



# Cloud and Managed Services for Data Center Application Centric Infrastructure

## Pro-actively Monitor and Manage Application Centric Infrastructure Solution 24 Hours a Day, 7 Days a Week

Cisco® Application Centric Infrastructure (ACI) is a comprehensive Software Defined Network Solution, making the application the focal point. It is delivered on an agile, open, and highly secure architecture. Its application-based policy model offers speed through automation, reducing errors and accelerating application deployment and IT processes from weeks to minutes.

### Simplify Adoption and Management

Cisco Cloud and Managed Services (CMS) for Data Center ACI experts will help you quickly adopt and benefit from the ACI solution with an immediate, flexible management solution.

### Increase Availability

CMS pro actively monitors, detects issues and identifies remediation before outages occur.

### Focus on Strategic Priorities

Your staff can focus on applying the benefits of ACI to your corporate initiatives.

### Leading Expertise

Cisco experience across the technologies and remote Data Center management, results in immediate issue resolution.

### Reduce Costs / Predictable OPEX

Avoid the cost of hiring and training specialized staff with automated monitoring and event correlation and ACI specific skill.

## Managing ACI

Multiple hardware and software vendors come together to deliver the benefits of an open programmable infrastructure with Cisco ACI. To effectively manage multiple vendors when issues arise requires the following people, process, and tools.

Skills Required to Manage ACI	Monitoring & Management Tools
<p><b>Protocols and programming</b></p> <ul style="list-style-type: none"> <li>IS-IS / ECMP</li> <li>Python</li> <li>XML/JSON Schema</li> </ul> <p><b>Multitenant Environment</b></p> <ul style="list-style-type: none"> <li>Application network profile/EPGs</li> <li>L3 contexts/VRF and bridge domains</li> <li>Service graphs / service devices</li> <li>Fabric and access policy</li> </ul> <p><b>Eco-system Integration</b></p> <ul style="list-style-type: none"> <li>L4-L7 services (southbound integration)</li> <li>Northbound integration</li> </ul> <p><b>Atomic Counters</b></p> <p><b>API/APIC</b></p> <ul style="list-style-type: none"> <li>Cisco Nexus® 9k / iN XO</li> <li>Leaf/spine network architecture</li> <li>Distributed L3 gateways and bridging service insertion / redirection</li> <li>iVXLAN</li> </ul>	<ul style="list-style-type: none"> <li>Certified Tools</li> <li>Automation</li> <li>Advanced Monitoring</li> <li>Advanced events correlation</li> <li>Advanced performance management</li> <li>Support for Cisco ACI and ecosystem products</li> <li>Comprehensive reporting and advanced analytics</li> <li>Topology and dependency mapping</li> </ul>

**Key Features**

- 24/7/365 proactive end-to-end monitoring of the ACI health, performance, event and capacity metrics.
- Quick activation for support (60-90 days)
- Dashboard with real-time reports
- Critical health-impacting alerts
- Highly skilled, trained and certified Cisco ACI expertise
- Single point of contact for entire ACI fabric, including partners
- Support for new ACI releases
- ACI configuration backup and software upgrade
- SLA's to ensure critical services availability
- Dedicated change and problem managers; using Cisco best practices

**ACI-capable monitoring tool and portal**

**Intellectual Capital**

- KPIs, thresholds, event correlation
- Reporting

**ACI Specific Change Management**

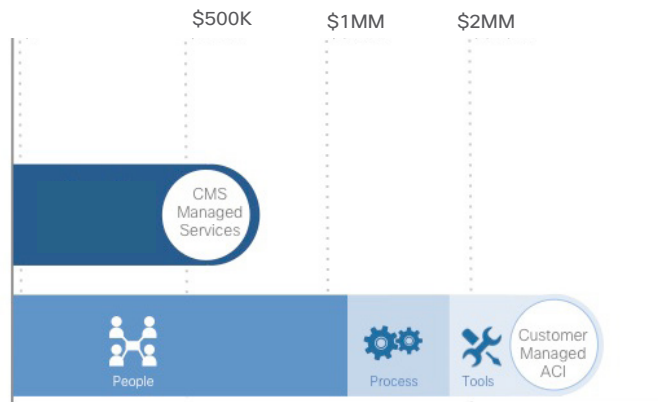
- Application Network Profile/EPGs
- Bridge domains
- L3 contexts/VRF
- Service graphs /Service devices
- Fabric and access policy

**Incident/Problem Management**

- Proactive tickets
- Troubleshooting
- Restoration of service
- Root cause analysis

**Why Cisco Cloud and Managed Services for Data Center ACI?**

Cisco Managed Data Center for ACI provides people, process, and tools to proactively monitor and manage the ACI environment and to quickly resolve any issue with any vendor in your ACI ecosystem. Using a typical ACI deployment, Cisco has quantified a cost comparison of customers providing day 2 support in house versus out tasking to Cisco CMS. Using Cisco CMS ACI experts and intellectual capital will accelerate the adoption of the ACI solution and at the same time reduce operational cost significantly.



**Figure 1.** Cisco CMS vs In-House Managed ACI

**Cisco Assumption:** 2 Data Centers, 2 medium clusters, 4 spines, 20 leaf switches. Manage in-house Support coverage is 24x7 with no backup coverage. 3-year term.

**How it Works**

Step 1	Step 2	Step 3	Step 4
Proactively monitor ACI Health 24x7x365. Customer can also contact CMS at our toll free number.	ACI Health-impacting alerts are identified and managed before they become critical.	CMS coordinates eco-system partners as needed to reach resolution.	CMS restores service and pro-actively conducts root cause analysis to mitigate potential problems.

**Next Steps**

Successful adoption and acceleration of Cisco ACI are dependent on multiple factors, one of which is the pro-active day 2 support. Cisco Managed Services for Data Center ACI uses Cisco intellectual capital, tools, and ACI experts to make sure you can quickly benefit from your investment in the ACI solution. For more information, contact us at [askcms@cisco.com](mailto:askcms@cisco.com). Visit [Managed Services](#) online.