Hosted Collaboration Solution

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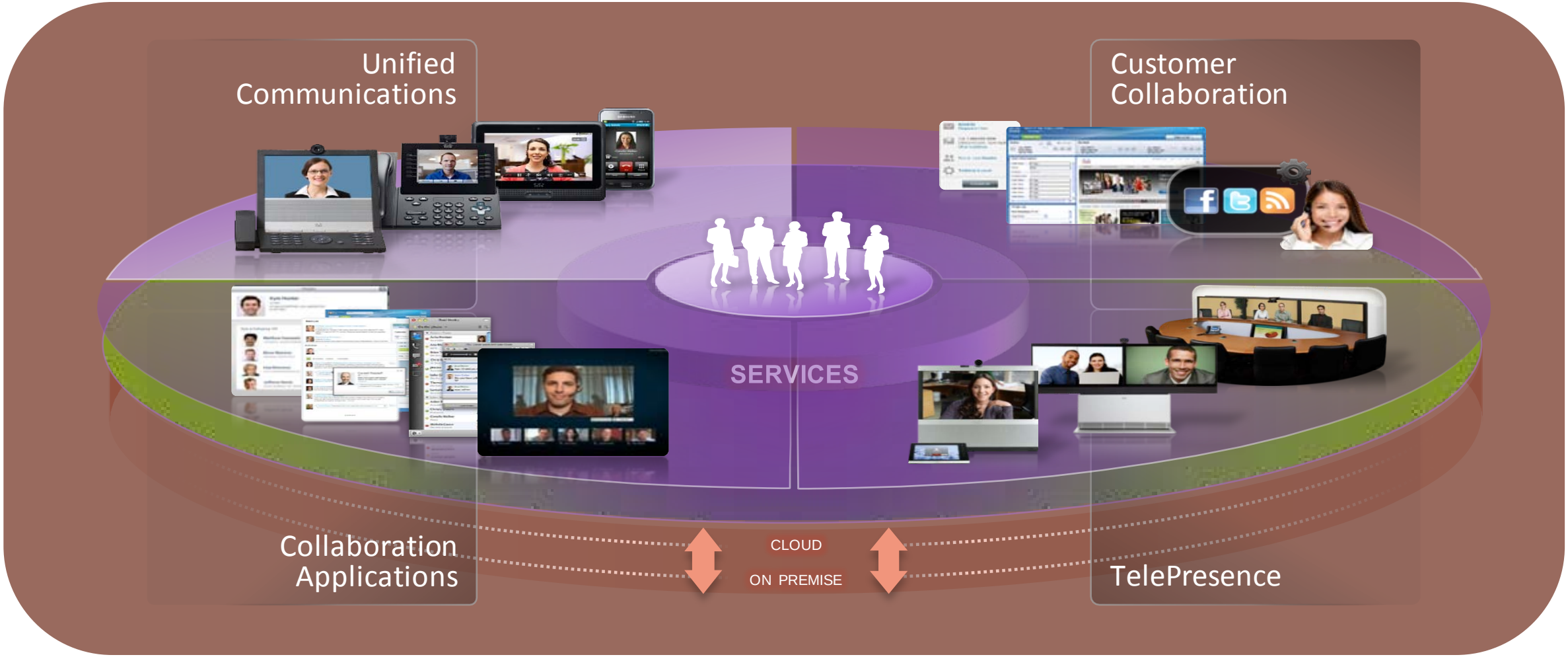
Agenda

- HCS Introduction
  - Applications and Bundles
  - Deployment Models
- HCS Architecture
  - Datacenter Infrastructure
  - Redundancy
  - Security
- HCS Management System
  - Service Fulfillment
  - Service Assurance

HCS Introduction

Cisco Collaboration Portfolio



Cisco Hosted Collaboration Solution

Services	Product	Same as Premises Deployed App
Voice & Video	Unified Communications Manager, Unified IP Phones, Jabber	Yes
Voice Mail & Integrated Messaging	Unity Connection	Yes
Presence & Instant Messaging	Unified Presence, Jabber	Yes
Mobility Services	Unified Mobility, Mobile Clients	Yes
Web Collaboration	WebEx Meeting Center	Yes

HCS Software Licensing: Application Bundles

		HCS Applications Bundles		
Functionality	**Collaboration Apps**	**Basic**	**Foundation**	**Standard**
Full Voice/Call Control	Basic UCL	●	●	●
Number of Devices		1	1	Multiple
Mobility (SNR)	Cisco Unified Mobility	●	●	●
Native Video	Video Endpoint(s)		●	●
Messaging	Unity Connection	●	●	●
Jabber IM & Presence	Jabber IM	●	●	●
Jabber Desktop	Jabber (full UC)		●	●
Jabber Mobile	Jabber (full UC)		●	●
Immersive Video	TelePresence UCM UCL		●	●
Web Conferencing	Cisco WebEx	●	●	●
Contact Center Agent	UCCE+CVP	●	●	●

● Included ● Optional Add-ons

HCS Device Support

HCS Foundation & Standard

HCS Basic

HCS Essential

Fax

Analog

3905

6901

6911

6921

99xx

89xx

79xx

7937

Jabber Desktop

Jabber Mobile

694x/696x

EX60 / EX90

Third Party SIP

IMS Integration

TelePresence Room

CTS-3000/3200

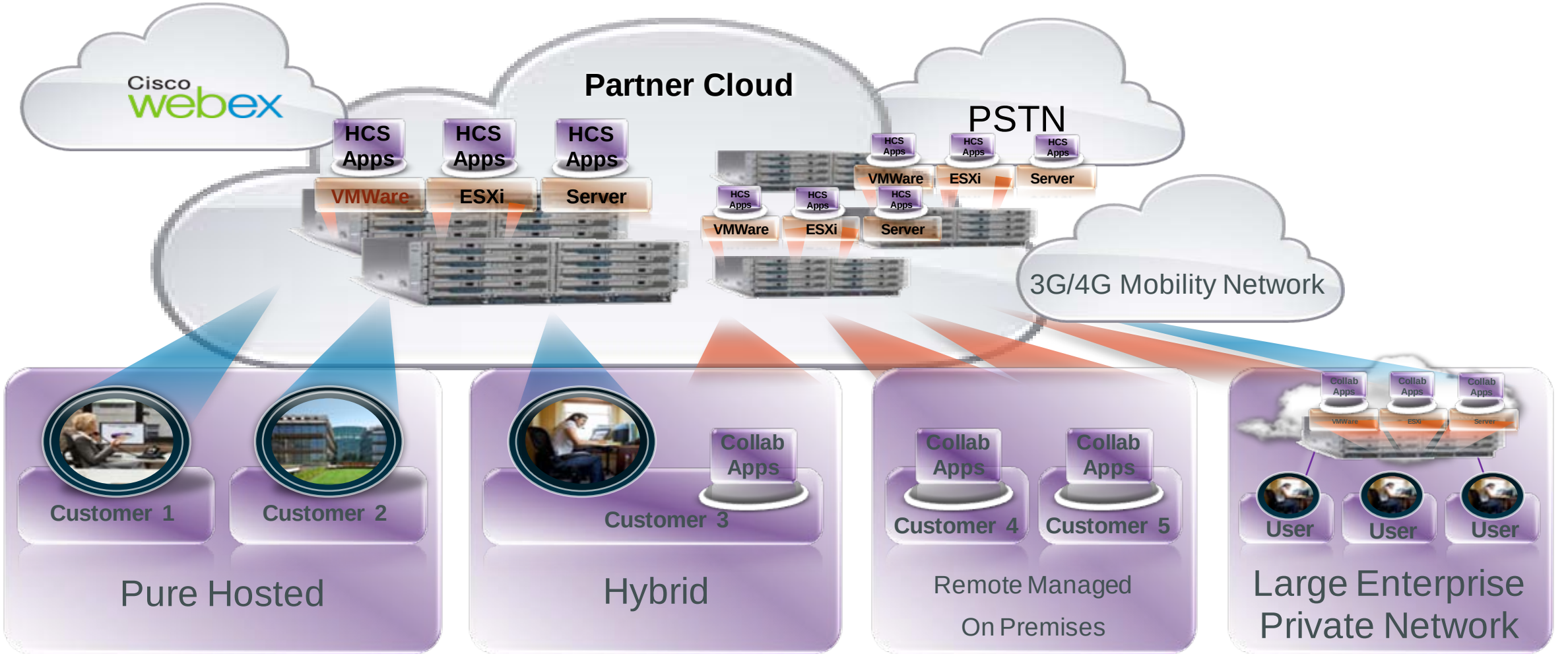
CTS-500/1000/1100

CTS-1300

Profile Series

Solution Platforms

Flexible Deployment Models



HCS – Complete Cloud Solution

- The broadest set of enterprise-class, proven collaboration solution
- Same experience on premise and on demand
- Automation from customer order to service activation
- Simplification of ongoing admin with end-customer self care
- End-to-end service assurance with real-time monitoring and recovery
- Optimized on the virtualization platform and network for cloud
- Scalable and secure to millions of subscribers

The Whole Offer

Hosted Collaboration Solution

- UC, web & video collaboration
- Provisioning & management
- Delivered on cloud optimized infrastructure

Delivery & Operations

- Operations readiness discovery
- Services complement partner delivery strategy
- Build & engineering services

Commercial Terms

- Flexible financing – Capex to Opex options
- Single contact (HW, SW & services)
- Joint business model development

Got-to-Market Support

- Cisco compensation
- Cisco sales engine
- Joint marketing
- Sales enablement
- MSCP

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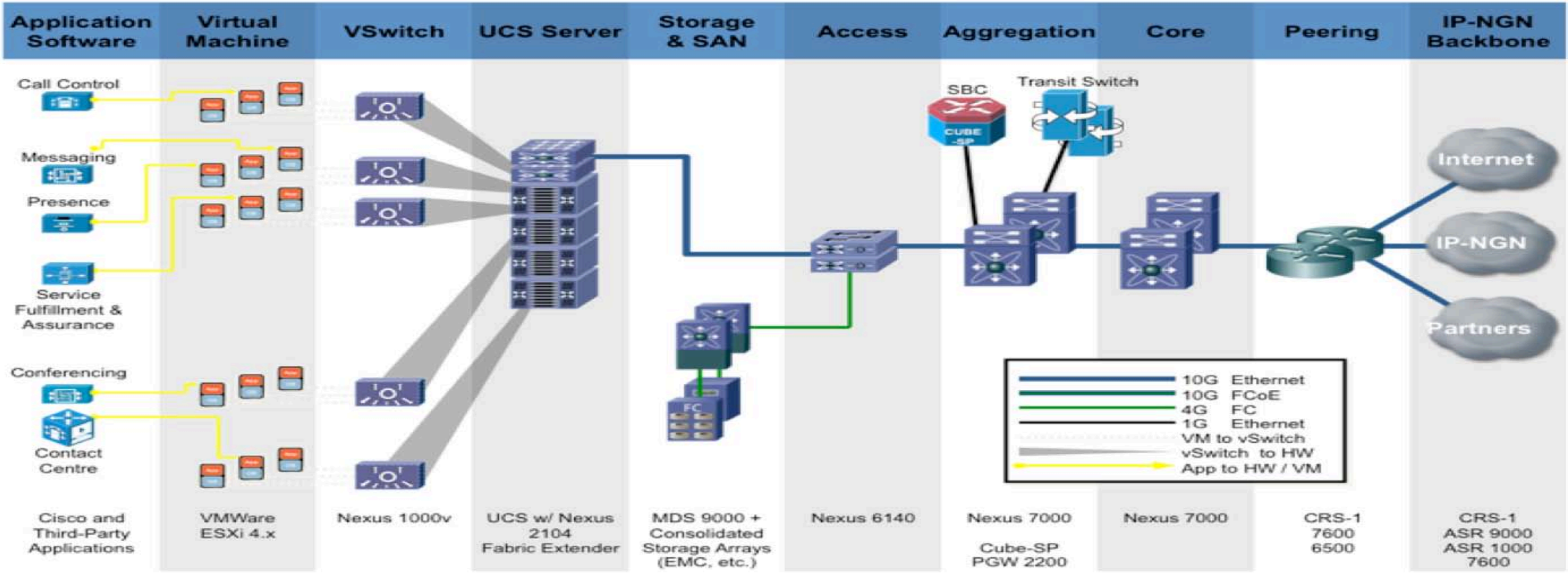
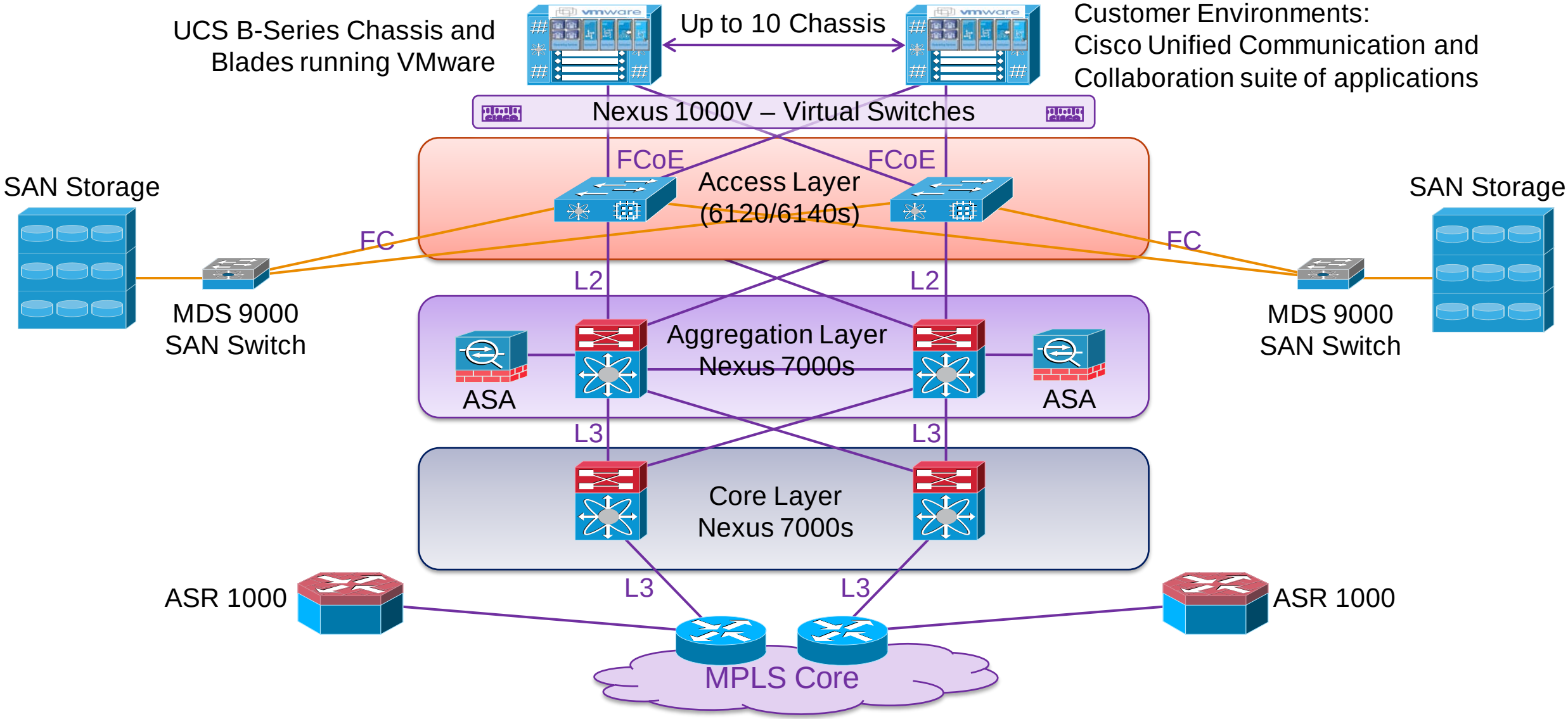
HCS Architecture

Overview of HCS DC Architecture



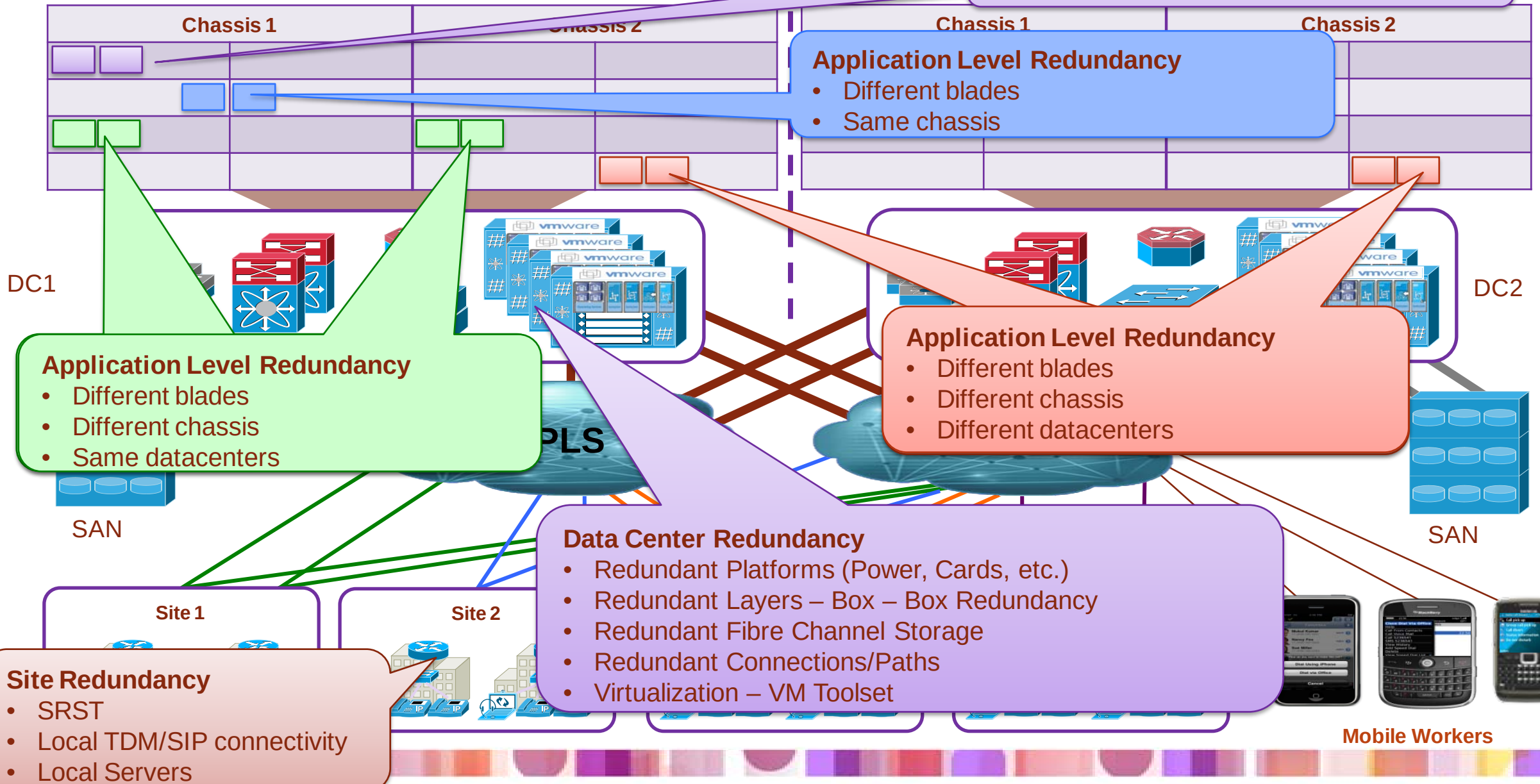
HCS Datacenter Architecture



Redundant Deployment Optio

Application Level Redundancy
- Same Blade

Application Level Redundancy
- Different blades
- Same chassis



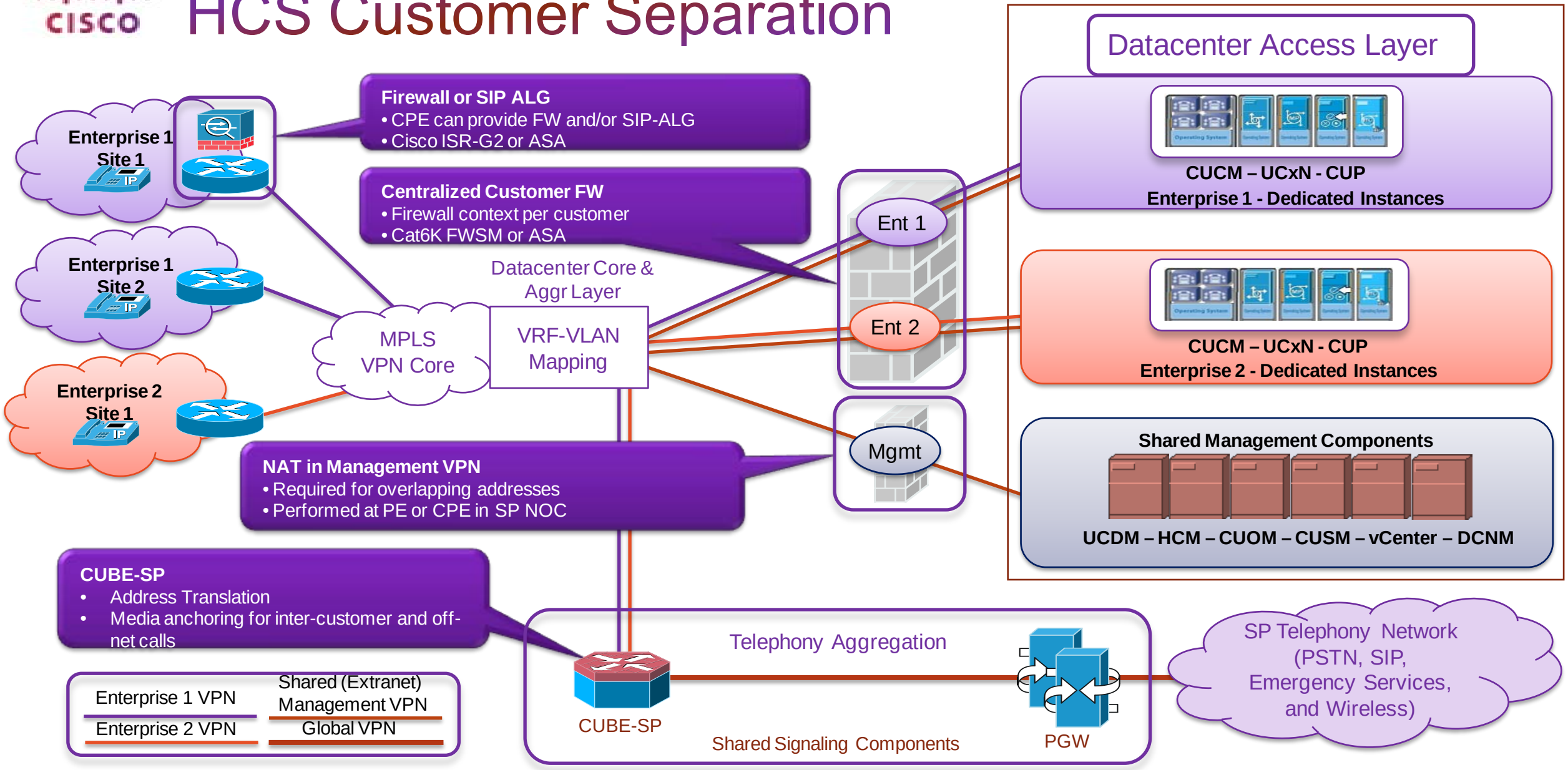
Application Level Redundancy
- Different blades
- Different chassis
- Same datacenters

Application Level Redundancy
- Different blades
- Different chassis
- Different datacenters

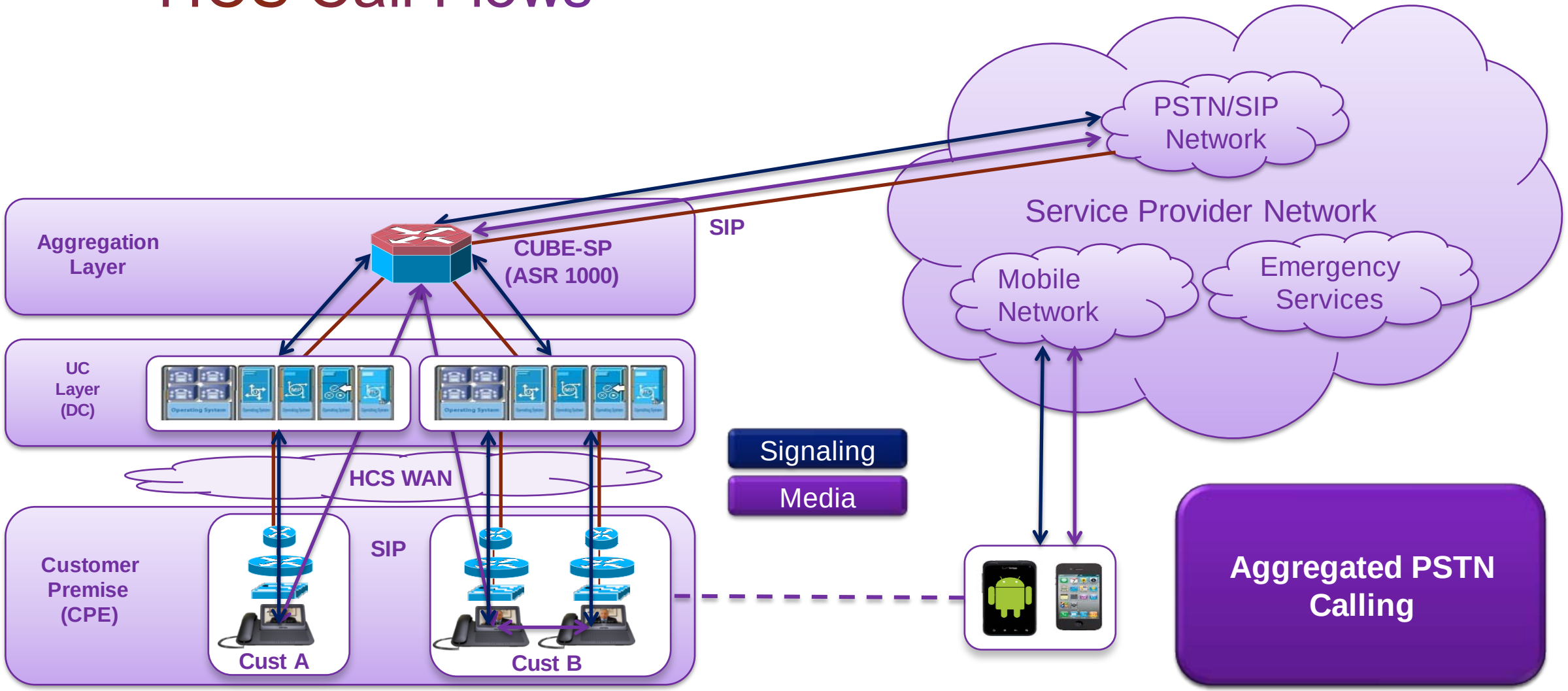
Data Center Redundancy
- Redundant Platforms (Power, Cards, etc.)
- Redundant Layers – Box – Box Redundancy
- Redundant Fibre Channel Storage
- Redundant Connections/Paths
- Virtualization – VM Toolset

Site Redundancy
- SRST
- Local TDM/SIP connectivity
- Local Servers

HCS Customer Separation



HCS Call Flows



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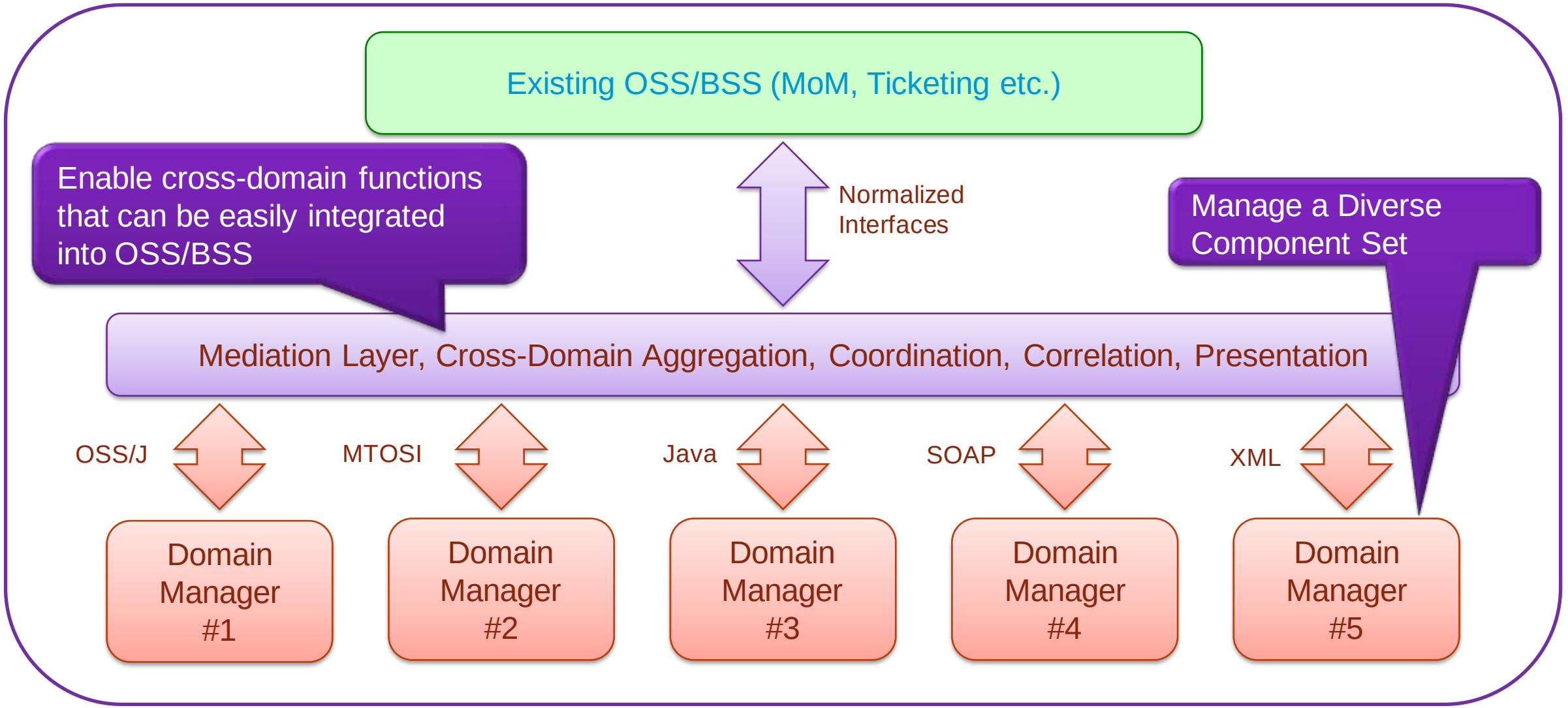
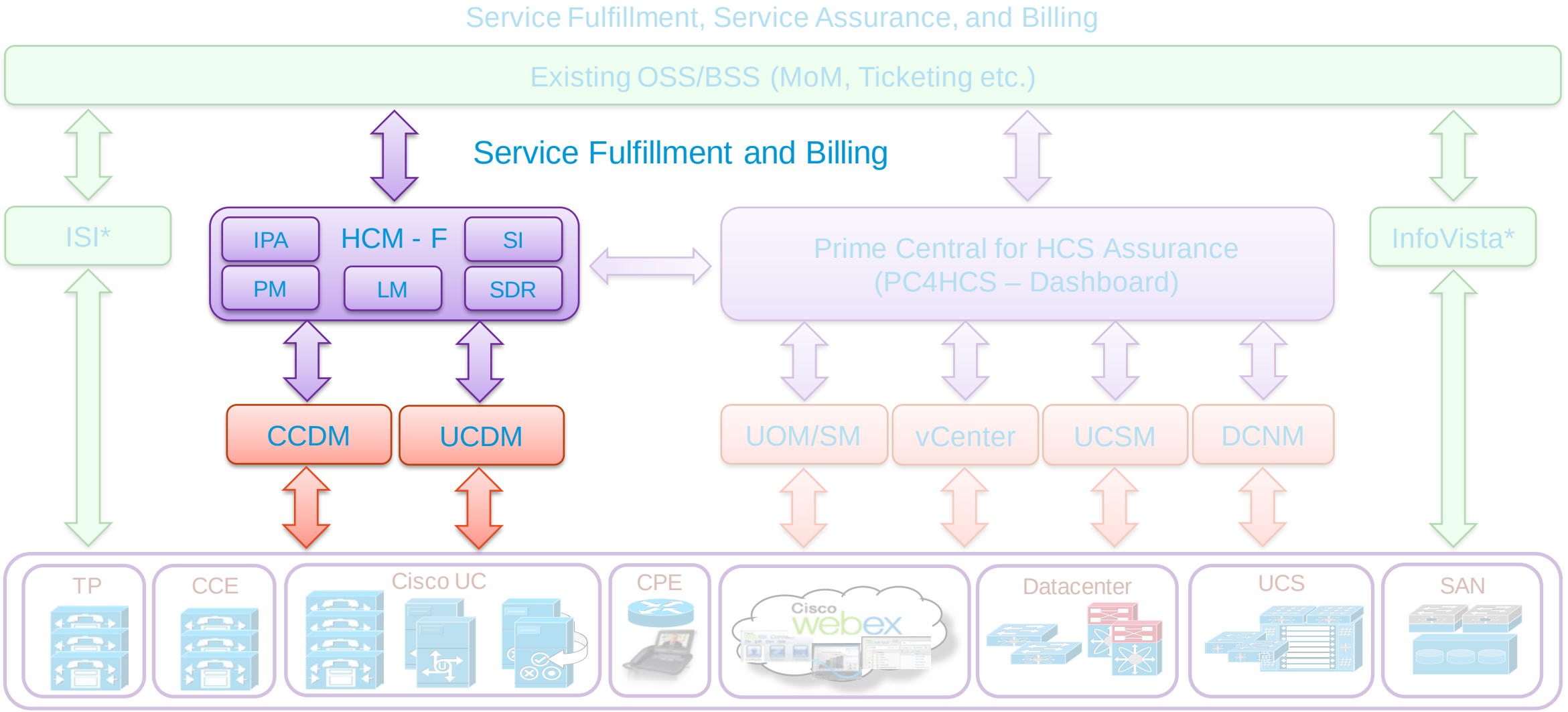
HCS Management System

HCS Management Framework



HCS 9.0.1 Management Architecture

HCS Component
HCS Domain Manager
SP/Partner Supplied



*Optional component or reference sale

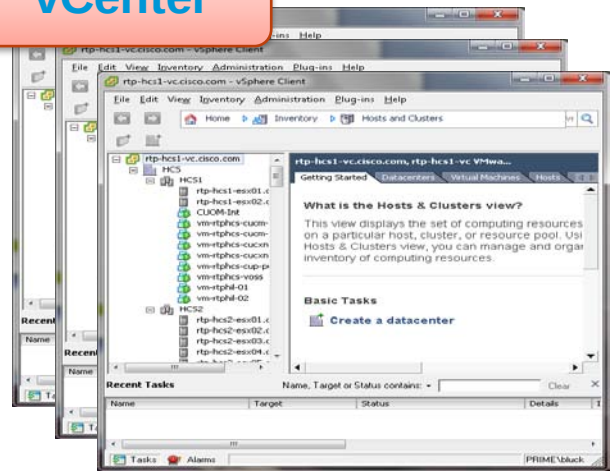
Shared Data Repository (SDR)

SDR

HCS UI & NBI

Config

vCenter



vCenter Sync

SDR

ESXi Hosts

Blades

VMs

Customer

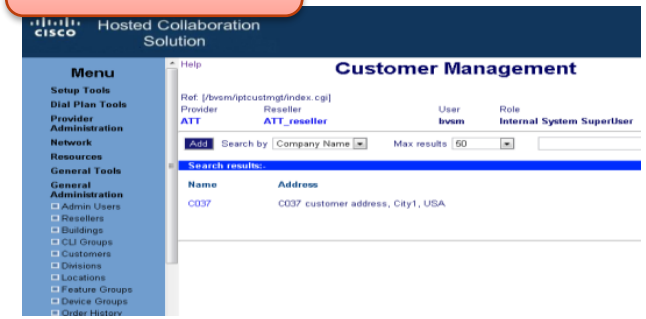
Apps

CE

Query SDR

Prime Central for HCS Assurance (PC4HCS)

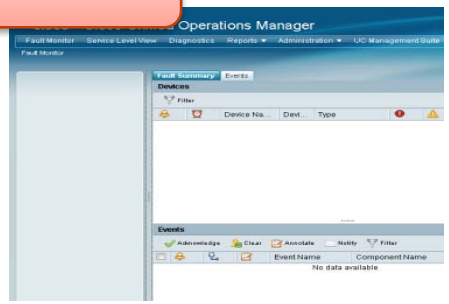
UCDM



CUCDM Sync

Provision

UOM/SM



HCM-F = Hosted Collaboration Mediation – Fulfillment

Infrastructure Provisioning Agent (IPA)

IPA

STEP 1: Create Customer Network Container
Create Customer VM's etc

SP Admin

STEP 2: Upload UC VM Template, Compute, Network & Storage created in Step 1

Cloud - O

NBI (SOAP/REST)

Orchestration Engine

Compute Network Storage

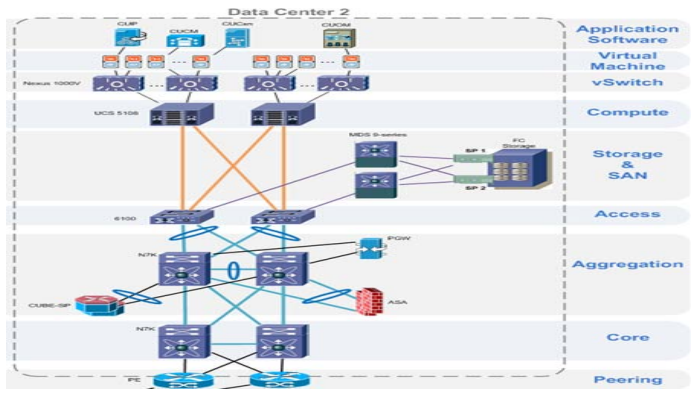
HCM - F

UI

NBI (SOAP)

IPA

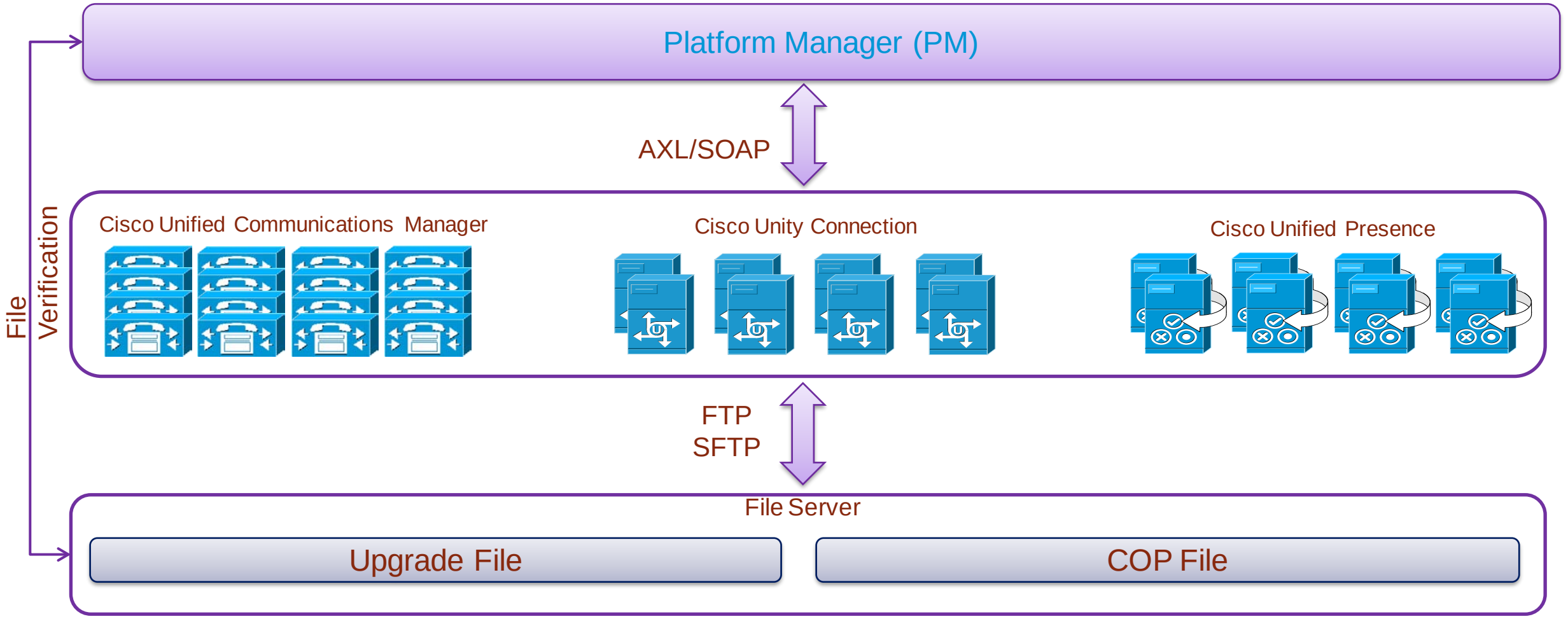
SDR



STEP 3: Clone, Identity and Configuration of UC Apps

Platform Manager (PM) Architecture

PM



UCDM Hierarchy

UCDM

Layer	Tasks
Service Provider Setup	Create Service Building Blocks Install Telephony Model Design Feature Packages Setup Infrastructure
Customer Creation & Administration	Set Inventory Levels Add Divisions Manage Numbering Plan Assign resources to locations
Location Creation & Management	Manage & Register Phones Manage End Users & Mobility Admin Group line features
End-User Self-Care	Manage Phone Features Manage Speed Dials Set Single Number Reach Change Presence monitoring View & Manage Directories

HCS 9.0.1 Management Architecture

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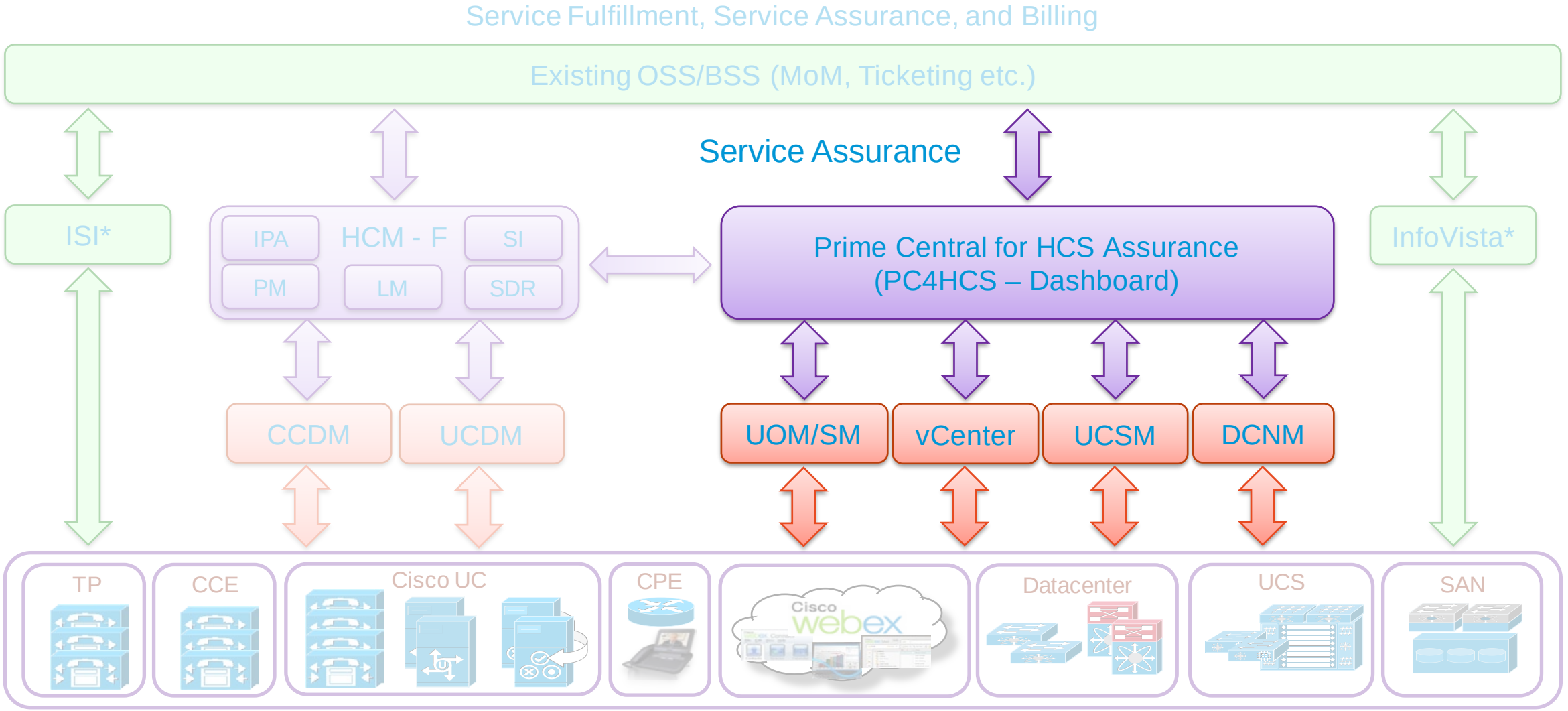
HCS Domain Manager
SP/Partner Supplied



*Optional component or reference sale

Prime Central for HCS (PC4HCS)

- Integrates with existing OSS or BSS system through SNMP
- Aggregated multi-customer operator dashboards with domain manager cross-launch
- View current service outages based on reported errors and alarms
- Cross-domain fault correlation and root-cause analysis
- Create service and application dependency trees
- Obtain, de-duplicate events, and normalize data into a consistent format

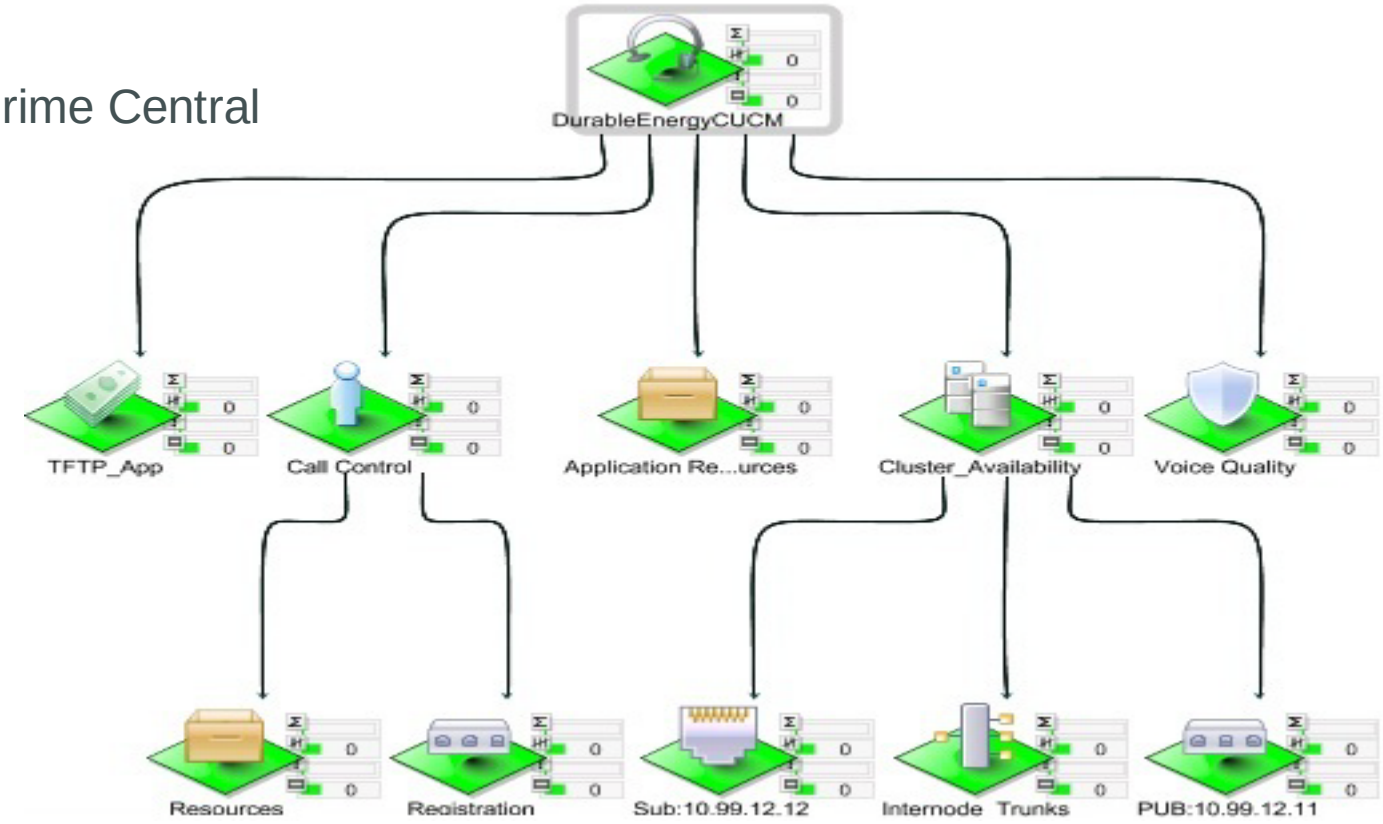
PC4HCS Assurance

- Northbound Interfaces
- Dashboards
- Analytics - Service Impact Analysis
- Analytics - Root Cause Analysis
- Data Modeling
- Event Collection

UOM/SM | vCenter | UCSM | DCNM

Service Visualizer

- Service tree created automatically
  - Configuration pushed from HCM-F into Prime Central
- Visual indicators to outages
  - Based alarms or errors being reported to Prime Central
- Proactively notify customers
  - "We are aware of this outage and the following services may be affected"
- View urgent service issues
- Understand what is affected



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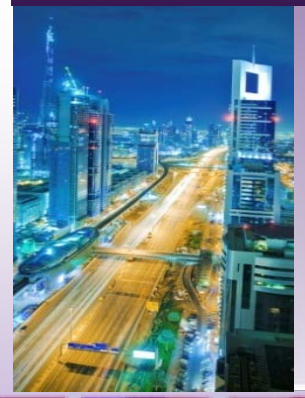
A Complete Offer from Cisco Now Available

Technology, Delivery, Commercials & Go-to-Market Combined

Cisco Collaboration

- Best in-class user experience
- Cloud-based, hybrid, on-premises
- Operational excellence in an end-to-end system

Delivery & Operations



- Fully integrated turn-key solution
- Advance Services offers a wide variety of Build, Operate, & Transfer Services

Go-to-Market Support

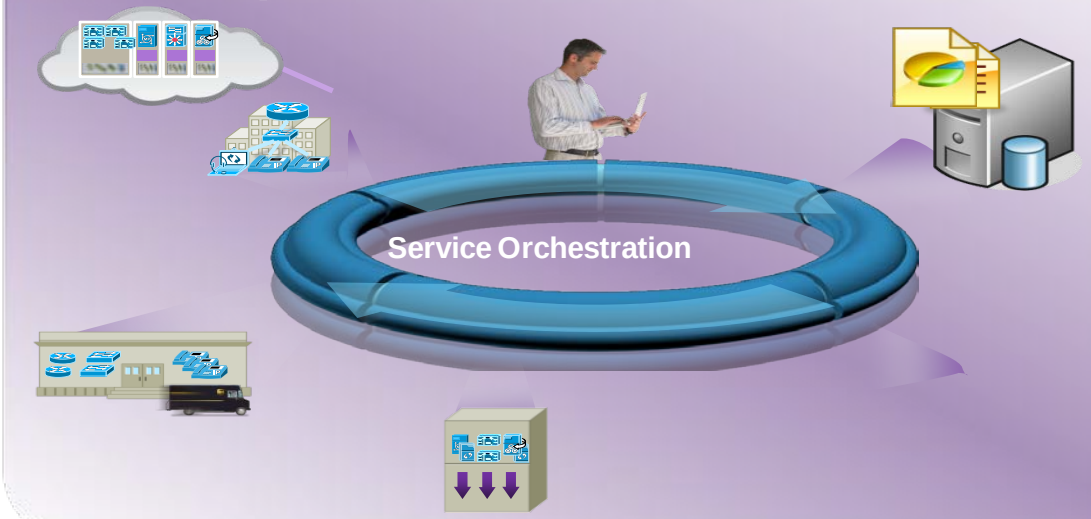
- New Cisco sales compensation model to incentive partner offers
- Partner Volume Discounts & Flexible Financing

Total Solution Benefits

Deliver capital and operational efficiencies on hosted platforms

CAPEX Improvements

OPEX Improvements



- Optimization of hardware platform
- Automation from customer order to service activation
- Simplification of ongoing admin with end-customer self care
- Real-time monitoring, recovery, and platform optimization
- Scalability to millions of paying subscribers!