

Technology Partner Solution Brief

# Extend Your Network Security Policy Management to Cisco ACI

## Highlights:

- Gain full visibility, with accurate topology modelling of the Cisco ACI Fabric
- View and track changes and search for tenants, Application Profiles, EPGs, contracts, and bridge domains
- Centralized visibility into ingress/egress traffic traversing the Cisco ACI Fabric
- Automatically detects and alerts on violations, misconfigurations, and out-of-band changes
- Perform instant impact analysis on policy changes
- Provides actionable remediation information on detected risks
- Optimize network access and troubleshoot connectivity



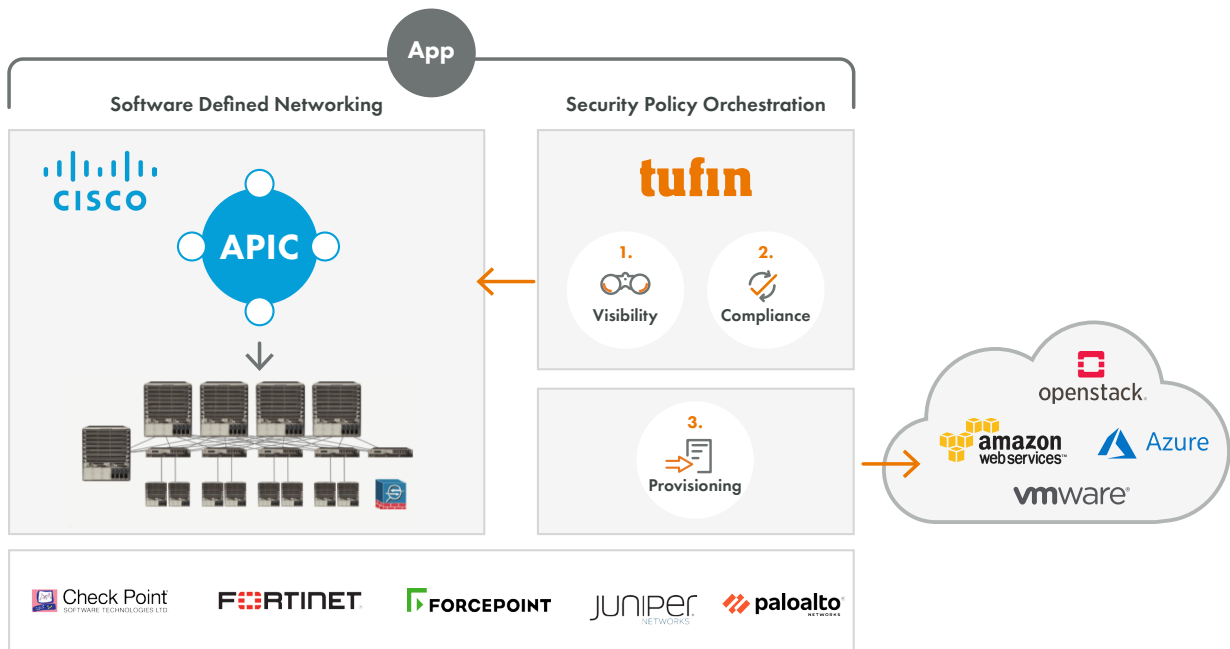
The Tufin Orchestration Suite™ for Cisco ACI enables organizations to centrally manage their ACI and non-ACI environments as one, directly from Tufin. Organizations can now gain full visibility and path analysis for Cisco ACI, and control traffic traversing the Fabric for accurate and fast anomalies detection, remediation, and network change planning.

When it comes to managing network security across the hybrid IT environment, a majority of organizations use disparate solutions to manage their NSD and non-SDN environments. This leads to inconsistent security policy enforcement, leaves blind spots when it comes to network traffic traversing through the SDN environment, and can result in troubleshooting connectivity, and anomalies detection failures.

The integration between Tufin Orchestration Suite and Cisco Application Centric Infrastructure (Cisco ACI) provides organizations with granular, end-to-end visibility—real-time monitoring of the Cisco ACI Fabric in the context of the overall IT environment. This in turn, helps organizations to accelerate the adoption of Cisco ACI for application agility and datacenter automation.

Cisco ACI is a policy-based network automation solution that integrates physical and virtual environments to achieve consistent control and visibility for accelerated application delivery, reduced operating costs, and greater business agility. Cisco ACI improves network security through micro-segmentation, Layer 4 through 7 automation, and a whitelist-based policy model.

The Tufin Orchestration Suite™ provides a policy-centric solution for automatically designing, provisioning, analyzing and auditing enterprise security changes in some of the largest, most complex networks. From applications to containers to firewalls, the suite provides advanced automation capabilities to increase business agility, improve accuracy through elimination of manual errors, and ensure continuous compliance through a single console. Tufin's unified security policy empowers network and IT security teams to effectively safeguard complex, heterogeneous environments through a central interface for defining and enforcing policy controls over firewalls, switches, Software Defined Networking (SDN), private and public cloud platforms and Kubernetes, down to any level of segmentation.



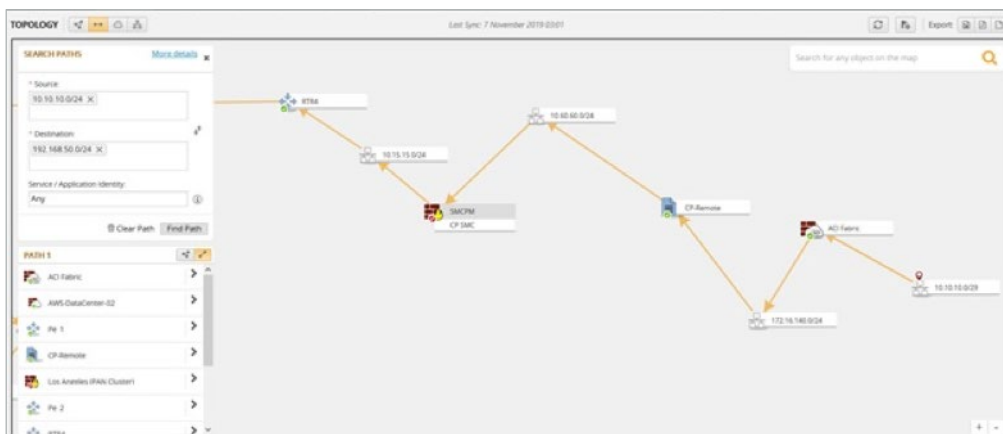
Cisco application-centric infrastructure with multi-vendor security policy orchestration from Tufin

## Full visibility and path analysis for Cisco ACI

To manage Cisco ACI security and connectivity from a central console with other firewalls, routers and hybrid cloud platforms, the Tufin Orchestration Suite connects to the Cisco Application Policy Infrastructure Controller (Cisco APIC). The ACI Fabric is automatically added into the Tufin topology map, and can now be managed within the Tufin solution, providing:

### End-to-end visibility and topology modelling

Tufin provides a graphic display of the fabric, a simplified representation of the relationships between tenants, Application Profile, as well as traffic traversing the ACI Fabric along non-ACI devices, and network zones.



Tufin topology map of the Cisco ACI with external communication routes

## Policy change analysis and tracking

Tufin documents changes made to the fabric, helps tracking and vetting fabric-related revisions (e.g. if a contract was deleted from the policy), and offers proactive risk assessment and risk-free policy modifications.

For every policy change, such as when a new tenant is added, Tufin analyzes L3 connectivity, service graphs, VFRs, contracts, and relevant EPGs, including other network security devices outside the Cisco APIC, if needed, providing an optimized way to implement the change.

Further, Tufin provides a color-coded comparison between the new and old revisions to easily visualize these changes. Based on the selected path, Tufin automatically implements changes in all relevant network devices targeted throughout the path.

Vendors	Group	Device	#	Changed on	Received on	Administrator	Action	Policy	Installed On	Ticket ID	Authorized	Comment
ACI Fabric		ACI Fabric	16	12/5/19 3:00 PM	12/5/19 3:00 PM						N/A	
ACI Fabric		ACI Fabric	15	12/5/19 12:00 PM	12/5/19 12:00 PM						N/A	
ACI Fabric		ACI Fabric	14	12/4/19 12:00 PM	12/4/19 12:00 PM						N/A	
ACI Fabric		ACI Fabric	13	12/3/19 4:01 PM	12/3/19 4:01 PM						N/A	
ACI Fabric		ACI Fabric	12	12/2/19 6:00 PM	12/2/19 6:00 PM						N/A	
ACI Fabric		ACI Fabric	11	12/2/19 5:00 PM	12/2/19 5:00 PM						N/A	
ACI Fabric		ACI Fabric	10	12/2/19 4:00 PM	12/2/19 4:00 PM						N/A	
ACI Fabric		ACI Fabric	9	12/2/19 3:00 PM	12/2/19 3:00 PM						N/A	
ACI Fabric		ACI Fabric	8	12/2/19 2:00 PM	12/2/19 2:00 PM						N/A	
ACI Fabric-Topology-Team		ACI Fabric-Topology-Team	24	12/2/19 2:00 PM	12/2/19 2:00 PM						N/A	New contract #28
ACI Fabric		ACI Fabric	7	12/2/19 1:00 PM	12/2/19 1:00 PM						N/A	
ACI Fabric-Topology-Team		ACI Fabric-Topology-Team	23	12/2/19 1:00 PM	12/2/19 1:00 PM						N/A	Object modification
ACI Fabric		ACI Fabric	6	11/29/19 5:01 PM	11/29/19 5:01 PM						N/A	
ACI Fabric		ACI Fabric	5	11/29/19 4:01 PM	11/29/19 4:01 PM						N/A	
ACI Fabric		ACI Fabric	4	11/29/19 3:01 PM	11/29/19 3:01 PM						N/A	
ACI Fabric		ACI Fabric	3	11/29/19 2:01 PM	11/29/19 2:01 PM						N/A	
ACI Fabric		ACI Fabric	2	11/29/19 11:01 AM	11/29/19 11:01 AM						N/A	
ACI Fabric		ACI Fabric	1	11/28/19 4:06 PM	11/28/19 4:07 PM						N/A	
ACI Fabric-Topology-Team		ACI Fabric-Topology-Team	22	11/28/19 4:06 PM	11/28/19 4:07 PM						N/A	New Contract
ACI Fabric-Design-Team		ACI Fabric-Design-Team	21	11/28/19 4:06 PM	11/28/19 4:06 PM						N/A	New contracts
ACI Fabric-Topology-Team		ACI Fabric-Topology-Team	21	7/23/19 4:00 PM	7/23/19 4:00 PM						N/A	EPGs
ACI Fabric-Design-Team		ACI Fabric-Design-Team	20	7/23/19 4:00 PM	7/23/19 4:00 PM						N/A	Contract #4 was mo
ACI Fabric-Design-Team		ACI Fabric-Design-Team	19	7/23/19 3:00 PM	7/23/19 3:00 PM						N/A	Contracts modifi
ACI Fabric-Topology-Team		ACI Fabric-Topology-Team	20	7/23/19 2:00 PM	7/23/19 2:00 PM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	18	7/23/19 2:00 PM	7/23/19 2:00 PM						N/A	Contracts modifi
ACI Fabric-Design-Team		ACI Fabric-Design-Team	17	7/23/19 11:00 AM	7/23/19 11:00 AM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	16	7/23/19 10:00 AM	7/23/19 10:00 AM						N/A	
ACI Fabric-Topology-Team		ACI Fabric-Topology-Team	19	7/23/19 12:00 AM	7/23/19 12:00 AM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	15	7/23/19 11:00 PM	7/23/19 11:00 PM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	14	7/22/19 10:00 PM	7/22/19 10:00 PM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	13	7/22/19 6:00 PM	7/22/19 6:00 PM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	12	7/22/19 5:00 PM	7/22/19 5:00 PM						N/A	
ACI Fabric-Design-Team		ACI Fabric-Design-Team	11	7/22/19 3:00 PM	7/22/19 3:00 PM						N/A	

Real-time policy revisions view

## Real-time connectivity troubleshooting based on accurate topology simulation

Tufin optimizes network traffic and automatically troubleshoots any connectivity issues between the EPGs and outside the ACI Fabric. For example, if an app availability issue is detected, admins can use Tufin interactive topology map to run path analysis to view EPG to EPG east-west traffic, as well as north-south traffic.

Tufin calculates and maps the path if it exists, or alerts on unavailable traffic routes. Admins can view the devices in the path, EPGs, and routing configurations inside and across the ACI fabric. Path analysis is calculated across all network security devices, throughout the hybrid environment, including the ACI Fabric. Based on the app's connectivity needs, rules that block traffic can also be changed.

## Conclusion

As many organizations embrace Software Defined Networking (SDN) as part of their digital transformation to achieve network virtualization and agility, at Tufin, we continue to be the first Network Security Policy Management (NSPM) vendor to provide enhanced support for Cisco ACI. This enables our customers to manage their SDN environment and the rest of their network as a single entity, providing consistent network security policy enforcement, continuous compliance and connectivity across the hybrid environment.