Enabling Business Agility with a **Hybrid Cloud Model**



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Business Asks & Opportunities

Value

Emerging business models

Secure & flexible digital platform

Advisory engagement with Customers

Speed

Time to market at cloud scale

Agile development & release

Business agility

Services

Standardized & catalog-based offers

Cost transparency

Self-service consumption

Fully managed

Operational Excellence

Always on & reliable

DevOps & SRE operating model

Cost efficient

Acceleration of Digital Transformation

88%

of organizations worldwide encouraged employees to **work from home** because of the pandemic

98%

of all meetings will include participants joining from home

58%

will work **8 or more days** each month **from home**in the future

75%

of companies have decided to accelerate their transformation plans because of this pandemic







Standards-based Cloud Platform / Infra-as-Code (IaC)

Transform Network

Cloud-ready Network

Modernize Application

Cloud-native Transformation (CNT)

Enable Cloud Operating Model

Self-service, Agile, DevOps, SRE



Capabilities for Hybrid Cloud Operating Model

Management Services

UX / Console	Onboarding	Tenant Management	Resource Management
Catalog	Capacity & Utilization Mgmt	Cost Management	Metering & Billing

Foundations

Solution Arch		Best Practices,	Workload	Secure
Architecture A		TOIs/Education	Placement	Connectivity
Curated	DNS &	Testing & Perf	Zoning &	Service
Cloud Offers	IPAM	Benchmarking	Firewall	Mesh

Core Services

Contair	Compute	Images	Storage	Overlays	Network
	ners, VM, BM, GPU	OS, Container hub	Block, File, Object, Eph	Storage efficiency, Network	Load Balancer, GSLB
	nta Protection kup, Encryption	Database SQL, NoSQL	PaaS Replication, Integration, Messaging, Pub/Sub		Value-add Low-Code, Al/ML, Caching

Managed Services

Provisioning & Orchestration	Hardened Images (Vanilla & profile based)	Lifecycle & Compliance	Config Mgmt	CMDB Integration
Access Management (account creation, synchronization, disable process, password policies, updates, sudoers, etc.)			Assurance & Analytics (APM, logging,	
Support services (Incidents, problems, service request, click to chat, changes, releases)				ng, alerting, s, SLO/SLI)

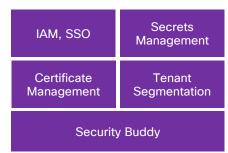
Developer Productivity Services

Version Control

Continuous QA

Build & Deployment

Security Services





Hey IT, I'm new to cloud – please help me out



Hey IT, Why do you need me to fill in all these meta-data just to get a cloud account?



Hey IT, Who is spending what \$ on what in public cloud?



Hey IT, How many enterprise workloads are on what cloud?

Cloud Builders / End Users

Simplify, Minimize Controls & Optiona

Balance of Conflicting Influencers

Business Process Stakeholders

Visibility, Guardrails & Adoption



Hey IT, get outta my way – I'm more of an expert than you so don't tell me what I can or cannot do



Hey IT, This is not a priority for us - we've got this under control.



Hey IT, What is our security posture for revenue making workloads on AWS?



Hey IT, What cloud usage maps to what business workloads/applications?

Unified provisioning and full lifecycle management

Flexible and Transparent funding, consumption and alerting

Consumption based pay as you go model

Right-size resources and save cost with optimization engine*

*Coming Soon

Multicloud account provisioning

Baseline security standard and continuous security reporting

Self-service and API programmable access for all functions

Integrated OneOps
Support Model





IT Services



cisco live!

CloudPort **Consumers Suppliers** Cisco IT's Cloud Edge Solution Private DC Campus Cisco IT SaaS **CloudPort Providers** Network Network Branch Connectivity Security Services Services laaS 11111 ШШ 11111 IIIII Providers Ш 11111 Teleworker **Carrier Neutral** Facility (CNF) Internet Network **VPN** Service User Providers Mobile Worker

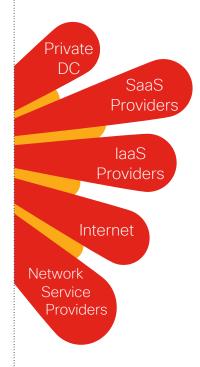
Cisco IT - CloudPort Carrier Neutral Facility (CNF) + On-Prem

Campus Branch Teleworker **VPN** User Mobile Worker

alialia cisco

Network Connectivity Network Security Services Services SaaS DDOS Internet Firewall Secure Cloud Connect Intrusion Prevention DMZ Web Security MAN (metro) **BGP Sinkhole** SDWAN **VPN** Cisco Cloud Backbone

CSIRT Tools



Cisco on Cisco

INFRASTRUCTURE



SOFTWARE



Next-Generation Firewall

Firepower Threat Defense (FTD) Firepower Management Center (FMC)

ThousandEyes

viptela

CSRv Cisco Cloud Services Router 1000v

FTDv / ASAv

Virtual NGFW & VPN

Continuous Security Buddy (CSB)

CSB - AWS

80+ Checks
30 PSB Validations*

CSB - Openshift ~14000 CAE Tenants

~ 14000 CAE Tenants 28 PSB Validations*

CSB IT - Openstack

~1200 Platform 3 Tenants 6 PSB Validations*



CSB - GCP

40+ Checks 16 PSBs*



Security Health Report

(Continuous Security Buddy) Report Date: March 23, 2018

Summary

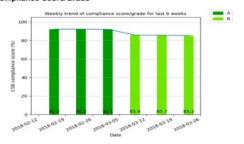
Tenant CSB Report for Account # 283603838660
Tenant CSB Account Details: csb-nprod
Tenant CSB Contacts: csb-account+nprod@cisco.com

Overall Compliance Score: 85.3% Compliance Grade: B

Key Compliance Failure Areas:

- 1. Security Groups with wide ports (100+) [SEC-INF-FWSEP]
- 2. Missing bastion host: 22 open (2+ public hosts per vpc) [SEC-INF-FWSEP]
- 3. Resources without proper tagging [SEC-OPS-ASTMGT-2]

Weekly trend of Compliance Score/Grade



Section 1: Identity and Access Management

Compliance Score: 100.0%

Legend

Compliant

Potential issues/information
Non-compliant and violation

- 1. IAM users without MFA enabled [SEC-CRE-MULTIFAC]: [None]
- 2. MFA enabled on Root user? [SEC-CRE-MULTIFAC]: Yes
- 3. MFA Compliance [SEC-CRE-MULTIFAC] (6/6): 100.0%
- 4. Access Key Rotation Violation (current 2+ years) [SEC-OPS-REVOKE]: [None]

Daily Reporting CSB Public Cloud

Section Score

- Not Scored

Overall Risk Score



Security Metrics

7. Trusted Advisor Checks

Section

1.	Identity and Access Management	- 75.6/100
2.	Network Security	- 80/100
3.	Storage (S3 buckets)	- 100/100
4.	Tagging	- 90/100
5.	External Vulnerabilities (Qualys)	- 90/100
6.	CIS AWS Benchmarks	- 90/100



Evolution





Agility Enables Business Continuity

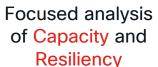
Cisco IT's Response to Outbreak

Automation addressed complex use cases:

- 1. TAC agents in India
- 2. Company-wide meetings

Real-time telemetry and analytics allowed us to quickly spot high utilization and Internet quality issues







Align Staff and Resources



Lean into Software



Traffic Optimization



End-User Change Management



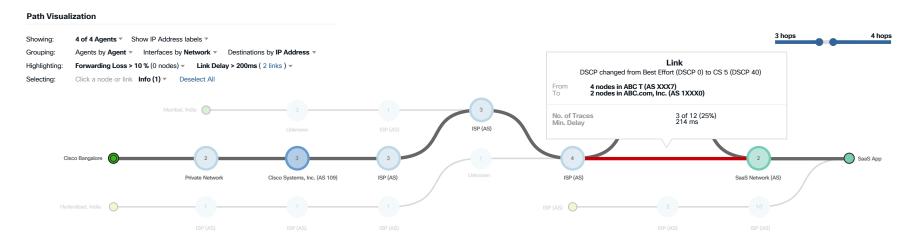
Network Assurance

Validate key cloud application behaviors from regions having issues





Validate VPN behaviors from regions having issues







Time to respond to or implement changes

	Expected	Actual	Acceleration	
Increase in remote working and/or collaboration	454	11	43x	
Increasing migration of assets to the cloud	547	23	24x	

McKinsey Global Survey - October 2020



Thank you

