

Secure Cloud Foundation (SCF) – Powered by Velocity

Change is everywhere

Table of Contents

AWS Service Usage Descriptions	2
Tower Post Processor (TPP)	2
Central Network (with PaloAlto)	2
Identity	3
IAM Roles and Policies	4
Tower Post Processor (TPP)	4
Central Network (with PaloAlto)	4
Identity	4

AWS Service Usage Descriptions

Tower Post Processor (TPP)

- **Serverless Application:** Serverless Functions for performing automated actions
 - AWS Lambda Functions, Python Env 3.9 and later
- **Organization Management:** Service for managing Accounts and Organizational Units
 - AWS Organizations
 - AWS Control Tower
 - Customizations for Control Tower (CfCT)
- **DevOps:** Development Operations Services for Continuous Integration, Deployment/Delivery
 - CodeCommit Repository
 - CodeBuild Jobs
 - CodePipeline Pipelines
- **Cloud Development Kit Pipelines** (for use with CDK Applications)

Central Network (with PaloAlto)

- **Infrastructure Product Management:** Resources for managing infrastructure products for standard network architecture
 - Service Catalog Products – VPCs
- **Network:** Resources for managing network infrastructure and traffic
 - VPCs
 - Security Groups
 - VPC Endpoints
 - Palo Alto VM Series (using EC2 Infrastructure)
 - Route 53 – Public and Private Hosted Zones
 - Transit Gateway Attachments
 - Transit Gateway Route Tables
 - AWS Elastic Load Balancer – Gateway Load Balancer
- **Resiliency:** Services for maintaining resilience of network infrastructure
 - EC2 Autoscaling -> Palo Alto Firewall AutoScaling
- **Serverless Automation:** Resources for performing automating actions during deployment and management of network infrastructure
 - AWS Lambda Functions – Python Env 3.9 and Later
- **DevOps:** Development Operations Services for Continuous Integration, Deployment/Delivery
 - CodeCommit Repository
 - CodeBuild Jobs
 - CodePipeline Pipelines
 - Cloud Development Kit Pipelines (for use with CDK Applications)
- **Access Management:** Resources used for managing access to and from network infrastructure
 - IAM Roles and Policies

Identity

- **Access Management:** Resources used for managing access for users
 - AWS Single Sign On (AWS SSO) Permission Sets (Optional)
 - IAM Roles
 - IAM Customer Managed Policies
- **DevOps:** Development Operations Services for Continuous Integration, Deployment/Delivery
 - CodeCommit Repository
 - CodeBuild Jobs
 - CodePipeline Pipelines
 - Cloud Development Kit Pipelines (for use with CDK Applications)

IAM Roles and Policies

Tower Post Processor (TPP)

- **TowerPostRole**
 - Description: Organization enumeration to identify target accounts and OUs for post processing activities
 - Principal: lambda.amazonaws.com

Central Network (with PaloAlto)

- **SSM-Network-Test-Role**
 - Description: SSM Role used for Network Testing from a Test EC2 Instance
 - Principal: ec2.amazonaws.com
- **Cloud-Connector-Instance-Role**
 - Description: Used by EC2 to access secrets from Secret Manager
 - Principal: ec2.amazonaws.com
- **Palo-FW-Instance-Role**
 - Description: Used by EC2 to access secrets from Secrets manager
 - Principal: ec2.amazonaws.com
- **Data-flow-log-role**
 - Description: used for writing vpc flow logs to appropriate target S3 buckets
 - Principal: vpc-flow-logs.amazonaws.com
- **Subscription-filter-flow-logs**
 - Description: Role required for subscribing VPC Flow logs to Kinesis service family
 - Principal: logs.amazonaws.com
- **Subscription-Filter-DNS**
 - Description: Role for subscribing Route53 DNS Logs to Kinesis Service Family
 - Principal: logs.amazonaws.com
- **Role5id432**
 - Description: Creates IAM Instance Profiles to be used by EC2 VMs
 - Principal: ec2.amazonaws.com

Identity

Default Roles Listed below are OPTIONAL for deployment when deploying the Identity Block. All roles are built to be used by IAM User or SSO User Principals.

- **IAMDeveloper**
 - **Description:** Read Only Access to IAM, and full access to S3 for uploading custom policies

- **IAMAdministrator**
 - **Description:** Default Role for Administering IAM Resources
- **IAMArchitect**
 - **Description:** Read only Access for review of custom policies created by IAM Developers
- **CloudOperations**
 - **Description:**
- **CloudEngineer**
 - **Description:** Permission to develop cloud applications using cloudformation
- **CloudDeveloper**
 - **Description:** role for enabling cloud development with defined set of aws services/resources
- **SecurityComplianceEngineer**
 - **Description:** Enumeration actions for performing Security Auditing
- **DatabaseEngineer**
 - **Description:** Full access to defined storage and database services/resources for database engineering
- **NetworkEngineer**
 - **Description:** AWS NetworkAdministrator managed policy for handling AWS Network resources
- **DevSecOpsEngineer**
 - **Description:** Permissions for handling development operations of cloud infrastructure and resources
- **Billing**
 - **Description:** Billing Access including Cost Explorer and Billing Dashboards/events

