ORACLE

# DOUG-Day 2022

EMEA Oracle Community Tour 2022

**Daniel Overby Hansen**

Senior Principal Product Manager

# DANIEL OVERBY HANSEN

Senior Principal Product Manager
Cloud Migration

https://dohdatabase.com

dohdatabase

@dohdatabase

# Thank You

Jeanette, Charlotte, Tove, Dimitri, Steen, Robert

# EMEA Community Tour

Christian
Edelweiss
Lino
Nelson
Patrick

# MASH
## Mentor and Speaker Hub

https://mashprogram.wordpress.com

# ORACLE
# CloudWorld

October 17-20  Las Vegas

#OCW22
oracle.com/cloudworld

Luk ⌄

| | | | |
|---|---|---|---|
| **CPH – LAS** | 09:30 – 15:55 | Rejsende 1 | 12.597 DKK | Skjul detaljer |

**CPH – LAS**  09:30 – 15:55
1 mellemlanding,**LAX**
SAS Go Pro

**LAS – CPH**  08:00 – 11:55 +1
1 mellemlanding,**SFO**
SAS Go Smart

Rejsende 1
voksen, tur retur
Billetpris                     9.434 DKK
Skatter og afgifter            3.163 DKK

12.597 DKK    Skjul detaljer

**TUR-RETUR**
CPH – LAS
LAS – CPH

**DATOER**
17 OKT – 21 OKT

**REJSENDE**
1 voksen

🛒 **I ALT**
**12.597 DKK**

Inkl. 3.163 DKK
Skatter og afgifter

**FORTSÆT**

# **Free Digital Passes**

- Keynotes
- Solution keynotes
- Sessions
- Oracle TV
- Digital Peer Networking

# Oracle Database 23c

ORACLE
CloudWorld

"The multicloud
era has begun."

LARRY ELLISON
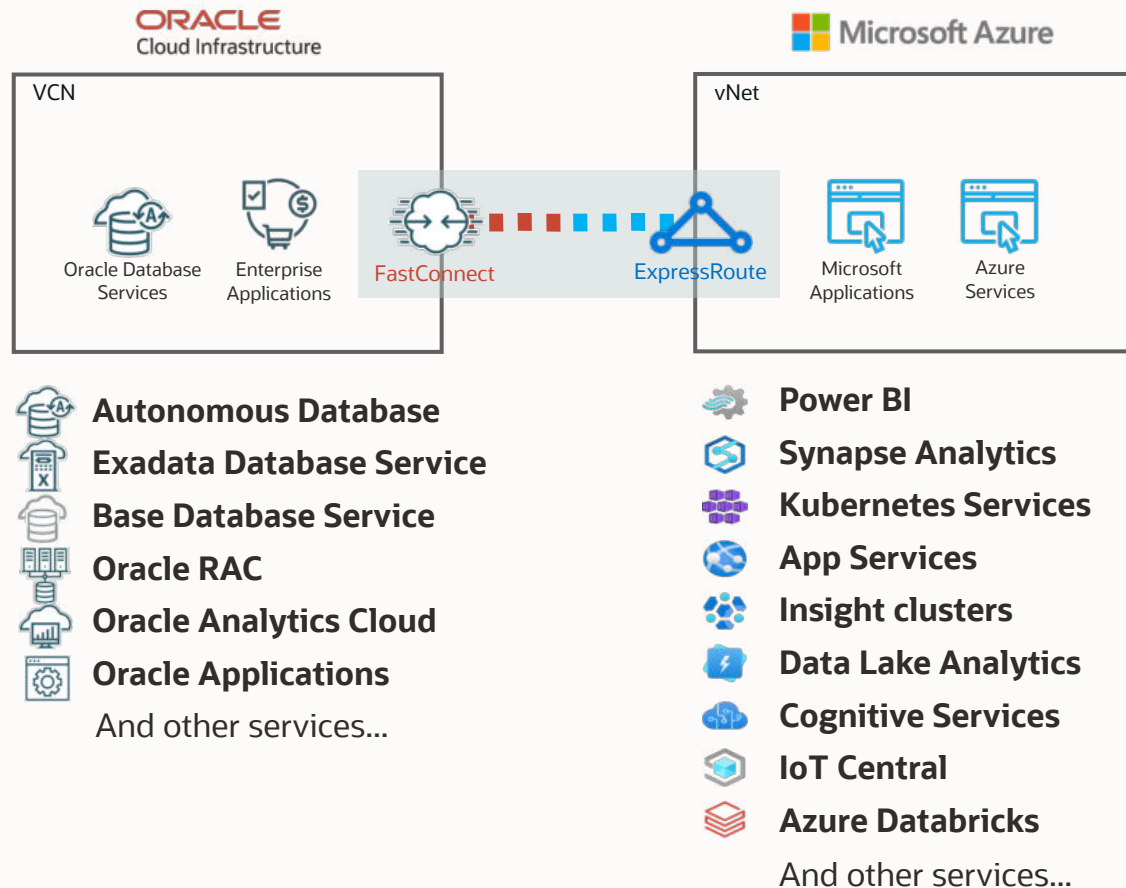CTO, Oracle

# Multicloud

**1**

Oracle Interconnect
for Azure

**2**

Oracle Database Service
for Azure

**3**

MySQL HeatWave
on AWS

# Oracle Interconnect for Azure

**ORACLE** Cloud Infrastructure

**Microsoft Azure**

VCN

Oracle Database Services | Enterprise Applications

FastConnect ← ... → ExpressRoute

vNet

Microsoft Applications | Azure Services

**Autonomous Database**
**Exadata Database Service**
**Base Database Service**
**Oracle RAC**
**Oracle Analytics Cloud**
**Oracle Applications**
And other services...

**Power BI**
**Synapse Analytics**
**Kubernetes Services**
**App Services**
**Insight clusters**
**Data Lake Analytics**
**Cognitive Services**
**IoT Central**
**Azure Databricks**
And other services...

## FastConnect and ExpressRoute
✓ Secure, private, and direct connection
✓ No intermediate service provider required
✓ No ingress/egress charges in either direction

## High and Predictable Performance
✓ High bandwidth up to 100 Gbps
✓ Sub 2ms low latency
✓ 99.95% Availability SLA

## Simplified Implementation
✓ One-time setup
✓ Terraform scripts for automated deployment

# Oracle Interconnect for Azure | Latency

Azure ←→ OCI
- ➢ Accenture         1.5ms
- ➢ ITConvergence       1.2 to 2.1ms

Azure **London** ←→ OCI **London**
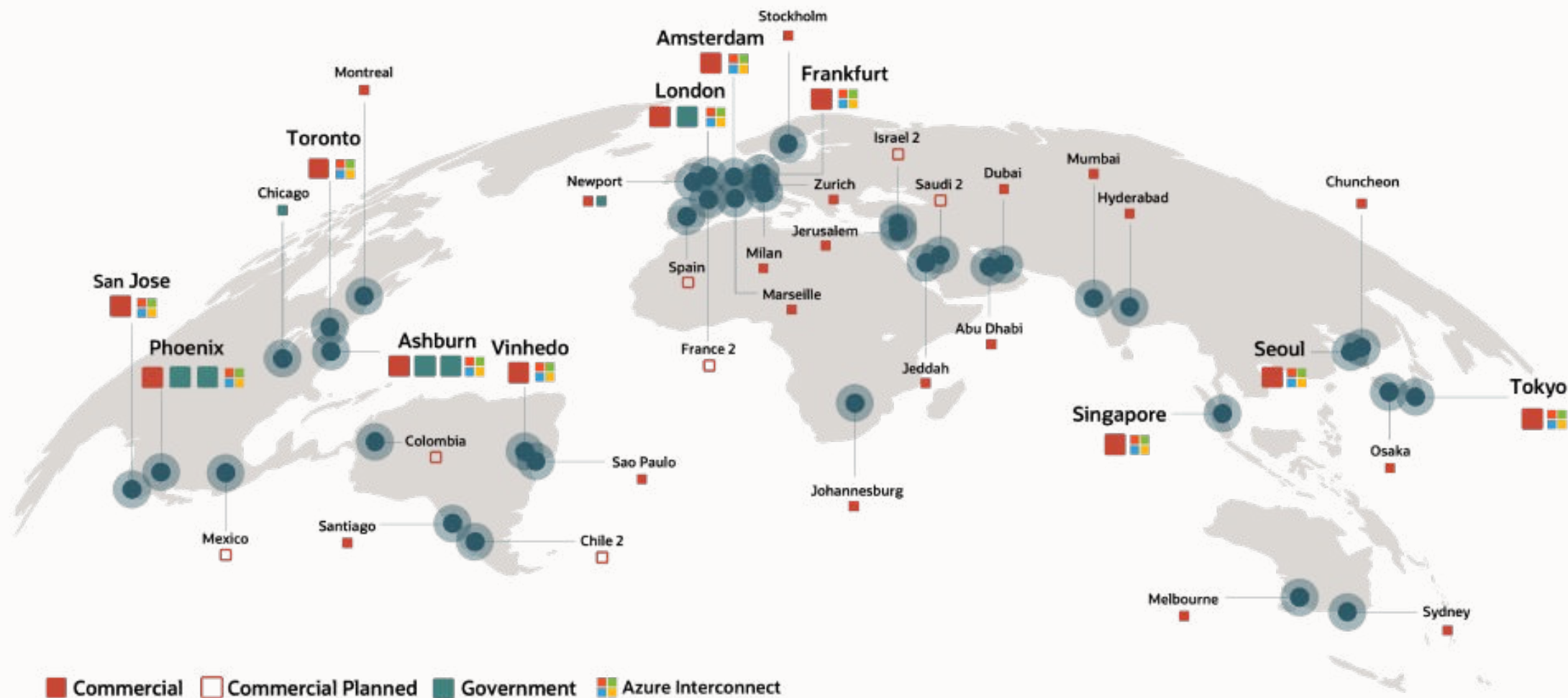- ➢ medium.com        1.36ms
- ➢ blog.maxjahn.at       1.79ms

Azure **Amsterdam** ←→ OCI **Amsterdam**
- ➢ blogs.oracle.com - Advatech   1.1ms
  (AZ3 in Azure to OCI – numbering might differ)

# Oracle Interconnect for Azure | Available in 11 regions



Stockholm
Amsterdam
Montreal
London
Frankfurt
Toronto
Israel 2
Mumbai
Chicago
Newport
Zurich
Saudi 2
Dubai
Chuncheon
San Jose
Jerusalem
Hyderabad
Phoenix
Spain
Milan
Ashburn
Vinhedo
Marseille
Abu Dhabi
Seoul
France 2
Jeddah
Tokyo
Colombia
Singapore
Sao Paulo
Osaka
Johannesburg
Santiago
Mexico
Chile 2
Melbourne
Sydney

■ Commercial   ☐ Commercial Planned   ■ Government   ■■ Azure Interconnect

# Oracle Database Service for Azure (ODSA)

# Oracle Database Service for Azure

An Oracle managed service that enables customers to easily provision and manage Oracle databases running on OCI using an Azure-native API and console experience.
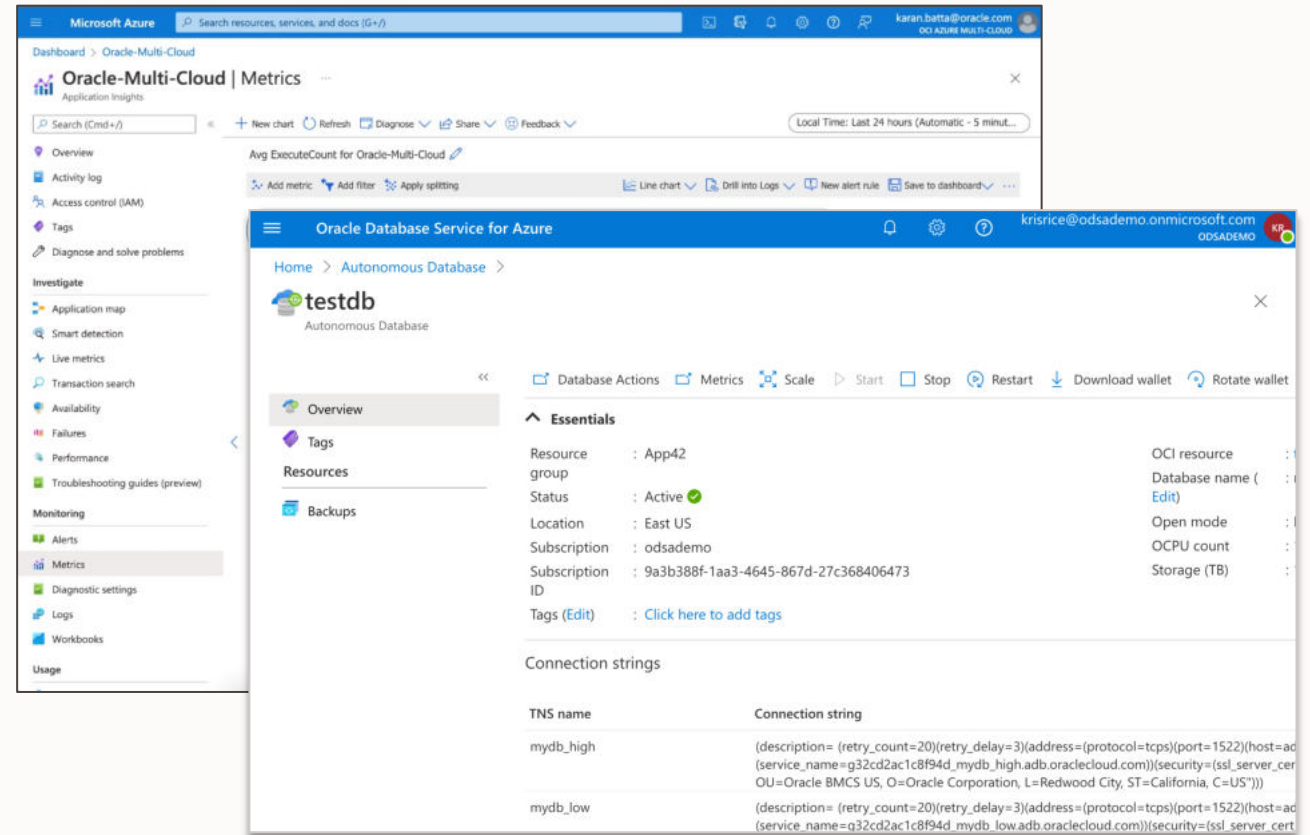


1. Connect Azure and OCI

2. Provision OCI databases

3. Use your OCI database like an Azure resource

4. OCI manages Azure to OCI networking

# Oracle Database Service for Azure

## Familiar Azure user experience

- Automated identity, networking, and monitoring integration
- < 2 ms latency private interconnect – suitable for nearly any app
- No additional cost

## Access OCI database services

- Zero downtime high availability with native Oracle RAC
- Scales up to 31 PB data warehouses and 10 million+ SQL IOPS
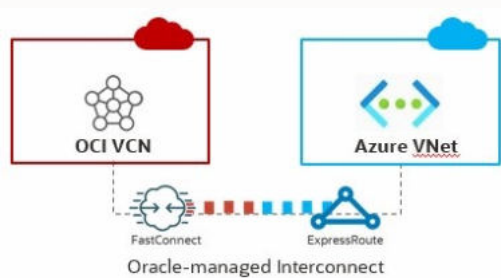- Completely hands-off, multi-modal Autonomous Database
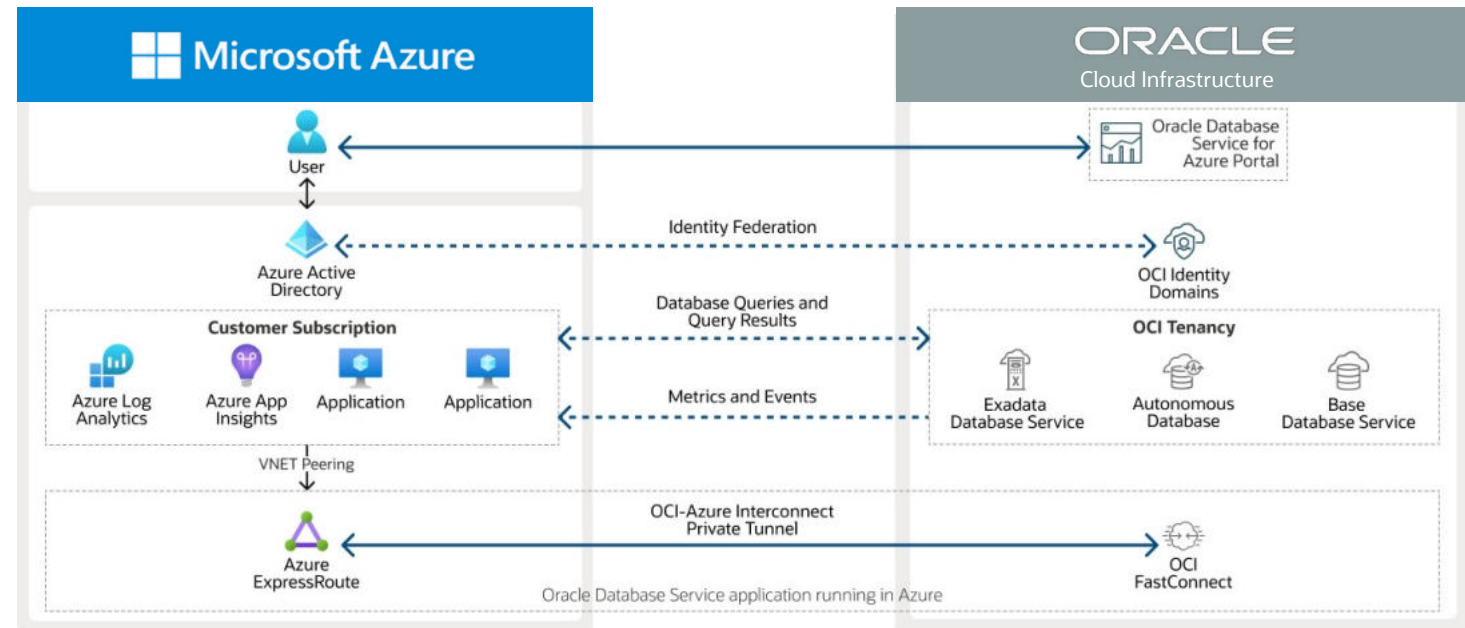
# Oracle Database Cloud Service for Azure (ODSA)
## Simpler, More Powerful Multicloud Architecture

**1**

### Oracle-managed Azure Interconnect



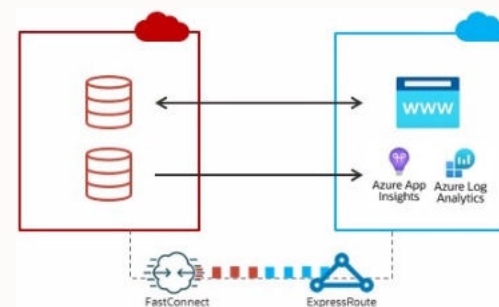Automatically configures the network between your Azure and Oracle accounts

**2**

### Azure-like portal and Terminology
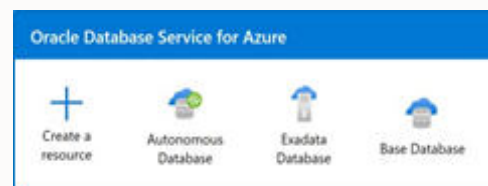


Create and manage your Oracle databases running in OCI as if they were Azure resources
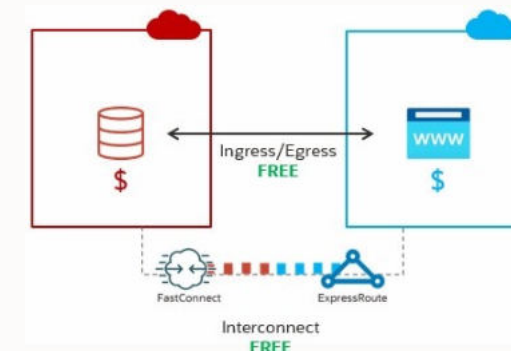
**3**

### Database Access, Metrics & Events



Resources in Azure access Oracle Databases in OCI & metrics and events streamed to Azure
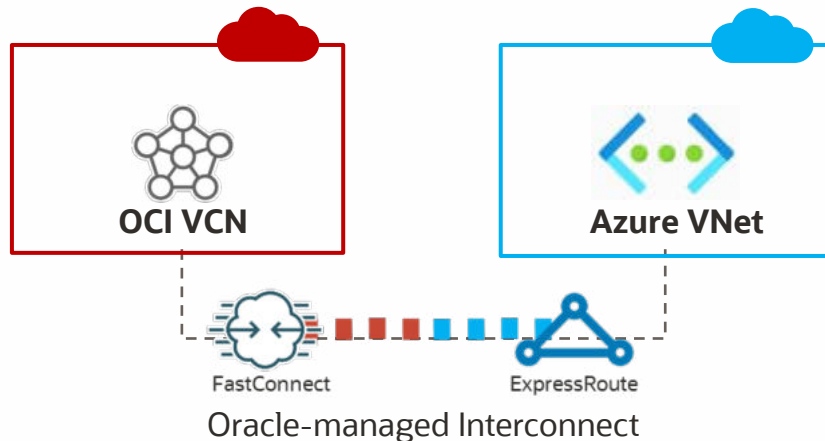
**4**

### Costs & Billing



No charges for Interconnect ports and gateways & no charges for ingress/egress traffic

# Oracle Database Cloud Service for Azure (ODSA)



**1** Guided cloud-to-cloud setup and configuration

OCI VCN

Azure VNet

FastConnect   ExpressRoute

Oracle-managed Interconnect

- ✓ **Oracle-managed OCI-Azure Interconnect**
- ✓ **Builds a private tunnel between your Azure and OCI accounts and configures DNS on both sides of the pipe**
- ✓ **Automatically configures the network between your Azure and Oracle accounts**
- ✓ **Integration with Azure Active Directory to simplify access and authentication**
- ✓ **Each Azure subscription is mapped to an OCI tenancy**

# Oracle Database Cloud Service for Azure (ODSA)

**2** Provision and operate OCI Database services
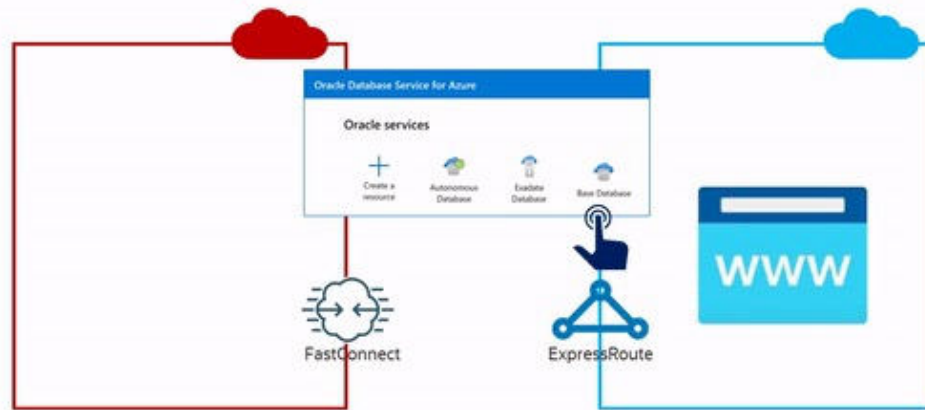


console.multicloud.oracle.com

- ✓ **Azure-like portal to create and manage your Oracle databases running in OCI**

- ✓ **You use your Azure credentials to sign in**

- ✓ **Database resources are created in your OCI tenancy**

- ✓ **Supports the creation of the following Services:**
    - ✓ Autonomous Database on Shared Exadata Infrastructure
    - ✓ Exadata Database Service
    - ✓ Base Database Service
    - ✓ More to come…

- ✓ **Common database management tasks**
    - ✓ create, delete, backup, restore, clone, start, stop, scale, …
    - ✓ More to come…

# Oracle Database Cloud Service for Azure (ODSA)



3 — Database Access, Metrics & Events
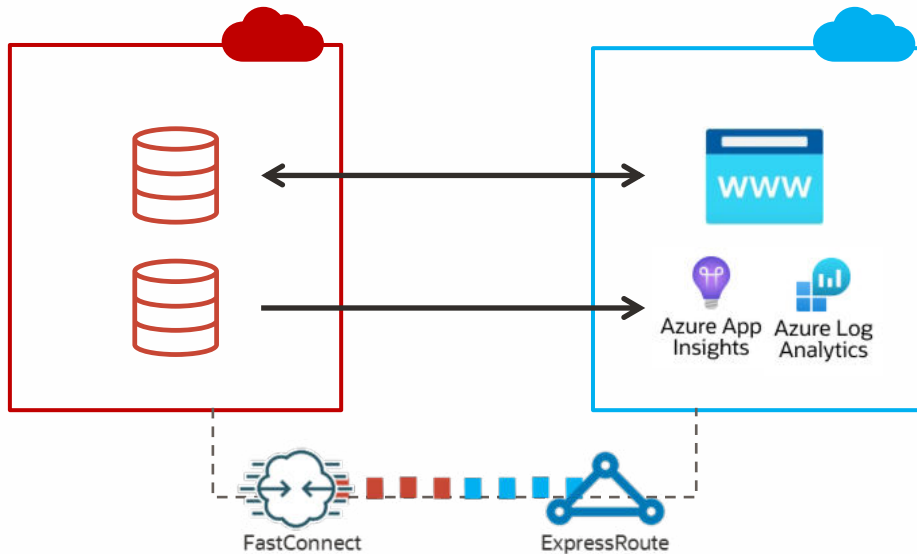
- ✓ **Resources in Azure access Oracle Databases in OCI**
- ✓ **Oracle Database metrics in OCI are streamed to Azure Application Insights**
- ✓ **Oracle Database events in OCI are provided to Azure Log Analytics**
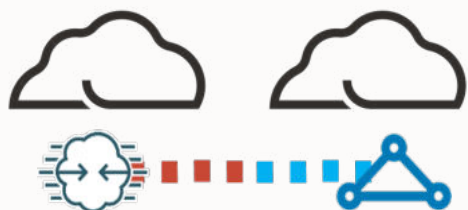
# Oracle Database Cloud Service for Azure (ODSA)



**4** Costs and Billing

Ingress/Egress
**FREE**

WWW

FastConnect — ExpressRoute
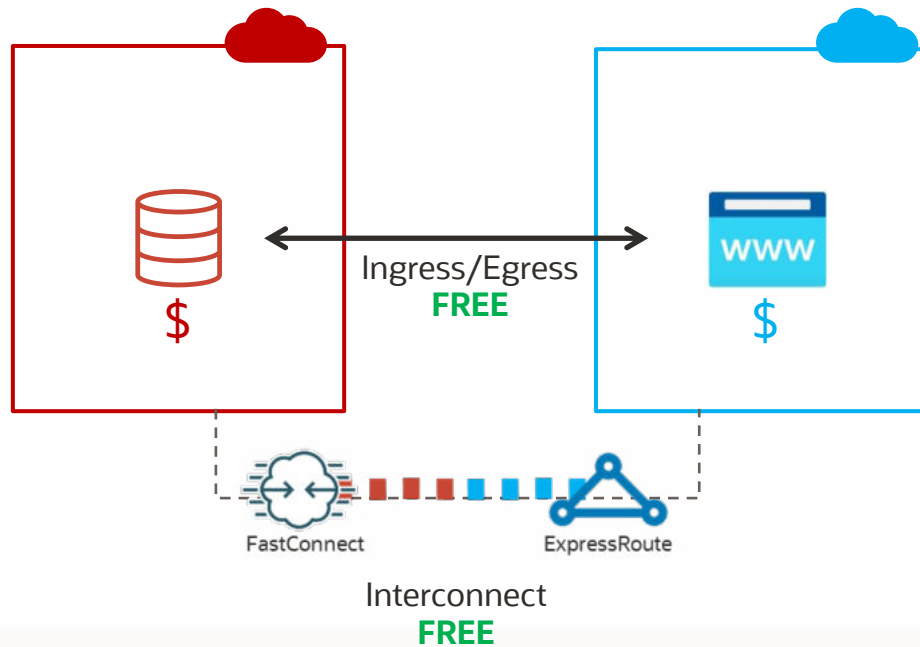
Interconnect
**FREE**

- ✓ **No charges for Interconnect ports and gateways**
- ✓ **No charges for ingress/egress network traffic**
- ✓ **You pay for your OCI and Azure resources**
- ✓ **No changes or replacement of ordinary contracts and billing processes**
- ✓ **Azure bills for the virtual network peering required by ODSA**
  - ○ https://docs.oracle.com/en-us/iaas/Content/multicloud/intro_how_multi-cloud_works.htm
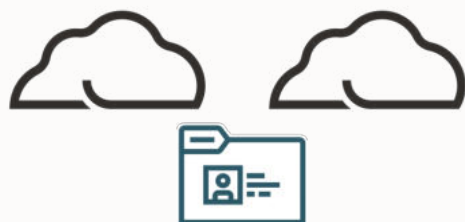
# ODSA | Solves Multicloud Challenges

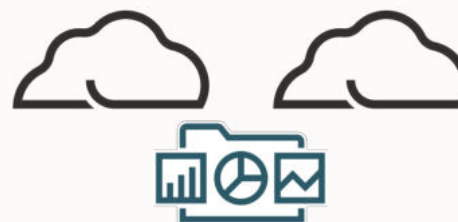| Network Connectivity & Costs | Security & User Management | Unified Management & Monitoring | Specialist Expertise |
|---|---|---|---|

**Network Connectivity & Costs**
- ✓ <2ms latency
- ✓ No ingress/egress cost
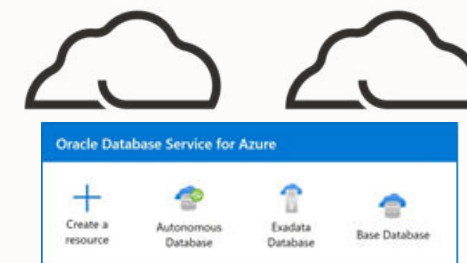- ✓ No port & gateway cost

**Security & User Management**
- ✓ Unified identity and access management via single sign-on

**Unified Management & Monitoring**
- ✓ Unified telemetry and monitoring

**Specialist Expertise**
- ✓ Multicloud portal with Azure terminology and look & feel

Oracle Database Service for Azure

Create a resource · Autonomous Database · Exadata Database · Base Database

# Oracle Database Service for Azure (ODSA) **vs.** OCI-Azure Interconnect

| | Oracle Database Service for Azure | OCI-Azure Interconnect |
|---|---|---|
| **Azure to OCI Connectivity** | **Oracle-managed** | Customer-managed |
| **Interconnect Cost** | **Free** | Port and Gateway charges |
| **Network ingress/egress Cost** | Free | Free |
| **Network Latency** | <2ms | <2ms |
| **Regional Availability** | 11 locations globally | 11 locations globally |
| **Use Cases** | **Connect Azure resources to Oracle Databases in OCI** | Connect Azure resources to any OCI resources |
| **Available DB Services in OCI** | Base Database, Exadata Database, Autonomous Shared | All database services |
| **Database Provisioning** | **ODSA Azure-like portal** | OCI Console |
| **Database Management** | ODSA Azure-like portal or OCI Console | OCI Console |
| **Monitoring** | Metrics and Events in Azure App Insights and Log Analytics | Customer-managed |
| **Identity Provider for OCI Console** | Azure Active Directory (or OCI IAM) | Azure Active Directory or OCI IAM |
| **Support** | Collaborative Support Model | Collaborative Support Model |
| **Architecture** | Multicloud | Multicloud |
| **Tenancy** | Multitenant | Single tenant |
| **Availability SLA/SLO** | SLO coming soon | SLA 99.95% |

# When to use…

## Azure Interconnect



FastConnect    ExpressRoute
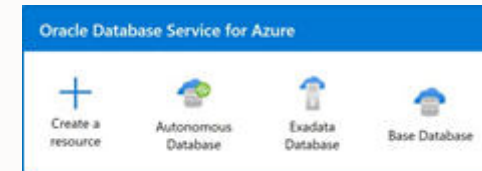
✓ **Want to connect Azure resources to any OCI resources**

✓ **Have the experience to set up and manage the Interconnect using Oracle FastConnect and Azure ExpressRoute**

✓ **Are aware of the additional cost for ports and gateways**

✓ **Are familiar with the OCI Console to provision and manage OCI resources**

   ❖ You should be anyway

## ODSA



Oracle Database Service for Azure
Create a resource    Autonomous Database    Exadata Database    Base Database

✓ **Simply want to provision Oracle databases in OCI as if they were Azure resources**

   ✓ Without dealing with any networking setup
   ✓ Without learning to navigate through OCI

✓ **Want to save the Interconnect cost**