



# OCI Reserved Private IPs Workshop

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# What Are Reserved Private IPs?

- Static IPv4/IPv6 addresses you can take out of the dynamic pool inside a subnet.
- Remain assigned across reboots; can be re-attached to any VNIC in the same subnet.
- Avoids IP churn and simplifies DNS / firewall rules.

# Key Use Cases

-  **Failover / HA** – move the IP to a standby instance in seconds.
-  **Blue-Green Deployments** – swap IP between versions with zero DNS change.
-  **Maintain Consistent IPs Across Lifecycle** - Reuse reserved IPs across replacements or re-creations of instances.
-  **Static IPs for Licensing or Compliance** - Some apps require fixed IPs for licensing, auditing, or compliance.
-  **5. Testing & DevOps Scenarios** - Use reserved IPs to test configurations before VM creation. Helpful in CI/CD pipelines, replicated environments, etc
-  **Audit & Compliance** – predictable IPs simplify security policies.

# Feature Highlights

- Supports both IPv4 and IPv6 reserved addresses.
- Integrates with IP Address Insights for subnet-level visibility.
- Console, CLI and Terraform support on day 1.

# Reserving an IP

- 1. Navigate to Networking>Virtual Cloud Networks>VCN Name>Subnet Details>IPv4 addresses or IPv6 addresses
- 2. Click **\*\*Add Reserve IP Address\*\***, IPv4 or IPv6 and a specific addresss
- 3. Provide a name & description (and optionally hostname), then add Reserve IP4 or 6 address.
- 4. Attach the reserved IP to a VNIC in the same subnet.
- 5. You can reserve existing subnets private IPs to make sure is not going to be reused in the future by other resources

# Reserving an IP console



AVAILABLE

web-tier-subnet1

- Edit
- Move resource
- Add tags
- Terminate
- Create path analysis ▾

DetailsTags

## Subnet Information

OCID: ...h25eognq [Show](#) [Copy](#)  
IPv4 CIDR Block: 172.17.1.0/24  
IPv6 Prefix: -  
Virtual Router MAC Address: [REDACTED]  
Subnet Type: Regional  
Compartment: [REDACTED]  
DNS Domain Name: ...evcn.com [Show](#) [Copy](#)

## Resources

- Security Lists (1)
- Alarms
- Logs
- IP Address Insights
- CIDR/prefix utilization
- IPv4 Addresses
- IPv6 Addresses

## Filters

Lifetime

All

State

ΔII

## IPv4 addresses

View IP addresses of all resources in this subnet.

Add reserved IPv4 address

Reserve IP address

Remove IP address reservation

<input type="checkbox"/>	Name	IP Address	State	Lifetime	Fully qualified domain name	Created	▾
<input type="checkbox"/>	test	172.17.1.2	Available	Reserved	-	Tue, Apr 22, 2025, 16:57:34 UTC	⋮
<input type="checkbox"/>	PE_eu-amsterdam-1_eb4d2931-8538-4c39-8717-8e89ced72f51	172.17.1.229	Assigned	Ephemeral	pe-eu-amsterdam-1-eb4d2931-8538-4c39-8717-8e89ced72f51	Tue, Apr 22, 2025, 14:06:30 UTC	⋮
<input type="checkbox"/>	WebServer2_AppVCN2	172.17.1.196	Assigned	Ephemeral	webserver2-appvcn2	Mon, Jan 29, 2024, 18:37:39 UTC	⋮
<input type="checkbox"/>	WebServer1_AppVCN2	172.17.1.209	Assigned	Ephemeral	webserver1-appvcn2	Fri, Jan 19, 2024, 11:27:07 UTC	⋮
0 selected						Showing 4 items	< 1 of 1 >

# Reserving existing Ephemeral in bulk

- To reserve all IP addresses in bulk, select the **Name** checkbox, and click **Reserve IP address**. You can also select several IP addresses individually.

Resources

Security Lists (1)

Alarms

Logs

IP Address Insights

CIDR/prefix utilization

IPv4 Addresses

IPv6 Addresses

Filters

Lifetime

All

State

All

Tag filters

IPv4 addresses

View IP addresses of all resources in this subnet.

Add reserved IPv4 address

Reserve IP address





Remove IP address reservation

<input type="checkbox"/>	Name	IP Address	State	Lifetime	Fully qualified domain name	Created
<input type="checkbox"/>	test2	172.17.1.3	Available	Reserved	-	Tue, Apr 22, 2025, 17:05:50 UTC
<input type="checkbox"/>	test	172.17.1.2	Available	Reserved	-	Tue, Apr 22, 2025, 16:57:34 UTC
<input checked="" type="checkbox"/>	PE_eu-amsterdam-1_eb4d2931-8538-4c39-8717-8e89ced72f51	172.17.1.229	Assigned	Ephemeral	pe-eu-amsterdam-1-eb4d2931-8538-4c39-8717-8e89ced72f51	Tue, Apr 22, 2025, 14:06:30 UTC
<input checked="" type="checkbox"/>	WebServer2_AppVCN2	172.17.1.196	Assigned	Ephemeral	webserver2-appvcn2	Mon, Jan 29, 2024, 18:37:39 UTC
<input checked="" type="checkbox"/>	WebServer1_AppVCN2	172.17.1.209	Assigned	Ephemeral	webserver1-appvcn2	Fri, Jan 19, 2024, 11:27:07 UTC

3 selected

Showing 5 items < 1 of 1 >

# Best Practices

-  Reserve IPs early in project design to avoid mid-stream renumbering.
-  Periodically audit unused reserved IPs to free them for other teams.
-  Remember: reservations are **\*\*subnet-scoped\*\***, not VCN-wide.
-  Moving an IP briefly interrupts traffic—plan maintenance windows.



Thank you



ORACLE

