

VOIP Installation (Descriptions below not meant to be all inclusive, rather to serve as general guidelines.) The intent is to deliver a complete turn-key VOIP solution that meets the District's IP communications needs.

- Call Manager
 - Meet with designated groups at each site to design call flow requirements, and configure accordingly
 - Implement call routing and features as discovered in design meetings
 - Install most current version of CSA, install District provided anti-virus, in accordance with Cisco compatibility standards and configure ACL's on the core infrastructure to protect servers from all but essential traffic, i.e. only phones gateways and user web sessions should have access to the voice servers etc.
 - Install Call Manager publisher and subscriber
 - Upgrade to latest version and service pack levels, including host OS according to Cisco recommendations
 - Configure all users and devices according to District provided extension list and requirements
 - Ensure proper call flow to each site, including under WAN failure conditions
 - Configure appropriate dial restrictions and time-of day restrictions
 - Configure automatic system backup, and deliver backup copy on external media
 - Configure attendant console for appropriate users
 - Configure 4-digit dialing to and from non-VOIP sites (Note: this does not mean to each user at a non-VOIP site, only to each site's main number)
 - Configure CDR
 - Ensure 911 calls use site PSTN connections under WAN Failure and that inbound calls are routed to site administrators' phones under SRST
 - Deliver documentation of configuration details, including usernames and passwords, IP Addresses, call flow and extension ranges
 - Provide basic end-user training and basic administrator training, including access to ccmuser pages
 - Provide all original installation media
- Unity Unified Messaging
 - Install Unity UM with message store on District email system
 - Upgrade to latest version and service pack levels
 - Install most current version of CSA, install District provided anti-virus, in accordance with Cisco compatibility standards and configure ACL's on the core infrastructure to protect servers from all but essential traffic, i.e. only phones gateways and user web sessions should have access to the voice servers etc.
 - Configure all users according to District provided extension list and requirements

- Configure call handlers and auto attendants according to design meeting discovery, District personnel will be available to perform recordings, but will require basic training on how to perform recordings
- Configure automatic system backup, and deliver backup copy on external media
- Deliver documentation of configuration details, including usernames and passwords, IP Addresses, call flow and extension ranges
- Provide basic end-user training and basic administrator training, including access to user PCA pages
- Provide all original installation media
- Cisco Emergency Responder
 - Install CER and upgrade to latest version and service pack levels, including host OS according to Cisco recommendations
 - Install most current version of CSA, install District provided anti-virus, in accordance with Cisco compatibility standards and configure ACL's on the core infrastructure to protect servers from all but essential traffic, i.e. only phones gateways and user web sessions should have access to the voice servers etc.
 - Configure CER to deliver E911 information to the individual classroom level and configure emergency call back to the originating phone
 - Configure CER to notify designated individuals within the District in the event 911 calls are placed
 - Update PSAP database accordingly
 - Provide basic administrator training
 - Ensure 911 calls use site PSTN connections under WAN Failure and that inbound calls are routed to site administrators' phones under SRST
 - Configure automatic system backup, and deliver backup copy on external media
 - Provide all original installation media
- Gateways
 - Install gateways at each site, ensuring the most current appropriate IOS version is installed
 - There will be a PRI at the core site with 4 analog backup lines, and 3 analog backup lines at each site.
 - Configure DHCP for the phone VLAN, if needed.
 - Configure gateways for QoS as appropriate. If the voice gateway is not the WAN gateway, ensure QoS is configured on the WAN gateway. There will be a dedicated voice VLAN at each site, previously configured under separate contract.
 - Configure paging integration at each site with FXO connectivity.
 - Note: LAN configuration and QoS will be performed under a separate contract
 - Configure DSP's, including for conference calling
 - Configure SRST for appropriate call handling for all site phones (up to 48 per site)

- Provide documentation of IP addresses, and usernames/passwords, including a copy of the IOS and running configuration.