



# Migrating Oracle EBS to Cloud (IaaS)

Anil Minocha  
Director, Oracle Practice  
Ravinder Sayal  
Lead Cloud Migration Architect  
Fujitsu America, Inc.

**MAY 16 & 17, 2018**

**CLEVELAND PUBLIC AUDITORIUM, CLEVELAND, OHIO**

**[WWW.NEOOUG.ORG/GLOC](http://WWW.NEOOUG.ORG/GLOC)**

# Agenda

- About Fujitsu and Oracle Partnership
- Why Cloud, why EBS on Oracle Cloud?
- EBS on Oracle Cloud
- Accessing Oracle Cloud and Marketplace
- Screen shots - Rapid provisioning of EBS
  - from Marketplace images
  - using EBS Cloud Admin Tool
- Oracle E-Business Suite Strategy and Direction  
(Nadia Bendjedou, VP, Product Strategy, EBS, Oracle Corporation)
- Q&A
- Resources

# Fujitsu and our Oracle Partnership Overview

IT Service

 **#1** in Japan  **#5** globally

Employees



156 thousand

Data Centers



121

Service Desks



74

FORTUNE named Fujitsu as “one of the World’s Most Admired Companies for 4th consecutive year.



Fujitsu Chosen for the Dow Jones Sustainability World Index for 16th time in 2015.



## Fujitsu & Oracle Partnership

- Fujitsu and Oracle have a rich 30+ year history of strategic and close collaboration
- Fujitsu is a strategic, global Oracle partner
- **Fujitsu and Oracle have Cloud Collaboration in Japan**  
(Oracle Cloud Services running in Fujitsu data center)
  - no other partner has this
- Fujitsu is **one of very few Oracle Global Managed Service Providers (MSP)**
- Cloud Migration Strategies and Roadmaps
- Workload Migrations – Lift and Shift
  - Oracle, AWS, Azure, Fujitsu K5
- Cloud Integrations – PaaS
- Oracle Applications; SaaS; and Support



# Oracle E-Business Suite Strategy and Direction

File

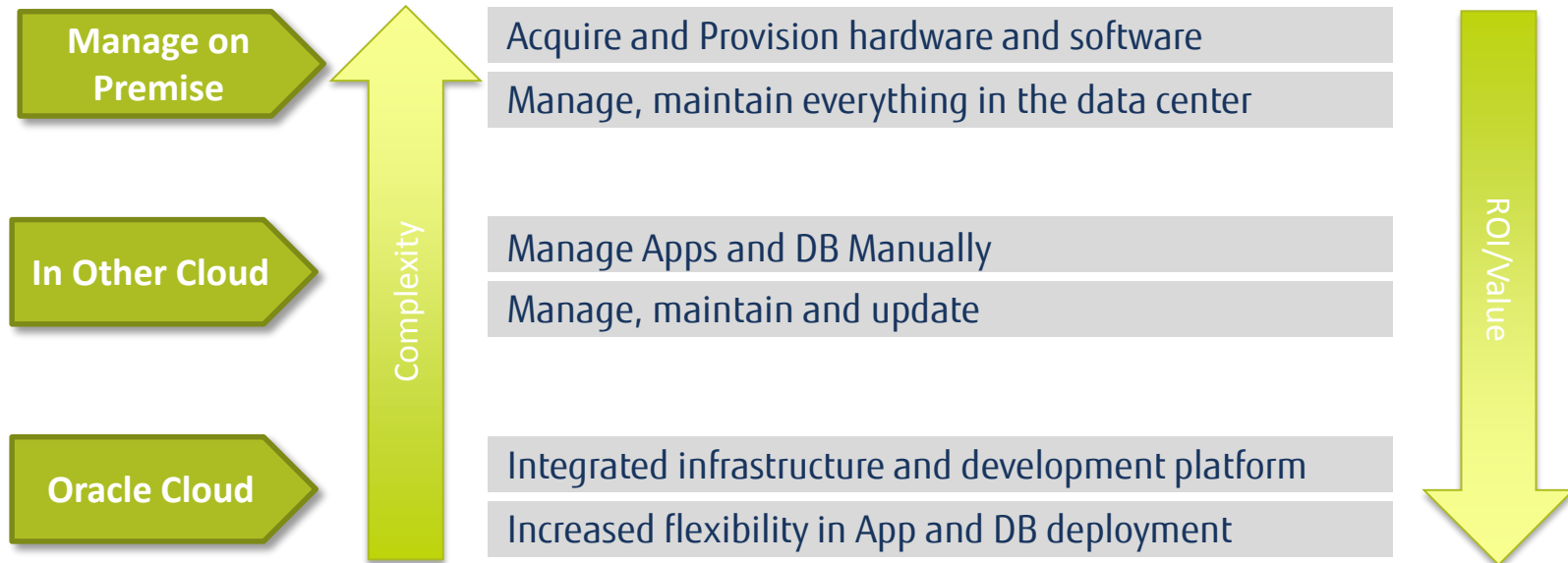


Nadia Bendjedou

Vice President – Product Strategy, EBS

Oracle Corporation

# Approaches to Running Oracle E-Business Suite



# Why Cloud

- **Challenges**

- Capacity issues / inability to scale
- Support diverse landscape

- **Options**

- Upgrade existing data centers
- Virtualized infrastructure

- **Key Benefits**

- Scalability & Reliability
- Drive Better Innovation
- Reduce IT Costs

- Maintenance requirements
- Financial considerations

- 3rd party data centers
- Migration to Cloud

- Future-ready platform
- Long-term sustainability
- No capital investment – OPEX model

**Everything points to Cloud**

# Benefits of transitioning to Oracle Cloud vs. Others

	Oracle Cloud	Other Clouds
High Performance at lower costs	✓	x
Unmatched High Availability <ul style="list-style-type: none"><li>• RAC, Exadata</li><li>• Automated scaling of application tiers</li><li>• Automated backup and recovery</li></ul>	✓	x
Unified interface to manage and monitor EBS infrastructure	✓	x
Automated Instance Provisioning using EBS Cloud Admin Tool	✓	x
Automated Lift and Shift of Oracle EBS	✓	x
Automated DB Tier PSU Patching	✓	x
EBS Integrations and Analytics	✓	x
Lower Licensing Cost	✓	x

# Some Use Cases for Oracle EBS on Oracle Cloud

Dev / Test / other Non-Prod in the Cloud

Extend Data center to Cloud  
BI / Reporting / Analytics / OATS env

Disaster Recovery / High Availability  
in the Cloud

Production in the Cloud



# Current Automated Capability for EBS across Oracle Cloud IaaS/PaaS Offerings

- Quick Provisioning
  - Cloud Marketplace images for single node installation in Compute
  - EBS Cloud Admin Tool for single/multiple application tier with different options for
    - Database tier – 1-node/2-node/Compute/Database / Exadata Cloud / (VM / Bare Metal)
- Lift and Shift / Cloning from on premise to Cloud
  - Application tier restored to Compute with options for
    - Database tier on Compute/Database / Exadata Cloud (VM / Bare Metal)
- Managing and Monitoring Environments
- Configuring Integrations for EBS 12.2 Cloud instance
  - Oracle Workflow Notification Mailer
  - Oracle Access Manager
  - SOA Cloud Service
- Use Development tools image
- Deploy Information Discovery instance from Marketplace images

# Oracle Cloud Marketplace images for EBS



EBS Development Tools  
Image

2015-12-21

★★★★★ (0) Free



EBS 12.2.7 Demo Install  
Image

2017-09-25

★★★★★ (0)



EBS 12.2.6 Demo DB  
Tier 11.2.0.4 Image

2016-12-16

★★★★★ (0)



EBS 12.2.6 Fresh Install  
Image

2016-09-15

★★★★★ (0)



EBS 12.2.6 Demo Install  
Image

2016-09-26

★★★★★ (2)



EBS Provisioning Tools  
Image

2018-02-16

★★★★★ (0) Free



EBS OS-Only Image

2018-02-16

★★★★★ (0) Free



EBS 12.2.5 Demo Install  
Image

2015-12-21

★★★★★ (3)

# EBS Cloud Admin Tool

- Set of automation utilities for creating, managing and configuring Oracle EBS environments on Oracle Cloud
- Most current version of the EBS Cloud Admin Tool is 18.1.1.2 /etc/ebscm.conf
- Provisioned and deployed once per Cloud domain / tenancy
- Launched by running **ProvisionEBS.pl**
- Self Update Utility helps update the tool to the latest available version very easily

```
=====
Provision Oracle E-Business Suite - Options
=====
```

```
Provision Oracle E-Business Suite - Enter Selection:
1: Create New Environment
2: Create Environment from Backup
3: Manage Environments
4: Administer Orchestration VM
5: Manage Oracle Storage Cloud Service (OSCS) Backups
6: Clean Up After a Failed Provisioning
7: Exit
```

```
Enter your choice from above list: █
```

# EBS Cloud Admin Tool

Tasks	Some Current Details
Create New Environment	<ul style="list-style-type: none"><li>• 12.2.6 with option of Database 12c Release 1 or 11g Release 2</li><li>• 12.1.3 - with option of Database 12c Release 1 or 11g Release 2</li></ul> And different options for Database tier based on version
Create New Environment from Backup	<ul style="list-style-type: none"><li>• Stage Area</li><li>• Oracle Storage Cloud Service</li><li>• Snapshot</li><li>• EBS Snapshot Master</li></ul>
Manage Environments	<ul style="list-style-type: none"><li>• Clone</li><li>• Scale – Add Application tier</li><li>• Delete</li><li>• Manage Backups – Create / Delete</li><li>• Configure Integrations</li><li>• Refresh from Backup</li></ul>
Administer Orchestration VM	Create Volume for stage area
Manage Oracle Storage Cloud Service (OSCS) Backups	Delete Backups
Clean Up Resources	Object Store Backup / Incomplete Installation, if do not wish to continue

# Automated Lift and Shift / Cloning of EBS

## Current High Level Procedure

- Install and configure EBS Cloud Back-up utility
- Create stage areas for backup
- Package the source EBS environment using EBS Cloud Back-up utility
  - Able to bring your existing configuration, customizations, database, data
- Move the EBS Package to the OCI Cloud Storage using the back-up utility
- Run the EBS Cloud Admin tool – Create new environment from backup
- Currently, supported for
  - 12.2.3 or later with DB 12.1.0.2 or 11.2.0.4; different DB Edition options
  - 12.1.3 with DB 12.1.0.2 or 11.2.0.4; different DB Edition options

# Accessing Oracle Cloud and Marketplace Cloud.oracle.com

ORACLE Cloud

 Sign In

Contact

Chat

English

Estimate

Buy

Try for Free

Applications

Platform

Infrastructure

Resources



## Complete, Integrated Cloud

Software as a Service

Platform as a Service

Infrastructure as a Service

Cloud Marketplace

# Cloud Account

ORACLE Cloud

Contact Chat English

Estimate

Buy

Try for Free

Applications Platform Infrastructure Resources



## Cloud Account

Cloud Account with Identity Cloud Service

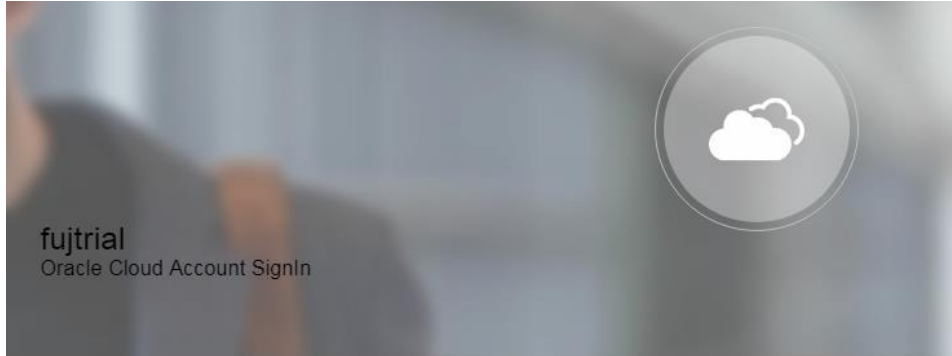


My Services >

fujtrial



# Provide credentials and Sign In



fujtrial  
Oracle Cloud Account SignIn

*User Name*

---

*Password*

---

**Sign In** [Can't sign in?](#)



# Dashboard

ORACLE Cloud My Services

Dashboard Users

Identity Domain: fu1trial - North America

**Guided Journey**  
Explore what you can do with Oracle Cloud services

**Create Instance**  
Provision a new service in minutes

**Account Management**  
Administer and manage your account and orders

**Customize Dashboard**  
Specify which services appear on the dashboard

Cloud Services

0 Important Notifications

Promotion **Upgrade to Paid**  
**\$300** of \$300 USD  
Remaining (26 days left)

Database  
Subscription ID: 1758354

✓

Identity Cloud  
Subscription ID: 1758354 Instance

✓

### Customize Dashboard

Select the services and options you want to display in the Dashboard for the selected Identity Domain or Cloud Account.

You can choose to always show (Show) or always hide (Hide), or Show Expanded or Collapsed where applicable, or use the system default. The system default is based on service instance count, upgrade to new version and other criteria.

Welcome Section  Automatic  Expand  Collapse

Infrastructure **Promotion** 5 Services

- Compute  
Subscription ID: 1758354  Automatic  Show  Hide
- Compute Classic  
Subscription ID: 1758354  Automatic  Show  Hide

Choose Show to always show this service

# Dashboard

<p>Analytics</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>SOA</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Data Integration Platform Cloud</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>
<p>Integration Cloud</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>API Platform</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>IoT Enterprise</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>
<p>Java</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Database Backup</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Database (OCI)</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>
<p>Storage Classic</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Compute Classic</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Compute</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>

# Dashboard

<p>Analytics</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>SOA</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Data Integration Platform Cloud</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>
<p>Integration Cloud</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>API Platform</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>IoT Enterprise</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>
<p>Java</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Database Backup</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Database (OCI)</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>
<p>Storage Classic</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Compute Classic</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>	<p>Compute</p> <p>Subscription ID: 1758354</p> <p>✓</p> <p>+ ⚙️ ☰</p>

# Compute Classic



## Service: Oracle Cloud Infrastructure - Compute Classic Compute Classic

Promotion

Open Service Console

Overview

Billing Metrics

Monitoring Metrics

Documents

### Overview Information



Category	Oracle IaaS and PaaS Cloud Services
Data Region	North America (Time zone: US/Central)
Cloud Account Name	collabdemo
Cloud Account Id	cacct-03df0466394b446eac41e5ed9f4785fe
Subscription	Cloud Promotion
Convert to Pay As You Go	

...

# Compute Classic Service Console

ORACLE Cloud My Services

Dashboard Users ?

Compute Classic Site: 601021994 - uscom-east-1

Visualization

Instances Network Storage Orchestration Images

Instances

As of 2:38:47 AM

instances

OCPUs

memory

volume size in use

A Compute Classic instance is a virtual machine running a specific operating system, with the CPU and memory resources that you specify. [Learn more...](#)

Search...

Category: All

Show: All



Create Instance

# Show All Available Images

Create Instance

Cancel

Customize

Create

## QuickStarts

Start with a common configuration or click Customize to choose from all available options.

Instance Name: ?

MyInstance\_201804220239

### Oracle Linux

- Oracle Linux 7.2 UEKR4
- 1 OCPUs
- 7.5GB Memory
- 128GB Storage

**\$68.68** /month  
(estimate in USD)

Selected

### Canonical Ubuntu Server

- Ubuntu Server 16.04 amd64
- 1 OCPUs
- 7.5GB Memory
- 128GB Storage

**\$68.68** /month  
(estimate in USD)

Select

### Microsoft Windows Server

- Windows Server 2012 R2 SE
- 2 OCPUs
- 15GB Memory
- 128GB Storage

**\$131.92** /month  
(estimate in USD)

Select

Show All Images

# Navigate to Marketplace Menu



## Image

Select an image (operating system and disk size) for your instance.

Oracle Images

E-Business Suite



Sort By: Relevance

Price: All

Category: All

Private Images

Marketplace



### EBS Development Tools Image

Oracle E-Business Suite Development Tools Image

Select



### EBS 12.2.7 Demo Install Image

Oracle E-Business Suite Release 12.2.7 Demo (Vision) Install Image

Select



### EBS 12.2.6 Demo DB Tier 11.2.0.4 Im...

Oracle E-Business Suite Release 12.2.6 Demo (Vision) Database Tier 11.2.0.4 Image

Select



### EBS 12.2.6 Fresh Install Image

Oracle E-Business Suite Release 12.2.6 Fresh Install Image

Select



### EBS 12.2.6 Demo Install Image

Oracle E-Business Suite Release 12.2.6 Demo (Vision) Install Image

Select



### EBS Provisioning Tools Image

Oracle E-Business Suite Provisioning Tools Image

Select

# Install the Selected Image

The screenshot shows the Oracle Cloud console interface for selecting an image. On the left, there are tabs for 'Oracle Images', 'Private Images', and 'Marketplace'. The 'Marketplace' tab is selected. In the center, a search bar contains '12.2.7'. Below it, the 'EBS 12.2.7 Demo Install Image' is listed with a 'Select' button. A modal dialog titled 'Install Marketplace Image' is overlaid on the screen. The dialog contains the following text: 'Download and install Marketplace image 'EBS 12.2.7 Demo Install Image' into your compute account'. Below this, there is a checked checkbox and the text 'I have reviewed and accept the [Oracle Standard Terms and Restrictions](#)'. At the bottom left of the dialog, it says '\*Required'. At the bottom right, there are two buttons: 'Install' (highlighted with a red box) and 'Cancel'.

Image

Select an image (operating system and disk size) for your instance.

Oracle Images 12.2.7

Private Images

Marketplace

**EBS 12.2.7 Demo Install Image**  
Oracle E-Business Suite Release 12.2  
Demo (Vision) Install Image

Select

**Install Marketplace Image**

Download and install Marketplace image 'EBS 12.2.7 Demo Install Image' into your compute account

I have reviewed and accept the [Oracle Standard Terms and Restrictions](#)

\*Required

Install Cancel



# Image Installed message and email

ORACLE Cloud My Services

Create Instance

Instance Creation  
Marketplace image installed and ready to use

Cancel Review and Create

Image Shape Instance Network Storage Review


Image

Select an image (operating system and disk size) for your instance.

Oracle Images 12.2.7 Sort By: Relevance Price: All Category: All

Private Images

Marketplace

  
**EBS 12.2.7 Demo Install image**  
Oracle E-Business Suite Release 12.2.7  
Demo (Vision) Install Image

Selected

ORACLE Cloud

Hello Anil,

The EBS 12.2.7 Demo Install Image application machine image is available in your Compute Classic account for creating VM instances. Sign in [here](#) to continue the application installation using the Compute Classic Console.

# Navigate to Private Images Menu

ORACLE Cloud My Services Dashboard Users 1 ? AM

## Create Instance

Cancel Review and Create

Image Shape Instance Network Storage Review

### Image

Select an image (operating system and disk size) for your instance.

Oracle Images

Private Images **EBS 12.2.7 Demo Install Image** Description: OPC\_OL6\_9\_EBS\_1227\_VISION\_INSTALL\_093017 Selected

Marketplace

Page 1 of 1 (1 of 1 items) < 1 >



### Shape

Select a shape (OCPU and memory) for your instance. [Learn more...](#)

Category	Name	OCPUs	Memory
General Purpose	oc3	1	7.5 GB
General Purpose	oc4	2	15 GB
General Purpose	oc5	4	30 GB
General Purpose	oc6	8	60 GB
General Purpose	oc7	16	120 GB
General Purpose	oc8	24	180 GB
General Purpose	oc9	32	240 GB
High I/O	ocio1m	1	15 GB
High I/O	ocio2m	2	30 GB
High I/O	ocio3m	4	60 GB
High I/O	ocio4m	8	120 GB
High I/O	ocio5m	16	240 GB
High Memory	oc1m	1	15 GB

# Add or Select the SSH Public Key



✔ Instance Creation ✕  
SSH public key "OACSpub" added.

Instance

Enter the required details to create your instance. [Learn more...](#)

ⓘ Persistent

ⓘ Placement

---

ⓘ Name\*

ⓘ Label\*

Description

ⓘ Tags

---

ⓘ SSH Keys  Add SSH Public Key

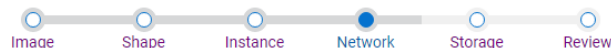
# Select or Create new Security List

Create Instance

Cancel

Review and Create

Instance Cost: **\$79.18** /month  
Estimate in USD, final cost may vary based on actual usage



## Network

Configure network settings. [Learn more...](#)

DNS Hostname Prefix

IP Network  Shared Network

### Shared Network Options

Public IP Address

Security Lists\*

Create Security List

### Create Security List

Enter the required details to create your security list. A name identifies your security list. Security rules and virtual machine instance configurations reference the name entered here. [Learn more...](#)

Name\*

Inbound Policy\*

Outbound Policy\*

Description

\*Required

Create Cancel

# Review and Navigate to Next Page

## Create Instance

Cancel

Review and Create

Instance Cost: **\$79.18** /month  
Estimate in USD, final cost may vary based on actual usage.



### Storage

You can attach existing storage volumes, or create and attach a storage volume to the instance. A persistent boot volume is created and used to boot your instance by default. You can specify a different boot disk, or remove the persistent boot disk and boot from a nonpersistent boot disk instead. You can also attach additional storage volumes to an instance after the instance is created.

Attach Existing Volume

Add New Volume

Name	Disk #	Size	Type	Delete On Termination	Boot Drive	
VIS1227_storage	1	375 GB	storage/default	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

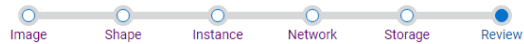
# Review Settings and Create

Create Instance

Cancel

Create

Instance Cost: **\$79.18** /month  
Estimate in USD, final cost may vary based on actual usage.



## Review

Review your settings for the new instance.

**i** You are permitted to use resources above your subscription rate at additional cost. [More...](#)

Image OPC\_OL6\_9\_EBS\_1227\_VISION\_INSTALL\_093017 (OPC\_OL6\_9\_EBS\_1227\_VI

Shape oc1m (OCPUs: 1; Memory: 15 GB)

Persistent False

Placement Auto

Name VIS1227

Label VIS1227

Description OPC\_OL6\_9\_VIS1227

Tags

DNS Hostname Prefix fujvis1227

Public IP Address Auto Generated

# Notification

ORACLE Cloud My Services

Compute Classic Site: 599991985 - uscom-east-1

Instance Creation

Starting orchestration VIS1227. The instance will be created shortly once all the storage volumes come online. Additional status information available in the orchestrations tab.

Instances Network Storage Orchestrations Images

Instances

As of 1:39:39 PM

instances

OCPUs

memory

volume size in use

A Compute Classic instance is a virtual machine running a specific operating system, with the CPU and memory resources that you specify. [Learn more...](#)

Search...

Category: All

Show: All



Create Instance

Failed to load instances.

# Provisioning Instance using EBS Cloud Admin Tool

```
oracle@fujtrial:~/apps-unlimited-ebs
Using username "opc".
Authenticating with public key "imported-openssh-key"
Last login: Sat Apr 21 14:48:57 2018 from 136.179.21.68
[opc@fujtrial ~]$ sudo su - oracle
[oracle@fujtrial ~]$ cd apps-unlimited-ebs/
[oracle@fujtrial apps-unlimited-ebs]$ perl ProvisionEBS.pl
```

```
=====  
Provision Oracle E-Business Suite - Options  
=====
```

```
Provision Oracle E-Business Suite - Enter Selection:  
1: Create New Environment  
2: Create Environment from Backup  
3: Manage Environments  
4: Administer Orchestration VM  
5: Manage Oracle Storage Cloud Service (OSCS) Backups  
6: Clean Up After a Failed Provisioning  
7: Exit  
  
Enter your choice from above list:
```

```
=====  
Provision Oracle E-Business Suite - Enter Oracle Cloud Credentials  
=====
```

[Ctrl-B: Back, Ctrl-H: Main Menu]

```
Oracle Compute Cloud Service Endpoint [https://compute.uscom-east-1.oraclecloud.com/] :  
Oracle Storage Cloud Service Endpoint [https://fujtrial.us.storage.oraclecloud.com/v1/Storage-fujtrial] :  
Oracle Cloud Compute Service Instance ID [599991985] :  
Oracle Cloud Identity Domain [fujtrial] :  
Oracle Cloud Data Center Code (examples: em1, us2, ap3) [us2] :  
Oracle Cloud User Name [anil.minocha@us.fujitsu.com] :  
Oracle Cloud Password :
```





# Provisioning Instance using EBS Cloud Admin Tool

```
=====
Provision Oracle E-Business Suite - Choose Release Combination
=====
```

```
[Ctrl-B: Back, Ctrl-H: Main Menu]
```

- 1: EBS 12.2.6 with Database 12.1.0.2 - Fresh
- 2: EBS 12.2.6 with Database 12.1.0.2 - Demo
- 3: EBS 12.2.6 with Database 11.2.0.4 - Fresh
- 4: EBS 12.2.6 with Database 11.2.0.4 - Demo
- 5: EBS 12.1.3 with Database 12.1.0.2 - Fresh
- 6: EBS 12.1.3 with Database 12.1.0.2 - Demo
- 7: EBS 12.1.3 with Database 11.2.0.4 - Fresh
- 8: EBS 12.1.3 with Database 11.2.0.4 - Demo
- 9: Distributed Yard Management System 12.2
- 10: Distributed Warehouse Management System 12.2

```
Choose EBS release from above list: █
```

# Questions and Answers

- [Anil.Minocha@fujitsu.com](mailto:Anil.Minocha@fujitsu.com)

# Resources

- [Getting Started with Oracle E-Business Suite on Oracle Cloud](#)
- [Oracle E-Business Suite on Oracle Cloud](#)
- [Latest blog for updates to EBS Admin Tool](#)