

## **Note:**



**When you join Zoom, your computer will automatically connect to the Audio Stream.**

## **Live QandA:**

There will be a live Question and Answer (QandA) time following the live presentation. If you have any questions you would like addressed during the session, you can ask them during the session using the Q&A functionality in Zoom. Your questions will be answered in the order received.

The replay and the slide deck will be available within 1 business day from the event post.





# Oracle Architecture Center

**Kumar Dhanagopal**

Consulting UA Developer  
Architecture Center

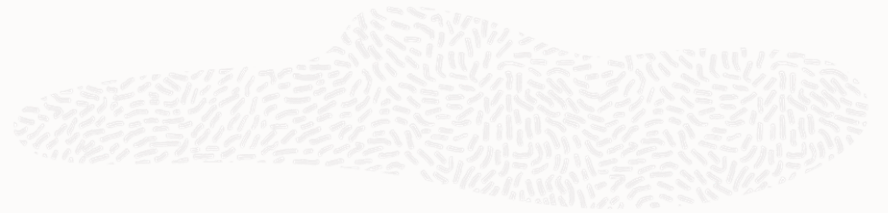
**Sanjay Narvekar**

Principal Product Manager  
Cloud GTM BI - Marketing

**November 13, 2020**



# Agenda



1. What is the Oracle Architecture Center?
2. Getting there
3. Navigating the site
4. Tour of a reference architecture
5. (Demo) Deploy an architecture quickly to Oracle Cloud
6. Coming soon...
7. Q&A

# Poll #1

## What topics interest you the most?

Answer 1: General OCI roadmap

Answer 2: Deep-dive sessions on new OCI services

Answer 3: Configurations and best practices for deploying on OCI

Answer 4: OCI supported third-party solutions and integrations

Answer 5: Real-world insights from practitioners



# What is the Oracle Architecture Center?

Your **one-stop portal** for architectural guidance!

Self-service portal for reference architectures, implementation guides, deployment automation, sample code, and best practices content for cross-product business use cases.

The screenshot shows the Oracle Architecture Center web interface. The header includes the Oracle logo, a hamburger menu, 'Help Center', a search bar with 'Architecture Center' entered, and user profile and globe icons. The left sidebar contains filters for 'Types' (Reference Architectures, Solution Playbooks), 'Technologies' (Database, IaaS, Java, Networking, PaaS, REST, SSO, SaaS, Terraform), and 'Products & Services' (Analytics Cloud, Autonomous Data Warehouse, Cloud Infrastructure, Content and Experience, Database, Digital Assistant, E-Business Suite, Identity Cloud Service, Integration). A 'Clear Filters' button is at the bottom of the sidebar. The main content area shows the title 'Oracle Architecture Center' and a brief description. Below this is a 'Sort By' dropdown set to 'Date (Newest First)'. The content is displayed in a grid of four cards. The first card is a 'Solution Playbook' titled 'Best practices for building resilient asynchronous integrations', marked as 'Customer-inspired'. The second card is a 'Reference Architecture' titled 'Deploy an autonomous database with a private endpoint'. The third card is a 'Reference Architecture' titled 'Rehost mainframe COBOL workloads to Oracle Cloud using Tuxedo ART', also marked as 'Customer-inspired'. The fourth card is a 'Reference Architecture' titled 'Set up a hub-and-spoke network topology'. Each card includes a brief description of the content.

**Business-focused**

**Cross-product**

**Validated**

**Automated**

**Curated**

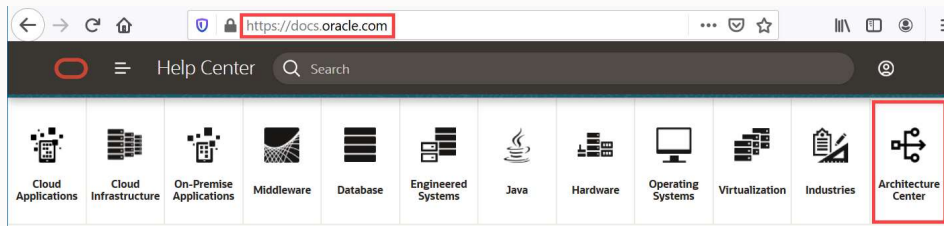




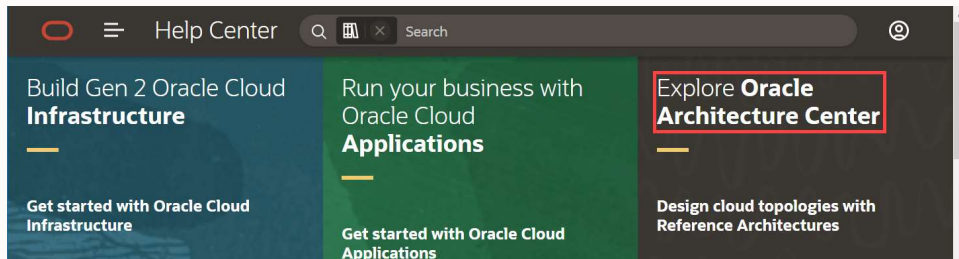
# Getting to the Oracle Architecture Center

1 [oracle.com/goto/architecture-center](https://oracle.com/goto/architecture-center)

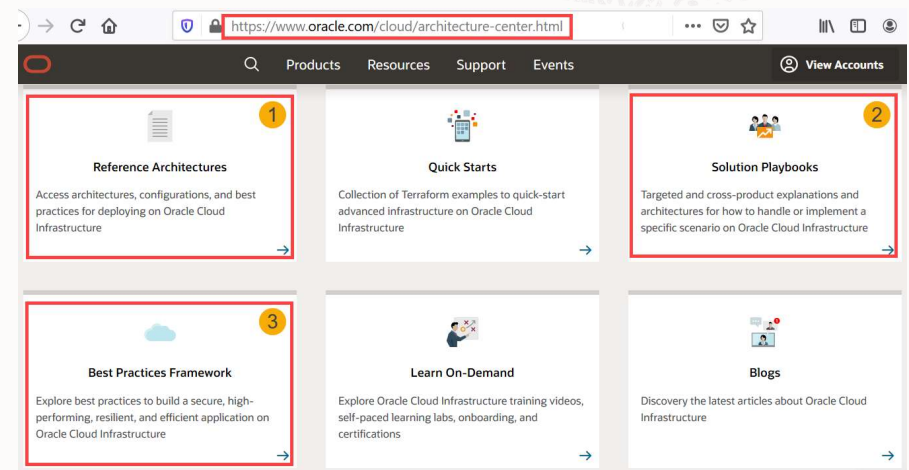
2 [docs.oracle.com](https://docs.oracle.com) → Architecture Center



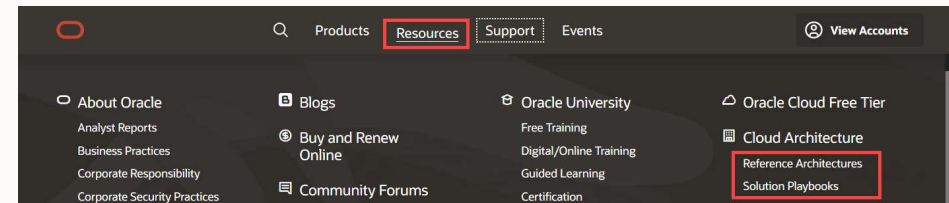
3 [docs.oracle.com/cloud](https://docs.oracle.com/cloud) → Explore Oracle Architecture Center



4 [oracle.com/cloud/architecture-center.html](https://www.oracle.com/cloud/architecture-center.html)



5 [oracle.com](https://oracle.com) → Resources



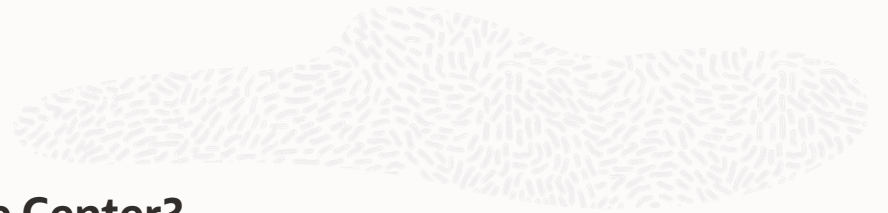
## Poll 2

### How familiar are you with the Oracle Architecture Center?

Answer 1: Very familiar

Answer 2: Somewhat familiar

Answer 3: Never heard of it



# Navigating the Oracle Architecture Center

Global Reach

The screenshot displays the Oracle Architecture Center web application. On the left, a sidebar contains filters for 'Types' (Reference Architectures, Solution Playbooks), 'Technologies' (Database, IaaS, Java, Networking, PaaS, REST, SSO, SaaS, Terraform), and 'Products & Services' (Analytics Cloud, Autonomous Data Warehouse, Cloud Infrastructure, Content and Experience, Database, Digital Assistant, E-Business Suite, Identity Cloud Service, Integration). A 'Clear Filters' button is at the bottom of the sidebar. The main content area features a 'Text Search' bar at the top, a 'Sort By' dropdown set to 'Date (Newest First)', and a grid of four featured articles. The first article is a 'Solution Playbook' titled 'Best practices for building resilient asynchronous integrations'. The second is a 'Reference Architecture' titled 'Deploy an autonomous database with a private endpoint'. The third is a 'Reference Architecture' titled 'Rehost mainframe COBOL workloads to Oracle Cloud using Tuxedo ART'. The fourth is a 'Reference Architecture' titled 'Set up a hub-and-spoke network topology'. On the right, a 'Global Reach' panel lists languages: Deutsch, English, Español, Français, Italiano, Português (Brasil), العربية, 中文 (简体), 中文 (繁體), 日本語, and 한국어. The Oracle logo is in the bottom right corner.

Text Search

Content Types

Technologies and Products filters

Text Search

Sort by Date or Title

Oracle Architecture Center

Looking for help with designing and implementing IT topologies for specific business scenarios? You can find reference architectures, solution playbooks, and more right here. For quickstart examples and training collateral, visit the [Oracle Cloud Infrastructure Architecture Center](#).

Sort By: Date (Newest First)

**Solution Playbook**

**Best practices for building resilient asynchronous integrations**

Learn about suggested approaches for building asynchronous integrations that are resilient to the realities of the modern networks and infrastructures.

**Reference Architecture**

**Deploy an autonomous database with a private endpoint**

Enable private access to an autonomous database in Oracle Cloud Infrastructure, by using a private endpoint.

**Reference Architecture**

**Rehost mainframe COBOL workloads to Oracle Cloud using Tuxedo ART**

Move legacy COBOL applications from IBM mainframe systems to a Tuxedo-based middle tier hosted on compute instances provisioned in Oracle Cloud Infrastructure, with Exadata DB systems making up the data tier.

**Reference Architecture**

**Set up a hub-and-spoke network topology**

Deploy the infrastructure resources required for a hub-and-spokes network topology in the cloud.

Clear Filters

Deutsch  
English  
Español  
Français  
Italiano  
Português (Brasil)  
العربية  
中文 (简体)  
中文 (繁體)  
日本語  
한국어



# Reference Architectures for a Wide Range of Use Cases

(sample list)



Oracle Apps on OCI	Oracle Database on OCI	Application modernization	Data Platform & Data Warehouse	Security & Observability	AppDev & DevOps	HA, DR, & Multicloud
Oracle Commerce (ATG)	Migration to Autonomous DB	Mainframe COBOL migration using Tuxedo ART	Departmental Data Warehouse	E-Business Suite with Fortinet Security Fabric	Streaming to Autonomous DB using Functions	Pilot-light DR
Oracle FLEXCUBE	Migration to Exadata DB	Apache Tomcat with MySQL	Enterprise Data Warehouse	PeopleSoft with Fortinet Security Fabric	Jenkins	OCI + Azure Interconnect
Oracle Modern Risk and Finance	Migration to Virtual Machine DB	JBoss WildFly with Autonomous DB	PostgreSQL	SIEM using Splunk	Cloud Native App with MySQL	HA Web App
Oracle Communications SBC	Migration to Bare Metal DB	WebLogic on Kubernetes	MySQL InnoDB	Security Zones	Helidon Microservices with Oracle DB	HA Bare Metal Database



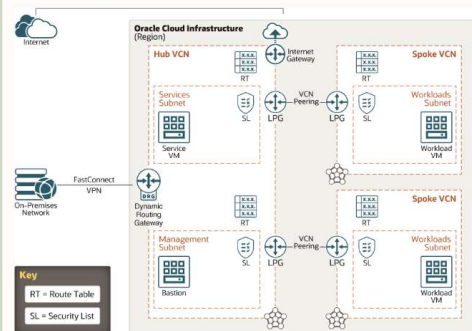
# Tour of a Sample Reference Architecture

Source: [docs.oracle.com/en/solutions/hub-spoke-network](https://docs.oracle.com/en/solutions/hub-spoke-network)  
(content shown here for illustrative purposes, abridged to fit the slide)

## Set up a hub-and-spoke network topology

### Architecture

The following diagram illustrates the reference architecture.



The architecture has the following components:

- **On-premises network**  
This network is the local network used by your organization. It is one of the spokes of the topology.
- **Region**  
An Oracle Cloud Infrastructure region is a localized geographic area that contains one or more data centers, called availability domains. Regions are independent of other regions, and vast distances can separate them (across countries or even continents).
- **Virtual cloud network (VCN)**  
A VCN is a customizable, private network that you set up in an Oracle Cloud Infrastructure region. Like traditional data center networks, VCNs give you complete control over your network environment. You can segment VCNs into subnets, which can be scoped to a region or to an availability domain. Both regional subnets and availability domain-specific subnets can coexist in the same VCN. A subnet can be public or private.  
  
This architecture has a hub VCN and one or more spoke VCNs.

### Recommendations

Your requirements might differ from the architecture described here. Use the following recommendations as a starting point.

- **VCNs**  
When you create the VCN, determine how many IP addresses your cloud resources in each subnet require. Using the Classless Inter-Domain Routing (CIDR) notation, specify a subnet mask and a network address range that's large enough for the required IP addresses.
- **Security lists**  
Use security lists to define ingress and egress rules that apply to the entire subnet.

### Considerations

When you design a hub-and-spoke network topology in the cloud, consider the following factors:

- **Cost**  
The only components of this architecture that have a cost are the compute instances and FastConnect (port hours and provider charges). The other components have no associated cost.
- **Security**  
Use appropriate security mechanisms to protect the topology.
- **Scalability**  
Consider the service limits for VCNs and subnets for your tenancy. If more networks are required, request an increase in the limits.
- **Performance**  
Within a region, performance isn't affected by the number of VCNs. When you peer VCNs in different regions, consider latency. When you use spokes connected through VPN Connect or FastConnect, the throughput of the connection is an additional factor.
- **Availability and redundancy**  
Except for the instances, the remaining components have no redundancy requirements.  
  
The VPN Connect and FastConnect components are redundant. For further redundancy, use multiple connections, preferably from different providers.

### Deploy

The Terraform code for this reference architecture is available in GitHub. You can pull the code into Oracle Cloud Infrastructure Resource Manager with a single click, create the stack, and deploy it. Alternatively, you can download the code from GitHub to your computer, customize the code, and deploy the architecture by using the Terraform CLI.

**Note:** The Terraform code includes most of the components shown in the architecture diagram. The service VM, workload VM, VPN connection, and FastConnect are not included in the code, although they are shown in the diagram.

- Deploy by using Oracle Cloud Infrastructure Resource Manager:
  1. Click **Deploy to Oracle Cloud**.  
If you aren't already signed in, enter the tenancy and user credentials.
  2. Review and accept the terms and conditions.
  3. Select the region where you want to deploy the stack.
  4. Follow the on-screen prompts and instructions to create the stack.
  5. After creating the stack, click **Terraform Actions**, and select **Plan**.
  6. Wait for the job to be completed, and review the plan.  
To make any changes, return to the Stack Details page, click **Edit Stack**, and make the required changes. Then, run the **Plan** action again.
  7. If no further changes are necessary, return to the Stack Details page, click **Terraform Actions**, and select **Apply**.
- Deploy by using the Terraform CLI:
  1. Go to [GitHub](#).
  2. Clone or download the repository to your local computer.
  3. Follow the instructions in the **README** document.

# Demo

*Deploy a reference architecture quickly to Oracle Cloud*



## (Coming Soon) Improved Landing Page

The screenshot shows the Oracle Architecture Center landing page. At the top is a navigation bar with the Oracle logo, a hamburger menu, 'Help Center', a search bar containing 'Architecture Center', and user/account icons. Below the navigation bar is a hero section with the title 'Oracle Architecture Center' and a subtitle 'Design and implement your cloud, hybrid, and on-premises workloads using our catalog of cross-product reference architectures, solution playbooks, and best practices.' To the right of the text is an illustration of a person with a magnifying glass. Below the hero section is a filter bar with 'Apply filters' and a list of categories: 'All' (257), 'Reference Architectures' (82), and 'Solution Playbooks' (175). A 'Date (Newest First)' dropdown is on the right. Below the filter bar are four reference architecture cards. The first card is 'Set up a hub-and-spoke network topology'. The second is 'Protect your workloads in the cloud using security zones'. The third is 'Design a pilot-light disaster recovery (DR) topology'. The fourth is 'Deploy linearly scalable sharded Oracle databases distributed across Oracle Cloud Microsoft Azure an...'. Each card has a 'Deploy to Oracle Cloud' button. The second and fourth cards also have an 'Automation Available' badge. Annotations with arrows point to these elements: 'Better UX' points to the filter bar; 'Count indicators' points to the category counts; 'One-Click Deployment' points to the 'Deploy to Oracle Cloud' button; and 'Automation Badge' points to the 'Automation Available' badge.

**Oracle Architecture Center**  
Design and implement your cloud, hybrid, and on-premises workloads using our catalog of cross-product reference architectures, solution playbooks, and best practices.

**Better UX** → Apply filters ▸

**Count indicators** → All 257 Reference Architectures 82 Solution Playbooks 175

↑↓ Date (Newest First) ▾

**One-Click Deployment** → Deploy to Oracle Cloud

**Automation Badge** → Automation Available

**Reference Architecture**  
**Set up a hub-and-spoke network topology**  
Deploy the infrastructure resources required for a hub-and-spokes network topology in the cloud.

**Reference Architecture**  
**Protect your workloads in the cloud using security zones**  
Maximize the security of your compute, networking, and storage resources in the cloud by placing...

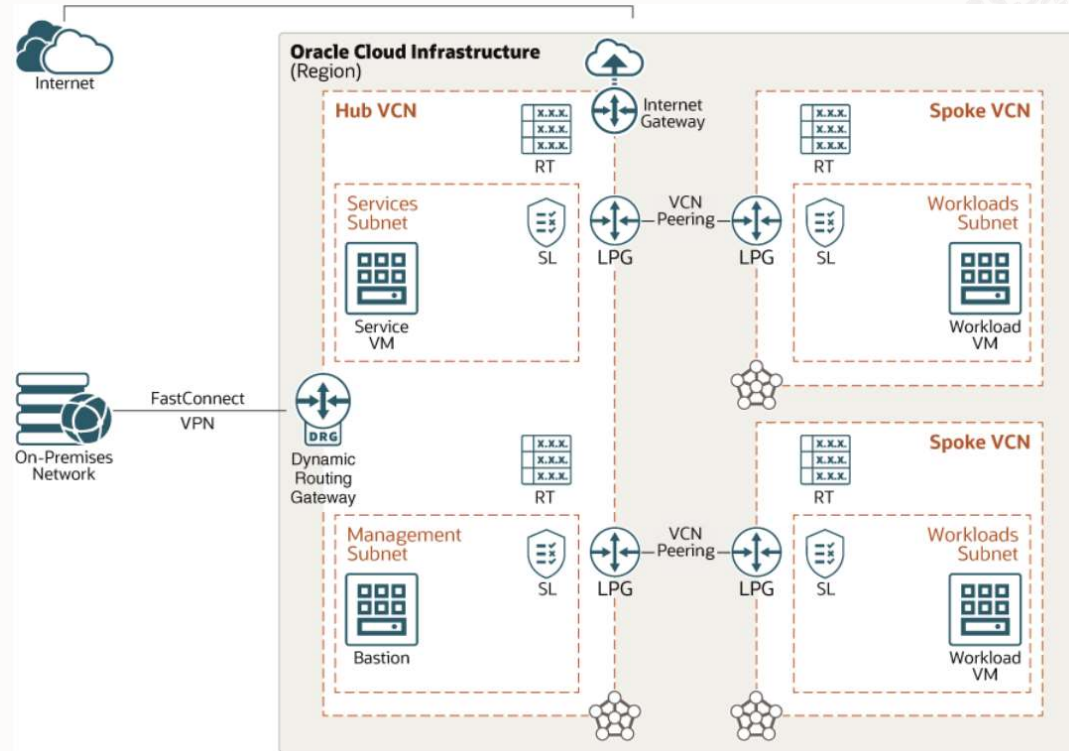
**Reference Architecture**  
**Design a pilot-light disaster recovery (DR) topology**  
Design a pilot-light DR topology for a multi-tier application stack, with redundant resources in each tier...

**Reference Architecture**  
**Deploy linearly scalable sharded Oracle databases distributed across Oracle Cloud Microsoft Azure an...**  
When you need a database that supports extreme scale-out with complete data isolation distributed...





## (Coming Soon) Editable Architecture Diagrams



[Download Editable Source](#)

Download and customize the architecture

## Poll 3

**What are the top focus areas that you typically need architectural guidance for?**

- Answer 1: Security
- Answer 2: Cost
- Answer 3: Management & governance
- Answer 4: High availability & resilience
- Answer 5: Performance
- Answer 6: App modernization





## Poll 4

### What would you like to see as part of the Oracle Architecture Center?

Answer 1: Examples of Open Source applications architectures

Answer 2: Examples of Oracle Applications architectures

Answer 3: More automation to deploy the architecture

Answer 4: More details on the implementation of the architecture

## Poll 5

### What is your preferred method of consuming technical content?

Answer 1: Tutorials and Blogs

Answer 2: Videos

Answer 3: Hands-on Labs

Answer 4: Documentation



# Thank you!

Comments, feedback?

Post them here:

<https://cloudcustomerconnect.oracle.com/posts/3eeac14d2c>

---





# Poll #6

## **Please share your feedback!**

How satisfied were you with today's content?

Did you learn something new today?

Do you know where to locate additional resources?



# Q&A

---

