AWS VPC: Virtual Private Confusion?

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Workhorse Computing
It used to be simple
You went to AWS.
Created a new node.
Maybe added some disk to it.
And off you went, computing happily ever after.
Too simple

Catch: Everyone’s nodes were in one subnet.

We could all see one another.

Maybe your neighbor wasn’t pretty.

Maybe they’d been cracked.

Whatever reason, you want privacy.
Private, no longer simple

OK, but no more "just create a node".

Creation starts with a "Virtual Private Cloud".

Then you get to create subnets, security rules, IP

 gateways, NAT gateways in multiple availability zones

in multiple regions... Got that?
AWS Nomenclature

AWS services are provided in "Regions".

Regions have "Availability Zones".

Regions have "us-east", "us-west", "canada".

EC2 & subnets make heavy use of zones.

Redundancy uses multiple zones within a region.

Designed to fail separately.
What you end up with

From the AWS docs:

Public & private subnets.
Gateways ("public").
NAT gateways ("private").
Security rules.

("private")
("public")
Create your VPC

Multiple VPCs possible.

Different regions
Per client.

By use: Dev. vs. QA vs. Prod.

Free-tier only vs. paid.

Split up to match your use case.
CREATE VP Connection

VPNs

Additional Information

View complete service health details

Service is operating normally

Amazon VPC - US East (N) (1)

Service is operating normally

Current Status

Resources

Service Health

VPC Dashboard

VPN Connections

Networking

Security

Support

VPC Dashboard

VPN Connections

Networking

Security

Support
Where ya at?
<table>
<thead>
<tr>
<th>ID</th>
<th>VCPE</th>
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**Summary**

- **ID**: Unique identifier for the VPC (Virtual Cloud Network) configuration.
- **VCPE**: Virtual Cloud Provider Endpoint.
- **VPC**: Virtual Private Cloud.
- **VCN**: Virtual Cloud Network.

**Details**

- **VCPE**: Indicates the connectivity endpoint for the VPC.
- **VPC**: Represents the VPC configuration details.
- **VCN**: Lists the various VCN configurations associated with the VPC.

**Actions**

- **Create VCN**: Option to create a new VCN.
- **Edit VCN**: Option to edit existing VCN configurations.
- **Delete VCN**: Option to delete VCN configurations.

**Notes**

- Ensure all VCNs are correctly configured to facilitate seamless connectivity.
- Regularly review and update VCN configurations to maintain network efficiency.

**Warning**

- Incorrect VCN configurations may lead to network downtime and service disruptions.

**Additional Resources**

- For more information, please refer to the official documentation on VPC and VCN configurations.
- Contact support for any issues related to VPC and VCN management.

**Contact Support**

- Support phone number: 123-456-7890
- Email: support@example.com

**Additional Links**

- VPC Configuration Guidelines
- VCN Best Practices
- Resource Management Dashboard

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**Whatcha got?**

- A comprehensive VPC and VCN management system.
- Enhanced connectivity and performance.
- Seamless integration with other cloud services.

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**Virtual Cloud Network**

- Encompasses a wide range of cloud services and capabilities.
- Designed to facilitate inclusive and efficient cloud computing.

**Next Steps**

- Implement additional security measures.
- Monitor network performance regularly.
- Collaborate with IT teams for integration and optimization.

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**Support & Feedback**

- Submit your feedback via the feedback form.
- Report any issues through the dedicated support channels.

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**Revision Date**

- 11/01/2023

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**Notes**

- Regular updates and enhancements to the VPC and VCN configurations.
- Stay updated with the latest cloud technologies and practices.
Whatcha got?
Whatcha doin'?
<table>
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What's inside?
Whatcha running?
Whatcha running?
Create a new VPC.
Add subnets.
Add security.
Start an instance.
See it for real...
Lots of docs.
VPC starts it all.
10.X.0/16 good start.
Availability zones & subnets work together.
Subnets break up.
10.X.0/24 works well.
10.X.Y.0/16 good start.
VPC starts it all.
Lots of docs.

Summary