Application Centric Infrastructure Datadog is a monitoring service for cloud-scale applications, providing monitoring of servers, databases, tools, and services through a SaaS-based data analytics platform. ACI-Datadog integration enables our customers to track the state and health of the network, track capacity of individual components, monitor hardware, and analyze network traffic stats. You can easily correlate issues based on timeline, which can help reduce time for network issue RCA.

Application Centric Infrastructure Terraform is an infrastructure-as-code tool for building, changing, and versioning infrastructure safely and efficiently. ACI provider for Terraform allows users to automate the deployment lifecycle of your ACI multi-cloud network, including cloud APIC as well.

Application Centric Infrastructure Tufin provides security policy management solutions. Integration of Tufin Orchestration Suite with Cisco ACI provides visibility, compliance, and automated provisioning of policies on security devices with a vendor-agnostic approach. It enables customers to configure alerts and reports to instantly identify and remediate violations, reducing the time and effort needed to achieve audit readiness.

Application Centric Infrastructure SevOne provides performance monitoring and optimization solutions for data centers. SevOne integrates with Cisco ACI, UCS and other products to offer a comprehensive monitoring solution for Cisco infrastructure in the data center. The SevOne monitoring solution for ACI provides a real-time view into the performance of the existing network and the new Cisco ACI deployment through a single pane of glass.

Application Centric Infrastructure SignalFx is a SaaS-based monitoring and analytics platform. It allows customers to analyze, visualize, automate, and alert, based on metrics from infrastructure, applications, microservices, containers, and functions. ACI-SignalFx integration helps monitor the state of the network, analyze network traffic, and visualize the physical and logical constructs of ACI networks.
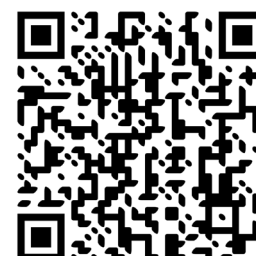
Application Centric Infrastructure Citrix ADC (formerly NetScaler) has been integrated with Cisco ACI from the beginning of the L4-7 services integration mode through the fully managed mode, then to the service manager mode, and lastly, to cloud orchestrator mode. This allows Citrix to be in a unique position to provide one of the widest portfolios of L4-7 integrations through the device package model.

The Partner Ecosystem

algosec · RED HAT ANSIBLE · APPDYNAMICS · AVI Networks

BLUECAT · bmc · CA A Broadcom Company technologies · Check Point SOFTWARE TECHNOLOGIES LTD.

CHEF · Cherwell · CISCO SECURITY · CITRIX

DATADOG · DELL EMC · f5 · FORTINET

HAPROXY · IBM · Infoblox CONTROL YOUR NETWORK · Microsoft

NetApp · NetBrain · openstack · paloalto networks

puppet · radware · redhat · SALTSTACK

SAP · ScienceLogic · servicenow · SevOne

SignalFx · splunk · Terraform · tufin

turbonomic · vmware · Vnomic · zenoss Own IT.

Find out more about the Data Center Networking Ecosystem by contacting us at dcn-ecosystem@cisco.com or scanning this QR code:

Cisco Data Center: Open Ecosystem Powered by Open Platforms

Cisco Data Center Ecosystem

The ecosystem solutions are built using the open API of Cisco Application Centric Infrastructure (ACI), Cisco Network Assurance Engine (NAE), and Cisco NX-OS platforms. These solutions address a broad and diverse set of use cases that customers typically use in their data center operations and management. By deploying these readily-available solutions, customers can leverage and extend their existing data center infrastructure investments.

Key Highlights of the Integrations

- Focus on solutions and outcomes instead of point products
- Cover a broad set of Data Center automation, operations and management use cases
- Built on Open APIs and extensible, in many cases, by customers

Application Centric Infrastructure AlgoSec integrates with Cisco ACI to extend ACI's policy-based automation to all security devices across their data center, on its edges and in the cloud. AlgoSec Security Management Solution for ACI enables customers to ensure continuous compliance and automates the provisioning of security policies across ACI fabric and multi-vendor security devices connected to the ACI fabric, helping customers build secure data centers.

Application Centric Infrastructure ScienceLogic's hybrid IT monitoring platform automatically discovers all elements making up your Cisco ACI system, including spines, leaves, APICs, tenants, applications, EPGs, bridge domains, contracts, etc. It maps your ACI components onto visual topology views, applies best practice monitoring templates, and populates a number of out-of-the-box dashboards. Simplify IT monitoring with one screen and solution to monitor your entire IT stack, including legacy infrastructure.

Application Centric Infrastructure Since 2015, Vnomic has been integrated with SAP and Cisco to automate policy-driven SAP delivery, governance and auditability on Cisco ACI infrastructures. The benefits of the integration are: 1) lowering TCO for deploying SAP HANA, while 2) simplifying operation via integrated infrastructure and application automation, resulting in 3) enhanced security and governance. SAP and Cisco provide policy-driven TDI enabling enterprises that can define application requirements to deploy a fully configured TDI solution in a few hours instead of weeks or months. Furthermore, as their requirements change due to new users, SLAs, scale or regulation, the intelligent TDI system will configure these changes instantly. Even the process of achieving TDI certification can be accomplished in hours.

Application Centric Infrastructure The NetBrain solution for Cisco ACI offers a simple approach, aiding enterprises to transition to an application-centric data center enabled by Cisco ACI. As a scalable and versatile automation platform, NetBrain integrates with Cisco ACI to provide deep visibility and automation for "Day 2" operational workflows such as monitoring, troubleshooting and visualization of the heterogeneous network. The integration also provides runbook automation, enabling teams to codify solutions to known problems and place these code routines in a monitor executable.

Application Centric Infrastructure Puppet is an open-source software configuration management tool that allows you to build, provision and orchestrate infrastructure across on-prem and public cloud environments. Puppet's integration with Cisco ACI bundles a set of Puppet Types, Providers and Classes to manage Day-1 to Day-N operations of your ACI infrastructure. This integration uses a Puppet Agent running as a proxy and leverages the puppet device.

NX-OS Puppet Lab's integration with Nexus 9k/7k/3k is made available through an NXOS agent and a Cisco NXOS Puppet Module. This integration allows administrators to automate Day-1 tasks such as the configuration of SNMP, authentication, and logging, and also Day-2 and Day-3 tasks, such as configuration of port channels, VLANS, and dynamic routes.

Application Centric Infrastructure F5 and Cisco are reinvigorating the ACI and BIG-IP joint solution to give customers L4-L7 capabilities within APIC with speed and agility via ACI App Center. Driven by a declarative API approach, the app provides a single point of automation to provision application services in ACI and BIG-IP deployments – greenfield or brownfield. The stateful F5 ACI ServiceCenter App gives the administrator the flexibility to execute workstreams independently: 1) Enhanced ACI-to-BIG-IP visibility, 2) Network stitching between BIG-IP and the ACI fabric, 3) Application services for ACI workloads. Stay tuned, F5 and Cisco have many more features coming to the F5 ACI ServiceCenter App!

Application Centric Infrastructure The ServiceNow platform provides solutions for IT service management (ITSM), IT business management (ITBM), IT operations management (ITOM), and Security Operations. Cisco ACI's integration with ServiceNow automates the discovery, application to business service mapping, firmware management, and provisioning of ACI Fabric from ServiceNow. This helps IT organizations quickly troubleshoot issues, adhere to committed SLAs, and improve the operational efficiency of their data centers.

Network Assurance Engine Cisco Network Assurance Engine integrates with ServiceNow to provide comprehensive insight and orchestration spanning IT services as well as the underlying network. With Cisco Network Assurance Engine integration, ServiceNow administrators can predict network outages and vulnerabilities before they affect service performance and accelerate changes while reducing risk. They can also orchestrate, automate, and validate network changes through the ServiceNow dashboard.

NX-OS Cisco Nexus 9k integration provides a simple view of IT infrastructure and how it relates to business services. IT organizations can use this solution to automatically discover and update ServiceNow CMDB with discovered inventory data consisting of both physical configuration data (switches, node links, chassis information, etc.) and a snapshot of the state of data center configurations.

Application Centric Infrastructure Splunk Enterprise enables users to collect, index, analyze operational data from various sources in the IT environment, and generate valuable insights and alerts. Cisco ACI integration offers a flexible approach to monitoring Cisco ACI, and the solution helps customers reduce costs, accelerate MTTR, meet SLAs, and improve efficiency through real-time and historical insights into ACI health, user and fabric analytics, and single-console visibility across physical and logical entities in their infrastructure.

Network Assurance Engine Cisco Network Assurance Engine integrates with Splunk Enterprise to enable unprecedented network insight, troubleshooting, and control. The solution delivers exceptional data center visibility, which allows network administrators to quickly identify, characterize, and correlate network problems. Using this integration, administrators can visualize these problems in real time and easily correlate them with problems across multiple infrastructure devices, network tiers and applications.

NX-OS Cisco Nexus 9k integration gathers data from Nexus 9000 switches and continuously monitors the data center, accelerating root cause analysis and troubleshooting of potential issues and downtimes. The solution helps network operations teams track physical inventory (line cards, fan tray, power modules, etc.), power and temperature usage, authentication and performance, and statistics for Nexus 9000 switches.

Application Centric Infrastructure Turbonomic is best described as a solution that continuously analyzes workload consumption, costs and compliance constraints, resulting in dynamic allocation of resources in real-time. The first use case addressed workload optimization for on-prem deployments. We are now working on a second use case expanding to multi-site deployment. The roadmap ahead, which includes workload fluidity through ACI Anywhere architectures, will be exciting for customers.

Network Assurance Engine In addition to what Turbonomic can do with ACI, the integration with NAE provides: 1) Automated intent assurance—newly deployed workloads are placed only where the network can support its intended policies, and 2) Automated self-healing—existing workloads are automatically moved to a different leaf, switch, or host if current network components cannot assure the implementation of policies.

Application Centric Infrastructure Ansible is an open-source IT automation engine that improves the scalability, consistency, and reliability of your IT environment. With ACI and ACI Multisite Orchestrator modules for Ansible, you can automate the deployment lifecycle of your multi-cloud network or any architecture of ACI you would like to configure. With playbooks and roles, you can create network automation workflows managed by the automation tool. Visit the Cisco ACI Guide-Ansible Documentation for more information!

NX-OS Similar to ACI, Cisco NX-OS is also supported by Ansible modules in order to automate your Nexus devices. With Ansible, you can manage the lifecycle of your NX-OS based network. This integration allows administrators to automate Day-1 tasks such as authentication, logging, and enabling the NX-API in order to use NX-API to connect to a switch. It also handles Day-2 and Day-3 tasks, such as configuration of port channels, VLANS, and more.

Application Centric Infrastructure The complementary nature of Avi Networks and Cisco ACI solutions comes from a common architectural approach using a single point of management and automation for data center network elements and a focus on a policy-based framework. Avi Networks has provided a new integration model in 2018 that solves customer problems and use cases using the power of ACI's APIs.

Application Centric Infrastructure With organizations transitioning to next-generation data centers and clouds, automation of security policies is needed to support on-demand provisioning and dynamic scaling of applications. The Cisco Application Policy Infrastructure Controller (APIC) automates flexible models of insertion of services (such as an ASA or FP NGFW firewall) between applications, also called End Point Groups (EPGs). You use these APIs to create, delete, and modify a configuration using managed objects, in addition to a lot more.

Application Centric Infrastructure AppDynamics is the industry's leading Application Performance Management solution that allows you to monitor your apps and gives you the power to ensure flawless customer experiences through end user monitoring, infrastructure visibility and business performance monitoring. ACI's integration with AppDynamics enables you to correlate application performance with network data, allowing you to troubleshoot and resolve network-related application issues faster.