**Acronyms**

| | |
|---|---|
| CME | cisco unified Communications Manager Express |
| CUCM | Cisco Unified Communications Manager |
| SCCP | Skinny Client Connection Protocol |
| SIP | Session Initiation Protocol |
| POTS | Plain Old Telephone Service |
| ITSP | Internet Telephony Service Provider |
| PSTN | Publicly Switched Telephone Network |
| FXO | Foreign eXchange Office |
| FXS | Foreign eXchange Subscriber |
| DSP | Digital Signal Processor |
| MWI | Message Waiting Indicator |
| UC | Unity Connection |
| VPIM | Voice Profile for Internet Mail |
| ICCS | Intra-Cluster Communication Signaling |
| TLS | Transport Layer Security (like IPSec) |
| VCS | Video Communication Server |

**Purpose / How Works**

| | |
|---|---|
| App.liance-based voicemail, e-mail, fax, IM, etc. | Cisco Unity Connection |
| Advertises user on phone, unavailable, etc. plus IM | Cisco Unified Presence |
| Connects IP telephony to POTS | Voice Gateway |
| L 4 Protocol that carries audio directly between 2 phones after communications manager connects them | RTP |

**Scale**

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|---|---|
| Max CME Phones | 450 |
| Max CUCM Phones per Cluster (not a custom-designed "megacluster") | 40,000 |
| Max CUCM Subscriber Nodes per cluster (not counting publisher) | 8 |
| Max Unity Connection Mailboxes per server | 20,000 |
| Max Unity Connection Mailboxes per Active-Active Server Pair | 20,000 |
| Max Unity Connection VoiceMail Ports per server (VMware) | 250 |
| Max Unity Connection VoiceMail Ports per High-Availability Server Pair | 500 |
| Max IM & Presence users with cluster integration | 45,000 |

**Purpose / How Works**

| | |
|---|---|
| ITSP | A SIP trunk to an ITSP replaces PSTN |
| FXO | (Port) Gateway trunk connection to PSTN; a telephone |
| FXS | Port for analog phone / fax, provides dial tone; a wall jack |
| DSP | Digital Format Conversion and to / from analog |
| CUCM Clustering | Static data replicated (1 way—publisher to 1-8 subscribers) Dynamic data divided (server "owns" a phone) |
| What happens when a CUCM publisher fails | "Locked Configuration" mode. No changes to DB (phones, routing plans). Features operate (including forwarding, etc) on subscribers, replicated sideways & up when publisher returns |
| How CUCM sends call to UC | UC is an extension; call is forwarded with original # in the signaling message so UC can use correct mailbox |
| LDAP | Central authentication or source for user imports |
| MWI | After a message is left, UC calls the MWI extension & CUCM lights it |
| Jabber | Softphone app with presence, IM, video voicemail & conferencing, directory, web conference. |
| Web Conference | IM chat program with topic "rooms" with a history that predates you joining. |
| VCS | Handles video calls to / from external devices we don't control |
| VCS Control | Self-contained, good if you don't also have CUCM |
| VCS Expressway | Firewall traversal for video calls |
| VCS Expressway Edge | Component in the DMZ, talks with "Core" |
| VCS Expressway Core | Component inside the firewall; talks with "Edge" |
| Telepresence Management Suite | Logistics management for videoconferencing facilities—Deployment planning, contact list, video conference scheduling, centralized aministration of video conferences, etc. |