Published Scope Appendices for Aviatrix Professional Services

Appendix Latest Release: October 25, 2024

The following is a detailed set of information pertaining to the scope of works associated the Schedule for Aviatrix Professional Services.

Upon executing an applicable order with Aviatrix, the Schedule and these appendices serve to govern the fulfillment and execution of services.

Onboarding and Adoption Programs for Solution Programs (Use Cases)

Aviatrix Professional Services has use case driven solutions that encompass a series of programs to support initial onboarding of the use case and further adoption of the use case with specific consulting activities to help customers achieve rapid time to value from their investment in Aviatrix software. Use cases follow a reference architecture solution pattern ("SP").

Below is the comprehensive appendix for Onboarding and Adoption programs to support the following Use Cases:

- **Cloud Perimeter Security ("SP1")**
- **Secure High Performance Edge connectivity ("SP3")**

Onboarding Appendix

Onboarding Summary for SP1

Onboarding Package	Onboarding Outcomes	Expected Level of Effort
Level 1 (Included in Starter Packs)	Clouds: Single CSP Regions: Maximum two regions Spoke Gateways: upto 5 VPC's/Vnet's	Up to 2 Program Weeks
Level 2	Clouds: Up to 2 CSP's Regions: Multi-region Spoke Gateways: upto 25 VPC's/Vnet's	Up to 4 Program Weeks
Level 3	Clouds: Multi Cloud Regions: Multi-region Spoke Gateways: upto 75 VPC's/Vnet's	Up to 8 Program Weeks

Onboarding Summary for SP3

Onboarding Package	Onboarding Outcomes	Expected Level of Effort
Level 1 (Included in Starter Packs)	Clouds: Single CSP Regions: Maximum two regions Transit Gateways: up to 2 VPC's/Vnet's Edge Gateways: up to 2 Gateway pairs	Up to 2 Program Weeks
Level 2	Clouds: Up to 2 CSP's Regions: Multi-region Transit Gateways: up to 6 VPC's/Vnet's Edge Gateways: up to 6 Gateway pairs	Up to 4 Program Weeks
Level 3	Clouds: Multi Cloud Regions: Multi-region Transit Gateways: up to 15 VPC's/Vnet's Edge Gateways: up to 15 Gateway pairs	Up to 8 Program Weeks

Use Case: Cloud Perimeter Security
Secure Cloud Egress ("SP1") Onboarding Program Details

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope. • Customer provides access to their current architecture. • Discuss/Gather requirements from the customer: ◦ IAM ◦ Availability Zone ◦ T-shirt sizing ◦ CIDR range ◦ Tagging
	Discovery	• Customer provides appropriate access for discovery. • Customer is responsible for managing Service Control Policies ("SCP") as needed to provision Aviatrix. • Develop HLD and review it with the Customer.
Implementation	**Management Plane**	• Assist with IAM permission, storage, key components required for Aviatrix build. • Deploy Controller and CoPilot. • High Availability enabled for the Control Plane (AWS only). • Assist with IAM permissions needed for cross accounts.
	Control Plane	• Configure CoPilot alerts and notifications. • Enable backup for Controller and CoPilot. • Assist with SAML enablement as needed. • Onboard CSP accounts on to the Controller for gateway deployment. • Control Plane hardening, including security group enforcement, access control, and patching.
	Data Plane	• Deploy Aviatrix Spoke Gateways. ◦ Level 1: in up to 5 vpc's ◦ Level 2: in up to 25 vpc's ◦ Level 3: in up to 75 vpc's
	Secure Egress	• Enable local egress on spoke gateways. • Enable global greenfield DCF policy for visibility. • Validate outbound connectivity & logging.
Impact	**Output?**	• A detailed design document outlining the architecture. • Runbooks detailing execution steps for tasks within this package.
	Automation	Automate the Aviatrix deployment using IaC (i.e. Terraform).

Use Case: Secure High Performance Edge connectivity
Secure High-Performance Datacenter Edge ("SP3") Onboarding Program Details

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope. • Customer provides access to their current architecture. • Discuss/Gather requirements from the customer: ◦ IAM ◦ Throughput ◦ T-shirt sizing ◦ CIDR range ◦ Tagging ◦ ASN for Edge Gateways ◦ Edge deployment options - Network Appliance for DC's - 10G and 25G - ESXi Virtual VM - Equinix NE - Megaport MVE
	Discovery	• Customer provides appropriate access for discovery. • Customer is responsible for managing Service Control. Policies ("SCP") as needed to provision Aviatrix. • Develop HLD and review it with the Customer.
Implementation	**Management Plane**	• Assist with IAM permission, storage, key components required for Aviatrix build. • Deploy Controller and CoPilot. • High Availability enabled for the Control Plane (AWS only). • Assist with IAM permissions needed for cross accounts.
	Control Plane	• Configure CoPilot alerts and notifications. • Enable backup for Controller and CoPilot. • Assist with SAML enablement as needed. • Onboard CSP accounts on to the Controller for gateway deployment. • Control Plane hardening, including security group enforcement, access control, and patching.
	Data Plane	Deploy Aviatrix Transit Gateways. Level 1: Up to 2 gateway pairs. Level 2: Up to 6 gateway pairs. Level 3: Up to 15 gateway pairs.
	Secure Edge	• Assist with establishing Aviatrix Transit connectivity to AWS TGW/Azure vWAN using BGPoGRE/BGPoLAN/BGPoIPSEC. • Customer needs to provision the underlay connectivity. ◦ LAN/WAN for Dell Hardware. • Configure edge gateways. ◦ Level 1: Up to 2 gateway pairs. ◦ Level 2: Up to 6 gateway pairs. ◦ Level 3: Up to 15 gateway pairs. • Attach the edge gateways to the appropriate transits. • Validate connectivity, logging.
Impact	**Output**•	A detailed design document outlining the architecture. • Runbooks detailing execution steps for tasks within this package.
	Automation	Automate the Aviatrix deployment using IaC (i.e Terraform).

Adoption Appendix

Adoption Summary

Adoption Package	Program Level of Effort	Program Timeframe
Level 1	8 hours/week	3 Months
Level 2	16 hours/week	3 Months
Level 3	32 hours/week	3 Months

Solution Pattern: Secure Cloud Egress ("SP1") Adoption Program Details

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope and the list of tasks expected to be delivered during the length of engagement ◦ Expansion ◦ Migration ◦ Capacity planning & T-shirt sizing ◦ Software Lifecycle Management to handle features/bugs ◦ Automation includes importing existing infra and new deployments • Optionally onboard the engineer in the system and provide access to key components like Controller, Copilot and cloud environments. • Customer is responsible for handling non-Aviatrix deliverables to meet expectations, like change scheduling and approvals, identifying the security polices etc.
	Discovery	• Prepare an agreed upon plan from the list of services. • Understand the existing deployment and any customization.
Implementation	**Management Plane**	• Alert ◦ Review and update CoPilot alerts and notifications based on historical data. • Documentation ◦ Review and recommend operational and troubleshooting best practices.
	Control Plane	• Software and Image upgrades. ◦ Update Aviatrix software and/or Controller images to latest version to ensure relevant bug fixes, security patches and latest features are available to drive Secure Cloud Egress adoption Assist with SAML enablement as needed.
	Data Plane	• Expansion ◦ Plan and deploy new spokes to handle Secure Cloud Egress traffic. • Migration ◦ Migrate additional VPCs/VNETs to Aviatrix Secure Cloud Egress solution. • Optimize ◦ Review the existing deployment and right-size Aviatrix gateways.

		• Software Upgrades ◦ Update Aviatrix software to latest version to ensure relevant bug fixes, security patches and latest features are available to drive Secure Cloud Egress adoption. • Automation ◦ Assist in importing existing infrastructure into IaC. ◦ Develop & update Terraform modules for repeatable new deployments as needed.
	Secure Egress	• DCF Policies ◦ Establish firewall rule patterns. (Priority numbering and nomenclature for various types of rules: Shared Services, IP whitelists, FQDN whitelists, exceptions to patterns, etc.). ◦ Migrate Polices from 3rd party firewalls like PaloAlto, Checkpoint, Fortigate, Cisco into Aviatrix DCF. ◦ Establish appropriate logging to 3rd party destinations. • Legacy to DCF policy migration (for existing customers).

Impact	**Output**	• Updated Cloud Design Document. • Customized operational and troubleshooting guidance. • Runbooks detailing execution steps for tasks within this package.
	Automation	Automate the Aviatrix deployment using IaC (i.e. Terraform).

Solution Pattern: Secure High-Performance Datacenter Edge ("SP3") Adoption Program Details

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope and the list of tasks expected to be delivered during the length of engagement. ◦ Expansion ◦ Capacity planning & T-shirt sizing ◦ Software LifeCycle Management to handle features/bugs ◦ Automation includes importing existing infrastructureand new deployments • Optionally onboard the engineer in the system and provide access to key components like Controller, CoPilot and cloud environments. • Customer is responsible for handling non-Aviatrix responsibilities to meet expectations, like change scheduling and approvals, identifying the security polices etc.
	Discovery	• Customer provides appropriate access for discovery. • Customer is responsible for managing Service Control Policies ("SCP") as needed to provision Aviatrix. • Develop/Update HLD and review it with the Customer.
Implementation	**Management Plane**	• Alert ◦ Review and update CoPilot alerts and notifications based on historical data. • Documentation ◦ Review and recommend operational and troubleshooting best practices.
	Control Plane	• Software and Image upgrades ◦ Update Aviatrix software and/or Controller images to latest version to ensure relevant bug fixes, security patches and latest features are available to drive Secure Cloud Egress adoption. Assist with SAML enablement as needed.
	Data Plane	• Expansion ◦ Plan and deploy new spokes to handle Secure Coud Egress traffic. • Optimize ◦ Review the existing deployment and right-size Aviatrix Transit and/or Edge gateways. • Software Upgrades ◦ Update Aviatrix software to latest version to ensure relevant bug fixes, security patches and latest features are available to drive Secure Cloud Egress adoption. • Automation ◦ Assist in importing existing infrastructure into IaC. ◦ Develop & update Terraform modules for repeatable new deployments as needed.
	Secure Edge	• Assist with expanding Aviatrix Transit connectivity to AWS TGW/Azure vWAN to additional cloud regions using BGPoGRE/BGPoLAN/BGPoIPSEC. • Assist with reviewing onprem to cloud underlay connectivity for best practices ◦ LAN/WAN for Edge Appliance • Attach the edge gateways to the appropriate transits. • Continuing migrations from existing onprem connectivity design to Edge • Validate connectivity, logging.
Impact	**Output**• Updated Cloud Design Document	• Customized Operational and Troubleshooting guidance. • Runbooks detailing execution steps for tasks within this package.
	Automation	Automate the Aviatrix deployment using IaC i.e Terraform.

Solution Pattern: Secure Cloud Egress (SP1) Migration Program Details

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope. • Customer provides access to their current architecture. • Discuss/Gather requirements from the customer: ◦ IAM ◦ Availability Zone for gateway groups ◦ Instance sizing ◦ CIDR range ◦ Redesign route table for Az affinity if needed. ◦ Tagging
	Discovery	• Customer provides appropriate access for discovery. • Customer is responsible for managing Service Control Policies (SCP) as needed to provision Aviatrix. • Develop/Update HLD and review it with the customer. • Assist with Onboarding accounts.
Implementation	**NAT Migration**	• Customer is responsible for securing CAB approvals, scheduling maintenance windows, and performing any necessary application validations required for the migration. • Retain EIP from NAT Gateways • Create additional route tables if needed. • Deploy Aviatrix Spoke Gateways. ◦ Level 1: in up to 10 vpc's ◦ Level 2: in up to 25 vpc's ◦ Level 3: in up to 75 vpc's • Enable local egress on spoke gateways. • Migrate the egress traffic from NAT to Spokes. • Enable global greenfield DCF policy for visibility. • Validate outbound connectivity & logging. • Cleanup of Nat Gateways
Impact	**Output**	• Updated Cloud Design Document • Runbooks detailing execution steps for tasks within this package.
	Automation	Automate the Aviatrix deployment using IaC i.e Terraform.

Solution Pattern: Generic Adoption Program Details

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope and the list of tasks expected to be delivered during the length of engagement ◦ Expansion ◦ Migration ◦ Capacity planning & T-shirt sizing ◦ Software Lifecycle Management to handle features/bugs ◦ Automation includes importing existing infra and new deployments • Optionally onboard the engineer in the system and provide access to key components like Controller, Copilot and cloud environments. • Customer is responsible for handling non-Aviatrix deliverables to meet expectations, like change scheduling and approvals, identifying the security polices etc
	Discovery	• Prepare a plan on agreed deliverables from the list of services. • Understand the existing deployment and any customization
Implementation	**Management Plane**	• Alert ◦ Review and update Copilot alerts and notifications based on historical data • Documentation ◦ Review and recommend operational and troubleshooting best practices
	Control Plane	• Software and Image upgrades ◦ Update Aviatrix software and/or Controller images to latest version to ensure relevant bug fixes, security patches and latest features are available to drive Secure Cloud Egress adoption Assist with SAML enablement as needed
	Data Plane	• Expansion ◦ Plan and deploy new spokes and enable spoke to transit attachments. • Migration ◦ Migrate additional VPCs/VNETs to Aviatrix MCNA solution • Optimize ◦ Review the existing deployment and right-size Aviatrix gateways • Software Upgrades ◦ Update Aviatrix software to latest version to ensure relevant bug fixes, security patches and latest features. • Automation ◦ Assist in importing existing infrastructure into IaC ◦ Develop & update TF modules for repeatable new deployments as needed
Impact	**Output**	• Updated Cloud Design Document • Customized Operational and Troubleshooting guidance. • Runbooks detailing execution steps for tasks within this package.
	Automation	Automate the Aviatrix deployment using IaC i.e Terraform.

Fixed Duration Programs for Platform Implementation

Fixed duration services cover more general platform implementation activities with our projects for **Discovery** and **Design**, **Build** and **Configure**, and **Migration** workstreams. These are fixed duration services (scoped with one-week minimum work effort required) and encompass a wider range of product configuration goals and objectives beyond specific solution use cases.

The Aviatrix fixed duration services project is delivered as a series of phases as described below using fixed fee program components/workstreams as follows:

- Design & Discovery (Technical Planning)
- Build & Configure (Setup and Guided Hands-on Keyboard)
- Migration (Brownfield)

Prior to beginning the first phase, Aviatrix will schedule a technical planning session(s) with the Customer to create and agree upon a proposed Project Plan to be followed, updated and managed to achieve the outcomes for the programs listed above. This technical planning session(s) is for live collaboration between engineers from the Customer and Aviatrix. In addition to the technical planning session for the Project, additional working sessions will focus on completing tasks for the current phase and will not exceed four (4) hours in duration per Program Day. A minimum of four (4) working sessions is recommended. The Customer engineer(s) should expect follow-on tasks and actions from the live working sessions that must be completed before the next live session.

The timing of each phase will require the Customer to schedule and commit Customer staff to support Aviatrix in its delivery of the Project pursuant to the agreed-upon schedule.

The Aviatrix services project is designed to provide the customer with a high-level configuration based on best practices.

Products In/Out Scope

Third Party Provider Products including the below, are outside project scope:

- Terraform
- Third Party Firewalls
- CI/CD Pipelines

Products inside project scope:

- Aviatrix Controller
- Aviatrix CoPilot
- Aviatrix Transit Firenet/Spoke Gateways
- Aviatrix Infra Automation (Terraform)
- Aviatrix High Performance Encryption (HPE)
- IPsec Tunnels to third party partners

Project Summary

Customer has requested Aviatrix Professional Services to apply Aviatrix Fixed Duration Services: detailed in the *S**pecial Terms*** section of the applicable order.

Kickstart Day

Start your journey with our foundational services, expertly designed to deploy the Controller & CoPilot software components.

Planning	Objectives	Outcomes
Insight	**Kickoff**	• Review scope. • Customer provides access to their current architecture. • Discuss/Gather requirements from the customer: ◦ IAM ◦ Throughput ◦ T-shirt sizing ◦ CIDR range
	Discovery	• Customer provides appropriate access for discovery. • Customer is responsible for managing Service Control Policies (“SCP”) as needed to provision Aviatrix. • Develop HLD and review it with the Customer.
Implementation	**Management Plane**	• Assist with default IAM permissions. • Deploy Controller and CoPilot. • High Availability enabled for the Control Plane (AWS only).
	Control Plane	• Configure CoPilot alerts and notifications. • Enable backup for Controller and CoPilot. • Control Plane hardening, including security group enforcement, access control, and patching.

Time and Materials

Daily Rate for ad-hoc consulting subject to 3 hour minimum per day and up to 8 hours maximum per day. Daily Rate subject to change.