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Oracle REST Data Services
Statement of Direction
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Executive Overview

Oracle REST Data Services provide a RESTful Web Service interface to data and logic in an Oracle Database, as well as access to data in an Oracle NoSQL Database. Oracle REST Data Services include features that make it easy to generate RESTful Web Services for data objects, to migrate data from an NoSQL Database to the Oracle Database, and to implement security with first-part or OAuth2 authentication. Oracle REST Data Services extend the standard REST framework with the ability to dynamically add modifiers to RESTful queries and to maintain a consistent snapshot view of data over multiple pages in the stateless Web Service environment.
Oracle’s Product Strategy

Database access through RESTful Web Services

Representational State Transfer, or REST, is an architecture used for Web Services that is rapidly becoming an important standard for Web data access. RESTful Web Services operates over HTTP/S, using a URI to an endpoint which delivers a response, frequently in the form of a set of data.

Oracle REST Data Services provide a RESTful interface to data and logic in and Oracle Database and data in an Oracle NoSQL database. RESTful Web Services can be used with a wide variety of different development languages as well as an integration mechanism.

Oracle REST Data Services 3.0

Oracle RESTful Data Services was formerly known as the Oracle Application Express Listener. This latest version continues to support the Oracle Application Express environment, but there are no dependencies on Application Express to use Oracle RESTful Data Services functionality. In addition, installation of the Oracle RESTful Data Services has been greatly simplified and can be accomplished through a wizard interface in SQL Developer.

Oracle RESTful Data Services provides functionality in three main areas –

Creation of RESTful Web Services –

- A RESTful Web Service can use any SQL statement or PL/SQL block in an Oracle Database, any data in an Oracle NoSQL database or a document collection stored in an Oracle Database.
- Automatic linkage of master-detail RESTful Web Services
- Full support for streaming large objects through a RESTful interface
- Define RESTful Web Services through wizards in SQL Developer or Application Express.
- One click enablement of dynamic RESTful access for query and CRUD operations on tables.
- Create a RESTful in SQL Developer with a single right click on any SQL statement or PL/SQL block
- PL/SQL API for generation of RESTful Web Service definitions
- Full test environment for RESTful Web Services in SQL Developer

Runtime use of Web Services

- Data can be automatically marshaled into JSON or .csv format
- Ability to support multiple endpoint locations for data transparency and flexibility
- API for bulk loading tables through RESTful Web Services
- Ability to change source of data transparently to the RESTful Web Service call, including between NoSQL and SQL databases

Extensions of RESTful Web Service functionality

- Ability to add filters and sorting to a RESTful Web Service, extending the flexible use of a smaller number of core RESTful Web Service calls
- Ability to maintain a logically consistent result set over multiple pages of returned data, which is not possible with any other implementation of RESTful Web Services using the
stateless HTTP protocol

**Future Investment**

As a key component of the Oracle Database, Oracle intends to continue enhancing Oracle REST Data Services. Oracle REST Data Services will be included with the next each new version of the Oracle Database as a standard database component.

**Oracle’s Support Policy**

Oracle REST Data Services is a standard feature and component of the Oracle Database. Support guidelines for Oracle Application Express are similar to those specified for the Oracle Database.

Oracle REST Data Services, formerly known as the Oracle Application Express Listener, has a large and active installed base among both Application Express users and standard Oracle Database users, with over 250,000 developers creating thousands of applications. Oracle recognizes the considerable investment in Oracle REST Data Services by our customers and remains committed to the long-term support of this product.

**Oracle’s Lifetime Support Policy**

Oracle’s Lifetime Support Policy defines the support levels and dates for Oracle products. The support timelines are defined in Oracle Lifetime Support Policy: Oracle Technology Products. In general, Premier Support for Oracle REST Data Services is provided for 5 years from the date of general availability of a product release.


Oracle REST Data Services customers readily upgrade to new versions of Oracle REST Data Services with no loss of functionality to their applications, while capitalizing on improved performance, security, accessibility and functionality.
Conclusion

Oracle REST Data Services is critically important to countless Oracle customers and Oracle remains committed to the ongoing development and support of Oracle REST Data Services. RESTful Web Services are rapidly becoming the standard access protocol for Web-based data sources, and support for this architecture is crucial to Oracle and the continued success of the Oracle Database.