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Oracle Database Cloud Service

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Agenda

Oracle Cloud Database Service Overview

- Cloud taxonomy
- What is the Database Cloud Service?
- Architecture and Tools

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The Cloud

Taxonomy

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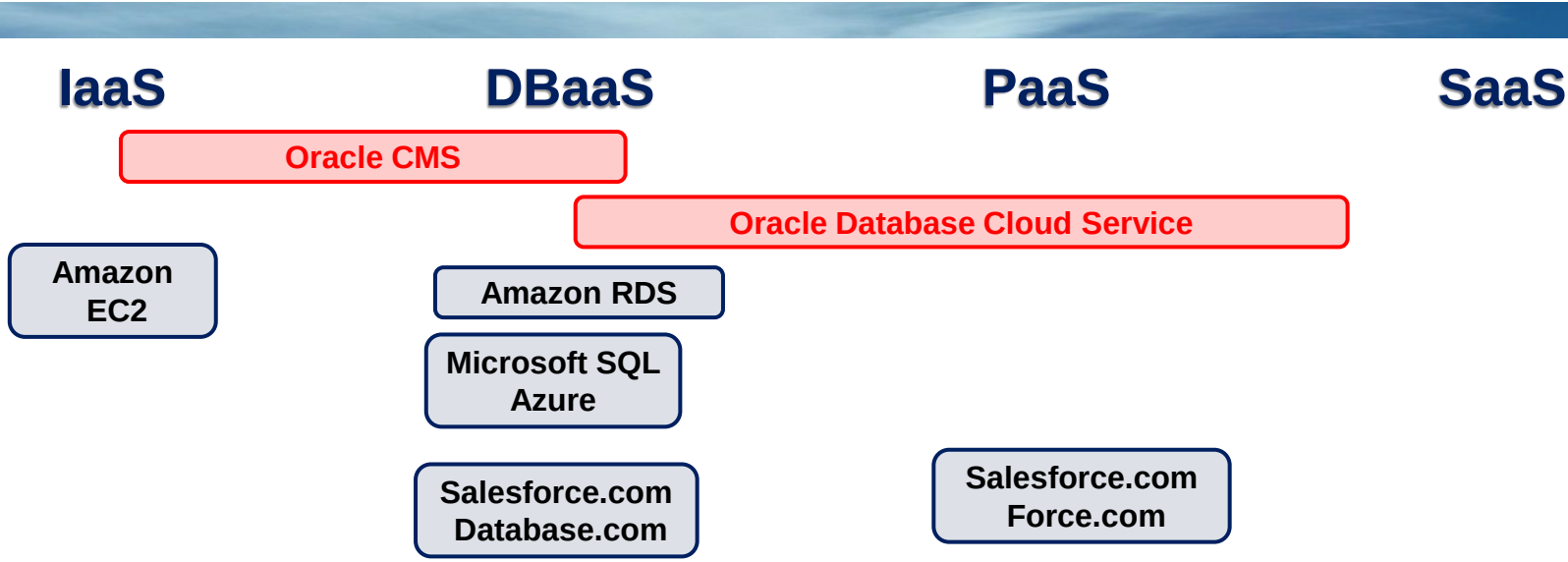
Cloud Database Offerings



Improved Productivity

Greater Business Value

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Oracle Database Offerings

	DBaaS	PaaS
Public Cloud	Oracle Cloud Managed Services	Oracle Database Cloud Service
Private Cloud	Oracle Database	Oracle Application Express (APEX)

Complete portability between public and private cloud

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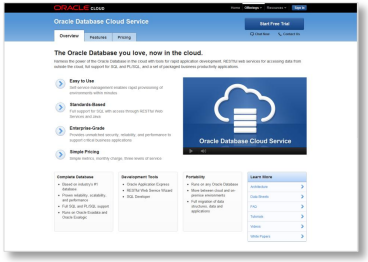
Database Cloud Service

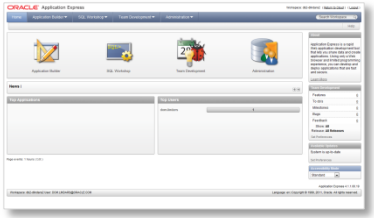
What is it?

Oracle Database Cloud Service

Key Components

- Product Components
  - Oracle Database 11g Release 2 EE
  - Running on Exadata
  - Rapid application development with Application Express (APEX)
  - Database access through RESTful Web Services
  - SQL Developer for creating and managing data and data structures
  - Packaged business and productivity applications
- Fully Managed Service
  - Designed to be a Massively Available Architecture
  - Highly Secure - Infrastructure and Operations
  - All database administration tasks are automated or managed
- Initial Offering
  - Pricing based on storage – 5Gb, 20Gb or 50Gb
  - Month to month subscription, including full Oracle Support
  - Free 30-day trial





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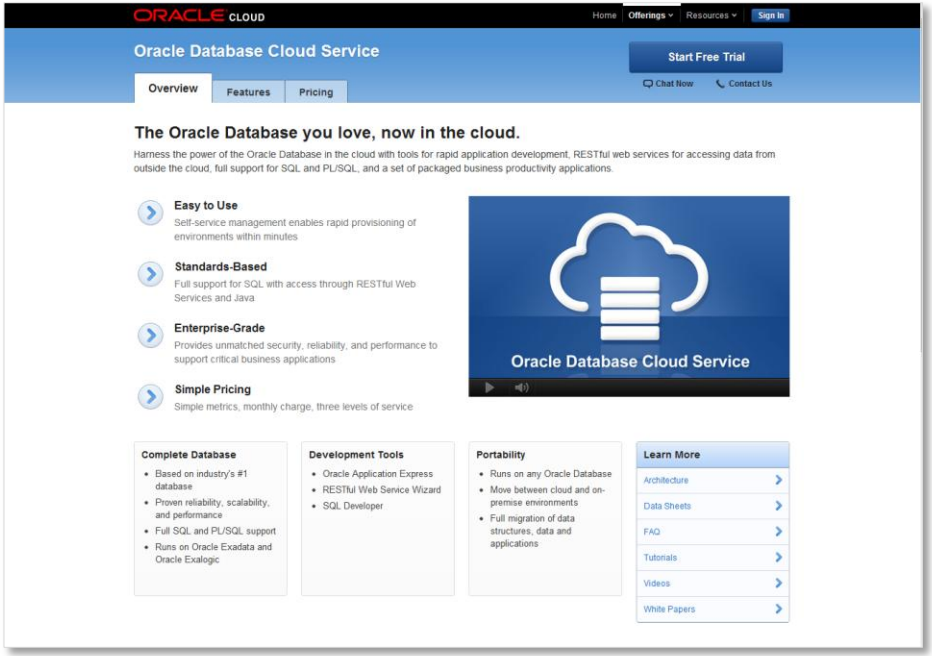
Use Cases and Target Markets

- New Cloud-based development
  - Application Express
  - RESTful Web Service access
- Existing applications
  - Application Express
  - Java (Java Cloud Service)
- Target Markets
  - Small & medium sized businesses
  - Departmental and lines of business
  - IT departments
  - Partners and ISVs



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Oracle Database Cloud Service

Database Service Data Access

Oracle Enterprise Edition

v11.2.0.3 on Exadata and RAC

+ Cloud Lockdown, no SQL*Net

HTTP

HTTP

Oracle Java Cloud

Java application deployment

JDBC access from WLS to DB

Oracle Application Express

Application development

SQL development

RESTful Web Services

Any client the can use REST

PHP, Java, .NET, Objective C

SQL Developer

Data browsing

Data loading/unloading

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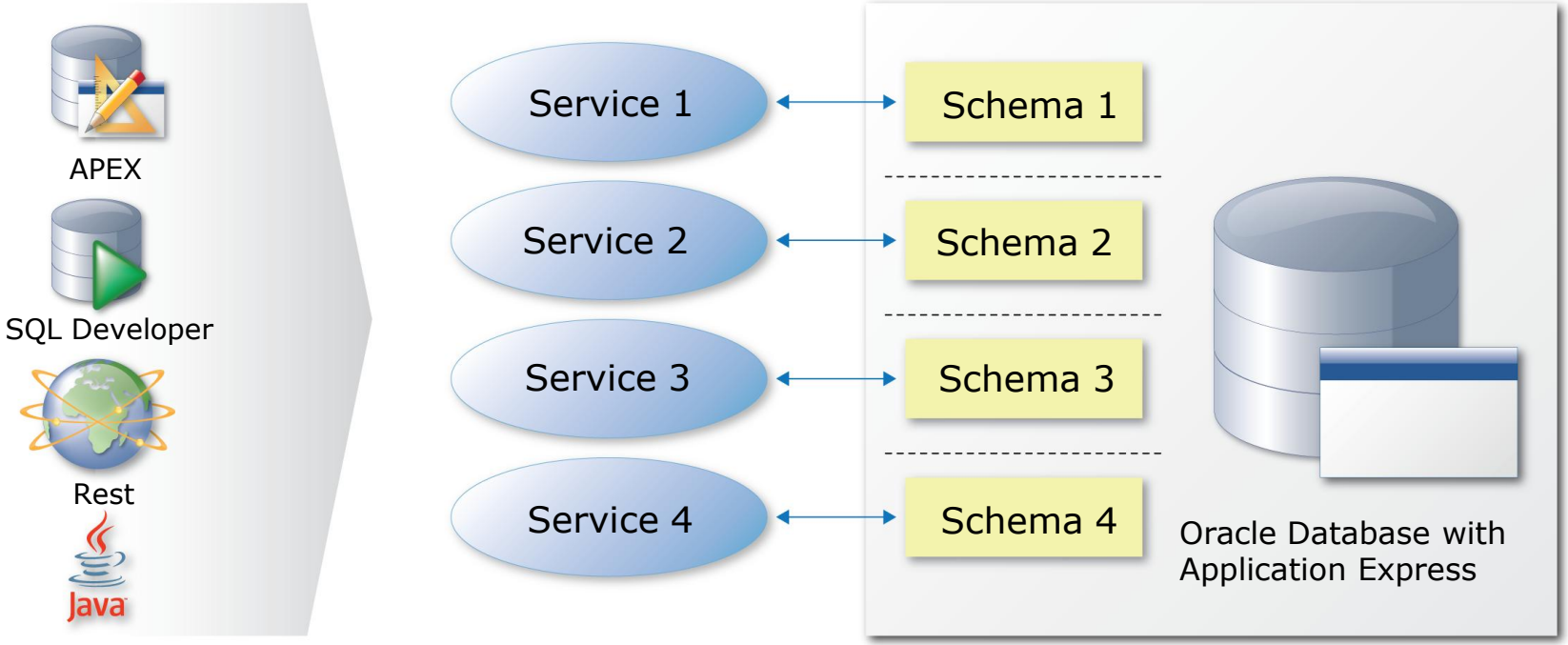
Multi-Tenant Architecture with Schema-Based Tenant Isolation



One Service = One Schema = One Tablespace = One Data File

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Database Cloud Service Pricing

30-Day Free Trial

Your trial offers the following features:

- **1 Schema**
  Oracle Database 11g Release 2
- **1 GB**
  Disk Storage
- **6 GB**
  Data Transfer

Database S5	Database S20	Database S50
$175 / month	$900 / month	$2,000 / month
1 Schema Oracle Database 11g Release 2	**1 Schema** Oracle Database 11g Release 2	**1 Schema** Oracle Database 11g Release 2
5 GB Disk Storage	**20 GB** Disk Storage	**50 GB** Disk Storage
30 GB Transfer [1]	**120 GB** Transfer [1]	**300 GB** Transfer [1]

1. Your data transfer limit is the maximum allowed bytes of data for transfer in and out of your service within your billing month.
2. Each license to the Oracle Database Cloud Service-Trial includes the limited right to use the following features of the service: (i) RESTful Web Services, (ii) Data Loading, (iii) Application Development, (iv) SQL Workshop, and (v) Team Development
3. End-User may upsize from a lower edition to a higher edition as any point of time (Downsizing is not allowed)

Oracle Database Cloud Service Trial includes the following features: 1 Schema Oracle Database 11g Release 2, 1 GB Disk Storage, 6 GB Data Transfer/p>

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Architecture and Tools

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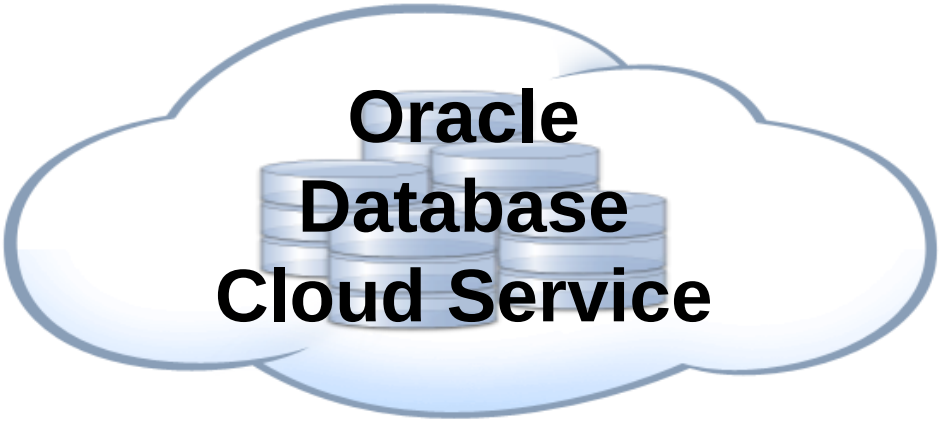
Architecture

- What's inside?



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Exadata X2-2

Exadata Database Machine X2-2 Full Rack

- 8 Intel-based two-processor Database servers (Sun X4170)
  - 96 CPU cores (12 per server)
  - 768 GB (96 GB per server)
  - 10 GigE connectivity to Data Center
    - 16 x 10GbE ports (2 per server)
- 14 Exadata Storage Servers X2-2
  - All with High Performance 600GB SAS disks
  - Over 85 Tb of storage, 34 Tb for database tablespaces
- 3 Sun Datacenter InfiniBand Switch 36
  - 36-port Managed QDR (40Gb/s) switch
- 1 “Admin” Cisco Ethernet switch
- Redundant Power Distributions Units (PDUs)

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Database Cloud Service

Oracle Database software

- Oracle Database 11g Enterprise Edition
  - Partitioning
  - Transparent Data Encryption
- RAC One Node - Active/Passive mode
  - 8 nodes, each with 3-5 database instances
- Active Data Guard using Physical Standby
  - Uses Logical Standby for rolling upgrades
- Full SQL and PL/SQL capabilities
  - Some lockdown based on security and integrity considerations
- Database Resource Manager used to control overall resource consumption

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Application Express – Rapid Web Development

Free Developer Service since 2001 and a Supported Product since 2004

- Quick and easy web application development
- Large # of customers references have developed applications using APEX
  - Including Oracle Store and Partner Store
- Best tool for SQL and PL/SQL application developers
  - Web-based UI on a single database applications
  - Includes pre-packaged templates to improve developer productivity
  - Quick and easy: Building applications declaratively
  - Allows developers to extend and add any custom SQL or PL/SQL
- Support for Web Services apps and Mobile apps
  - Understands dynamic page events for AJAX apps
  - Out of the box templates for complete Mobile apps
  - All in one development environment

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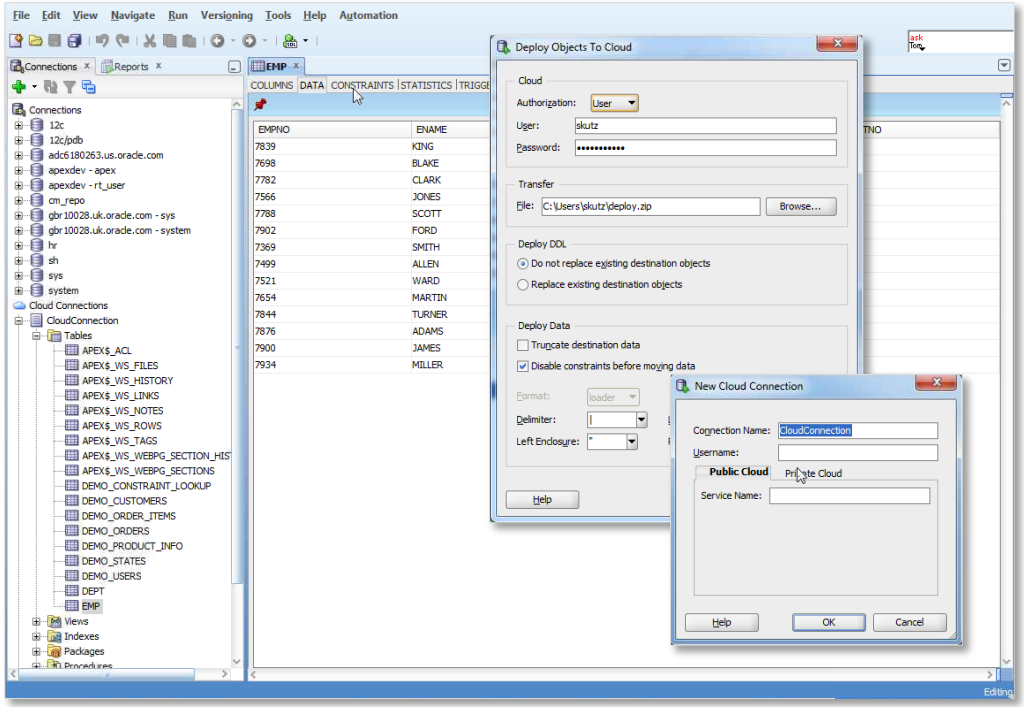
SQL Developer – Now for Cloud Databases

Full Object Browsing and Integrated, Secure Bulk Data Loading

- Connect to a Cloud Database
  - Just like any other database
- Browse Tenant/Cloud schema objects
  - Create tables, indexes, packages
  - Query, filter and update data
- Create Deployment Shopping Carts
  - Transparent bulk data loading facility
  - Add any SQL Developer object
  - Tables (with or without data) any code
  - Use pre and post loading scripts
  - Upload bulk data securely (via SFTP)
  - Deploy to any target database
  - Compare environments and carts
  - Transparent and seamless



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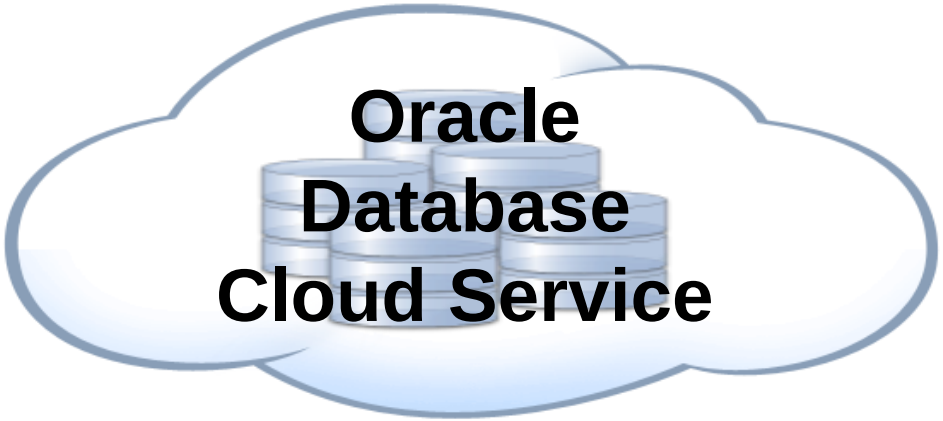
Oracle Database Cloud Service

Summary

- Simple
- Portable
- Enterprise strength
- Productive



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