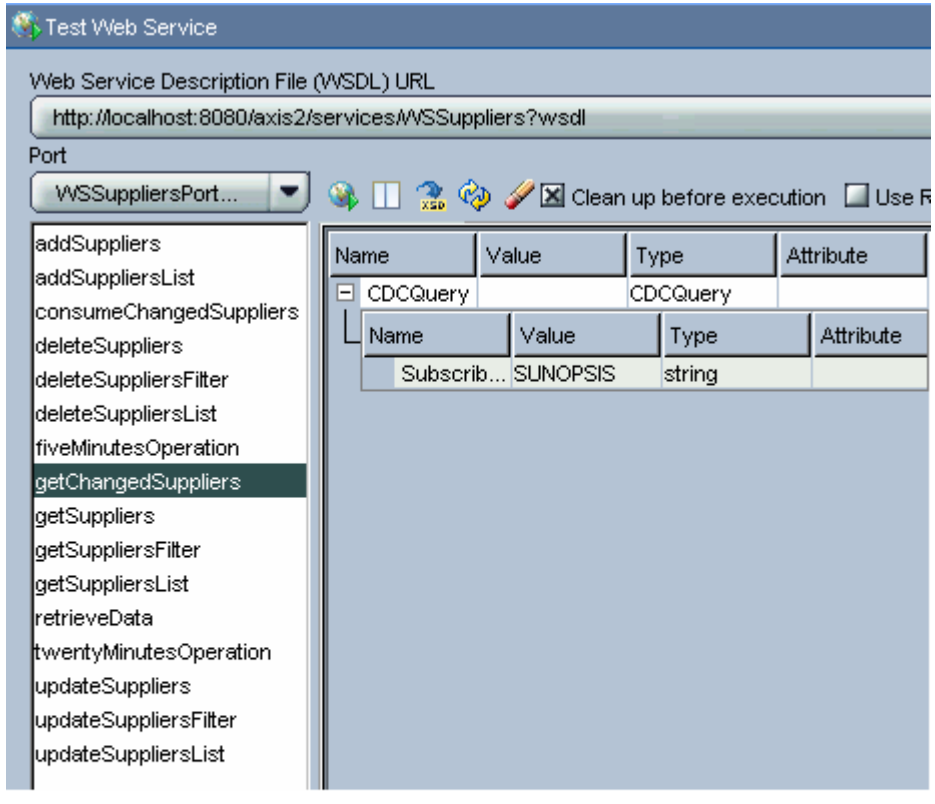
Data Services: Models

- 在“*deployed datastore*”标签页下，选择要通过Web Service暴露出去的datastore



Data Services : Testing From Designer

- Web services can be tested directly from the designer interface (right-click on a datastore)
- Each *port* can be tested individually



演示：ODI Public Web Service