

Benefits of developing APEX applications on the Exadata Express Cloud Service

A collage of logos and publications. At the top left is a LinkedIn profile card for Roel Hartman, Oracle ACE Director, with 5,413 followers, 207 posts, and 1,154 likes. To its right is a Blogger logo. Below the LinkedIn card are logos for ODTUG Kscope14 (Seattle, Washington, June 22-26), COLLABORATE, ORACLE OPEN WORLD, UK OUG (UK Oracle User Group), DOAG, and Ogh. On the right side of the collage are two book covers: 'Expert Oracle Application Express' and 'Oracle Application Express for Mobile Web Applications'.






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nujiten.blogspot.com

Notes on Oracle

Oracle Things I Got to Remember Not to Forget

Oracle ACE Director Alex Nuijten




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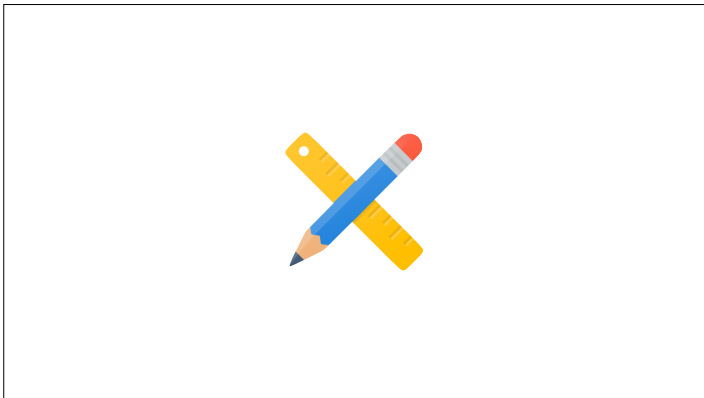
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ODTUG
Kscope19
SEATTLE, WASHINGTON - JUNE 23-27

CALL FOR ABSTRACTS NOW OPEN



ClocWise: Central Location of Oracle Conferences

Approaching CIP Deadlines

NYOUG Developer Meeting
12 Days

BDUG Oracle Database
42 Days

UKOUG Oracle UK
71 Days

[SEE ALL CIP](#)

Events Timeline

Check out all these events and Call for Papers!

Click events made easy - brought to you by smartApps

ClocWise: Central Location of Oracle Conferences

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UKOUG	go to cfp	09 October 2018	CIP for OUG Ireland 2019 ends in 15 Days <small>in Dublin from 4 April 2019 to 5 April 2019</small>
ITOUUG	go to cfp	31 October 2018	CIP for Tech Day 2019 ends in 17 Days <small>in Milan, Roma from 30 January 2019 to 1 February 2019</small>
IOUG	go to cfp	02 November 2018	CIP for Collaborate 19 ends in 19 Days <small>in San Antonio, TX from 7 April 2019 to 11 April 2019</small>
OUGN	go to cfp	03 November 2018	CIP for OUGN19 Spring Conference ends in 20 Days <small>in New York, NY from 2019 to Q2, March 2019</small>
DOAG	go to cfp	08 November 2018	CIP for APEX Connect 2019 ends in 25 Days <small>in Bonn from 7 May 2019 to 9 May 2019</small>
CDTLUG	go to cfp	06 December 2018	CIP for Kscope19 ends in 52 Days <small>in Seattle, WA from 22 June 2019 to 27 June 2019</small>
AAPPEKS	go to cfp	12 December 2018	CIP for APEX Alpha Adria ends in 59 Days <small>in Zagreb on 12 April 2019</small>
PSADMIN	go to cfp	15 February 2019	CIP for psadmin.conf 19 ends in 124 Days <small>in Minneapolis, MN from 1 May 2019 to 8 May 2019</small>

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Tweets

CLOCWISE @CLOCWISE · Aug 17
New - or updated - event

NYOUG Fall Devops Meeting
or [event page](#)
CIP ends on 31-Aug-2018, but don't wait and head over to [register early!](#)
[or cfp](#)

NYOUG Call for Abstracts
We are accepting presentations to be given at our meeting. If you would like to present at an upcoming meeting please complete and submit the following form.
[Form](#)

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#OracleData
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It is still 12.2 (Sep 21, 2018)

ORACLE Cloud

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Oracle Database Exadata Express Cloud Service

Exadata Express provides your own Oracle Database Enterprise Edition running the latest database release on Exadata. It's a fully managed service packed with features for modern application development.

Database Versions

Oracle Database 12c Release 2 Enterprise Edition plus options running on Exadata.

Service Packaging

Available in different shapes up to 1 TB of storage, 4 OCPUs, and 40 GB of memory (PGA/SGA).

DevOps

Easily provision new databases in the cloud within minutes.

Access

Administrative Access

Manage Oracle Database Express via an easy browser-based service console, SQL*Plus, SQLcl and other tools.

Data Access

Work with data using Oracle REST Data Services (ORDS), or directly connect database clients and access data over Oracle Net (SQL*Net). Supported client drivers include JDBC, .NET, Python, Node.js, PHP/OCI+ and more.

Dev Tools

Use Oracle Application Express (APEX) for rapid development of web apps that look beautiful in desktop and mobile browsers. Leverage your own domain name.

Management

Fully Managed Offering

A fully managed database cloud service. Network configuration, storage, database patching & upgrades and more are taken care of for you. No customer DBA required.

Security

Data at rest is encrypted by data at using Transparent Data Encryption (TDE). Database auditing is enabled. Database client access uses SSL/TLS 1.2 encrypted and mutually authenticated connections.

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Platform > Data Management > Database > Pricing

Database

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Database Service

Oracle Database Exadata Cloud at Customer

Database Service on Bare Metal

Exadata Express Service

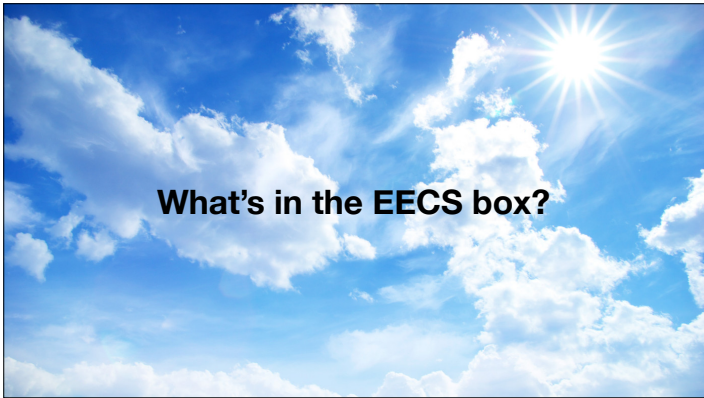
Oracle Database Exadata Cloud Service

Database Schema Service

USD - US Dollar

Universal Credit Services

Shape	Pay As You Go (Hosted Environment Per Hour)	Monthly Flex (Hosted Environment Per Hour)	Part Number	Database Processor Maximum	Database Storage Maximum	Database Memory Maximum	Data Transfer Maximum
Exadata Express X2D	\$0.3028	\$0.2352	B88408	1 OCPU	200B	3.5GB PGA, 4GB SGA	120GB/month
Exadata Express	\$0.8064	\$0.6376	B88409	1 OCPU	2500B	3.5GB PGA, 4GB SGA	1600GB/month



ORACLE Exadata Express smartapex Help / r2atman@smartapex.nl

Service Instance: smartapex

Home

Client Access: Enabled Database Version: 12.2 APEX Version: 18.1.0.00.45 Storage Usage: 1.8 TB / 23.07 GB

Welcome Tour

Take a quick video tour of Exadata Express. See how to connect database clients, load data, and develop apps in minutes.

Develop

Download developer tools and rapidly create apps with your favorite programming language or using Application Express (APEX).

Manage

Perform management tasks for your cloud database such as setting the admin password, creating schemas, exporting data and more.

Deutsch English Español Français Italiano Português (Brazil) 中文 (简体) 中文 (繁体) 日本語 한국어

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ORACLE Exadata Express smartapex Help / r2atman@smartapex.nl

Service Instance: smartapex

Develop

Application Express

- App Builder: Rapidly develop and deploy data-driven apps from your browser.
- Productivity Apps: Browse and install from a gallery of built-in productivity apps.
- SQL Workshop: Run SQL commands and execute SQL scripts.
- REST Data Service: Create and manage simple REST data interfaces.

Client Development

Setup

- Client Access: Provide access to your cloud database from client tools. **Enabled**
- Client Credentials: Download a zip file containing your security credentials and network configuration files.

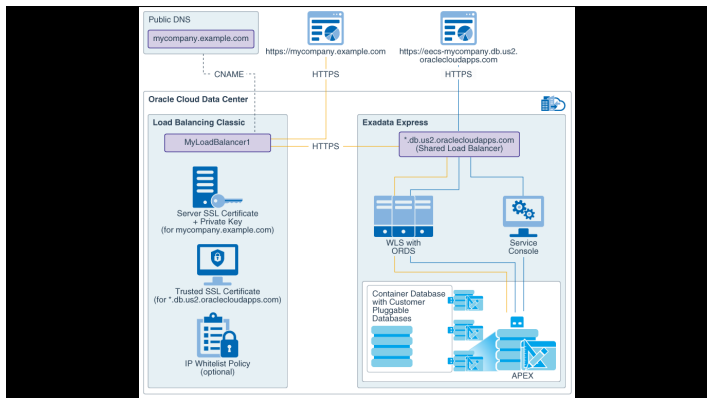
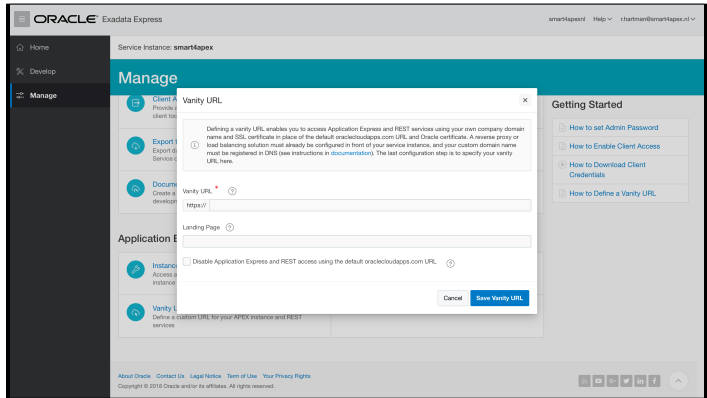
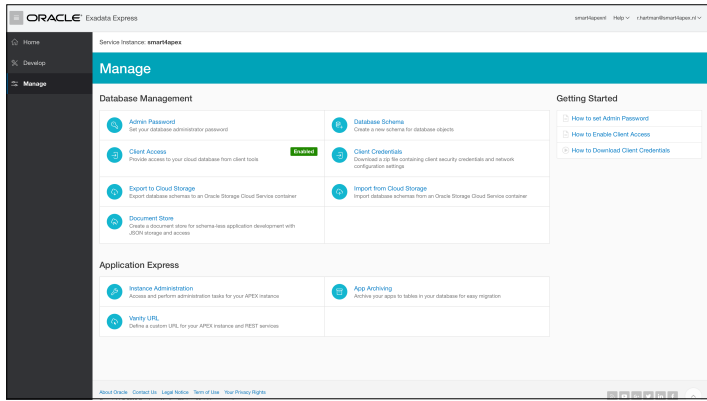
Tools and Utilities

- SQL*Plus: Set up command-line access to your database using SQL*Plus and Instant Client.
- SQLcl: Get an enhanced command-line experience using the new SQLcl utility.
- SQL Developer: Download SQL Developer, an integrated environment that simplifies SQL and PL/SQL development.
- Data Modeler: Download Data Modeler, a graphical tool that simplifies your data modeling tasks.

Languages and Framework

Getting Started

- About APEX Web Development
- How to Connect from Java
- How to Connect from .NET
- How to Connect from Node.js
- How to Connect from SQL Developer
- How to Configure REST Access
- How to Connect and Use SOCA Java
- How to Connect and Use SOCA REST





ORACLE Exadata Express

Service Instance: **smn1apex**

Manage

Database Management

- Admin Password: Set your database administrator password
- Client Access: Provide access to your cloud database from client tools
- Export to Cloud Storage: Export database schemas to an Oracle Storage Cloud Service container
- Document Store: Change document store for software-test application development with JSON storage and access
- Database Schema: Create a new schema for database objects
- Client Credentials**: Download a zip file containing client security credentials and network configuration settings
- Import from Cloud Storage: Import database schemas from an Oracle Storage Cloud Service container

Getting Started

- How to Get Admin Password
- How to Enable Client Access
- How to Download Client Credentials

Application Express

- Instance Administration: Access and perform administration tasks for your APEX instance
- Verify URL: Define a custom URL for your APEX instance and REST services
- App Archiving: Archive your apps to tables in your database for easy migration

password

Create a new schema for database objects

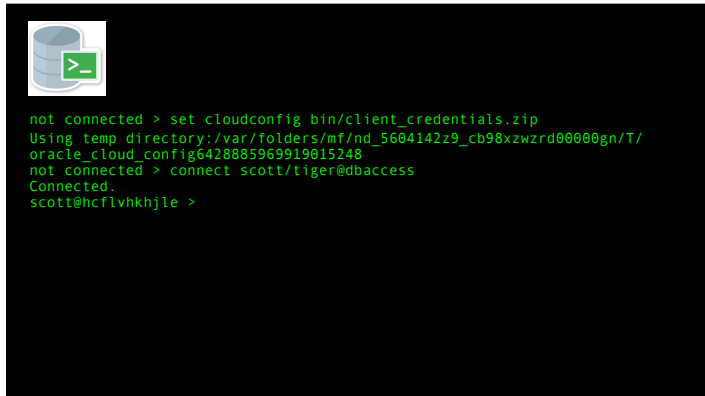
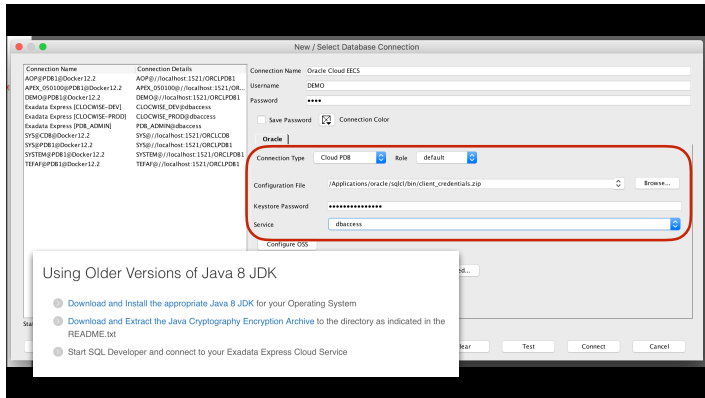
Client Credentials

Download a zip file containing client security credentials and network configuration settings required to access your cloud database. You must protect this file to prevent unauthorized database access. Remember the password you enter here because you may be prompted for it later.

Password *

Confirm Password *

Cancel Download



Authentication Scheme

Show All	Name	Subscription	Source	Session
Name				
	* Name	Oracle Cloud Identity Management		
	* Scheme Type	Oracle Cloud Identity Management		

Authorization Scheme

Show All	Name	Subscription	Authorization Scheme
Name			
	Application: 103 ClooWise Admin		
	* Name	Administrator	
Subscription			
	Reference Master Authorization Scheme From		<input checked="" type="checkbox"/> Refresh
This is the "master" copy of this authorization scheme.			
No authorization schemes subscribe to this authorization scheme.			
Authorization Scheme			
	* Scheme Type	Oracle Cloud Identity Management	
	User is assigned to	All User Groups	
	* User Group(s)	CLOOWISE_ADMIN	
	Identify error message displayed when scheme violated	I am so sorry, but you don't seem fit to have the administrator role.	

ORACLE Cloud My Services | Dashboard | Users | ?

Users | SFTP Users | Roles | **Custom Roles** | Contacts | SSO Configuration | OAuth Administration | My Profile

Users | Manage user accounts, assign roles, and reset passwords. | Add | Import | Export

Find user: [Search]

Show: CLOOWISE Ad... | Sort by: Email

Manage Roles: Alex Nuijten

Available Roles	Selected Roles
EXPRESS_S6_Evaluate Express Service Based Entitlement Administration	CLOOWISE Administrator
Identity Domain Administrator	developer99274 Developer Service User Role
developer99274 Developer Service Administrator	smart14qpx Database Administrator
	smart14qpx Database Developer
	smart14qpx Database User

Save Cancel

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See:

<https://docs.oracle.com/en/cloud/paas/exadata-express-cloud/csdbk/feature-restrictions-and-limitations.html>

x



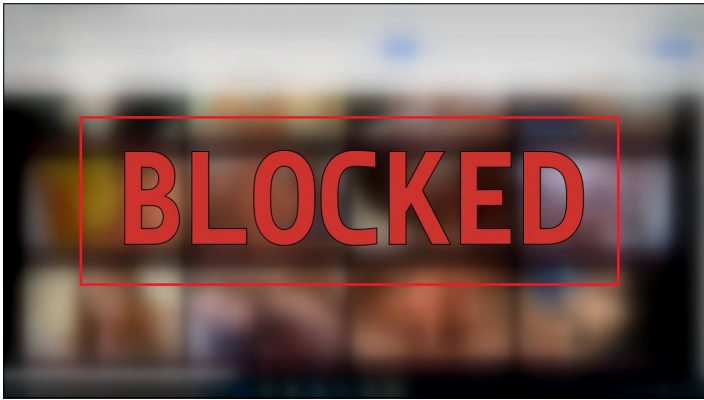
No OS access.

So you cannot upload / host / serve files from this server.

But you can serve Images / CSS / JS files from somewhere else, like a CDN, DropBox, etc

Any action that reads/writes something to the filesystem is locked down. No exp/imp, no trace files, etc.

Using Exadata Express as the back-end database for Oracle Forms is not supported.



- Some packages are blocked, like `dbms_crypto` >> NIET MEER !!
- But in most cases there's a work around, like `OOS_UTILS` for our Twitter package



ACL is arranged for a number of well known – but undocumented list of – endpoints (like the Twitter API).
You cannot add your own, but can ask for more via an SR.

Network access is disabled, except when using `APEX_WEB_SERVICE` and `APEX_MAIL` PL/SQL APIs

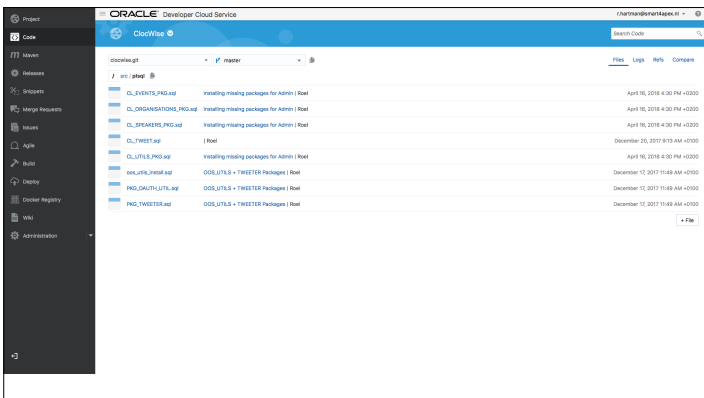
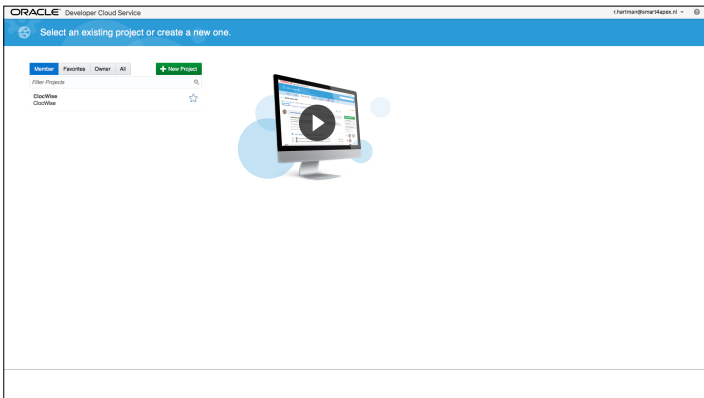


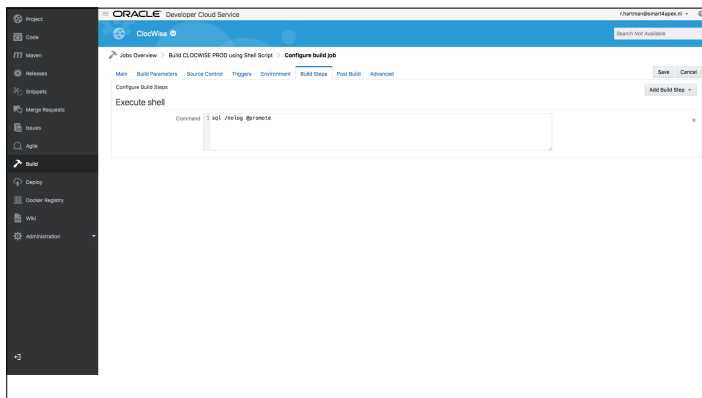
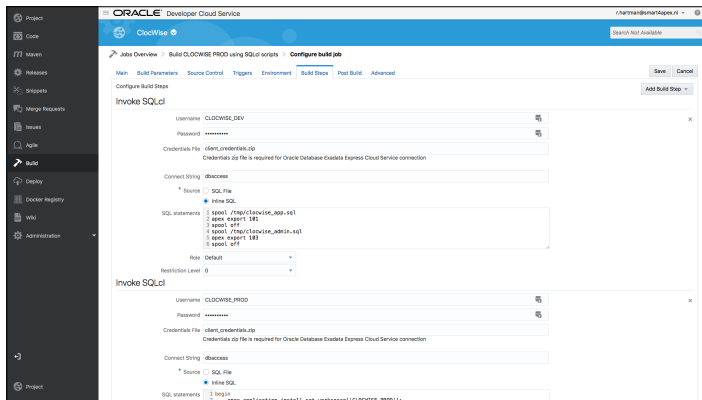
There's quite some (planned) downtime on a regular base. Outside business hours.
So if you need 24/7 availability this might not work for you.
But for “less important” PROD sites, or TEST (or DEV) it is OK.



Demo / quick click through

Most interesting parts : Code (GIT) and Build





- From SQL Developer (or Visual Studio Code / GitKraken)
(optional) > Connect to EECS / Dev
> The “Help” on clocwise.org shows the last deployment date
> In your GIT structure, open a file make a change and save the file.
> Commit the change, then Push
> On the “Code” page, show the change. Then navigate to the “Build” page where the Build is queued / executed
> Once (successfully) finished, show the new deployment date on clocwise.org (and you might get an email)

Take aways

- ▶ EECS – as easy as your local instance
- ▶ No DBA required
- ▶ Possible to overcome the limitations
- ▶ Availability enough for most use cases
- ▶ DCS to assist in CI / CD strategy

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alex@allapex.nl

A graphic with a blue sky and white clouds background. The letters 'Q' and 'A' are prominently displayed in a large, bold, black font, with an ampersand '&' in a smaller blue font between them. The sun is visible in the upper right corner, creating a lens flare effect.

Q & A

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