

# Aviatrix Global Transit Network for AWS Cloud

## Quick Start Reference Deployment

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This Quick Start reference deployment guide was created by Amazon Web Services (AWS) in partnership with Aviatrix Systems.

[Quick Starts](#) are automated reference deployments that use AWS CloudFormation templates to deploy key technologies on AWS, following AWS best practices.

## Overview

This Quick Start reference deployment guide provides step-by-step instructions for deploying [Aviatrix Global Transit Network Architecture](#) on the Amazon Web Services (AWS) Cloud.

Aviatrix Global Transit Quick Start is a fully automated solution that utilizes AWS APIs to deploy a global transit VPC in minutes. A typical AWS Global Transit VPC architecture which includes a Transit Hub VPC connecting many Spoke VPCs to facilitate communication between the Spoke VPCs and an on-premises network.

This Quick Start automates the deployment of the required infrastructure to enable a Global Transit Network architecture, securely connecting spoke VPCs to a central Transit Hub VPC.

## Aviatrix for AWS

Aviatrix is a leader in cloud networking, and both an AWS Advanced Technology Partner and Networking Competency Partner. In 2017, Aviatrix was also recognized by Gartner as a “Cool Vendor” in Cloud Computing. With Aviatrix software, cloud operations, architects and networking engineers can utilize the one-click power of cloud-native networking to enable secure connectivity across their VPCs, sites and users.

## Costs and Licenses

You are responsible for the cost of the AWS services used while running this Quick Start reference deployment. The CloudFormation template for this Quick Start includes configuration parameters that you can customize. Some of the settings, such as instance type, will affect the cost of deployment. For cost estimates, see the pricing pages for each AWS service you will be using during this deployment. Prices are subject to change.

You are also responsible for the Aviatrix licenses that are required to deploy the Aviatrix Global Transit VPC solution. Aviatrix licenses can be either purchased beforehand or from the [AWS Marketplace](#). There are two licensing options that can be accessed from the AWS Marketplace that you could choose with this Quick Start:

1. [Aviatrix Inter-Region VPC Peering 5 Tunnel License](#)
2. [Aviatrix BYOL license](#)

(See the Prerequisites section for details.)

In case you choose to use the BYOL license, please ensure that you have the BYOL license which must be purchased from Aviatrix directly. For BYOL licenses purchase, contact Aviatrix Sales at [sales@aviatrix.com](mailto:sales@aviatrix.com).

As of the date of publication, the cost for running a transit VPC with this solution's default settings using the license included AMI in the US East (N. Virginia) Region is as shown in the table below.

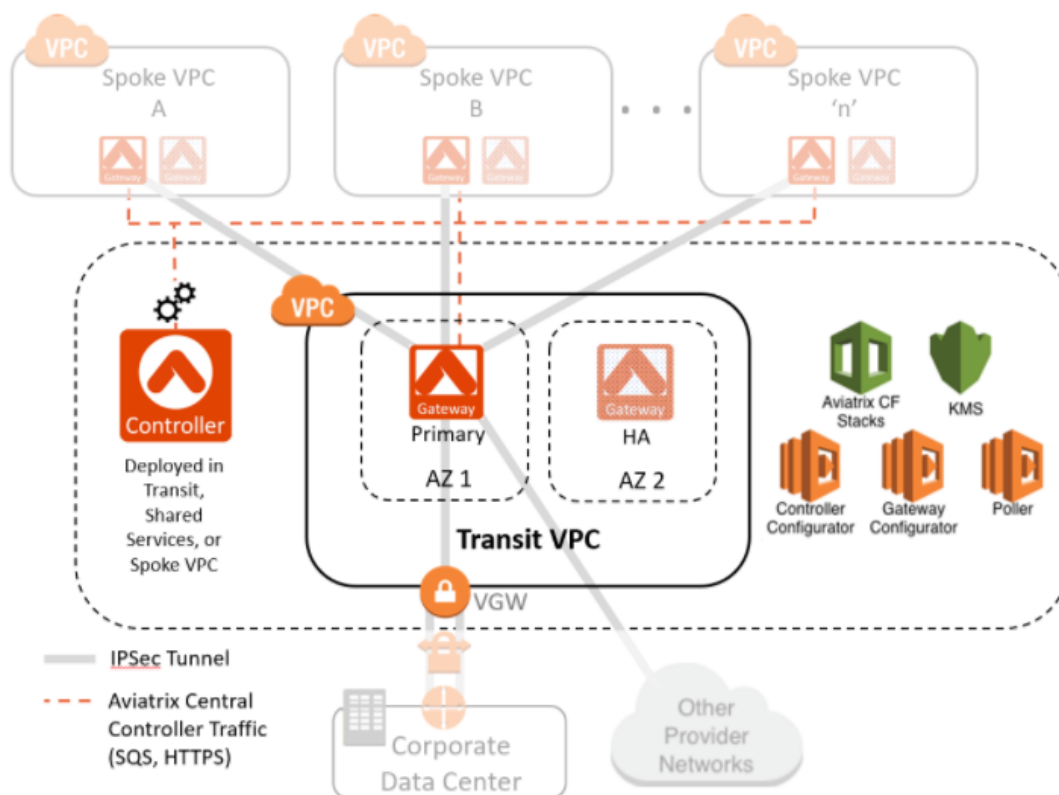
Transit VPC Deployment Size	License Included Cost/Hour
5 Spoke/Tunnel License	\$0.70/Hour

Prices are subject to change.

Additionally, the solution creates a unique AWS Key Management Service (AWS KMS) customer master key (CMK) for protecting network configuration information, which costs \$1/month. For full details, see the pricing webpage for each AWS service you will be using in this solution.

## Architecture

Deploying this Quick Start for a new virtual private cloud (VPC) with *default parameters* builds the following Aviatrix Global Transit VPC environment in the AWS Cloud.



A typical AWS Global Transit VPC architecture which includes a Transit Hub VPC connecting many Spoke VPCs to facilitate communication between the Spoke VPCs and on-premises network.

**Figure 1: Quick Start Aviatrix Global Transit Network architecture on AWS**

## Global Transit VPC Architecture Description

Aviatrix Global Transit VPC solution enables a highly secure Global Transit VPC architecture using Aviatrix Cloud Controller and Aviatrix Gateways that are deployed in a high availability configuration. The Transit hub VPC can be a new VPC or an existing VPC.

This highly available design deploys the Aviatrix Controller and two Aviatrix Gateway instances into separate Availability Zones of a dedicated Global transit VPC, which will act as the hub of your global transit network. The gateway instances allow for IPsec VPN termination, routing and security policies. Aviatrix Cloud Controller provides a user-

friendly interface to further customize the Transit VPC architecture that is deployed by this Quick Start, as well as monitoring and cloud network visualization.

The Aviatrix Global Transit VPC solution also automatically adds spoke VPCs in any AWS Region to your global transit network by simply tagging your VPCs – the VPN connection will automatically be established between the tagged spoke VPC and the global transit hub VPC, using a combination of CloudFormation and Lambda scripts. Multiple AWS accounts are also supported. This Quick Start allows you to deploy Spoke VPCs in up to two AWS accounts. Adding more than two accounts to your Global Transit VPC architecture is supported using the Aviatrix Controller. Contact [info@aviatrix.com](mailto:info@aviatrix.com) for more information.

All scripts are written, maintained and supported by Aviatrix, and verified by the AWS Quick Start team.

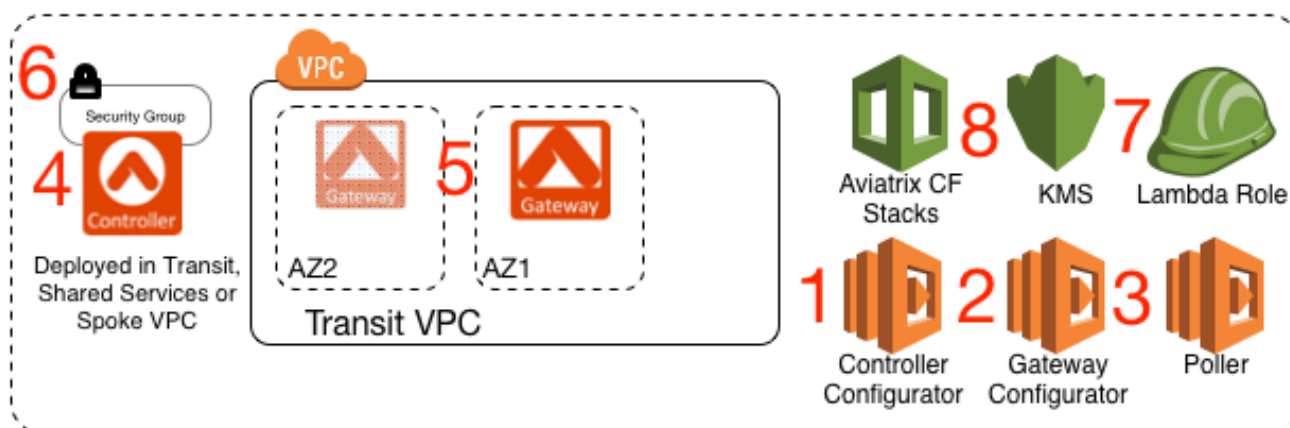
### Additional Functionality

Once you have established your transit VPC, you can extend beyond the AWS Cloud and automate configuration of VPN connections to network providers or on-premises infrastructure – or even other public cloud providers – using the Aviatrix Controller.

Aviatrix allows you to optionally expand your global transit architecture to include a Shared Services layer with direct peering for better support of cloud/devops teams who require a shared services or management VPC for common services in the cloud (security, egress filtering, etc.). Contact [info@aviatrix.com](mailto:info@aviatrix.com) for more information.

## Quick Start Components

The Quick Start sets up the following functional and automation components:



1. One Controller Configurator Lambda Script to automatically deploy and configure the Aviatrix Controller using API calls.
2. One Gateway Configurator Lambda Script to automatically deploy Transit hub and spoke Aviatrix gateway(s) using API calls.
3. One Poller Lambda Script to detect VPC tags for spoke VPCs. The Tag Name can be default or custom. If the Spoke VPC Tag Value = True it will be connected to the Transit Hub Gateway, and if the Spoke VPC Tag Value= False it will be disconnected from the Transit Hub Gateway.
4. One Aviatrix Controller EC2 Instance (named Aviatrix Controller).
5. Two Aviatrix Hub Gateway EC2 Instances with Gateway HA
6. One Aviatrix Security Group (named AviatrixSecurityGroup).
7. IAM role for the Lambdas (Controller Configurator, Gateway Configurator, Poller)
8. Encryption Key using AWS KMS to encrypt the environment variables of the Lambdas

## Prerequisites

### Specialized Knowledge

Before you deploy this Quick Start, we recommend that you become familiar with the following AWS services. (If you are new to AWS, see [Getting Started with AWS](#).) The Aviatrix solution does not require advanced networking skills to deploy and maintain.

- [Amazon VPC](#)
- [Amazon EC2](#)

### License Requirements

This Aviatrix Global Transit Hub Solution by default deploys an Aviatrix Controller, a Transit Hub Gateway and up to 5 spoke gateways, utilizing the Licenses included in the AWS Marketplace AMI for [Aviatrix Inter-Region VPC Peering 5 Tunnel License](#).

The Aviatrix Global Transit Hub Solution can grow beyond 5 spokes. When building a Global Transit Hub solution that has more than 5 spoke VPCs, you must choose the AWS Market Place AMI for [Aviatrix for Cloud Interconnect, Cloud Peering and VPN \(BYOL\)](#). *This will require a license ID that you will need to procure beforehand from Aviatrix Systems.*

You can start by building the Global Transit Hub using the 5 Tunnel license included AMI, a and change it at a later time to the BYOL license by following the instructions in this link: [Migrate from 5 Tunnel License Included to BYOL](#).

## Technical Requirements

To start, an AWS account is required. The Aviatrix Global Transit VPC Quick Start can connect to spoke VPCs across one or two AWS accounts. Do not use this Quick Start to build a transit VPC across more than 2 accounts.

The solution also allows you to connect your spoke VPCs in *the different regions by tagging those VPCs as instructed in the deployment steps.*

**Note:** If you need to connect spoke VPCs across more than two accounts and regions, use the Aviatrix Cloud Controller to setup multiple accounts and then use the Transit Peering configuration option available through the Aviatrix Cloud Controller.

## IAM Requirements

Aviatrix Global Transit VPC Quick Start will require the following IAM roles to be created in the AWS Account prior to launching this Quick Start.

1. One Aviatrix Role for EC2 (named aviatrix-role-ec2) with corresponding role policy (named aviatrix-assume-role-policy). Click [here](#) for this policy's details.
2. One Aviatrix Role for Apps (named aviatrix-role-app) with corresponding role policy (named aviatrix-app-policy) Click [here](#) for this policy's details.

These IAM roles can be configured using the Aviatrix IAM Role Cloud Formation Template. See Deployment Steps Section – Step 3.



## Deployment Options

This Quick Start provides two deployment options:

- **Deploy Aviatrix into a new VPC.** This option builds a new AWS environment consisting of the Global Transit VPC, subnets, Internet Gateway, Default Route and other infrastructure components, and then deploys an Aviatrix Controller and one Aviatrix Hub Gateway into this new VPC.
- **Deploy Aviatrix into an existing VPC.** This option provisions an Aviatrix Controller, one Aviatrix Hub Gateway and other infrastructure components into an existing AWS VPC that will be designated as the Transit Hub VPC.
- The Quick Start allows you to choose either of these options. It also lets you customize and configure CIDR blocks, instance types, and Aviatrix settings, as discussed later in this guide.

## Deployment Steps

### Step 1. Prepare Your AWS Account

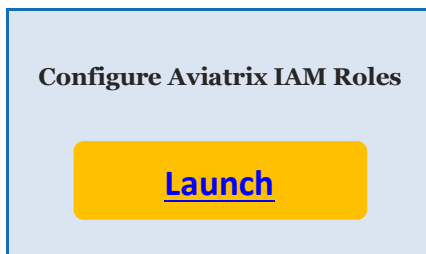
1. If you don't already have an AWS account, create one at <https://aws.amazon.com> by following the on-screen instructions.
2. Use the region selector in the AWS Console navigation bar to choose the AWS Region where you want to deploy Aviatrix Global Transit Solution on AWS.
3. Create a [key pair](#) in your preferred region.
4. If necessary, [request a service limit increase](#) for the Amazon EC2 instance type that will be used for Aviatrix gateways. You might need to do this if you already have an existing deployment that uses this instance type, and you think you might exceed the [default limit](#) with this reference deployment.

### Step 2. Subscribe to the Aviatrix AMI

1. Log in to the AWS Marketplace at <https://aws.amazon.com/marketplace/>.
2. Open the page for [Aviatrix Inter-Region VPC Peering 5 Tunnel License](#), or [Aviatrix Marketplace AMI Aviatrix for Cloud Interconnect, Cloud Peering and VPN \(BYOL\)](#), and choose **Continue to Subscribe**.
3. Use the **Manual Launch** option to read and **Accept Software Terms**.

**Important:** Do not launch the instance manually as this will be done by the Aviatrix Global Transit VPC Quick Start – See Step 4 below.

### Step 3. Configure Aviatrix IAM Roles



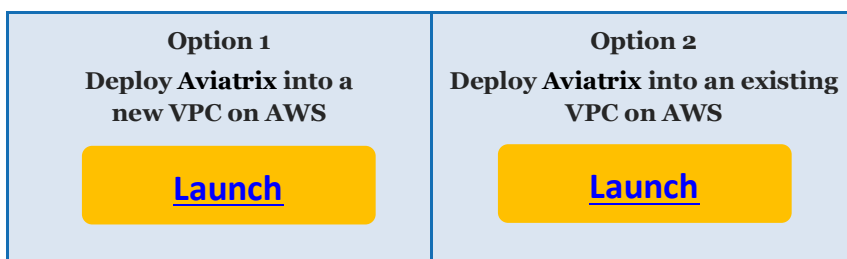
This Cloud Formation Template will configure the following IAM roles.

1. One Aviatrix Role for EC2 (named aviatrix-role-ec2) with corresponding role policy (named aviatrix-assume-role-policy). Click [here](#) for this policy's details.
2. One Aviatrix Role for Apps (named aviatrix-role-app) with corresponding role policy (named aviatrix-app-policy) Click [here](#) for this policy's details.

**Note:** If these IAM roles already exist in your AWS account, this CFT will return a Create Failed error. Ignore this error and Continue to Step 4.

### Step 4. Launch the Quick Start

1. Choose one of the following options to launch the AWS Cloud Formation template into your AWS account. For help choosing an option, see [deployment options](#) earlier in this guide.



**Important:** If you're deploying Aviatrix Global Transit Solution into an existing VPC, make sure that your VPC has at least 2 public subnets. These subnets require an Internet Gateway (IGW) and a default route pointing to the Internet Gateway. You'll be prompted for your VPC settings when you launch the Quick Start.

2. Each Global Transit VPC Hub deployment takes about 10 minutes to complete.
3. Upon choosing one of the above options, you will be redirected to the AWS Cloud Formation Create Stack page.
4. Check the region that is displayed in the upper-right corner of the **AWS Management Console** navigation bar, and change it if necessary. This is where the infrastructure for Aviatrix will be deployed. By default, the template is launched in the US East 1 (Virginia) Region.
5. On the **Select Template** page of the Create stack, ("Specify an Amazon S3 template URL") keep the default setting for the template URL, and then choose **Next**.

**Note:** The URL for the Aviatrix Global Transit VPC template is already populated. Do not change this URL.

6. On the **Specify Details** page, provide a name for the stack (for example: Aviatrix). Review the parameters for the template. Provide values for the parameters that require input. For all other parameters, review the default settings and customize them as necessary. When you finish reviewing and customizing the parameters, choose **Next**.
  7. In the following tables, parameters are listed by category and described separately for the two deployment options:
    - [Parameters for deploying Aviatrix into a new VPC](#)
    - [Parameters for deploying Aviatrix into an existing VPC](#)
- **Option 1: Template Parameters for deploying Aviatrix into a new VPC**
  - *Specify Details:*

Parameter label (name)	Default	Description
<b>Stack name</b>	<i>&lt;Requires input&gt;</i>	Give the stack a name. Name length should be less than 35 characters.

- *Amazon Ec2 Configuration:*

Parameter label (name)	Default	Description
Keypair	<Requires input>	Key Pair to be used in the Aviatrix Controller for SSH access

- *VPC Configuration:*

Parameter label (name)	Default	Description
VPC CIDR	10.1.0.0/16	Subnet address to be assigned to the VPC
Public Subnet 1 CIDR	10.1.0.0/24	Subnet CIDR where the Aviatrix Controller will be deployed
Public Subnet 2 CIDR	10.1.1.0/24	Secondary Subnet CIDR where the HA Hub Gateway will be deployed
Availability zones	<Requires input>	Availability zones where the Primary and HA Hub Gateway will be deployed.

- *Controller Information:*

Parameter label (name)	Default	Description
Admin Email	<Requires input>	Email for the administrator of the Aviatrix Controller
Controller Password	<Requires input>	Password for the controller. It must contain an uppercase letter, a number and a symbol.
Aviatrix Controller Instance Type	T2.Medium	Instance Type for the Aviatrix Controller.

- *License Configuration:*

Parameter label (name)	Default	Description
License Model	License Included	Aviatrix License type (Licenses Included or BYOL)
BYOL License Key	<Requires input>	BYOL license Key provided by Aviatrix

- *Gateway Information:*

Parameter label (name)	Default	Description
<b>Hub Gateway Instance Type</b>	T2.Medium	Instance Type for the Aviatrix Transit Hub Gateway
<b>Spoke Gateway Instance Type</b>	T2.micro	Instance Type for the Aviatrix Transit Spoke Gateway(s)
<b>Spoke VPC Tag Name</b>	aviatrix-spoke	Tag to identify Spoke VPC to be connected to Transit Hub

- *Optional 2<sup>nd</sup> AWS Account Configuration*

Parameter label (name)	Default	Description
<b>Optional Second AWS Account number</b>	<Requires input>	Amazon account number for the second AWS Account where spoke VPCs may be deployed. This field is optional.
<b>ARN for Aviatrix-role-app on secondary Account</b>	<Requires input>	Amazon Resource Name (ARN) for the second AWS Account where Spoke VPC may be deployed
<b>ARN for Aviatrix-role-ec2 on secondary Account</b>	<Requires input>	Amazon Resource Name (ARN) for the second AWS Account where Spoke VPC may be deployed

- When you finish reviewing and customizing the parameters, choose **Next**, which takes to the Options Page.
- On the **Options** page, you can [specify tags](#) (key-value pairs) for resources in your stack and [set advanced options](#). When you're done, choose **Next**.
- On the **Review** page, review and confirm the template settings. Under **Capabilities**, select the checkbox "**I acknowledge that AWS CloudFormation might create IAM resources with custom names.**" to acknowledge that you accept that the template will create IAM resources.
- Choose **Create** to deploy the stack.

- **Option 2: Parameters for deploying Aviatrix into an existing VPC**

- *Specify Details:*

Parameter label (name)	Default	Description
Stack name	<Requires input>	Give the stack a name. Name length should be less than 35 characters.

*Parameters:*

- *Amazon Ec2 Configuration:*

Parameter label (name)	Default	Description
Keypair	<Requires input>	Key pair to be used in the Aviatrix Controller for SSH access

- *Existing VPC Configuration:*

Parameter label (name)	Default	Description
VPC ID	Select from Drop down	Subnet address to be assigned to the VPC
Public Subnet 1 CIDR	Select from Drop down	Subnet CIDR where the Aviatrix Controller will be deployed
Public Subnet 2 CIDR	Select from Drop down	Secondary Subnet CIDR where the HA Hub Gateway will be deployed
Availability zones	<Requires input>	Availability zones where the Primary and HA Hub Gateway will be deployed.

- *Controller Information:*

Parameter label (name)	Default	Description
Admin Email	<Requires input>	Email for the administrator of the Aviatrix Controller
Controller Password	<Requires input>	Password for the controller. It must contain an uppercase letter, a number and a symbol.
Aviatrix Controller Instance Type	T2.Medium	Instance Type for the Aviatrix Controller.

- *License Configuration:*

Parameter label (name)	Default	Description
<b>License Model</b>	License Included	Aviatrix License type (Licenses Included or BYOL)
<b>BYOL License Key</b>	<Requires input>	BYOL license Key provided by Aviatrix

- *Gateway Information:*

Parameter label (name)	Default	Description
<b>Hub Gateway Instance Type</b>	T2.Medium	Instance Type for the Aviatrix Transit Hub Gateway
<b>Spoke Gateway Instance Type</b>	T2.micro	Instance Type for the Aviatrix Transit Spoke Gateway(s)
<b>Spoke VPC Tag Name</b>	aviatrix-spoke	Tag to identify Spoke VPC to be connected to Transit Hub

- *Optional 2 AWS Account Configuration:*

Parameter label (name)	Default	Description
<b>Optional Second AWS Account number</b>	<Requires input>	Amazon account number for the second AWS Account where spoke VPCs may be deployed.
<b>ARN for Aviatrix-role-app on second Account</b>	<Requires input>	Amazon Resource Name (ARN) for the second AWS Account where Spoke VPC may be deployed
<b>ARN for Aviatrix-role-ec2 on second Account</b>	<Requires input>	Amazon Resource Name (ARN) for the second AWS Account where Spoke VPC may be deployed

- On the **Options** page, you can [specify tags](#) (key-value pairs) for resources in your stack and [set advanced options](#). When you're done, choose **Next**.
- On the **Review** page, review and confirm the template settings. Under **Capabilities**, select the checkbox "I acknowledge that AWS CloudFormation might create IAM resources with custom names." to acknowledge that you accept that the template will create IAM resources.
- Choose **Create** to deploy the stack.

10. *Monitor the status of the stack.*

- a. When the status is **CREATE\_COMPLETE**, the Aviatrix Global Transit Hub Solution is ready.
  - b. Use the URLs displayed in the **Outputs** tab for the stack to view the resources that were created.
11. (OPTIONAL): Troubleshooting – you can use AWS Cloudwatch to view detailed logs of the Aviatrix Global Transit VPC Quick Start.

## Step 5. Adding a Spoke VPC

**Important:** Spoke VPCs must have the following base configuration for the automation to work:

1. The spoke VPC must be associated with an IGW.
2. The spoke VPC routing table must have a default route that is pointing to the IGW.
3. The spoke VPC must have at least two public subnets in different Availability zones. These subnets must be explicitly associated with the VPC routing table.
4. Most importantly, the Spoke VPC subnet CIDR cannot be overlapping with any other subnets in other spoke VPCs.

1. Go to **AWS Management Console** and select the region where the new spoke VPC will be deployed.
2. Under Services select **VPC**.
3. Choose or create the VPC that will become your spoke in the Aviatrix Global Transit Hub architecture.
4. Go to the **Tags** tab.
5. Click on **Edit** and create a new tag on the VPC:
  - **Key:** aviatrix-spoke (if you customized your Spoke VPC Tag Name during the CFT launch, choose the custom name)
  - **Value:** true



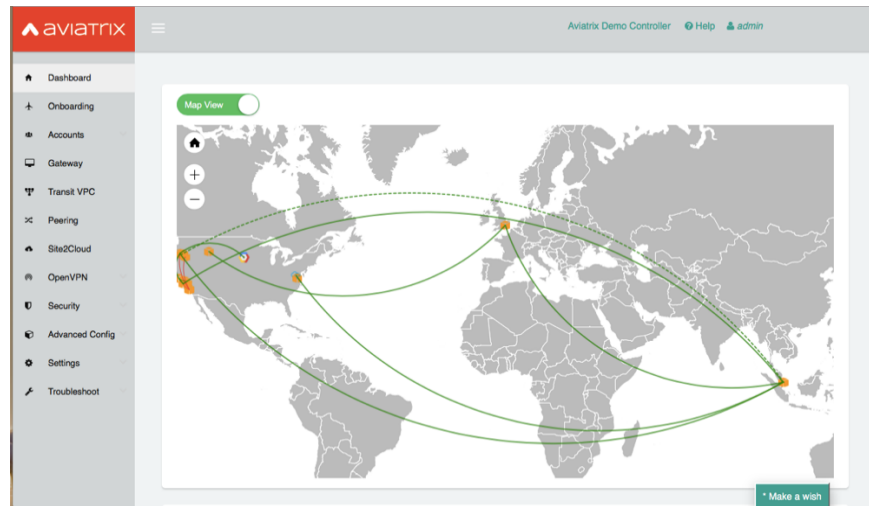
6. In less than 2 minutes, the Poller process will detect the new tag and execute the necessary API calls to deploy an Aviatrix spoke VPC gateway in first public subnet that it finds and then deploys the Aviatrix HA Gateway in the 2<sup>nd</sup> public subnet in that VPC. It will then automatically peer it with the Aviatrix Transit Hub Gateway and update the routing tables in each spoke VPC with the transit routes.
7. After the process is completed, the “aviatrix-spoke” tags will be changed to “peered.”

### Step 6. (Optional) Delete Spoke VPC

1. Choose the **VPC(s)** that you no longer want it to be part of the Aviatrix Global Transit Hub architecture.
2. Change the aviatrix-spoke tag on the VPC:
  - **Key:** aviatrix-spoke (if you customized your Spoke VPC Tag Name during the CFT launch, choose the custom name)
  - **Value:** *false*
3. In less than 2 minutes, the Poller process will detect the change in the tag and execute the necessary API calls to delete the peering with the Aviatrix Transit Hub Gateway, and will delete the Aviatrix gateways on the VPC.
4. After the process is completed, the “*aviatrix-spoke*” tags will be changed to “*unpeered*.”

### Step 7. (Optional) Launch Aviatrix UI

1. Under the Outputs of the Stack you will find the address of the controller (AviatrixControllerEIP=x.x.x.x), utilize that information to access the Aviatrix Controller UI using a web browser i.e.: <https://X.X.X.X/>



**Figure 2: Aviatrix Cloud Controller Dashboard**

2. From the Aviatrix Controller UI, you will be able to view the Global Transit VPC topology as well as administrate and orchestrate many cloud networking functions.

### Step 8. (Optional) Connecting Transit Hub to Enterprise site using VPN or Direct Connect

1. To enable a hybrid cloud connecting the Transit Hub VPC to an enterprise site or co-location, Aviatrix supports connecting the transit hub gateway to the VGW terminating VPN or Direct Connect from the enterprise site or co-location.
2. For more instruction on connecting to an enterprise site or co-location, visit [how to connect the Transit Hub VPC to a VGW that terminates your Direct Connect or VPN connection.](#)

## What is Unique About the Aviatrix Global Transit Solution?

- **Centralized Controller** – Point-and-click, centralized management console (with REST API support) manages distributed gateways and can easily be operated by both Cloud Ops and network engineers. No deep networking skills required (No CLI). Additionally, changes or customizations can quickly and easily be implemented through the Aviatrix controller UI.
- **BGP is Required in Transit VPC Only** – The Aviatrix offering is API-based and uses Policy-Based Routing (PBR) from the spokes to the transit hub VPC. The Spoke VPC routes are advertised to the Aviatrix Gateway in the Transit VPC by the Aviatrix Controller. The Aviatrix Gateway in the Transit VPC then exchanges routes with the on-premises network using BGP via the VGW. The learned routes from the Aviatrix Transit Gateway are sent to the Controller to be propagated to the spoke VPCs.
- **Simplified Troubleshooting** – Integrated diagnostic tools make troubleshooting much easier than traditional networking products that use BGP everywhere. Integrated FlightPath troubleshooting tool helps identify EC2 Connectivity problems faster to minimize business downtime.
- **Built-in Security** – VPC Isolation and segmentation are created by design - no inter VPC connectivity occurs unless specified by the administrator. With encrypted links, an integrated stateful firewall for policy enforcement, and fully qualified domain name filtering (FQDN), Aviatrix ensures security is fully integrated with your global transit network.
- **Monitoring and Visibility** – Central Controller dashboard provides visual representation of your global transit network, and monitors, displays and alerts on link status, performance and link latency for transit hubs and spoke VPCs.
- **Fully Supported Solution** – To ensure a successful deployment, Aviatrix provides customer support for all components of the solution including the Aviatrix Controller, Gateways and the automation scripts.

## Best Practices Using Aviatrix on AWS

### *Gateway Sizing*

For complete information on how to correctly size your gateway, please refer to our [Aviatrix Documentation](#)

### *Backups*

When deployed in a cloud environment, the Aviatrix controller is not in the data path because packet processing and encryption is done by the Aviatrix gateways.

When the controller is down or out of service, your network will continue to be operational and encrypted tunnels and OpenVPN users stay connected and are not affected. Since most of the data logs are forwarded from the gateways directly, the loss of log information from the controller is minimal. The only impact is that you cannot build new tunnels or add new OpenVPN users.

This loosely coupled relationship between the controller and gateways reduces the impact of the availability of the controller and simplifies your infrastructure. Since the controller stores configuration data, it should be periodically backed up to the appropriate AWS account. If a replacement controller is launched, you can restore the configuration data from your backup. For more info, refer to the [Aviatrix Documentation](#).

### *More Documentation*

Please find our complete documentation at <http://docs.aviatrix.com>.

## Security

The Aviatrix controller is secured by exposing only the necessary ports (TCP 443). Each gateway created by the Aviatrix Controller is able to communicate only with other gateways (using UDP 500 and 4500) and the controller (using TCP 22,443). Software and patch updates are provided by Aviatrix. For more info, contact us at [info@aviatrix.com](mailto:info@aviatrix.com).

All peering connections are secured utilizing IPSEC encryption.

## FAQ

**Q.** What is a Transit VPC?

**A.** A transit VPC is a common strategy for connecting multiple, geographically dispersed VPCs and remote networks in order to create a global network transit center. A transit VPC simplifies network management and minimizes the number of connections required to connect multiple VPCs and remote networks.

**Q.** How is an Aviatrix Global Transit VPC different from other solutions?

**A.** Aviatrix is the only cloud-native solution for creating a transit hub to enable simple point-and-click configuration of networking connections in AWS. The Aviatrix Controller gives users the ability to implement and operationalize Global Transit VPC design via the point-and-click UI or via its Cloud Network Orchestration APIs.

**Q.** Does the Aviatrix Solution offer High Availability?

**A.** Yes. The solution deploys dual gateways in both the transit hub and spoke VPCs. If one Aviatrix gateway fails, the standby Aviatrix gateway automatically connects in seconds to reduce network downtime.

**Q.** How long will it take me to deploy the Aviatrix Global Transit Hub for AWS?

**A.** If you already have an AWS account, it should take less than 10 minutes to deploy the Aviatrix Global Transit Hub. Spoke VPCs are automatically connected as and when they are tagged.

## Additional Resources

### AWS Services

- [Amazon EC2](#)
- [AWS CloudFormation](#)
- [Amazon VPC](#)
- [Aviatrix Website](#)
- [Aviatrix Documentation](#)

### Quick Start Reference Deployments

- [AWS Quick Start home page](#)

## Send Us Feedback

You can visit our [GitHub Repository](#) to download the templates and scripts for this Quick Start, post your comments, and share your customizations with others.

## Document Revisions

Date	Change	In sections
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### Notices

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