

Calling Features

Feature name	Feature description
Abbreviated Dialing	Ability to dial shorter dial patterns for intra branch/ company calls - also known as VPN
Anonymous Call Reject	Gives the user the ability to block anonymous incoming calls
Barge-In/ Barge-Out	Ability for an authorized user to interrupt a call in progress on another phone extension for the purpose of training/quality assurance or the ability to leave a call in progress on another phone
Black List	Gives the user the ability to block incoming calls based on specific numbers or patterns - same as call restrictions/ Call Blocking
Bridged Call Appearance	The same phone number can appear and be answered on multiple phone sets.
Bridged Call Appearance - Shared Hold	This gives the ability for a user on the same bridged group to un-hold a line that had been put on hold by another user on the same bridge.
Call Blocking	Allows users to selectively block calls from user-defined origins (e.g. specific extensions, ANIs, off-net calls in general)
Call Drop	Terminate the call without hanging up the receiver
Call duration display	Display the duration of the call on the terminal
Call Forward all	User can direct all calls to another station or location also known as call forward universal
Call forward busy	User can redirect calls to another station or location when busy.
Call forward on no answer	User can redirect calls to another station or location after specified number of rings.
Call Forward Programmable	Call forward can be programmed on the phone either via a soft key or via a button
Call hold	A button on phone set that places incoming call on hold, retrieves call. The system also support call hold reminder to remind the user for held calls.
Call Hold reminder	User is reminded of a held call with an audible beep after the configurable amount of time
Call Log on Provisioning system	Viewable call logs per extension
Call Number Suppression	Ability for the user to suppress caller ID information for outgoing calls
Call Park Timeout	The call comes back to the original party once the park timer expires
Call park/retrieve	A user can put a call on "hold" (to a virtual extension) and then pick up from another phone in the system. The system also support park timeouts when the call will come back to the original device.
Call pickup	A user can answer a call ringing on another extension
Call return	Calls back the last incoming number.
Call Screening	Gives the user or the system to restrict/permit incoming calls through the system or to the user.
Call transfer attended	Redirect an answered call to another user after announcing the caller. This includes restrictions on trunk-to-trunk transfers, etc.
Call transfer unattended	Blindly redirect an answered call to another user
Called ID	Display the name and/or number of the calling party.
Calling History - answered calls	User can view the last few missed calls, answered calls and dialed calls through the LCD on the phone
Calling History - missed calls	User can view the last few missed calls, answered calls and dialed calls through the LCD on the phone
Calling History - placed calls	User can view the last few missed calls, answered calls and dialed calls through the LCD on the phone
Camp On	Allows users to wait on line (in queue) if the requested resource (called party) is busy. It connects the users in queue by calling them back - on a first-come, first-served basis - when the requested resource becomes available
Conference Drop	Allows the conference initiator to drop off the call without dropping the other parties from the call
Direct phone to gateway dialing	Provides remote survivability in case of call processor failures, such that the phone dials out directly to PSTN and will be able to receive calls directly from the PSTN gateways.
Direct transfer to third party voicemail	Allows the attendant/user to directly transfer a call to another extension's voicemail
Direct transfer to voicemail	Automatically redirects all calls to the users voicemail with a single button push
Directed Pick-up	Enables the user to pick up his/her call from another phone by entering an authorization code
Distinctive ringing	Ring with different characteristics, depending, for example, on whether a call is internal or external.
Do not disturb	Phones can be made to appear out of service.
Follow me	Allows multiple, disparate phones to ring simultaneously when one extension is dialed.
Group Paging	Ability for one extension/user to intercom page a group of extensions
Group Call Pickup	An extension in an area that can be answered by a group of phones by simply punching an feature access code
Handsfree support	Incoming calls will be auto answered in the handsfree mode and the call will be answered on the speaker phone after a audible beep.
Hard Attendant Console Support	Support for hardware attendant console complementing the phone. The console provides busy line field indication and speed dials for 100-300 extensions, allows the operator to initiate transfers, conferences, call parks and call holds directly through the console via programmable keys.
Headset support	Plactronics head set support available on the phones for hands free communications
Hot Ring Down Circuits (Hotline)	The phone connects to a predetermined number as soon as the user picks up the phone. Feature used often in elevators, common hotel areas etc
Hotelling	Ability for the user to login in from any IP terminal anywhere in the network and get the same feature set as his primary phone.
Hunt Group - Calling Group	Calling Groups are made up of 1 or more members. The group has its own "group extension." Calls that reach the group are always distributed to ALL members of the group. The second call to the group will queue behind the first ringing call.
Hunt Group - Circular	Circular Hunt groups may also be referred to as a round robin. The group is made up of 1 or more members/agents. The group has its own "group extension." The next available member answers a call directed to the group. The starting point is based on the member of the group that last answered the call.
Hunt Group - Linear	The group is made up of 1 or more members/agents. The group has its own "group extension." Calls that reach the group are always handled in the same manner that is - a order is established to search for a member of the group that is available. The system inspects the status of member A, if unavailable the system attempts to reach member B, then member C, etc. If no member is available, a pre-defined coverage solution is initiated. This coverage point is invoked immediately if no members are available.
Last number redial	Button causes last call to be re-dialed.

Message Waiting Indication	Message waiting indication on the phones indicated new messages and total messages
Messaging waiting light	A visual indicator of a voicemail message. (I.e. blinking lamp)
Missed call indicator	lists missed calls.
Multiple call appearance	A single phone can have multiple, repeated instances of a single phone extension.
Multiple ring patterns	The user can choose multiple ring patterns for different calls uniquely identifying different call types.
Multiple ring styles	Allows selection of available rings.
Music on hold	A caller hears music when placed on hold.
Music on hold per customer group	A caller hears music when placed on hold and this can be configured per user or per customer group
Mute	A mute button to disable the microphone.
One-button send all calls	Automatically redirects all calls to coverage with a single button push.
One-button speed dial	Programmable one-touch speed dial on a phone set.
Paging	Ability for one extension to intercom page another extension
Personal Speed Dialing	Ability of the user to speed dial either through buttons on the phone or through feature codes.
Priority ringing	Distinctive ringing for calls based on internal calls, external calls or anonymous calls.
Remote Call Pickup	Same as Directed Pickup
Ringer Cadence Tone	User can configure the ring tones for incoming calls, priority calls, distinctive ringing
Send Beep	User/extension can send a notification to another user/extension which plays a beep tone on the destination extension and gives the originating party ID
Serial Calling	Feature set up some with attendant privilege when an incoming calling party wishes to speak to more than one person. When the first party hangs up, the call comes back to the attendant so that the next call can be originated.
Silent Monitor	Ability for an authorized supervisor or qualified user to listen in to the call of another phone extension for the purpose of training/quality assurance.
Speed Dial BLF	Speed Dials phones have busy line field functionality, thus displaying the status of the extension mapped on the device
System Speed Dialing	Speed dials that can be used by everyone in the system
Third Party Call Forward	Ability for a any authorized user to remotely call forward (universal) another phone extension. The feature is controlled by an access control list.
Three Party Conference	Audio path for multiple parties on single call, established just via user keystrokes, no outside intervention.
Toll Screening	Access list to restrict the users ability to make toll calls (Class of Service Feature)
User Directory	The site directory is available on the phone and through the user web portal. The phone directory is searchable and can be used directly to initiate calls.
Volume control	For speaker, handset, ringer.
Warm Ring Down Circuits (Warmline)	The phone connects to a predetermined number if the user picks up the phone and does not dial a number within a pre-determined period of time.
White List	Ability for user to configure a "Permit" list for incoming calls - Part of Call Restrictions

Unified Messaging Features

Feature name	Feature description
Auto Attendant	Auto-attendant functionality with user directory functionality
Call Return	Return a call to the person leaving the message after hearing the message
Custom Greetings	Users can provide their customized greetings for voice mails/ find me follow me
Del. Message Retrieval	Delete a message in the middle of retrieveing messages
Distribution Lists	System distribution lists that can be accessed by a group of users. For each entry in a distribution list, the subscriber can define a mailbox number, external phone number, and e-mail address for the recipient.
Extended Absence Greetings	Users can set customized greeting for extended absence. The system will remind the user if the feature
FAX auto delivery	When there is an event in the mailbox a fax notification is sent via fax
FAX mailbox	Ability to receive faxes in a mailbox
Find Me Follow Me	Gives the user the ability to program the call coverage points based on time of day, day of week, ANI etc.
Future Delivery	Record message to be delivered at a future time
Fwd email as FAX	Email is sent to a fax machine
Fwd voice as email	Voice can be forwarded as email through a WAV attachment
IMAP4	A subscriber who is configured for a e-mail account can access their e-mail and voice mail messages from the web using IMAP4 client
Mailbox full alert	Alerts the user when the mailbox is full
Message Annotation	See above - Can annotate a message before forwarding to another party
Message Broadcast	Provide a mechanism for all user mailbox to be notified with a message
Message Forwarding	Can forward the message to another mail box with comments added
Message Notification	Message notification to terminals of new/ total messages
Message play-out Control	Can pause, replay, skip, hear last 10 secs , fast forward (10 secs) of the message
Message Schedule Delivery	Schedule a message delivery at a future date.
Online Help	Online Help available through the voice mail system or attendant system
Outdial from inbox	Provides the user the ability to outdial a number once he enters into the voice mail system
Personal Auto Attendant	Configure a personal auto-attendant for features such as find me follow me
POP3	A subscriber who is configured for a e-mail account can access their e-mail and voice mail messages from the web using POP3 client
Print Fax to Print	The user can print faxes onto a printer
Prog. Cover Sheets	Ability to provide a personalized cover sheet
Prompt Bypass	Provides the ability to bypass prompts and take DTMF
Scheduled Greetings	Users can provide their customized greetings for voice mails/ find me follow me
User Directory	Gives the user directory that can be used in voice mail or auto attendant
Voice/Fax/Email integ.	Retrieve voice mail or faxes as email.
VoiceMail	Advanced voice mail functionality
VPIM	Support for Voice profile for Internet mail (VPIM) to exchange voice mail messages between disparate voice mail servers

Administrative and System Features

Feature name	Feature description
508/ADA Compliant user provisioning system	The 3Com 508 compliant user provisioning system allows the user to self manage changes to his profile including calling feature changes, bridged lines, viewing call history etc.
802.1 P/Q Tagging	802.1 P/Q tagging enables the administrator to segregate the voice traffic from data traffic to help the data components (routers/ switches) optimize the traffic while providing an extra level of security.
Additional security provided by locking MAC addresses to hubs	Working in conjunction with Network Jacks and ethernet switches, 3Com phone devices can be locked by their MAC addresses to specific location for additional security such as those required in college campuses.
Advanced 911 functionality	System keeps a mapping of ERL and MAC address to phone numbers to location in the hands free install mode which can be used by the enterprise administrator to easily transmit the information to PSAP points and locate the endpoint. The system restricts Class of Service on the phones that made the emergency calls i.e. once an emergency call is initiated, it will not be allowed to forward calls, access voicemail or go to do not disturb mode. In addition the system keeps a mapping of ELIN numbers thus ensuring that each phone is reachable even when there are fewer external PSTN lines available.
Analog Line Support	System support for FXO, FXS lines
Automated daylight saving setting support	The system allows the administrator to automatically configure for daylight savings settings thus ensuring that all the systems in the network need not be touched during time changes.
Automatic phone upgrades	System automatically upgrades the phone code if the latest version is available thus ensuring a phone touch free upgrade procedure for the enterprise
Call Detail Record Reporting Application	A windows based reporting application that allows the administrator to generate call detail reports using default templates or by creating new reports. The default call reports includes: incoming call reports, outgoing call reports, call reports based on extensions, calls per hour. The CDRs also include performance statistics measured on the phone on a per call basis.
Call Detail Records	System provides detailed information on call made through the system. Users can also view detailed information on their call history
Centralized Branch Provisioning	System supports complete centralized provisioning and management of all branch sites including the ability for branch VCX servers/gateways to self configure based on previously configured values. Using the 3Com EMS system to push configurations and updates from a central location
Class of Service	Ability for the administrator to assign class of services to users thereby automatically assigning the features for any user
Complementary Attendant Console Support	Support for software based complementary attendant console complementing the phone. The console running on a Windows based PC provides busy line field indication and speed dials for 100-300 extensions, allows the operator to initiate transfers, conferences, call parks and call holds directly through the console via programmable keys.
Complete mobility of users	The system can also work in a mode where the user can log in to any device to receive calls at any location for maximum mobility and productivity
DHCP capable phones	Phones, Consoles can be auto configured through a DHCP server aiding a no-touch deployment.
Easy Installations	The system has an extremely easy installation minimizing human intervention and operational errors. The installations is extremely intuitive and ensure seamless upgrades and downgrades. Also ensures easy configuration for redundancy and mirroring. The install mechanisms will also allow for Operating systems upgrades and fallback in case of any administrative issues during upgrades.
Enterprise Management	The system is managed through a SNMP based enterprise management suite that is an extensive enterprise management platform for configuring the system, viewing statistics and managing changes.
Feature Access Codes	Feature access codes aids the use of analog sets and very basic phones in providing the same feature set as IP phones would get
Flexible data/time display	Date/Time displays on the phones can be configured for providing displays based on user preference or based on location preference. Date formats include MMDDYY, DDMMYY, DDMMYYYY, MMDDYYYY and the time can be displayed on a 12 hour or 24 hour format
Hands free Installation of phones	The system can work in a mode where the only configuration for the system is done by the administrator and the phones will automatically detect their configuration (phone number, downloader address, etc) just by plugging in the phone.
Headset support on phones	Support for headsets and also integrated headset capability on phones where the set can be activated/deactivated on a single button press.
Intelligent Mirroring	Real time replication of messaging information across a primary and secondary server for replication of voice mails, emails, faxmails
Low vocoder support	System supports G.729ab codec in a pending patent optimized way that will maximize the bandwidth usage for LAN/WAN calls.
Multiple sets support	System supports 3Com's 3104 manager set, 2102, 3102 business sets and the 3101, 2101 basic set. Also supports 3105 Attendant Console. Additionally as the system is based on standards based SIP protocol, it interoperates with many SIP based IP phones and soft phones.
Phone DTMF Security	DTMF monotone on phone being a security feature to prevent malicious parties decoding the tones
QOS Tagging (TOS Byte)	Tags IP packets with so that they can be prioritized from other traffic types ensuring high voice quality.
RAID Support	All VCX servers support RAID 1 - Creates an exact copy (or mirror) of the data into one or more hard disks
Replication	Real time replication of user data across lans and wans so that the system runs at 99.999% availability
Rugged IP PBX Platform	All the core call control and IP messaging services run on a rugged and open intel based linux platform. The servers run on an internal firewall which disables most of the applications except for the one's absolutely required for the IP PBX. This firewall also prevents the servers from coming under DOS attacks thus providing a secure, highly available platform.
Server access security	All interactions with the IP PBX servers can be done only through secure shell (SSH) securing the core system.
Trunk to Trunk transfer restriction	As part of Class of Service the ability for the system to restrict inter trunk transfers to prevent call fraud
Type of Service	Ability for the administrator to assign type of services to users thereby automatically assigning dial plans and calling restrictions for any user

Routing Features

Feature name	Feature description
PSTN to PSTN Routing	Support for creating routes to make calls using VoIP for transparent trunking
PSTN to IP Routing	Support for creating routes to provide phone numbers to IP destinations.
IP to PSTN Routing	Support for creating routes to make calls to PSTN destinations
IP to IP routing	Support for e-mail/URL like addresses
NANP Support	Supporting 7/10/11 digit North American Numbering Plan.
NPA Routing	Route calls based on the NPA of the called number in NANP
NPA NXX Routing	Route calls based on the NPA NXX of the called number in NANP
E.164 numbering plan	Support for international numbering plans
Support for dialing prefixes	This feature allows the use of country specific prefixes used for make local/national/international calls. E.g. 011 is used as a prefix in North America for making international calls.
VPN Numbering Plan	Support for 2-10 digit private numbering plans
Hunt Groups	Ability to use alternate pre-defined lines for the call in case it is busy
Blacklist	Ability to restrict pairs of origination and terminations
White-list	Ability to have a specific list of originators allowed for a particular destination
Alternate routing	To provide alternate routes to reach the same endpoint
Source-based Routing	Ability to route calls destined to same destination through different networks based upon the caller
Network Abbreviated Dialing	Support for abbreviated numbers for reaching a specific network facility
Call Blocking	Block calls to a specific number or a specific numbering plan
Outbound Restriction	Ability to restrict outbound calls from an endpoint

Phone Features

Feature	Feature Description	3102	3101	3103
Reliability-MTBF	Product provides an expected MTBF of 876,000 hours. No component shall have a life of less than 5 years and the keypad shall support at least 1,000,000 presses.	Y	Y	Y
Reliability>Returns	Product has an expected return rate from field failures, no greater than 1.75% after 1 year in use.	Y	Y	Y
ADA Compliance	Hardware fully ADA compliant. Software has the fonts configurable to various sizes.	Y	Y	Y
FCC	FCC Class A (US) compliant & tested	Y	Y	Y
CE	CE (Europe) compliant & tested	Y	Y	Y
C-tick	C-tick (Australia) compliant & tested	Y	Y	Y
Mexico	NOMs compliant & tested	Y	Y	Y
Safety-US/Canada	cULus compliant & tested	Y	Y	Y
Safety-Australia	TS-001 compliant	Y	Y	Y
New Zealand PTT Test	New Zealand's PTT in- country test	Y	Y	Y
Desk Use	The entire unit provides an adjustable viewing position for the display either via an adjustable stand or adjustable display angle	Y	Y	Y
Desk Stability	The product remains at the same place without any skidding when operating keypad or tugging cord.	Y	Y	Y
Wall Use	The product is attachable to a standard telephone wall mount plate with good stability.	Y	Y	Y
Fixed Button Labeling	Fixed functional buttons shall be re-labeled with icons	Y	Y	Y
Power over Ethernet	Phone accepts power over Ethernet and is compatible with IEEE standard.	Y	Y	Y
Power External	Phone accepts local power supply	Y	Y	Y
Ethernet Support	Phone support 10/100 interface	Y	Y	Y
Link Status	Provide loss of link notification on the LCD - similar to other 31XX phones	Y	Y	Y
Headset Jack 1	A headset jack shall be available with an RJ-9 modular connector.	Y	Y	Y
Headset Jack 2	Headset jack shall be able to support industry standard Plantronics Polaris interface without need for an external amplifier.	Y	Y	Y
Speaker Phone	Full-duplex speakerphone is supported with a single microphone and speaker on the body.	Y	N	Y
Vocoder-1	Support G.711 (u-Law)	Y	Y	Y
Vocoder-2	Support G. 729A/B	Y	Y	Y
Dynamic Codec Selectionr	Codec selection shall be auto-negotiated during the initial phase of a call..	Y	Y	Y
Voice activity detection	Phone supports Voice activity detection with silence suppression and comfort noise generation.	Y	Y	Y
Acoustic Echo Cancellation	Acoustic echo shall be cancelled for the delay of up to 80msec.	Y	Y	Y
Handset Echo Cancellation	Phone cancels local echo generated by feedback from the handset earpiece to the handset microphone	Y	Y	Y
Voice Characteristics Handset & Headset G.711	<= 65ms Total latency <= 30ms Send latency <= 30ms Receive latency >= 4.0 MOS (handset only)	Y	Y	Y
Voice Characteristics Handset & Headset G.729A/B	<= 70ms Total latency <= 40ms Send latency <= 25ms Receive latency >= 3.8 MOS (handset only)	Y	Y	Y
Voice Characteristics Speaker G.711	<= 85ms Total latency <= TBD MOS (handset only)	Y	N	Y
Voice Characteristics Speaker G.729 A/B	<= 90ms Total latency >= TBD MOS (handset only)	Y	N	Y
DTMF	Comply with RFC 2833	Y	Y	Y
DTMF - Monotone Dialpad Feedback	User configurable setting for DTMF or monotone feedback to dialpad presses	Y	Y	Y

Software

Feature	Feature Description	3102	3101	3103
802.1 P/Q Tagging	802.1 P/Q tagging enables the administrator to segregate the voice traffic from data traffic to help the data components (routers/ switches) optimize the traffic while providing an extra level of security.	Y	Y	Y
Abbreviated Dialing	Ability to dial shorter dial patterns for intra branch/ company calls - also known as VPN	Y	Y	Y

Additional security provided by locking MAC addresses to hubs	Working in conjunction with Network Jacks and ethernet switches, 3Com phone devices can be locked by their MAC addresses to specific location for additional security such as those required in college campuses.	Y	Y	Y
Advanced 911 functionality	System keeps a mapping of ERL and MAC address to phone numbers to location in the hands free install mode which can be used by the enterprise administrator	Y	Y	Y
Anonymous Call Reject	Gives the user the ability to block anonymous incoming calls	Y	Y	Y
Audio Performance Reporting Local	The phone shall support real time and historic audio performance statistics in LCD	Y	Y	Y
Automated daylight saving setting support	The system allows the administrator to automatically configure for daylight savings settings thus ensuring that all the systems in the network need not be touched during time changes.	Y	Y	Y
Black List	Gives the user the ability to block incoming calls based on specific numbers or patterns - same as call restrictions/ Call Blocking	Y	Y	Y
Bridged Call Appearance - MASTER	The same phone number can appear and be answered on multiple phone sets.	Y	N	Y
Bridged Call Appearance - MWI	The bridged phone's message waiting status should be available on the display	Y	N	Y
Bridged Call Appearance - SLAVE	The same phone number can appear and be answered on multiple phone sets.	Y	N	Y
Call Blocking	Allows users to selectively block calls from user-defined origins (e.g. specific extensions, ANIs, off-net calls in general)	Y	Y	Y
Call Conference	Audio path for multiple parties on single call, established just via user keystrokes, no outside intervention. Three way conferences are allowed.	Y	Y	Y
Call Drop	Terminate the call without hanging up the receiver.	Y	Y	Y
Call duration display	Display the duration of the call on the terminal	Y	Y	Y
Call Forward all	User can direct all calls to another station or location also known as call forward universal	Y	Y	Y
Call forward busy	User can redirect calls to another station or location when busy.	Y	Y	Y
Call forward on no answer	User can redirect calls to another station or location after specified number of rings.	Y	Y	Y
Call Forward Programmable	Call forward can be programmed on the phone either via a soft key or via a button	Y	Y	Y
Call hold	A button on phone set that places incoming call on hold, retrieves call. The system also support call hold reminder to remind the user for held calls.	Y	Y	Y
Call Hold reminder	User is reminded of a held call with an audible beep after the configurable amount of time	Y	Y	Y
Call Number Suppression	Ability for the user to suppress caller ID information for outgoing calls	Y	Y	Y
Call park	A user can put a call on "hold" (to a virtual extension) and then pick up from another phone in the system. The system also support park timeouts when the call will come back to the original device.	Y	Y	Y
Call park retrieval	A user can retrieve a parked call by dialing the pickup extension from another phone	Y	Y	Y
Call Park Timeout	The call comes back to the original party once the park timer expires	Y	Y	Y
Call pickup	A user can answer a call ringing on the users extension from another device - also known as directed pickup.	Y	Y	Y
Call return	Calls back the last incoming number.	Y	Y	Y
Call Screening	Gives the user or the system to restrict/permit incoming calls through the system or to the user.	Y	Y	Y
Call transfer attended	Redirect an answered call to another user after announcing the caller. This includes restrictions on trunk-to-trunk transfers, etc.	Y	Y	Y
Call transfer unattended	Blindly redirect an answered call to another user	Y	Y	Y
Called ID - Called Party	Display the name of the called party.	Y	Y	Y
Called ID - Calling Party	Display the name and/or number of the calling party.	Y	Y	Y
Calling History - answered calls	User can view the last few missed calls, answered calls and dialed calls through the LCD on the phone	Y	Y	Y
Calling History - missed calls	User can view the last few missed calls, answered calls and dialed calls through the LCD on the phone	Y	Y	Y
Calling History - placed calls	User can view the last few missed calls, answered calls and dialed calls through the LCD on the phone	Y	Y	Y
Calling History - Display with Caller Name	User can view the last few answered/placed/missed callsthrough the LCD on the phone and get the caller name in the history instead of just the Number	N	N	Y
Camp On	Allows users to wait on line (in queue) if the requested resource (called party) is busy. It connects the users in queue by calling them back - on a first-come, first-served basis - when the requested resource becomes available	Y	Y	Y

Complementary Attendant Console Support	Support for software based complementary attendant console complementing the phone. The console running on a Windows based PC provides busy line field indication and speed dials for 100-300 extensions, allows the operator to initiate transfers, conference	Y	Y	Y
Complete mobility of users	The system can also work in a mode where the user can log in to any device to receive calls at any location for maximum mobility and productivity	Y	Y	Y
Default Dial Domain	Phone should recognize local gateways in diplan for the user	Y	Y	Y
Device Profile	When a user logs into his phone, his phone preferences may be retrieved from the network or his phone.	Y	Y	Y
DHCP capable phones	Phones, Consoles can be auto configured through a DHCP server aiding a no-touch deployment	Y	Y	Y
Direct phone to gateway dialing	Provides remote survivability in case of call processor failures, such that the phone dials out directly to PSTN and will be able to receive calls directly from the PSTN gateways.	Y	Y	Y
Direct transfer to voicemail	Automatically redirects all calls to voicemail with a single button push.	Y	Y	Y
Directed Pick-up	Enables the user to pick up his/her call from another phone by entering an authorization code	Y	Y	Y
Distinctive ringing	Ring with different characteristics, depending, for example, on whether a call is internal or external.	Y	Y	Y
Do not disturb	Phones can be made to appear out of service.	Y	Y	Y
DTMF tone Volume control	Ability to configure the volume for the DTMF tone on the phone	Y	Y	Y
Feature Access Codes	Feature access codes aids the use of analog sets and very basic phones in providing the same feature set as IP phones would get	Y	Y	Y
Flexible data/time display	Date/Time displays on the phones can be configured for providing displays based on user preference or based on location preference. Date formats include MMDDYY, DDMMYY, DDDMMYYY, MMDDYYYY and the time can be displayed on a 12 hour or 24 hour format	Y	Y	Y
Follow me	Allows multiple, disparate phones to ring simultaneously when one extension is dialed.	Y	Y	Y
Forwarded call indication	Display the number of the forwarding phone.	Y	Y	Y
Four Party Conference	Capability for four parties to conference	N	N	Y
Group Paging	Ability for one extension/user to intercom page a group of extensions	Y	Y	Y
Group Call Pickup	An extension in an area that can be answered by a group of phones by simply punching an feature access code	Y	Y	Y
Global Directory	Enterprise wide directory on the phone	Y	Y	Y
Hands free Installation of phones	The system can work in a mode where the only configuration for the system is done by the administrator and the phones will automatically detect their configuration (phone number, downloadere address, etc) just by plugging in the phone.	Y	Y	Y
Hands-Free Installation	Phone shall register to allow for Hands Free installation	Y	N	Y
Handsfree support	Incoming calls will be auto answered in the handsfree mode and the call will be answered on the speaker phone after a audible beep.	Y	Y	Y
Hard Attendant Console Support : Ability to monitor the phone	The console provides busy line field indication and speed dials for 100-300 extensions, allows the operator to initiate transfers, conferences, call parks and call holds directly through the console via programmable keys.	Y	Y	Y
Hard Attendant Console Support as a phone adjunct	Support for hardware attendant console complementing the phone. The console provides busy line field indication and speed dials for 100-300 extensions, allows the operator to initiate transfers, conferences, call parks and call holds directly through the	Y	Y	Y
Headset support	Plactronics head set support available on the phones for hands free communications	Y	Y	Y
Headset support on phones	Support for headsets and also integrated headset capability on phones where the set can be activated/deactivated on a single button press.	Y	Y	Y
Hot Ring Down Circuits (Hotline)	The phone connects to a predetermined number as soon as the user picks up the phone. Feature used often in elevators, common hotel areas etc	Y	Y	Y
Hotel ling	Ability for the user to login in from any IP terminal anywhere in the network and get the same feature set as his primary phone.	Y	Y	Y
Hunt Groups	Provide hunt log-in functionality with screen appearance for MWI for group messages	Y	Y	Y
Last number redial	Button causes last call to be re-dialed.	Y	Y	Y
Local Image storage in phone	Phones can store the excutable images locally and not go to a download server unless there is an update available.	N	N	Y
Message Waiting Indication	Message waiting indication on the phones indicated new messages and total messages	Y	Y	Y
Messaging waiting light	A visual indicator of a voicemail message. (I.e. blinking lamp)	Y	Y	Y
Missed call indicator	lists missed calls.	Y	Y	Y

Multiple call appearance	A single phone can have multiple, repeated instances of a single phone extension.	Y	Y	Y
Multiple ring patterns	The user can choose multiple ring patterns for different calls uniquely identifying different call types.	Y	Y	Y
Multiple ring styles	Allows selection of available rings.	Y	Y	Y
Music on hold	A caller hears music when placed on hold.	Y	Y	Y
Music on hold per customer group	A caller hears music when placed on hold and this can be configured per user or per customer group	Y	Y	Y
Mute	A mute button to disable the microphone.	Y	N	Y
One-button send all calls	Automatically redirects all calls to coverage with a single button push.	Y	N	Y
One-button speed dial	Programmable one-touch speed dial on a phone set.	Y	N	Y
One-button voice mail	Programmable one-touch voice-mail on a phone set.	Y	Y	Y
P-Asserted ID	Add existing VCX 31xx p-Asserted ID functionality	Y	Y	Y
Phone DTMF Security	DTMF monotone on phone being a security feature to prevent malicious parties decoding the tones	Y	Y	Y
Phone Software Updates	Phone code stored in the phone's volatile memory can be refreshed using download mechanism when a new version is detected	Y	Y	Y
Priority ringing	Distinctive ringing for calls based on internal calls, external calls or anonymous calls.	Y	Y	Y
Programmable Buttons	Ability to customize the buttons based on user preferences	Y	N	Y
QOS Tagging (TOS Byte)	Tags IP packets with so that they can be prioritized from other traffic types ensuring high voice quality.	Y	Y	Y
Remote Call Forward	Needs update	Y	Y	Y
Ringer Cadence Tone	User can configure the ring tones for incoming calls, priority calls, distinctive ringing	Y	Y	Y
Send Beep	User/extension can send a notification to another user/extension which plays a beep tone on the destination extension and gives the originating party ID	Y	Y	Y
Silent Monitoring/ Barge In	Provide interactive user interface on phones to allow silent monitor & barge-in features	Y	N	Y
Speed Dial BLF	Speed Dials phones have busy line field functionality, thus displaying the status of the extension mapped on the device	Y	Y	Y
Speed Dialing	Ability to speed dial either through buttons on the phone or through feature codes.	Y	Y	Y
Toll Screening	Access list to restrict the users ability to make toll calls (Class of Service Feature)	Y	Y	Y
User Directory	The site directory is available on the phone and through the user web portal. The phone directory is searchable and can be used directly to initiate calls.	Y	Y	Y
Volume control	For speaker, handset, ringer.	Y	Y	Y
Warm Ring Down Circuits (Warmline)	The phone connects to a predetermined number if the user picks up the phone and does not dial a number within a pre-determined period of time.	Y	Y	Y