



## I N D E X

---

### Numerics

7931 [196](#)  
911 services [735](#)

---

### A

abbreviated dialing [902](#)  
account code entry [877](#)  
Acct soft key [876](#)  
ad hoc conferencing [666](#)  
after-hour exempt (voice register pool) command [496](#)  
after-hour exempt command [495](#)  
after-hours block pattern command [492](#)  
after hours call blocking  
    configuring exception for dial peer [493](#)  
    configuring exception for SIP phone [494, 495](#)  
after-hours date command [493](#)  
after-hours day command [493](#)  
after-hours toll bar [485](#)  
agent availability, ephone hunt groups [593](#)  
agent status control, hunt groups [595](#)  
alerting (call stage) [876](#)  
allow-connections command [114, 550](#)  
allow-connections sip-to-sip command [969](#)  
allow subscribe command [855](#)  
allow watch command [849, 972, 975](#)  
analog phones [173](#)  
Answer soft key [876](#)  
API, XML [1005](#)  
application (voice register global) command [158](#)  
application command [242](#)  
archives, downloading for Cisco Unified CME [88](#)

associate application command [334](#)  
associate application sccp command [681](#)  
associate ccm command [332, 681](#)  
associate profile command [332](#)  
ATA (Cisco Analog Telephone Adapters) [173](#)  
audio fallback, for video calls [916](#)  
audio file for MOH [90](#)  
audio paging [831](#)  
authenticate command [155](#)  
authenticate credential command [130, 856](#)  
authenticate ood-refer command [129](#)  
authenticate presence command [856](#)  
authentication, *See* phone authentication  
authentication for HTTP server [361](#)  
authentication string, entering on phone [452](#)  
auth-mode command [440, 450](#)  
auth-string command [450](#)  
auto-answer, headset [791](#)  
auto-answer command [804](#)  
auto assign command [249](#)  
auto-cut-through command [823](#)  
auto-line command [481](#)  
auto logout command [596](#)  
automatic agent status not-ready, ephone hunt groups [596](#)  
automatic line selection [479](#)  
automatic registration blocking [147](#)  
auto-reg-ephone command [147](#)

---

### B

b2bua command [394](#)  
bandwidth, for video [923](#)  
bind interface command [679](#)

- bit-rate, setting maximum value [922](#)
  - BLF for a phone [172](#)
  - BLF for phone line [172](#)
  - blf-speed-dial command [851, 853](#)
  - BLF status [844](#)
  - blocking
    - automatic registration [147](#)
    - caller ID [485](#)
    - call park [507](#)
    - calls [485](#)
    - call transfer [521](#)
    - features [878](#)
    - local directory [707](#)
  - bulk command [142](#)
  - bulk-loading speed-dial numbers [904](#)
  - bulk registration
    - configuring [141](#)
    - disabling SIP proxy registration [192](#)
  - bulk-speed-dial list command [905](#)
  - bulk-speed-dial-prefix command [905](#)
  - busy call forwarding [518](#)
  - button command [208](#)
    - assigning dns to phones [181](#)
    - overlaid ephone-dns [636](#)
  - button-layout command [944](#)
- 
- C
- CA (certification authority) [414](#)
  - cadence command [677](#)
  - Callback soft key [876](#)
  - call blocking
    - based on date and time [485](#)
    - override [486](#)
  - call-coverage features [581](#)
  - caller-id block command [659](#)
  - caller ID blocking [658](#)
  - caller-id command [812](#)
  - call-forward all command [543](#)
    - call-forward b2bua all command [565](#)
    - call-forward b2bua busy command [387, 565](#)
    - call-forward b2bua mailbox command [387, 565](#)
    - call-forward b2bua noan command [388, 565, 731](#)
    - call-forward b2bua unreachable command [566](#)
    - call-forward busy command [543](#)
    - call-forward busy command, overlaid ephone-dns [635](#)
    - call forwarding
      - blocking local extension forwards [543](#)
      - H.450.3 standard [521](#)
      - selective [518](#)
      - transcoding between G.726 and G.711 [324](#)
    - call-forward max-length command [543](#)
    - call-forward night-service command [543](#)
    - call-forward noan command [543](#)
    - call-forward noan command, overlaid ephone-dns [635](#)
    - call-forward pattern command [542](#)
    - call-forward system command [293](#)
    - call hunt [583](#)
    - calling-number local command [552](#)
    - callmon command [969](#)
    - call park
      - alternate target [505](#)
      - blocking [507](#)
      - call-park slots [504](#)
      - dedicated slots [506](#)
      - directed [504](#)
      - examples [513](#)
      - monitoring call-park slots [504](#)
      - redirect [507](#)
      - reminder ring [505](#)
      - timeout interval [505](#)
    - call-park system redirect command [511](#)
    - call pickup
      - examples [639](#)
      - group numbers [584, 609](#)
    - call routing, loopback [809](#)
    - call setup, video [917](#)
    - call start slow command [918](#)

- call transfer [568](#)
  - blocking [521](#)
  - consult transfer for direct station select [520](#)
  - direct station select [520](#)
  - H.450.2 standard [521](#)
  - H.450 standards [520](#)
  - transcoding between G.726 and G.711 [324](#)
- call type [916](#)
- call waiting
  - beep [586](#)
  - overlaid ephone-dns [601](#)
  - ring [587](#)
- call-waiting [614](#)
- call-waiting beep command [612](#)
- call-waiting ring command [587, 612](#)
- CAPF (certificate authority proxy function) [415](#)
- capf-auth-str command [439](#)
- capf-server command [449](#)
- cert-enroll-trustpoint command [449](#)
- certificate [413](#)
- certificate authority proxy function, *See* CAPF
- certificate revocation list, *See* CRL
- certificate trust list, *See* CTL
- certification authority, *See* CA
- cert-oper (CAPF-server) command [451](#)
- cert-oper (ephone) command [440](#)
- CFwdALL soft key [876](#)
- channel huntstop [584](#)
- CIF (common intermediate format) [914](#)
- Cisco BTS Softswitch (Cisco BTS) [522, 523, 526, 528](#)
- Cisco IOS softwrae [71](#)
- Cisco IPC Express [62](#)
- Cisco phone firmware
  - troubleshooting upgrade [106](#)
  - upgrading SIP [95](#)
  - verifying firmware version on an IP phone [106](#)
- Cisco PSTN Gateway (Cisco PGW) [522, 526, 528](#)
- Cisco QoS [73](#)
- Cisco Unified CME for SIP phones
  - applying translation rules [301](#)
  - configuring bulk registration [141](#)
  - configuring call forwarding [564](#)
  - configuring call transfer [568](#)
  - configuring dial-plan patterns [292](#)
  - configuring hunt stop [607](#)
  - configuring voice hunt groups [623](#)
  - configuring voice mailbox [386](#)
  - creating and applying templates [932](#)
  - creating DNs [181](#)
  - disabling SIP proxy registration [192](#)
  - generating configuration profiles [270](#)
  - RFC 2833 dual tone DTMF MTP passthrough [378](#)
  - SIP MWI - QSIG translation [380](#)
- Cisco Unified Communications Manager
  - interworking with Cisco Unified CME [558, 562](#)
  - network scenario [534, 535](#)
  - no support for H.450 standards [522](#)
- Cisco Unified IP Phone 7931G [196](#)
- Cisco Unified Video Advantage [913](#)
- Cisco Unity
  - configuring SIP dial peer for [390](#)
  - integration [377](#)
- Cisco Unity Connection integration [377](#)
- Cisco Unity Express
  - configuring SIP dial peer for [393](#)
  - integration with Cisco Unified CME [377](#)
  - transcoding between G.726 and G.711 [324](#)
- Cisco VG 224 [173](#)
- class of restriction (COR) [487](#)
- clear telephony-service xml-event-log command [1011](#)
- clid strip command [660](#)
- clid strip name command [660](#)
- client identifier command [119](#)
- cli write command [254](#)
- clock summer-time command [122](#)
- clock timezone command [122](#)
- cnf-file command [148](#)
- cnf-file location command [148](#)

- cnf-file perphone command 438
  - codec (dspfarm-profile) command 334
  - codec command 195, 217, 245, 394, 680, 976
  - codec g729r8 dspfarm-assist command 175, 325
  - codec preference command 456
  - common intermediate format, see CIF 914
  - conference add-mode command 686
  - conference ad-hoc command 685
  - conference admin command 687
  - conference drop-mode command 686
  - conference hardware command 683
  - conference-join custom-cptone command 680
  - conference-leave custom-cptone command 680
  - conference meetme command 685
  - conferencing 665
    - end-of-conference options 667
    - examples 689
    - gain control 667
    - initiator dropoff control 667
    - transcoding between G.729 and G.711 for ad hoc calls 324
  - configuration
    - tasks
      - install software 72
  - configuration files
    - externally stored 138, 266
    - GUI 365
    - per phone 138, 266
    - per phone type 138, 266
  - configuring Cisco QoS 73
  - configuring VLANs 73
  - Confrn soft key 876
  - connected (call stage) 876
  - connection plar opx command 199
  - COR (class of restriction) 487
  - cor command 490
  - corlist command 488
  - CPU consumption, for video calls 915
  - create cnf-files command 95, 105
  - create profile command 97, 101, 192, 271, 854
  - credentials command 447
  - CRL (certificate revocation list) 414
  - crypto pki authenticate command 346, 347, 433, 435, 459
  - crypto pki enroll command 346, 433
  - crypto pki server command 341, 425, 427, 430
  - crypto pki trustpoint command 343, 344, 347, 427, 429, 432, 435, 458
  - CTL (certificate trust list) 414
  - ctl-client command 442, 445
  - ctl-service admin command 447
  - customer administrator GUI access setup
    - using the CLI 367
    - using the GUI 366
  - customer administrator GUI file 365
- 
- ## D
- database level command 342, 426
  - database url command 342, 426
  - date-format command 145, 156
  - debug cch323 video command 924
  - debug dspfarm command 352
  - debug ephone detail command 924
  - debug ephone message command 924
  - debug ephone mtp command 352
  - debug ephone register command 924
  - debug ephone video command 924
  - debug h225asn1 command 924
  - debug h245 asn1 command 924
  - debug sccp command 352
  - debug tftp event command 106
  - debug voip ccapi inout command 924
  - dedicated call-park slots 506
  - default-router command 117, 119
  - description (ephone-hunt) command 619
  - description command 391, 393, 945, 946
  - destination-pattern command 245, 392, 393
  - device-security-mode command 437, 439

- DHCP server
    - changing TFTP address [127](#)
    - option 150 and configuration files [127](#)
  - DHCP service
    - description [110](#)
    - setting up [116](#)
  - dialing plans [287](#)
  - dial-peer hunt command [599](#)
  - dial-peer hunt for ephone-dn dial peers
  - dial-peer preference [583](#)
  - dial peers
    - ephone-dns [167](#)
    - for call transfer and forwarding [530](#)
  - dial-peer voice command [391, 393](#)
  - dialplan command [188](#)
  - dialplan-pattern command [292, 293](#)
  - dial plans for SIP phones [176](#)
  - dial tone, secondary [290](#)
  - DID (Direct Inward Dialing) [289](#)
  - digital certificate [413](#)
  - digital certificates [413](#)
  - digital signature [413](#)
  - digit collect kpml command [190](#)
  - directed call park [504](#)
  - directed call pickup, *See* call pickup
  - directories [707](#)
  - directory command [710](#)
  - directory entry command [712](#)
  - directory numbers for SIP phones [181](#)
  - direct station select [897](#)
  - direct station select call transfer [520](#)
  - display-logout command [619](#)
  - distinctive ringing [865](#)
  - DND (do not disturb) [730](#)
  - dnd command [731](#)
  - DND soft key [596, 732, 876](#)
  - dn-webedit command [364](#)
  - do not disturb (DND) [730](#)
  - downloading files for Cisco Unified CME [88](#)
  - dspfarm connection interval command [353](#)
  - dspfarm profile command [333](#)
  - dspfarm rtp timeout command [353](#)
  - DSP farms, usage considerations [325](#)
  - dspfarm transcoder maximum sessions command [336, 337](#)
  - DSPs (digital signal processors) [323, 326](#)
  - dsp services dspfarm command [331, 335, 676](#)
  - DSS (direct station select) service [897](#)
  - dst auto-adjust command [156](#)
  - dst command [156](#)
  - DTMF integration [378](#)
  - DTMF integration patterns for voice mail [388](#)
  - DTMF relay
    - for H.323 networks [111](#)
    - SIP NOTIFY [393](#)
    - SIP trunks [124](#)
  - dtmf-relay command [184, 976](#)
  - dtmf-relay h245-alphanumeric command [124, 245](#)
  - dtmf-relay rtp-nte command [125, 392](#)
  - dtmf-relay sip-notify command [125, 394](#)
  - dual-line ephone-dn [168](#)
  - dual-number ephone-dns [170](#)
  - dualtone conference command [677](#)
  - dynamic membership, hunt groups [595](#)
- 
- E
  - E.164 number registration
    - ephone-hunt group pilot number [618](#)
    - SIP [112](#)
  - elin command [747](#)
  - emergency response callback command [749](#)
  - emergency response location command [751, 752, 753](#)
  - emergency response zone command [748](#)
  - emptycapability command [455](#)
  - encryption [412](#)
  - EndCall soft key [876](#)
  - endpoint capability match [916](#)
  - enhanced 911 services [735](#)

enrollment terminal command [435](#)  
 enrollment url command [344, 427, 429, 432](#)  
 ephone command [180](#)  
 ephone-dn command [104, 178, 711](#)  
 ephone-dn dial-peer hunt  
 ephone-dns
 

- assigning to phone (button command) [181](#)
- definition [49](#)
- dual-line [168](#)
- dual-number [170](#)
- hunt groups [587](#)
- overlaid [171, 599](#)
- secondary number [170](#)
- shared [170](#)
- single-line [168](#)
- two ephone-dns with one number [169](#)
- types [167](#)

 ephone-hunt command [616](#)  
 ephone hunt groups
 

- agent availability options [593](#)
- agent status control [595](#)
- automatic agent status not-ready [596](#)
- dynamic membership [595](#)
- examples [640](#)
- final number [588](#)
- hops [587](#)
- longest-idle groups [591](#)
- peer groups [590](#)
- sequential groups [589](#)

 ephone-hunt login command [620](#)  
 ephones
 

- basic configuration [179](#)
- definition [49](#)
- enabling video [920](#)
- setting video bandwidth [923](#)

 extending overlaid ephone-dn calls [603](#)  
 extension assigner feature [233](#)  
 extension-assigner tag-type command [247](#)  
 extension mobility [763](#)

external-ring command [872](#)

## F

FAC (feature access code) [775](#)  
 fac command [778](#)  
 far-end camera control, see FECC [914](#)  
 fastdial command [902, 908](#)  
 fax relay [783](#)  
 feature access code (FAC) [775](#)  
 feature blocking [878](#)  
 feature buttons
 

- fixed [940](#)
- URL provisioning for [942](#)

 features blocked command [887](#)  
 FECC (far-end camera control) [914](#)  
 filename command [187](#)  
 files, downloading for Cisco Unified CME [88](#)  
 file text command [97, 101, 271](#)  
 final command [617, 626](#)  
 firmware files
 

- phone [88](#)
- video [914](#)

 fixed line/feature button layout [940](#)  
 Flash soft key [876, 877](#)  
 flow-around mode, video stream [917](#)  
 flow control messages [917](#)  
 flow-through mode, video stream [917](#)  
 forwarding, *See* call forwarding  
 forwarding calls using local hairpin routing [551](#)  
 forward local-calls command [543](#)  
 frequency command [677](#)  
 from-ring command [619](#)  
 fwd-final command [618](#)  
 fxo hook-flash command [885](#)  
 FXS ports [173](#)

## G

- G.711 conference calls [666](#)
- G.729r8 codec
  - remote phones [175, 325](#)
  - transcoding [323](#)
- gain control for conferences [667](#)
- gatekeeper, H.323
  - not registering ephone hunt-group pilot number [618](#)
  - number format restrictions [288](#)
- gcid command [969](#)
- generating SIP profiles [270](#)
- GPickUp soft key [876](#)
- grant auto command [342, 427, 431](#)
- group call pickup [584](#)
- group pickup, *See* call pickup
- GUI (graphical user interface)
  - customer administrator setup [366](#)
  - how to access [364](#)
  - phone user setup [368](#)
  - prerequisites [359](#)
  - restrictions [360](#)
  - setting up [361](#)
  - system administrator setup [363](#)

## H

- H.225 debug messages [924](#)
- H.245 debug messages [924](#)
- H.261 video codec [914](#)
- H.263 video codec [914](#)
- H.323-to-H.323 connections, enabling [549](#)
- H.323 video endpoints [916](#)
- H.450.12 supplementary services
  - description [525](#)
- H.450.2 supplementary services [521](#)
  - description [521](#)
  - enabling [537](#)
  - handling non-H.450.2 calls [525](#)
  - network requirements [523](#)
- H.450.3 supplementary services [521](#)
  - description [521](#)
  - enabling [537](#)
  - handling non-H.450.3 calls [525](#)
  - network requirements [523](#)
- H.450 standards
  - call forwarding [518](#)
  - call transfer [520](#)
- H.450 tandem gateways
  - description [528](#)
  - enabling H.323-to-H.323 connections [549](#)
  - licensing [528](#)
- h225 h245-address on-connect (h323 voice-service) command [560](#)
- h225 h245-address on-connect (voice-class) command [561](#)
- h323 command [454](#)
- hairpin call routing
  - description [525](#)
  - enabling H.323-to-H.323 connections [549](#)
  - network requirements [527](#)
  - restrictions [549](#)
- headset auto-answer [791](#)
- headset auto-answer command [794](#)
- HLog soft key [596, 876](#)
- hold (call stage) [876](#)
- hold-alert command [614, 870](#)
- Hold soft key [876](#)
- hookflash functionality [877](#)
- hops command [617, 626](#)
- host command [119](#)
- HTTP path, setting [361](#)
- HTTP server, enabling [361](#)
- hunt, *See* call hunt
- hunt-group logout command [596, 620](#)
- hunt groups [587](#)
- huntstop [583, 607](#)
- huntstop, channel [584](#)

huntstop channel command [605](#)  
 huntstop channel command, overlaid ephone-dns [635](#)  
 huntstop command [197, 205, 583, 608](#)  
 huntstop command, overlaid ephone-dns [599, 635](#)

---

I

id command [183, 804](#)  
 idle (call stage) [876](#)  
 incoming alerting command (redundant router) [151, 152](#)  
 in key systems [208](#)  
 input gain command [823](#)  
 installing Cisoc IOS software [71](#)  
 installing hardware [69](#)  
 intercom command [802](#)  
 intercom lines [799](#)

- configuring for SCCP phones [801](#)
- configuring for SIP phones [803](#)

 interface command [121](#)  
 international languages and tones
 

- alternative locales [308](#)
- user-defined locales [308](#)

 interoperability with other systems [532](#)  
 intersite calling plan [288](#)  
 ip dhcp pool command [117, 119, 128](#)  
 ip helper-address command [121](#)  
 ip http authentication command [362](#)  
 ip http path flash command [362, 899](#)  
 ip http server command [362, 899](#)  
 IP phone
 

- configuring phone options [942](#)
- programmable vendor parameters [941](#)

 ip source-address (credentials) command [447](#)  
 ip source-address command [339](#)  
 ip source-address command (redundant router) [144, 151, 152](#)  
 issuer-name command [426](#)  
 ixi application cme command [1008](#)  
 ixi transport http command [1007](#)

---

 K

keepalive command [149, 973](#)  
 keepalive retries command [332](#)  
 keep-conference (voice register pool) command [674](#)  
 keep-conference command [672](#)  
 keygen-retry command [451](#)  
 keygen-timeout command [451](#)  
 keypad-normalize command [181](#)  
 keyswitch [50, 196](#)  
 key system [50, 196](#)  
 KPML [176](#)  
 kron occurrence command [255](#)  
 kron policy-list command [254](#)

---

 L

label command [948, 950](#)  
 language support [307](#)  
 license requirements [49](#)  
 lifetime certificate command [426, 431](#)  
 line buttons
 

- fixed [940](#)
- phone labels [941](#)

 line selection, automatic [479](#)  
 list command [616, 625](#)  
 live-feed music on hold [819](#)  
 load (telephony service) command [95, 104](#)  
 load-cfg-file command [438](#)  
 load command [97, 144, 154](#)  
 local directory [707](#)  
 locales
 

- multiple [308](#)
- system-defined [308](#)
- user-defined [308](#)

 locally significant certificate, *See* LSC  
 local speed dial [898](#)  
 login (telephony-service) command [493](#)  
 Login soft key [876](#)



log table max-size command [1010](#)  
 log table retain-timer command [1010](#)  
 longest-idle ephone hunt groups [591](#)  
 loopback call routing [809](#)  
 loopback-dn command [813](#)  
 LSC (locally significant certificate) [415](#)

## M

mac-address command [180, 207, 252](#)  
 mailbox-selection (dial-peer) command [384](#)  
 mailbox-selection (ephone-dn) command [386](#)  
 mailbox selection policy [383, 384](#)  
 manufacture-installed certificate, *See* MIC  
 max-conferences command [670](#)  
 max-dn command [144, 154](#)  
 max-ephones command [144](#)  
 maximum bit-rate command [922](#)  
 maximum conference-party command [680](#)  
 maximum sessions command [334, 680](#)  
 max-pool command [154](#)  
 max-redirect command [620](#)  
 max-subscription command [847](#)  
 max-timeout command [617](#)  
 media encryption [409](#)  
 media messages [916](#)  
 media path setup [917](#)  
 media termination point, *See* MTP  
 meet-me conferencing [668](#)  
 messages
 

- debug [924](#)
- flow control [917](#)
- media [916](#)

 MIBs [54](#)  
 MIC (manufacture-installed certificate) [415](#)

- configuring [434](#)

 mode command [97, 154, 854](#)  
 mode ra command [430](#)  
 MOH (music on hold)

audio file to download [90](#)  
 from a live feed [819](#)  
 from an audio file [820](#)  
 transcoding between G.726 and G.711 [324](#)  
 moh (telephony-service) command [821](#)  
 moh command [825](#)  
 monitoring call-park slots [504](#)  
 monitor-line button [896](#)  
 monitor mode for shared lines [172](#)  
 MTP (media termination point)
 

- remote phones [175](#)
- transcoding for video [915](#)

 mtp command [217](#)  
 multicast moh command [821](#)  
 multicast-moh command [822, 826](#)  
 multi-party ad hoc conferencing [667](#)  
 MWI
 

- configuring Subscribe notify [399](#)
- configuring unsolicited notify [399](#)
- defining MWI outcall [398](#)
- prefix specification for SIP [401](#)

 mwi command [399, 401](#)  
 mwi-line command [208, 395, 396](#)  
 mwi prefix command [402](#)  
 mwi reg-e164 command [398](#)  
 mwi-server command [400](#)  
 mwi stutter command [398](#)  
 mwi-type command [198, 397](#)

## N

name command [179, 711, 717](#)  
 network command [117](#)  
 network-locale (ephone-template) command [317](#)  
 network-locale command [316](#)  
 network locales
 

- alternative [308](#)
- system-defined [308](#)
- user-defined [308](#)

network parameters [109](#)  
 NewCall soft key [876](#)  
 night service [597](#)  
     examples [643](#)  
     notification [597](#)  
     parameters [597](#)  
 night-service bell (ephone) command [631](#)  
 night-service bell (ephone-dn) command [630](#)  
 night-service call forwarding [518](#)  
 night-service code command [630](#)  
 night-service date command [628, 629](#)  
 night-service day command [628, 629](#)  
 night-service everyday command [628, 629](#)  
 night-service weekday command [630](#)  
 night-service weekend command [630](#)  
 no-answer call forwarding [518](#)  
 no ephone command [100](#)  
 no-reg (ephone-hunt) command [618](#)  
 no-reg command [193](#)  
 no supplementary-service sip moved-temporary  
 command [969](#)  
 notification, night-service [597](#)  
 notification, on-hold [866](#)  
 notify telephone-event command [115, 125](#)  
 not-ready, automatic, ephone hunt groups [596](#)  
 no upgrade command [98](#)  
 no vad command [394](#)  
 no voice register pool command [103](#)  
 NTP (Network Time Protocol) [111, 138](#)  
 ntp server command [122](#)  
 ntp-server command [157](#)  
 number (voice register dn) command [182, 607, 804](#)  
 number (voice register pool) command [184, 804](#)  
 number command [179](#)  
 number plan [288](#)

---

## O

one-quarter common intermediate format, see QCIF [914](#)

on-hold notification [866](#)  
 OOD-R (out-of-dialog refer) [112](#)  
 open logical channel (OLC) [917](#)  
 operation command [824](#)  
 option 150 and configuration files, changing TFTP  
 address [127](#)  
 option 150 ip command [117, 119, 128](#)  
 overlaid ephone-dns [171, 599](#)  
     call waiting [601](#)  
     definition [171](#)  
     examples [644](#)  
     huntstop [599](#)  
     preference [599](#)  
     restrictions [633](#)  
     rollover to another button [603](#)  
 override for after-hours toll bar [485](#)

---

## P

packet voice/data modules (PVDM) [326](#)  
 paging [831](#)  
 paging command [834](#)  
 paging-dn command [836](#)  
 paging group command [836](#)  
 parallel voice hunt groups [592](#)  
 param ea-password command [242](#)  
 paramspace callsetup after-hours-exempt command [494](#)  
 paramspace command [243](#)  
 parking calls [503, 504](#)  
 park-slot command [510](#)  
 Park soft key [876](#)  
 pattern command [187](#)  
 pattern direct command [389](#)  
 pattern ext-to-ext busy command [390](#)  
 pattern ext-to-ext no-answer command [390](#)  
 pattern trunk-to-ext busy command [390](#)  
 pattern trunk-to-ext no-answer command [390](#)  
 PBX model [289](#)  
 PBX system [50, 177](#)

- peer ephone hunt groups 590
  - per-phone configuration files 138, 266
  - personal speed dial 901
  - phone authentication 409
    - authentication string entering on phone 452
    - CA configuration 424
    - CAPF server configuration 448
    - certificates 413
    - Cisco Unified CME server function configuration 431
    - configuration tasks 424
    - CTL client and CTL provider configuration 441, 442
    - examples 460
    - MIC importing 434
    - PKI 413
    - RA configuration 428
    - telephony-service security configuration 436
    - telephony-service security parameters 436
  - phone-key-size command 450
  - phone labels 941
  - phone number plan 288
  - phone-redirect-limit command 568
  - phones
    - analog 173
    - basic configuration 165
    - configuration files 265
    - remote teleworker 174
  - phone screen
    - custom background images 940
    - header bar display 940
    - system message display 941
  - phone-specific parameters for individual SIP phones 183
  - phone user GUI access setup 368
    - using CLI 369
    - using GUI 368
  - pickup, *See* call pickup
  - pickup-group command 610
  - PickUp soft key 876
  - pilot command 616, 625
  - PIN (personal identification number) 486
  - pin command 495
  - PKI (Public Key Infrastructure) 413
  - policy-list command 255
  - port (CAPF-server) command 449
  - preference (ephone-dn) command 583, 605
  - preference (ephone-hunt) command 618
  - preference (voice hunt group) command 626
  - preference, dial-peer 583
  - preference command 197, 607
  - preference command, overlaid ephone-dns 599, 634
  - presence call-list command 847, 851, 853
  - presence command 847, 855
  - presence enable command 847
  - presence service 843
  - present-call command 619
  - private lines to Public Switched Telephone Network (PSTN) 173
  - profile-identifier register command 682
  - provision-tag command 252
- Q
- 
- QCIF (one-quarter common intermediate format) 914
  - qsig decode command 554
- R
- 
- RA (registration authority) 414
  - ready/not-ready status, hunt groups 595
  - Real-Time Transport Protocol, *See* RTP
  - rebooting phones 277
  - Redial soft key 876
  - refer-ood enable command 129
  - refer target dial-peer command 975
  - regenerate command 444, 446
  - register id command 973
  - register support, SIP 112
  - registrar command 115, 125, 142

registrar server command [115, 970](#)  
 registration, blocking automatic [147](#)  
 registration, video-enabled endpoints [914](#)  
 registration authority, *See* RA  
 relay, DTMF [111](#)  
 reminder, call-park [505](#)  
 reminder, on-hold [866](#)  
 remote phones [174](#)  
 request outstanding command [1007](#)  
 request timeout command [1007](#)  
 reset (voice register global) command [282, 284](#)  
 reset (voice register pool) command [98](#)  
 resetting all SIP phones [281](#)  
 resetting phones  
     description [277](#)  
     reset (ephone) command [279, 281](#)  
 resolution, for video [914](#)  
 response size command [1007](#)  
 response timeout command [1008](#)  
 restart command [854](#)  
 restarting phones  
     description [277](#)  
     restart (ephone) command [280](#)  
 retry register command [115, 125](#)  
 revocation-check command [343, 345, 430, 433, 435, 458](#)  
 RFC 2833 DTMF MTP passthrough [378](#)  
 ring command [868](#)  
 ringing, distinctive [865](#)  
 ringing call stage [876](#)  
 ring number command (redundant router) [153](#)  
 rollover button for overlaid ephone-dns [603](#)  
 routing, loopback [809](#)  
 RSA key pair [414](#)  
 rsakeypair command [343, 345, 430, 433](#)  
 RTP (Real-Time Transport Protocol) [917](#)  
 RTP packets [918](#)  
 rule command [296](#)

---

## S

SAST (system administrator security token)  
 sast1 trustpoint command [442, 445](#)  
 sast2 trustpoint command [443, 445](#)  
 SCCP (Skinny Client Control Protocol)  
     analog phones [173](#)  
     firmware [88](#)  
     security [409](#)  
 sccp blf-speed-dial retry-interval command [855](#)  
 sccp ccm command [335, 678](#)  
 sccp ccm group command [332, 678, 681](#)  
 sccp command [679](#)  
 sccp ip precedence command [353](#)  
 sccp local command [335, 678](#)  
 SCCP video endpoints [916](#)  
 sdsfarm conference mute-on command [683](#)  
 sdsfarm tag command [340, 683](#)  
 sdsfarm transcode sessions command [339](#)  
 sdsfarm units command [683](#)  
 secondary dial tone [290](#)  
 secondary-dialtone command [304](#)  
 secondary numbers [170](#)  
 secondary start command [619](#)  
 secure real-time transport protocol [409](#)  
 secure-signaling trustpoint command [437](#)  
 secure transcoding [326, 422](#)  
 security, *See* phone authentication  
 seized (call stage) [876](#)  
 selective call forwarding [518](#)  
 sequential ephone hunt groups [589](#)  
 serial-number command [430](#)  
 server (CTL-client) command [443](#)  
 server cme command [443, 445](#)  
 server command [855](#)  
 server-security-mode command [438](#)  
 service command [242, 244](#)  
 service dhcp command [121](#)  
 service directed-pickup command [609](#)

- service dss command 900
- service local-directory command 710
- service phone command 957, 958
- service phone videoCapability command 919
- Session Initiation Protocol, *See* SIP
- session protocol command 394
- session-server command 971, 976
- session target command 245, 392, 394
- session transport protocol 177
- shared ephone-dns 170
- shared-line overlays 600
- shared lines 288
- show call active video command 924
- show call prompt-mem-usage command 563
- show capf-server auth-string command 441
- show crypto pki certificates command 431, 434
- show crypto pki server command 431
- show ctl-client command 446
- show dspfarm sessions active command 352
- show dspfarm sessions command 350
- show dspfarm sessions summary command 351
- show ephone-dn park command 513
- show ephone offhook command 924
- show ephone phone-load command 106, 914
- show ephone registered command 913, 920, 924
- show fb-its-log command 1011
- show rtp connections command 924
- show running-config command 923
- show sccp command 350
- show sccp connections command 350
- show sccp connections details command 352
- show sdsfarm command 350
- show sdsfarm sessions command 328
- show sdsfarm units command 328
- show sip-ua register status command 126, 127
- show sip-ua statistics command 126, 127
- show sip-ua status command 126
- show sip-ua timers command 126, 127
- show telephony-service bulk-speed-dial command 906
- show telephony-service security-info command 441
- show telephony-service tftp-bindings command 269
- show voice dsp command 328
- show voice emergency callers command 754
- show voice register profile text command 272
- show voice register tftp-bind command 272
- show voip rtp connections command 563, 918
- signal immediate command 824
- signal loop-start live-feed command 824
- signature 413
- single in-line memory module (SIMM) sockets 326
- single-line ephone-dn 168
- SIP (Session Initiation Protocol)
  - endpoints 915
  - register support 112
- sip command 114, 970
- SIP dial plans 176
- SIP MWI - QSIG translation 380
- SIP phone firmware, upgrading 95
- SIP-to-SIP call forwarding 564
- sip-ua command 129, 142, 400, 846
- slots, call-park 504
- slow start, for video 918
- soft key
  - display 875
  - DND 596
  - feature blocking 875
  - HLog 596
- softkeys alerting command 879
- softkeys commands 875
- softkeys connected (voice register template) command 882
- softkeys connected command 687, 879
- softkeys hold command 687, 880, 882
- softkeys idel (voice register template) command 882
- softkeys idle command 687, 880
- softkeys ringing command 880
- softkeys seized (voice register template) command 882
- softkeys seized command 687, 880

software, downloading for Cisco Unified CME 88

source-addr command 449

source-address command 154

speed dial 893, 906

- bulk loading 904
- buttons on phones 902
- local 898
- monitor-line button 896
- personal 901

speeddial.xml file 894

speed-dial command 903, 907

spfarm profile command 680

squeeze command 147, 267

srst dn line-mode command 995

srst dn template command 995

srst ephone description command 996

srst ephone template command 995

srst mode auto-provision command 995

S RTP 409

srtsp fallback command 454, 456

subnet command 750

supplementary-service h225-notify cid-update (dial-peer) command 561

supplementary-service h225-notify cid-update (voice-service) command 560

supplementary-service h450.12 (dial-peer) command 549

supplementary-service h450.12 (voice-service) command 548

supplementary-service h450.2 (dial-peer) command 540

supplementary-service h450.2 (voice-service) command 540

supplementary-service h450.3 (dial-peer) command 541

supplementary-service h450.3 (voice-service) command 540, 552

supplementary-service h450.7 command 554, 556

supplementary-service media-renegotiate command 454

supplementary-service qsig call-forward command 554, 556

supplementary-service sip command 557

switchback interval command 333

switchback method command 333

switchover method command 333

system administrator GUI access setup 363

system administrator security token, *See* SAST

system-defined locales 308

system message command 951

---

## T

TACACS authentication for HTTP server 361

TAPI (Telephony Application Programming Interface) software 91

telephony-service ccm-compatible (h323 voice-service) command 560

telephony-service ccm-compatible (voice-class) command 561

telephony service command 94, 104

telephony-service security parameters 436

teleworker remote phones 174

template command 570, 933

templates, creating and applying 932

tftp-path command 154

TFTP server

- changing address 127
- storing configuration files 138, 265

tftp-server-credentials trustpoint command 437

tftp-server flash command 144

three-party ad hoc conferencing 666

three-party conferencing, *See* conferencing

time-format command 145, 156

timeout command 617, 626

timeouts busy command 149

timeouts interdigit (telephony-service) command 149

timers register command 116, 126

time-webedit command 364

time-zone command 146

timezone command 156

TLS (transport layer security) 415

toll bar, after-hours 485

toll bar override 485

transcoding support [323](#)  
 transfer, *See* call transfer  
 transfer max-length command [521, 546](#)  
 transfer-mode command [544](#)  
 transfer-park blocked command [511](#)  
 transfer-pattern blocked command [521, 545](#)  
 transfer-pattern command [539](#)  
 transfer-system command [538](#)  
 translate command [296, 299](#)  
 translate-outgoing command [302](#)  
 translation-profile command [298](#)  
 translation-profile incoming command [300](#)  
 transport layer security, *See* TLS  
 Transfer soft key [876](#)  
 troubleshooting Cisco phone firmware upgrade [106](#)  
 troubleshooting tips for upgrading, downgrading,  
 converting phone firmware [106](#)  
 trunk command [201, 205](#)  
 trustpoint [414](#)  
 trustpoint (credentials) command [447](#)  
 trustpoint-label command [449](#)  
 TSP (TAPI Service Provider) software [91](#)  
 type command [180, 184, 186, 208, 804](#)

## U

Unified CCX, interoperability [966](#)  
 upgrade command [97, 101](#)  
 upgrading SIP firmware [95](#)  
 url command [713, 718, 954, 955](#)  
 url idle command [951](#)  
 user-defined locales [308](#)  
 user GUI access setup [368](#)  
 user-locale (ephone-template) command [317](#)  
 user-locale command [316](#)  
 user locales
 

- alternative [308](#)
- system-defined [308](#)
- user-defined [308](#)

username command [369](#)

## V

vad command [245](#)  
 vendorConfig parameters [941](#)  
 verifying firmware version on an IP phone [106](#)  
 verifying SIP profiles [271](#)  
 video
 

- call setup [917](#)
- codec selection process [916](#)
- codecs supported [914](#)
- enabling [919](#)
- firmware version [914](#)
- formats supported [914](#)
- icon [915](#)
- prerequisites [918](#)
- restrictions [918](#)
- setting parameters [922](#)
- troubleshooting [924](#)

 video (config-ephone) command [921](#)  
 video (config-telephony) command [922](#)  
 virtual voice port [167](#)  
 VLAN [73](#)  
 vm-integration command [389](#)  
 voice call send-alert command [969](#)  
 voice-card command [676](#)  
 voice class codec command [456](#)  
 voice-class codec command [456](#)  
 voice class custom-cptone command [677](#)  
 voice emergency response location command [746, 750](#)  
 voice hunt-group command [625](#)  
 voice hunt groups [623](#)  
 voice mail
 

- DTMF integration patterns [388](#)
- integration [375](#)
- mailbox selection policy [383, 384](#)
- MWI prefix specification for SIP [401](#)

 voicemail (voice register global) command [382, 387](#)

voice port, virtual [167](#)  
voice register dialplan command [186](#)  
voice register dn command [182, 387, 717, 803](#)  
voice register global command [97, 100, 154, 156, 158, 568, 718](#)  
voice register pool command [97, 183, 490, 804](#)  
voice-register session-server command [973](#)  
voice register template command [569, 933](#)  
voice services hardware [69](#)  
voice service voip command [969](#)  
voice translation-profile command [296](#)  
voice translation-rule command [295](#)  
VoIP-to-VoIP connections [532](#)  
    configuring [549](#)  
    H.450 tandem gateways [528](#)  
    hairpin call routing [525](#)

---

## W

watcher all command [855](#)  
watch mode for a phone [172](#)  
web admin customer command [368](#)  
web admin system command [363](#)  
web customize load command [366](#)

---

## X

XML application programming interface [1005](#)  
XML files  
    downloading xml.template [90](#)  
    GUI configuration file [365](#)  
    speeddial.xml for system speed dial [894](#)  
xml user command [1009](#)