Voice and Data Networking (VDN) Managed Services

VZ Enterprise Center (VEC) – Comprehensive Functionality for Online Management of Telecom Services

**Billing Report Inbox**
- Access to daily prided call detail and online shared reports pages (SRPs).

**Dynamic Network Manager**
- Web based interface of 3 components: Looking Glass, Dynamic Port, and CAM & QOS UIs.

**Looking Glass** in Dynamic Network Manager
- Enables changes to PPIs, CAMs, and customer QOS profiles. View network config and make layer-3 mode w/o’s being charged thru Looking Glass option.

**Electronic Data Interface (EDI)**
- Electronic delivery system transporting large volumes of billing data to automate monthly invoice processing.

**Outbound Network Manager (ONM)**
- Can re-examine configuration data and customize features on near real-time basis.

**Online Invoice**
- Provides online billing using an electronic presentment and payment (EPP) app – formerly known as billing.

**Directed Data Billing Services**
- Provides customer electronically and allows customized billing report creation.

**Reporting Center**
- Network reporting application to create reporting structures unique to and/or organization for reporting and analysis. Formerly event monitor.

**Web Access**
- Mobile feature allows customers access to their virtual centres from anywhere.

**Traffic Reporting and Traffic Monitor**
- Provides summary and detailed info on billed numbers within 1-30 mins (near real-time) after a call has been completed, and a comprehensive suite of inward and outward call detail reports.

**Service Management Tools**
- Provides visibility into near real-time inventory (accounts, change requests, network alarms, main events) to manage network at the service level.

**Reports and Trend Analysis**
- Electronic trending and score testing tool to initiate circuit monitoring and loop back testing. Open, tools, or update tickets for a broad range of products.

Electronic Data Interchange (EDI)
- Provides easier and faster provisioning and integration of customer WANs to cloud services using VEC.

Conferencing Services

Web Conferencing
- Cloud-based Web and video conferencing solution enabling collaboration in real-time from anywhere, anytime, on any mobile device, or video system as though working in the same room. Solutions include meetings, events, training, and support services.

Cloud Connected Audio (CCA)
- Audio conferencing naturally integrated into WebEx meetings.

Wide Area Network (WAN) Services

Network Connectivity Interchange – VZ Secure Cloud Interconnected (SCI)
- Enables connections to a global ecosystem of cloud providers and apps.

Security Services

Distributed Local Service of Service (DLS) Users
- A managed, cloud-based, on-demand service designed to intercept/remove significant amounts of malicious DDoS traffic inbound to a Customer’s intern connected network.

IP Voice Services

Voice Time Sharing Option (TSO)
- Enables telephone calls via the Internet, sometimes referred to as "IP Trunking" Customer premise gateway device, and used to connect legacy PBX and key systems to the Internet across the customer’s WANs.

Virtual Communications Express (VCE)
- Cloud-based VoIP services and VZ support.

Voice SDE – Cisco MGCP
- Full suite of collaboration services including voice, video, instant messaging, presence, and conferencing from the cloud hosted platform. SAE edition (government) is a FRAMP certified. Supports integrated Cisco cloud UC offerings such as WebEx (audio conferencing), CMM (video), cloud connected audio (audio conferencing), Contact Center Enterprise, and Spark.

Hidden Self-Hosted Unified communications app/platform resonant centers by unifying presence, instant messaging, video, voice messaging, screen sharing, and conferencing capabilities.
Networking Tower Mast Disguised as a Cactus

By 2021, early adopter brands that redesign their websites to support visual and voice search will increase digital commerce revenue by 15%.

Identity as a Service: Federated Cloud Model

In this model, the service provider connects directly to Cisco via dedicated IP peering connections. The service provider carries all of its customers’ audio traffic, from both off-net and on-net users, and sends it to the Cisco Collaboration Cloud.

Figure 2: Sealed vendor faces business directly with the End User

Figure 3: Supplier/CCA-SP High Level Architecture - Outbound Dial

The overall timeline for the discovery and ATO phases would be approximately 12 months depending on the site and device volumes.

Operational Support Systems (OSS)