







CONTENTS

---

CHAPTER 1

**Ekueq Wpkhkgf EOG Hgcwrtgu Tqcf o cr 1**

Qdvckpki Fqewogpvcvkqp. Qdvckpki Uwrrqtv.



Tgvtkevkqpu hqt Fghkpi Pgyqtm Rctc ogvtu 122

Kphqt ocwqp Cdqwv Fghkpi Pgyqtm Rctc ogvtu 122

F J E R

Rgt/Rjqpg Eqphki wtcvkqp Hkngr 156

JHU Fqy pncf

Ugy Wr Ekueq Wpkhkf EOG O

Fwca/Nkpg 225

Qevq/Nkpg 226

Hgcwtg Eqo rctkuqp d{ Fktgevqt{ Pwodgt Nkpg/Oqfg qp UEER



UEER Ogfk Eqpvtqn hqt Ugewtg Oqfg 243

Ugewtg Eqo o wpkecvkqp Dgy y ggp UVG. UVW. cpf KR/UVG Cetquu UKR Vtwpm 244

Tgoqvg Vngyqtmgt Rjqpgu 244

Ogfk Vgtokecvkqp Rqkpv hqt Tgoqvg Rjqpgu 245

I094;t: Eqfge qp Tgoqvg Rjqpgu 245

Dwu{ Vtkiigt cpf Ejcppgn Jwpvuvqr hqt UKR Rjqpgu 246

Owvkrng Ecnmu Rgt Nkpg 246

Ekueq Wpkhkgf : ;63 cpf : ;67 UEER KR Rjqpgu 246

Ekueq Wpkhkgf 8;43. 8;63. 8;67. 8;83. : ;63. cpf : ;67 UKR KR Rjqpgu 247

Oqfkh{ vjg Inqdcn Eqfge 278

Eqphki wtg Eqfgeu qh Kpfxkfwcn Rjqpgu hqt Ecnmu Dgyy ggp Nqecn Rjqpgu 280

Eqphki wtg Rjqpgu hqt c Mg{ U{uvgo 282

Etgcvkpi Fktgevt{ Pwodgtu hqt c Uko rng Mg{ U{uvgo qp UEER Rjqpg 282

Eqphki wtg Vtwpm Nkpgu hqt c Mg{ U{uvgo qp UEER Rjqpg 284

Eqphki wtg c Uko rng Mg{ U{uvgo Rjqpg Vtwpm Nkpg Eqphki wtcvkqp qp UEER Rjqpg 285

Eqphki wtg cp Cfxcepf



Eqphki wtg





Cr rri{ Xqkeg Vtcpuvcvkqp Twngu qp UKR Rjqpgu Dghqtg Ekueq Wpkhkgf EOG 603 460

Xgtkh{ Xqkeg Vtcpuvcvkqp Twngu cpf Rtqhkgu 462

Cevkxcvg Ugeqpfct{ Fkcn

Etgevg c Vtwuvrqpv 499

Cwjgpkcevg cpf Gptqnn c Egtvkhcevg ykvj vjg EC Ugtxgt 501

Eqr { vjg EC



Tgvtkevqpu hqt Gpcdnkpi vjg IWK 523

Kphqt o cvkqp Cdqwv Gpcdnkpi vjg IWK 524

Ekueq

UKR O YK

Gzc o rng hqt Eqphki wtkpi UKR Fktgevqt{ Pwodgt hqt O YK Qwvecnn 578

Gzc o rng hqt Eqphki wtkpi UKR Fktgevqt{ Pwodgt hqt O YK Wpuqnekvgf Pqvk{ 579

Gzc o rng hqt Eqphki wtkpi UKR Fktgevqt{ Pwodgt hqt O YK UwduetkdglPQVKH [ 579

Hgcwvtg Kphqt o cvkqp hqt Xqkeg/Ockn Kpvgi tcvkqp 579



**Fktgevqt{ Ugtxkegu** 659

Ƙphqt o cvkqp Cdqw Fktgevqt{ Ugtxkegu 659

Nqecn Fktgevqt{ 659

Gzvgtpcn Fktgevqt{ 660

Ecngf/Pcog Fkurnc{ 660

Fktgevqt{ Ugcte j 661

Eqphki wtg Fktgevqt{ Ugtxkegu 661

Eqphki wtg Nqecn Fktgevqt{ Ugtxkeg 661

Fgl&g c &c og hqt c Fktgevqt{ Pw&dg t qp UEER Rjqpg 662

Cff cp Gpvt{ vq c Nqecn Fktgevqt{ qp UEER Rjqpg 663

Eqphki wtg Gzvgtpcn Fktgevqt{ Fkurnc{ qp UEER Rjqpg 665

Ecngf/Pcog Fkurnc{ 666

Xgth{ Ecngf/Pcog Fkurnc{

Eqphki wtg Fq Pqv Fkuwtd qp UKO

Cuuki p cp GTN

Gz o rng hqt Eqphk i wtkpi Gzvgpukqp Oqdlnkv { hqt







**Owuke qp J qnf** 829

Rtgtgswkukygu hqt Owuke qp J qnf 829

Tguvtkevqpu hqt Owuke qp J qnf 829

Kphqt o cvkqp

&80 677.45600P S O H V

Eqphkiwtckqp Gzc o rngu hqtEqph t



Eqphkiwtg



Dcpf ykfvj Eqpvtqn hqt UKR





**Ecnn Dnqemkpi** 1061

Ƙphqt o cvkqp Cdqww Ecnn Dnqemkpi 1061

Ecnn Dnqemkpi Dcugf qp Fcvg cpf Vkog



Xgth{ NREQT Eqphki wcvkqp 1128

Eqphki wcvkqp Gzc o rngu hqt NREQT 1128

Gzc o rng hqt Eqphki wtkpi NREQT hqt Ekueq Wpkhkgf EOG 1128

Gzc o rng hqt Eqphki wtkpi NREQT qp Ekueq 5:22 Ugtkgu Kpygi tcvgf Ugtxlegu Tqwwgt 1132

Hgcwvtg Kphqt o cvkqp hqt NREQT 1145

---

CHAPTER 43

**Ecnn Vtcpuhtg cpf Hqtyctf** 1147

Kphqt o cvkqp Cdqwv Ecnn Vtcpuhtg cpf Hqtyctf

J0672034 Uwrrqtv 1166

Jcktrkp Ecnn Tqwwkpi 1167

Vkru hqt Wukpi Jcktrkp Ecnn Tqwwkpi 1170

Ecnnkpi Pwodgt Nqecn 1170

J0672 Vcpfgo Icvgyc{u 1170

Vkru hqt Wukpi J0672 Vcpfgo Icvgyc{u 1172

Fkcn Rggtu 1173

S Ukipcnkpi Uwrngogpvt{ Ugtxkegu 1173

Fkucdng UKR Uwrngogpvt{ Ugtxkegu hqt Ecnn Hqtyctf cpf Ecnn Vtcpuht 1174

V{rkecn Pgyyqtm Uegpctkqu hqt Ecnn Vtcpuht cpf Ecnn Hqtyctfki 1174

Ekueq EOG 503 qt Ncvgt cpf Ekueq KQU Icvgyc{u 1175

Ekueq EOG 502 qt cp Gctnkt Xgtukqp cpf Ekueq KQU Icvgyc{u 1175

Ekueq

Eqphki wtg Ekueq EOG 503

**Ecnn Eqxgtc ig Hgcwvtgu** 1239

Ƙphqt o cvkqp Cdqwv Ecnn Eqxgtc ig Hgcwvtgu 1239

Ecnn Eqxgtc ig Uw o oct{ 1239

Qwv/qh/ Fkcniq TGHT 1242

Ecnn J wpv 1243

Ecnn Rkewr 1243

Ecnn Yckvpi 1246

Ecnn/Yckvpi Dggr hqt UEER Rjqpgu 1246

Ecnn/Yckvpi Tkpi hqt UEER Rjqpgu 1247

Ecpegn Ecnn Yckvpi 1247

Ecnn dcm Dw{ Uwduetkdt 1248

J wpv I tqwru 1248

Grjqpg/J wpv I tqwru cpf Xqkeg J wpv/ I tqwru Eq o rctkuq 1249

Ugswgvkcn J wpv I tqwru 1250

Rggt J wpv I tqwru 1251

Nqpi guv/kfng J wpv I tqwru 1251

Retcmngn J wpv I tqwru \*Ecnn Dncuv+ 1252

Xkgy cpf Lqkp hqt Xqkeg J wpv I tqwru 1253

Gpcdng Wugt Ƙpvgtc eg vq Xkgy. Lqkp. cpf Wplqkp Xqkeg J wpv I tqwru qp UEER Rjqpg 1254

Eqphki wtg Ugtxkeg WTN Dwwqp Qp UEER Rjqpg Nkpg Mg{ 1255

Eqphki wtg Ugtxkeg WTN Dwwqp Qp UKR Rjqpg Nkpg Mg{ 1257

Fkurnc{ Uwr rqt v hqt vjg Pc o g qh c Ecngf Xqkeg J wpv/ I tqwr 1259

Uwr rqt v hqt Xqkeg J wpv I tqwr Fguetkrvkqpu

Cwvq o cvke C i g p v U v c v w u P q v / T g c f { h q t X q k e g J w p v I t q w r 1269

R t g u g p v c v k q p q h E c m u h q t G r j q p g J w p v I t q w r 1270

R t g u g p v c v k q p q h E c m u h q t X q k e g J w p v I t q w r 1270

P k i j v U g t x k e g 1271

Q x g t n c k f G r j q p g / f p u 1274

U j c t g f / N k p g Q x g t n c { u 1275

E c m Y c k v k p i h q t Q x g t n c k f G r j q p g / f p u 1276



Eqphkiwtevkqp Gzc o rngu hqt Ecm Eqxgte ig Hgcwvtgu 1333

Ecm Jwpk Gzc o rngu 1333

Gzc o rng hqt Ugwki Grjqpg/fp

Gz o r ng hqt Qxgtackf Grjqpg/fpu y





Uggev Dwwqp Nc{qww hqt c Ekueq Wpkhkgf UEER KR Rjqpg 9;53 I 1453

Eqphki wtg Dwwqp Nc{qww qp UEER Rjqpg 1454

Eqphki wtg Dwwqp Nc{qww qp UKR Rjqpg 1456

Eqphki wtg Ugtxkeg WTN Dwwqp qp c UKR KR Rjqpg Nkpg Mg{ 1459

Eqphki wtg Ugtxkeg WTN Dwwqp qp c UEER Rjqpg Nkpg Mg{

Gzc o rng hqt WTN Rtqxkukqkpi hqt Fktgevtkgu. Ugtxkegu. cpf Oguucigu Dwwqpu 1490

Gzc o rng hqt Rtqitc o ocdng XgpfqtEqphki Rctcogvtu 1491

Gzc o rng hqt



Gz o r n g h q t



Eqphkiwtckqp



# Cisco Unified CME Features Roadmap

---

Vjku tqcf o cr nkuvu vjg hgcvtgu fqew ogpvf kp vjg *Ekueq Wpkhkf Eqo owpkcvkqpu Opc igt Gzrtguu Ufwgo*  
*Cfokpukvtcvqt Iwkfg cpf ocru vjgo vq vjg oqfwngu kp*













---

---

---

---

---

---

---















---

---

---

---

---

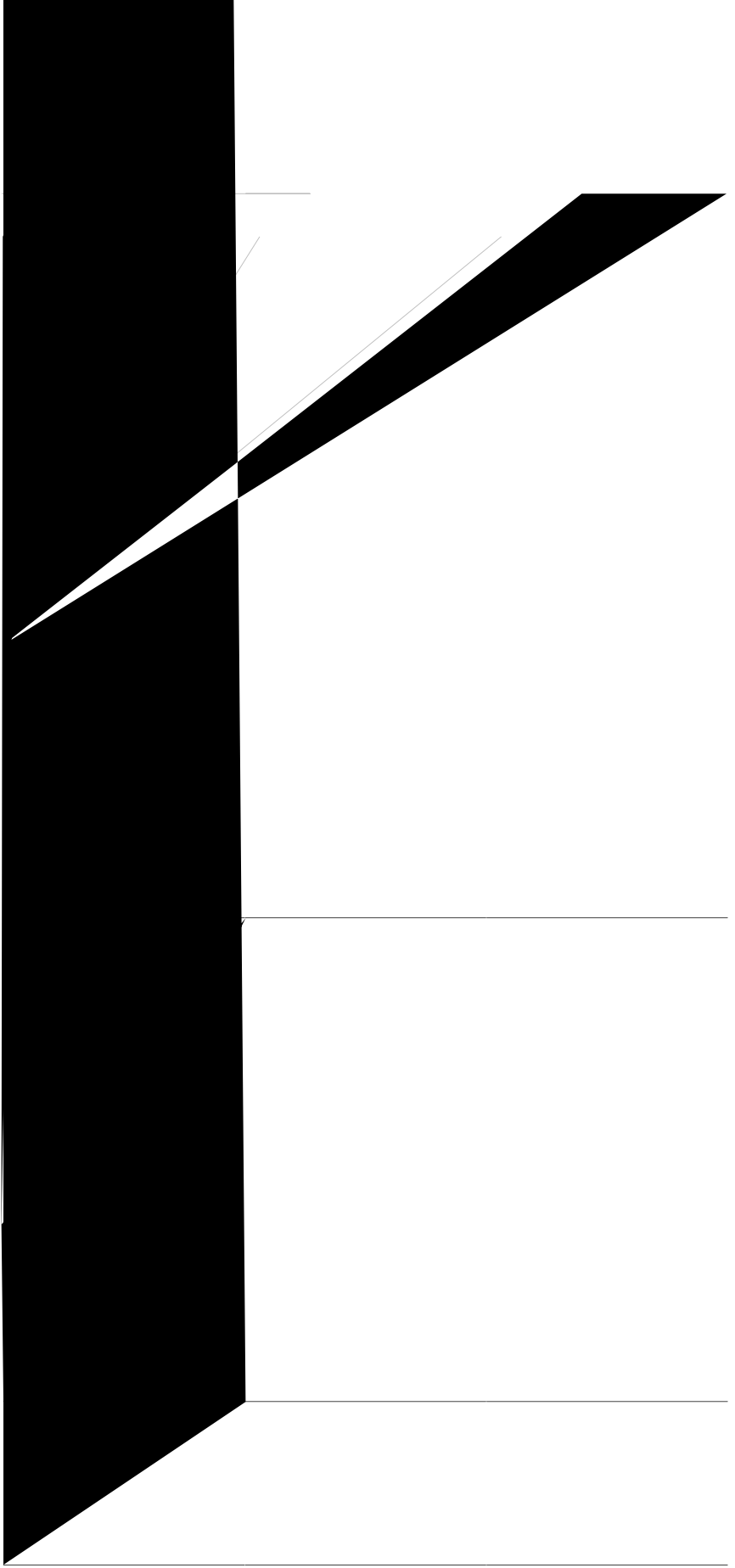




Version	Feature Name	Feature Description	Where Documented
		<p>Cnnqyu {qw vq ewuvq ok g  v jg fkurnc{ qtfgt qh  xctkqwu dwwqp v{ rgu</p>	<p><a href="#">Eqphkiwtg Dwwqp Nc{qvw  qp UEER Rjqpgu. qp  rcig 3676</a></p> <p><a href="#">Eqphkiwtg Dwwqp Nc{qvw  qp UKR Rjqpgu. qp rcig  3678</a></p>

Version	Feature Name	Feature Description	Where Documented
	Gpjcpeg o gpn vq Xqkeg Jwpv I tqwr Tgvtkevqpp		<a href="#">Eqphkiwtg Ecm Eqxgtcig</a>











---

---

---

---

---







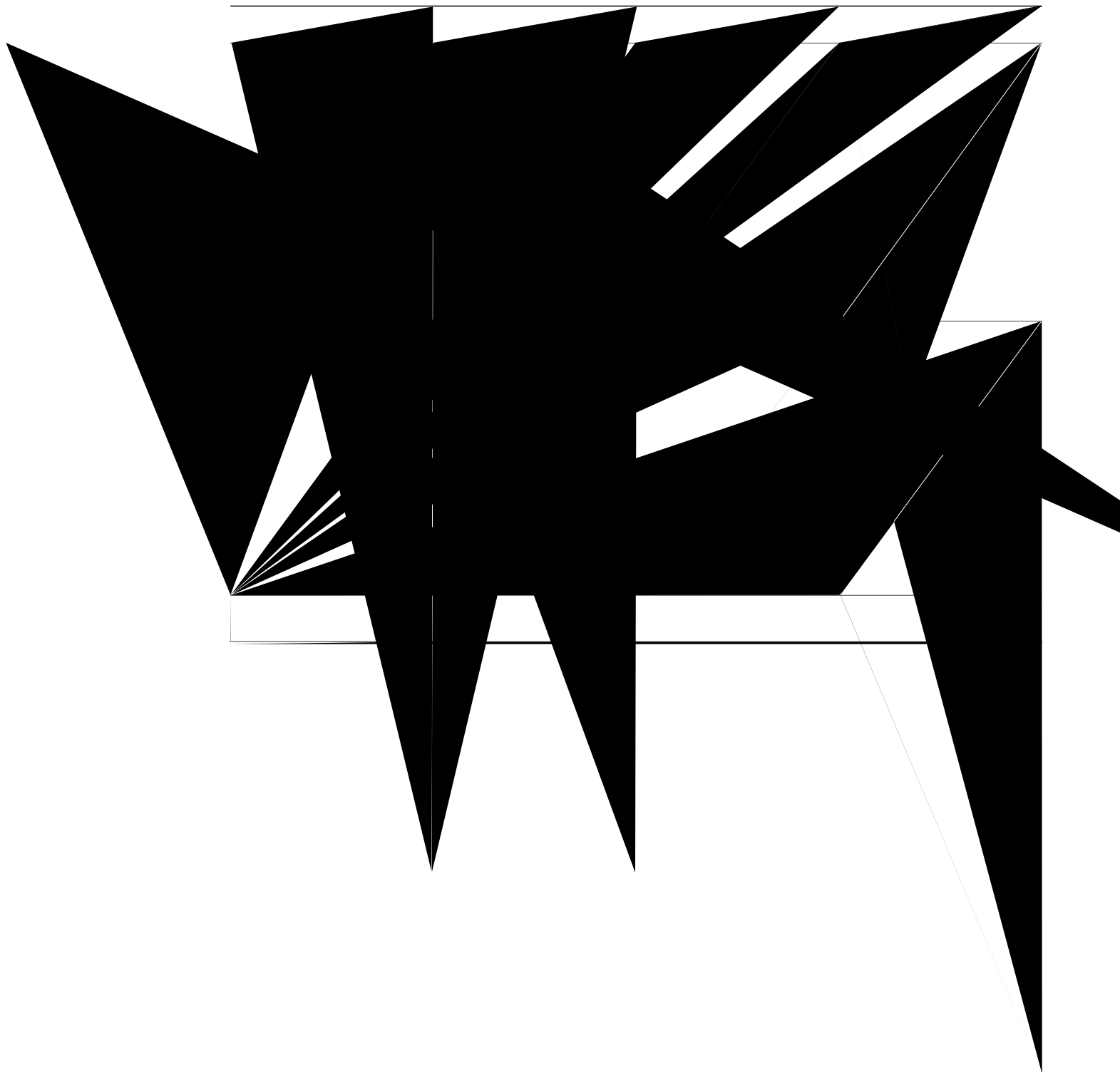
---

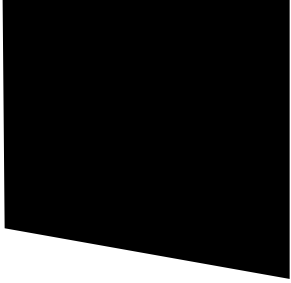
---

---

---

---





---







---

---

---

---





---

---

---

---















---

---

---













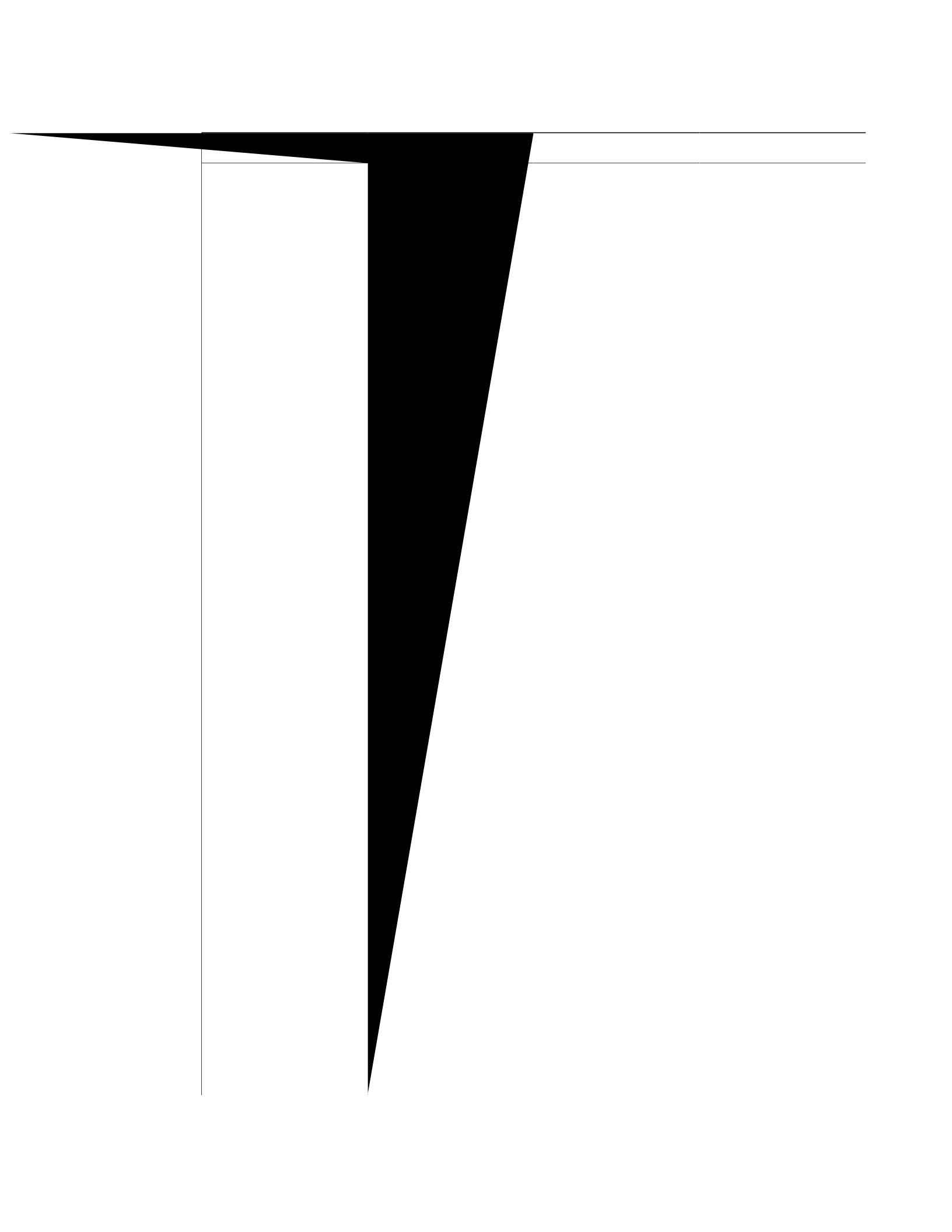






Version	Feature Name	Feature Description	Where Documented
		<p> yknfectf unqv ctg  eqphkiwtgf hqt jwpv  itqrwru cpf vjg cigpvu  grjqpg/fpu ctg  cwvjqtklgf vq lqkp jwpv  itqrwru0    <b>Ejcpig kp jqr</b>  <b>eq o o cpf fghewnv</b> Vjg  oczko wo pwodgt qh  jqr cmmqygf d{ c jwpv  itqr ku cwvq o cvkecnn{  cflwuvgf vq tghngev vjg </p>	




























Version	Feature Name	Feature Description	Where Documented
		<b>ZON kpygthceg</b>	

vtcfgoctmu o gpvkqpgf ctg vjg rtqrgtv{ qh vjgkt tgurgevixg qypgtu0 Vjg wug qh vjg yqtf rctvpgt fqgu pqv ko rn{  
c rctvpgtujkr tgnvkvpujkr dgvyggp Ekueq cpf cp{ qvjgt eq o rcp{ \*3332T+0  
Cp{ kvpgtpgv Rtqvqeqn \*KR+ cff

## Cisco Unified CME Overview

---

[Ko rqtvepv Kphqt o cvkqp cdqvv Ekueq KQU ZG 38 Fgpcnk. rcig 89](#)  
[Kpvtqfwekqp. rcig 89](#)



Ekueq KCF4652 tqwgt ku eqppgevgf vq c o wmkugtkeg

rctvkewncf hgcwvtg ugv hqt vjg nkhyk o g



eq o c p f v q f k u e d n g

License Authorization:  
Status: AUTHORIZED  
Last Communication Attempt: SUCCESS  
Next Communication Attempt: May 13 07:11:48 2016 UTC

License Usage:

License	Entitlement tag	Count	Status
regid.2014-12.com.ci...	(ISR_4351_UnifiedCommun..)	1	AUTHORIZED
regid.2016-10.com.ci...	(CME_EP)	4	AUTHORIZED

## Licensing Modes



---

Vq uwr rqtv J0545 ecnn vtcpuhgtu cpf hqtyctfu vq pgyqtm fgxkegu vjcv fq pqv uwr rqtv vjg J0672 uvcpfctf.  
uwej cu Ekueq Wpkhkgf

# Keypress Model

kp c mg{uykvej u{uvgo. {qw ecp ugv wr oquv qh {qwt r jppgu vq jcxg c



## Additional References











# Information About Planning Y

Y jcv gzkvki qt rtghgttgf dknkpi ogvjqf fq {qw ycpv vq wug hqt vtepuhggtgf cpf hqtyctfgf ecnuA

Fq {qw pggf vq qrvok|g pgvyqtm dcpfykfvj qt okpok|g xqkeg fgnc{A

Dgecwug vjgug hcevqtu ecp nkokv {qwt ejqkegu hqt uqog qh vjg eqphki wtcvkqp fgekukqpu vjcv {qw yknn ocmg yjgp  
{qw etgcvg qh c fknkpi rncp. ugg vjg [Ekueq Wpkhgf Eq o owpkecvkqpu](#) [Ocpigt Gzrtguu Uqnwvkqp](#)

Vtēpuncvkqp twngu Wug vtēpuncvkqp twngu vq o epkrwncvg fkcngf fki kvu dghqtg ecnu eqppgev



---

---

---





Task	Documentation
	<a href="#">Oqfkh{ Ekueq Wpkhgf KR Rjppg Qrvkpu. qp rcig 3659</a>



Step 5 Kfgpvkh{ FTCO cpf hncuj ogoqt{ tgswtgogpvhqt vjg Ekueq Wpkhkgf EOG xgtukqp cpf Ekueq tqwvgt oqfgn {qw ctg wukpi0 Vq hkp Ekueq Wpkhkgf EOG urgekhecvkqpu. ugg vjg cr rtrtkcvg Ekueq Wpkhkgf EOG Uwr rqtvgf Hkto yctg. Rncvhtou. Ogoqt{. cpf Xqkeg Rtqfwevu0

Step 6 Eqo rctg vjg coqwpvqh ogoqt{ tgswtgf vq vjg coqwpvqh ogoqt{

Step 4 Vq tgnqcf vjg Ekueq Wpkkkf EOG tqwvgt ykvj vjg pgy uqhv yctg



## SUMMARY STEPS

1. **gpcdng**
2. **xncp fcvdcug**
3. **xncp** *xncp/pwodgt* **pc o g** *xncp/pcog*
4. **xncp** *xncp/pwodgt* **pc o g** *xncp/pcog*
5. **gzkv**
6. **y t**
7. **eqphkiwtg vgt o kpcn**
8. **o cetq inqdcn cr rn{ ekueq/inqdcn**
9. **kpvgthceg** *unqv/pwodgt 1 rqtv/pwodgt*
10. **o cetq cr rn{**

---

---

---

---

---

---





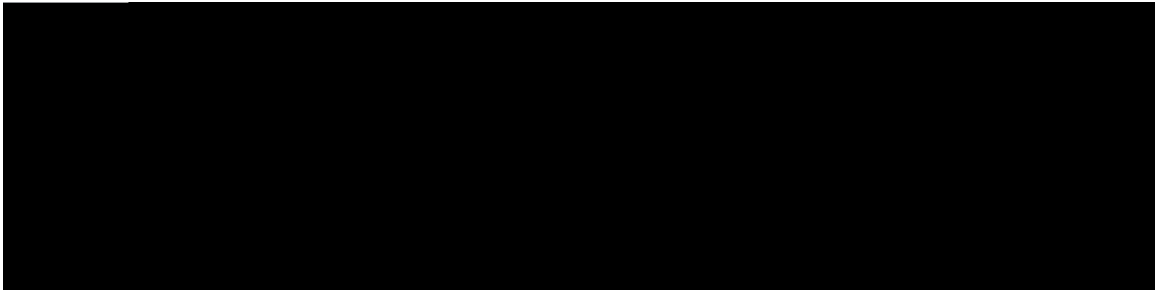






Hkngu tgswtgf hqt vjg qrgtcvkqp qh vjg IWK o wuv dg eqrkgf kpvq hncuj o g o qt { qp vjg tqwvgt0 Hqt  
kphqt o cvkqp cdqvw hkngu.





CHAPTER

## Basic Files

C vct ctejkxg eqpvckpu vjg dcuke hkngu {qw pggf hqt Ekueq Wpkhkf EOG0 Dg uwtg vq fqy pncf vjg eqttgev xgtukqp  
hqt vjg Ekueq KQU



UKR hkt o yctg R2U5/zz/{/||.



## File Naming Conventions

Step 5 Xgtkh{ v.jg kpuvcncvkqp0 Wug



---

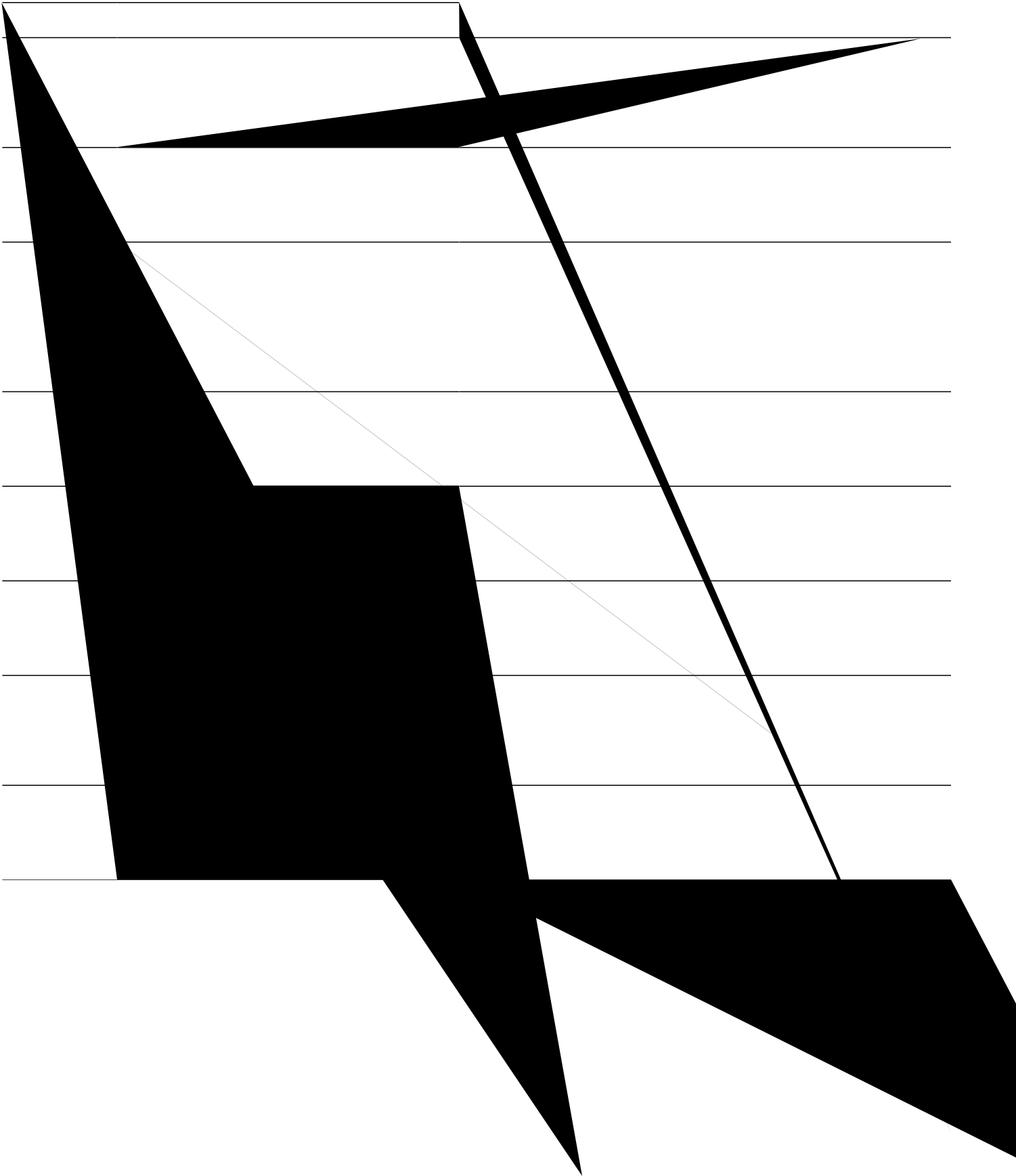
---



## DETAILED STEPS

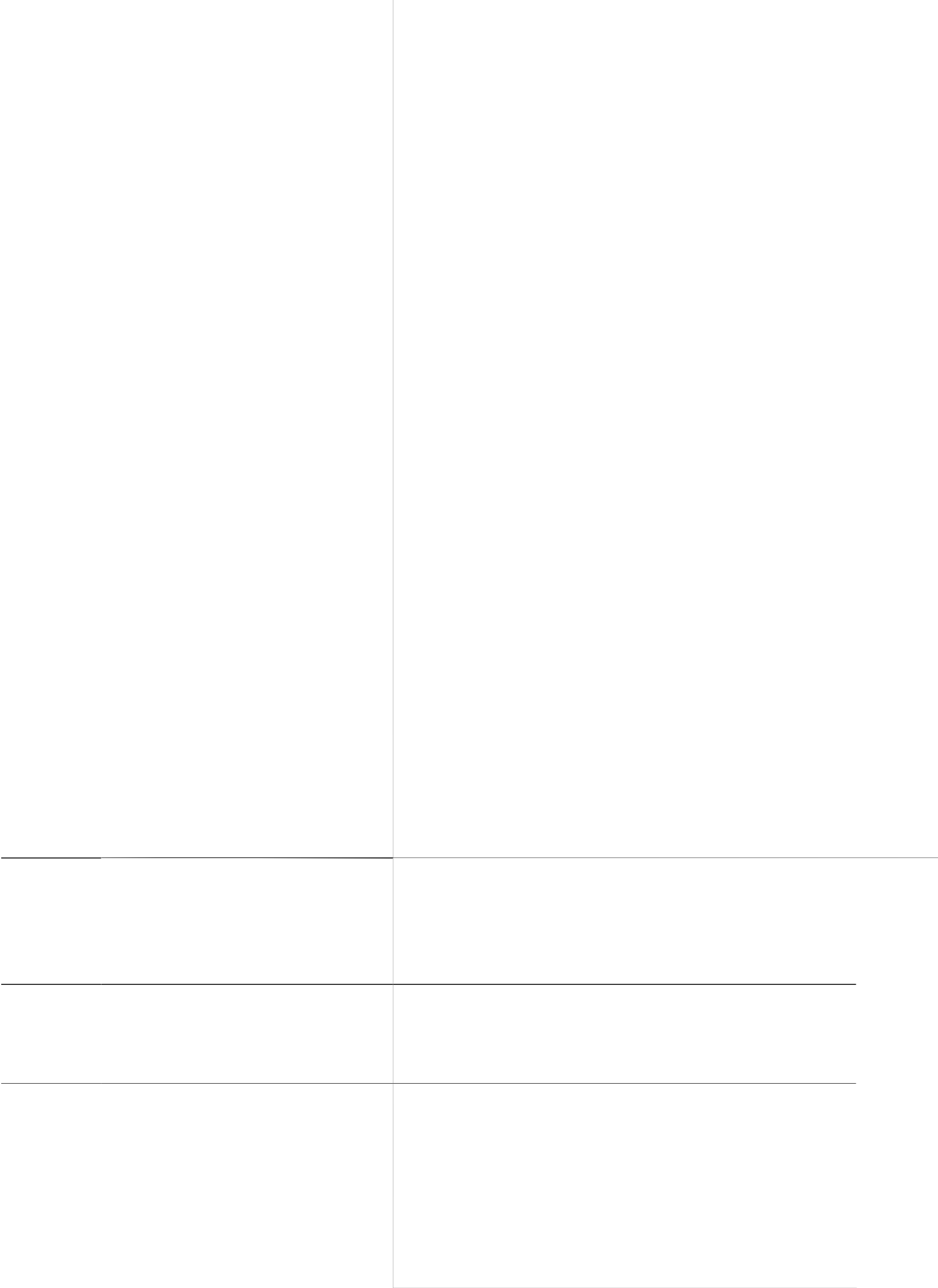
---











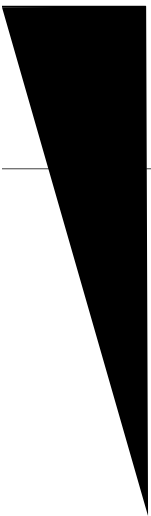
	Command or Action	Purpose
		*Qr vkqpcn+



---

kh







	Command or Action	Purpose
	<b>gpf</b>  Example:	Gzkvu vq rtkxknigif GZGE oqfg0

Wug vjku eqo o cpf vq ngctp vjg hknqpc o gu cuuqekcvgf ykvj vjcv rjqpg hkt o yctg

Router# **ujqy hmcuj**<

```
31      128996 Sep 19 2005 12:19:02 -07:00 P00307020300.bin
32          461 Sep 19 2005 12:19:02 -07:00 P00307020300.loads
33      681290 Sep 19 2005 12:19:04 -07:00 P00307020300.sb2
34      129400 Sep 19 2005 12:19:04 -07:00 P00307020300.sbn
```

Step 2 **ujqy grjqpg**



# Restrictions for Defining Network Parameters

кп

eqtgev







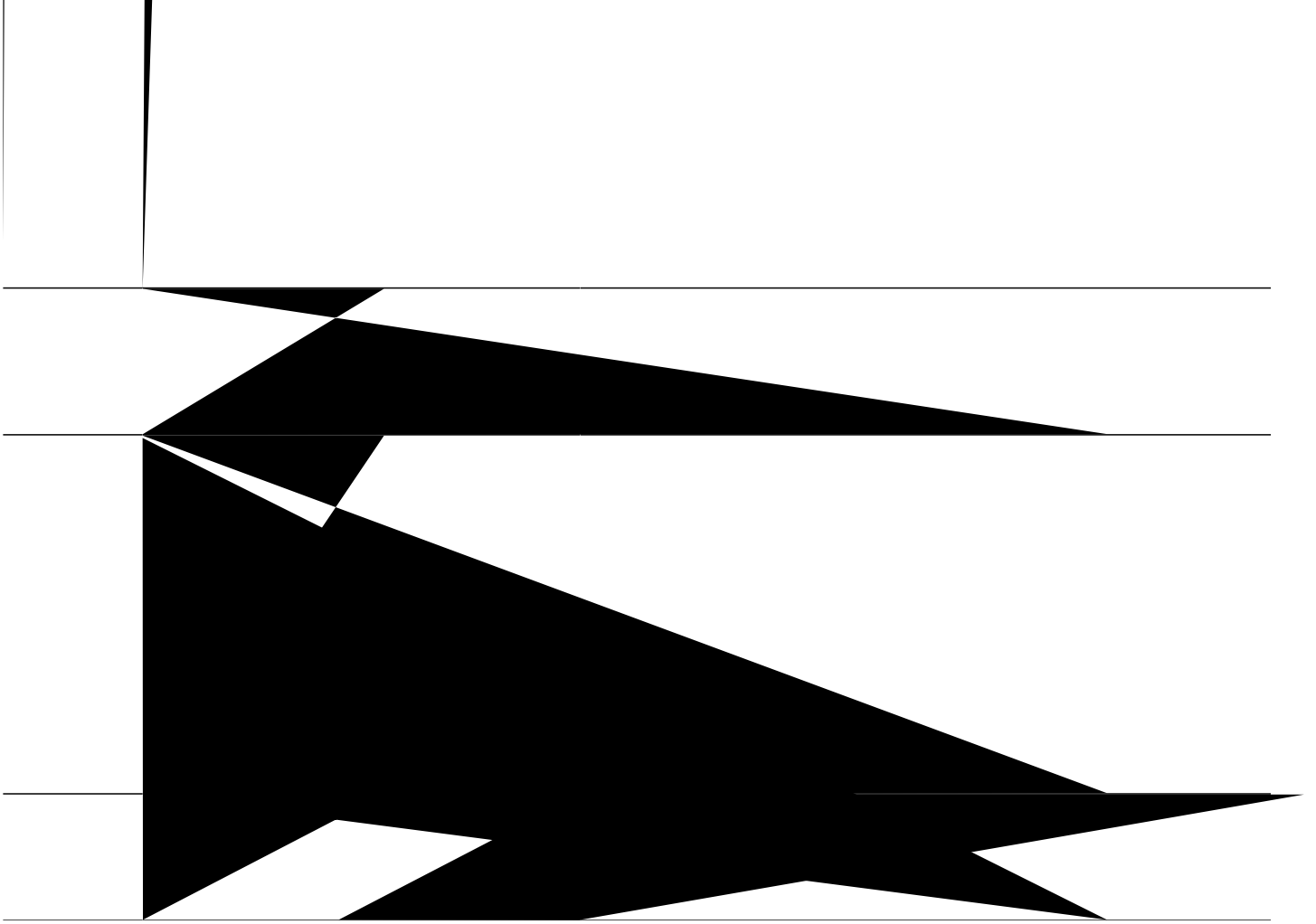


	Command or Action	Purpose
		Eqphkiwtgu vjg oczkowo vkog kpvgtxcn cmqygf dgvyggp vyq eqpugewkxg PQVKH [ o guucigu hqt c ukping FVOH gxgpv



---

Fq *pqv* rghqto vjku vcum kh {qw cntgcf{ jcxg c F JER ugtxgt qp vjg NCP vjcv ecp dg wugf vq rtqxkfg  
cfftguugu vq vjg Ekueq Wpkhgf EOG rjqpgu<sup>0</sup> Ugg [Gpcdng](#) [Pgyqtm](#) [Vko](#)g





---

---

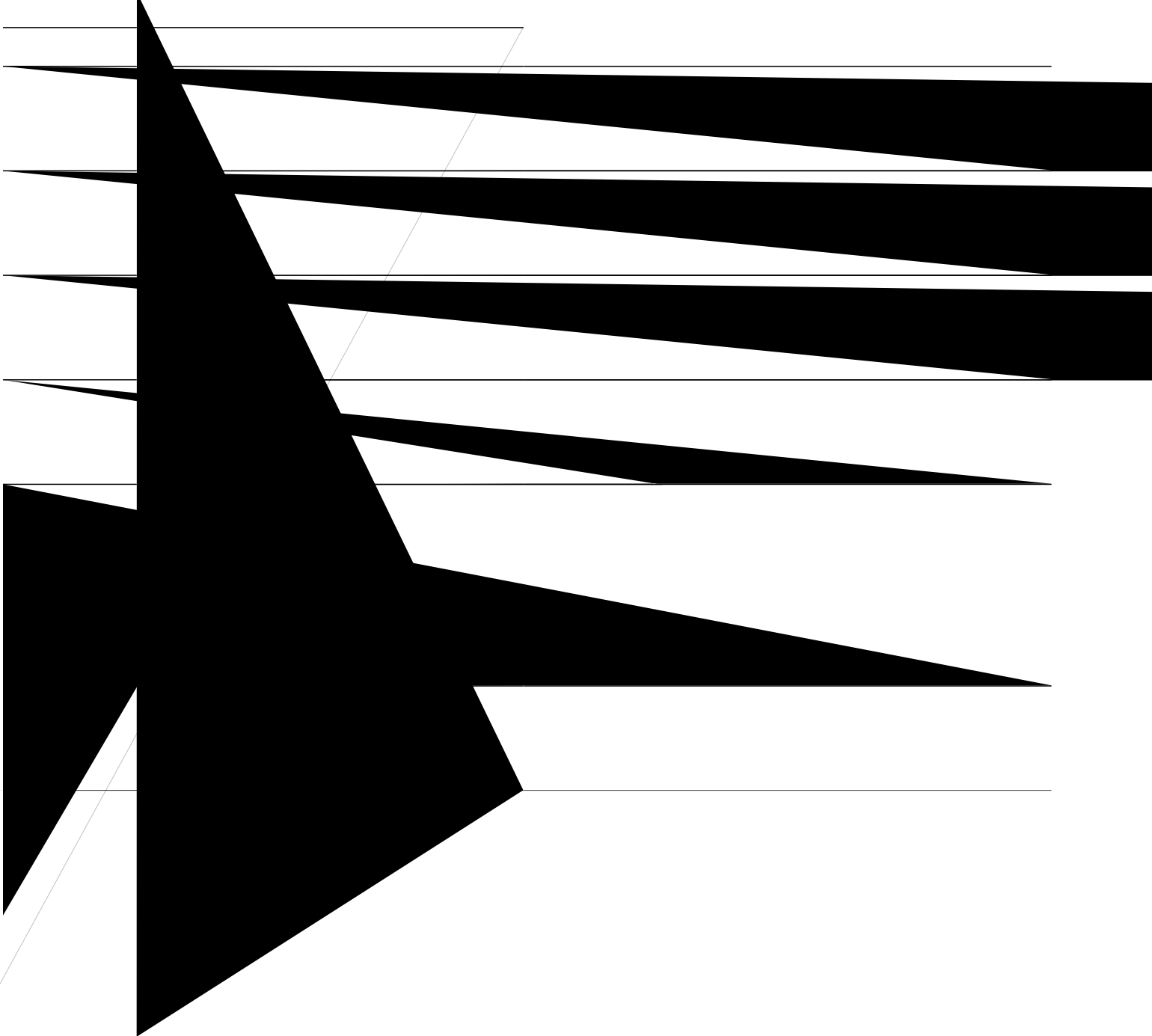
---

---

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **ugtxkeg fjer**
4. **kpvgtfceg v{rg pwo dgt**
5. **kr jgnrgt/cf ftguu kr /cfftguu**
6. **gpf**

## DETAILED STEPS



What to Do Next





## SUMMARY STEPS

1. **gpcdig**
- 2.





## Before You Begin

V | FcvcEUX0eux hkng ku cffgf vq vjg eqphki wtcvkqp hkngu qh Ekueq Wpkhkgf

---

---

---

---

---

---

---

---

---

---



# Configure DTMF Relay for H.323 Networks in Multisite Installations

Vq eqphki wtg FVOH tgn{ hqt J0545 pgv yqtmu kp c o wvkukvg kpuvcncvkqp qpn{. r gthqt o vjg hqnnqykpi uvgru0



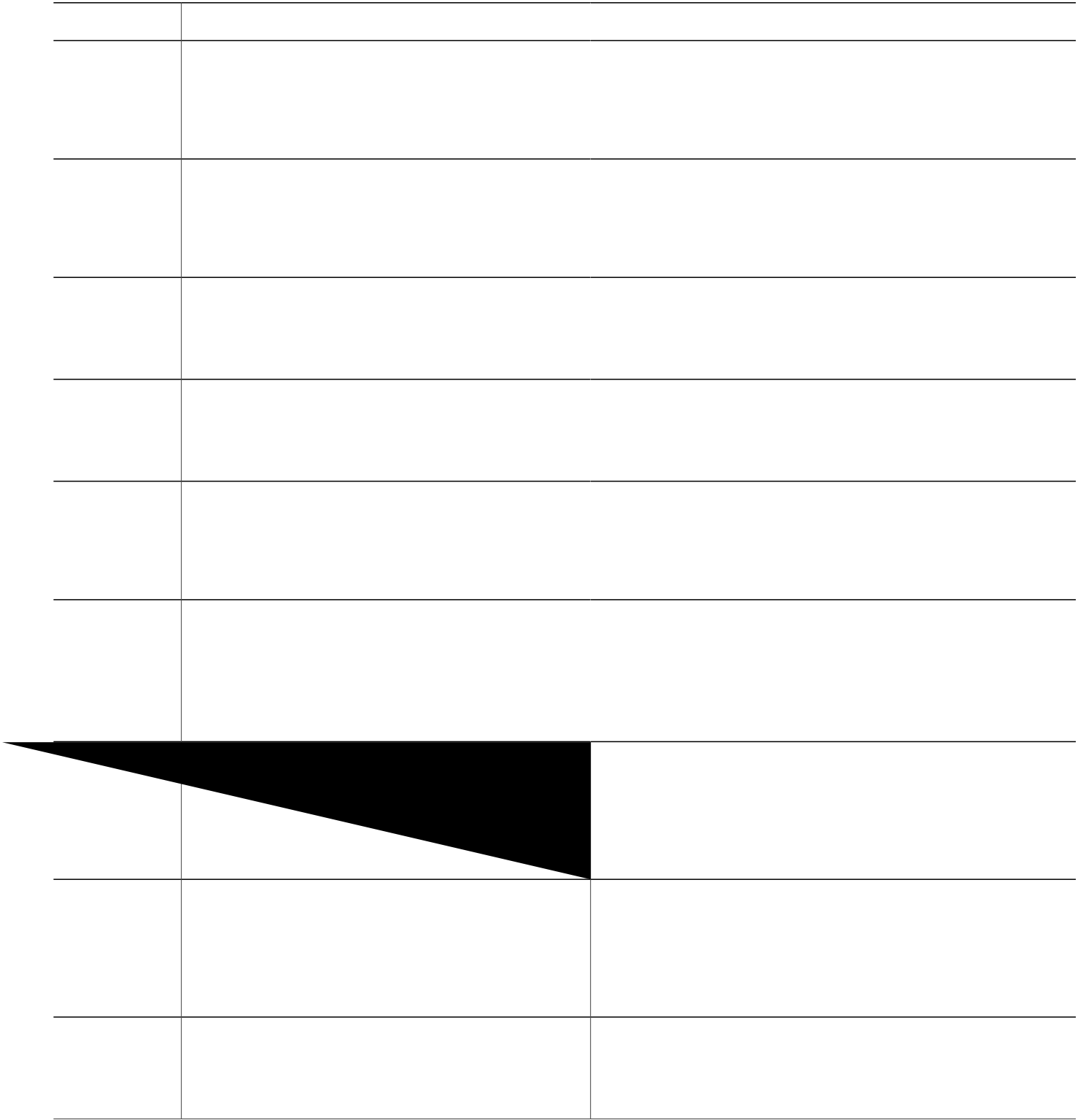
---

Vq eqphki wtg O

Kh {qw ctg eqphki wtkpi Ekueq Wpkhkgf EOG hqt vjg hktuv vk o g qp vjku tqwvgt cpf {qw ctg tgc f { vq eqphki wtg  
u{uvgo rctc o gygtu0 Hqt o qtg kphqt o cvkqp. ugg [U{uvgo/Ngxgn Rctc o gygtu. qp rc ig 36;](#)0

Kh {qw ctg hkpkujgf o qfkh{kpi pgvy qtm rctc o gygtu hqt cp cntgc f { eqphki wtg f Ekueq Wpkhkgf EOG





## Verify SIP Trunk Support Configuration

Vq xgtkh{ UKR vtwpm eqphki wtcvkqp. rgthqt o vjg hqmqykp i O



# Configuration Examples for Network Parameters

## NTP Server







Кр Екуеу Wрkhgf



## Register Transaction

Vjg



Server: Cisco-SIPGateway/IOS-12.x

CSeq: 240 REGISTER

Mime-Version: 1.0

```
> < x-cisco-remotecc-response > < response > < code > 200 < /code > < optionsind >  
< combine max="6" > < remotecc >  
< status/ > < /remotecc > < service-control/ > < /combine > < dialog usage="shared  
line" > < sub/ > < /dialog >
```

Fwtkpi dwnm tgi kvtcvkqp. Ekueq





Rgt u{uvgo Vjku ku



Note

---

Vjg eqphki wtcvkqp hknngu ctg u jctgf d{ vjg J VVR cpf VHVR ugtxgtu0 J qy gxt. vjg hkt o yctg hknngu ctg fkhhtgpn hqt gcej ugtxgtl

---

Hqt o qtg kphqt o cvkqp qp Rj qpg Hkt o yctg Hknngu. ugg [kpuvcnn](#) cpf [Wri tcfg Ekueq Wpkhkf EOG Uqh v yctg](#)



## File Binding and Fetching

qpn{ vjqg hknq vjcv ctg kp hncuj <le o glncful ecp dg ceeguugf0

Dww yjgp kv ku vjg tqqv fktgevt{ rcvj vjcv ku wugf cu vjg

Eqphki wtg rtko ct{ cpf ugeqpfct{ Ekueq Wpkhkgf EOG





eqphkiwtgf hqt ogfke hmqy ctqwpf. vjg





---

Restriction



# Configure System-Level Parameters

## Configure IP Phones in IPv4, IPv6, or Dual Stack Mode



---

Restriction

Ngice{ KR rjqpgu ctg pqv uwr rqtvgf0



## Configure IPv6 Source Address for SCCP IP Phones



---

---

---



00:00:34: %LINK-3-UPDOWN: Interface ephone\_dsp DN 1.2, changed state to up

Step 2

Wug vjg **ujqy gr jppg uqemg**v eq o o c p f v q x g t k h { k h K R x 6 q p n { . K R x 8 q p n { . q t f w c n / u v c e m \* K R x 6 ! K R x 8 + k u e q p h k i w t g f k p  
E k u e q W p k h k g f E O G 0 k p v j g h q m q y k p i g z c o r n g . U E E R V E R n k u v g p k p i u q e m g v \* u m k p p { a v e r a n k u v g p a u q e m g v h f + x c n w g u 2 v q







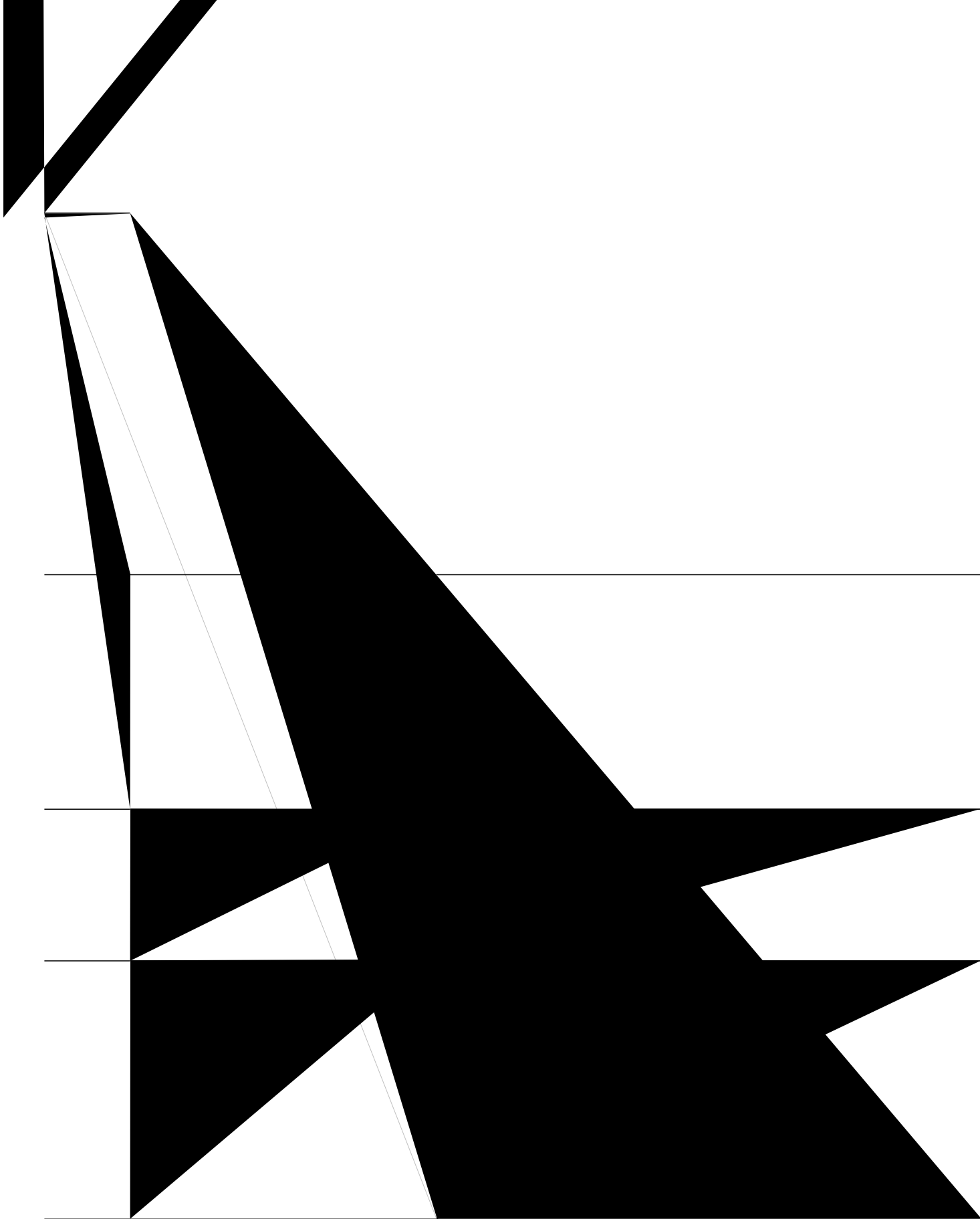






---

FUER tgsuktgu Ekueq Wpkhg f





## SUMMARY STEPS

1. **gpcdn**
2. **eqphk i wtg vgt o kpcn**

# Block Automatic Registration for SCCP Phones

Before You Begin

Ekueq Wpkhkf EOG 602 qt c ncygt xgtukqp0

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg**

# Define Per-Phone Configuration Files and Alternate Location for SCCP Phones



Restriction

---

VHVR f qgu pqv uwr r qtv hkng f gngvkqp<sup>0</sup> Y jgp eqphki wtcvkqp hkngu ctg wr fcvgf. vjg{ qxgt y tkvg cp{ gzkuvkp i  
eqphki wtcvkqp hkngu ykvj vjg uc o g pc o g<sup>0</sup> Kh









## DETAILED STEPS

---

---

---

---

---

---



---

Restriction

Cevkxg ecmmu ctg pqv uwr rqtvgf

	Command or Action	Purpose
Step 6	<b>gp f</b>  Example: Router(config-register-global)# end	Tgywtpu vq rtkxknigif GZGE oqfg0

---





## DETAILED STEPS

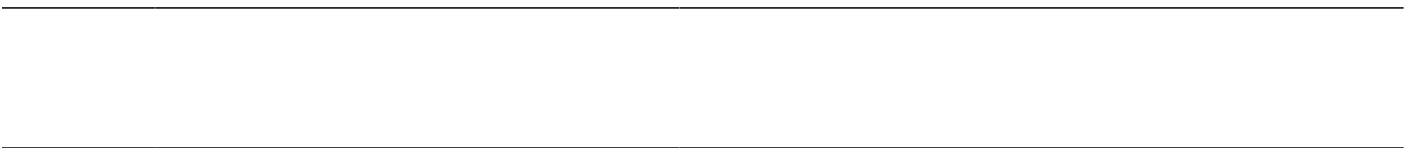
---

---

---

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt okpcn**
3. **xqkeg tgikuvgt inqdcn**
4. **o qfg e o g**
5. **uqwteg/c f f tguu *kr/cfftguu* ]**



# Set Up Cisco Unified CME for SIP Phones

Vq kfgpvkh{

## DETAILED STEPS

---

---

---

---

---

---

---







	Command or Action	Purpose
		*Qr vk qpcn+ Gpcd

## DETAILED STEPS





---

---

---

---

---



---

Restriction

Qpñ{ Ekueq : ;73. ; ;73. cpf ; ;93 UKR KR Rj qpgu ctg uwr rqtvgf0

Pq KRx8 uwr rqtv hqt vjg JHU fqypñqcf ugtxkeg0

---

Before You Begin

Ekueq Wps



	Command or Action	Purpose
		Gpvgtu xqleg tgi kuvgt inqdcn eqphki wtcvkqp o qfg vq ugv rctc o gygtu hqt

## DETAILED STEPS

---

---

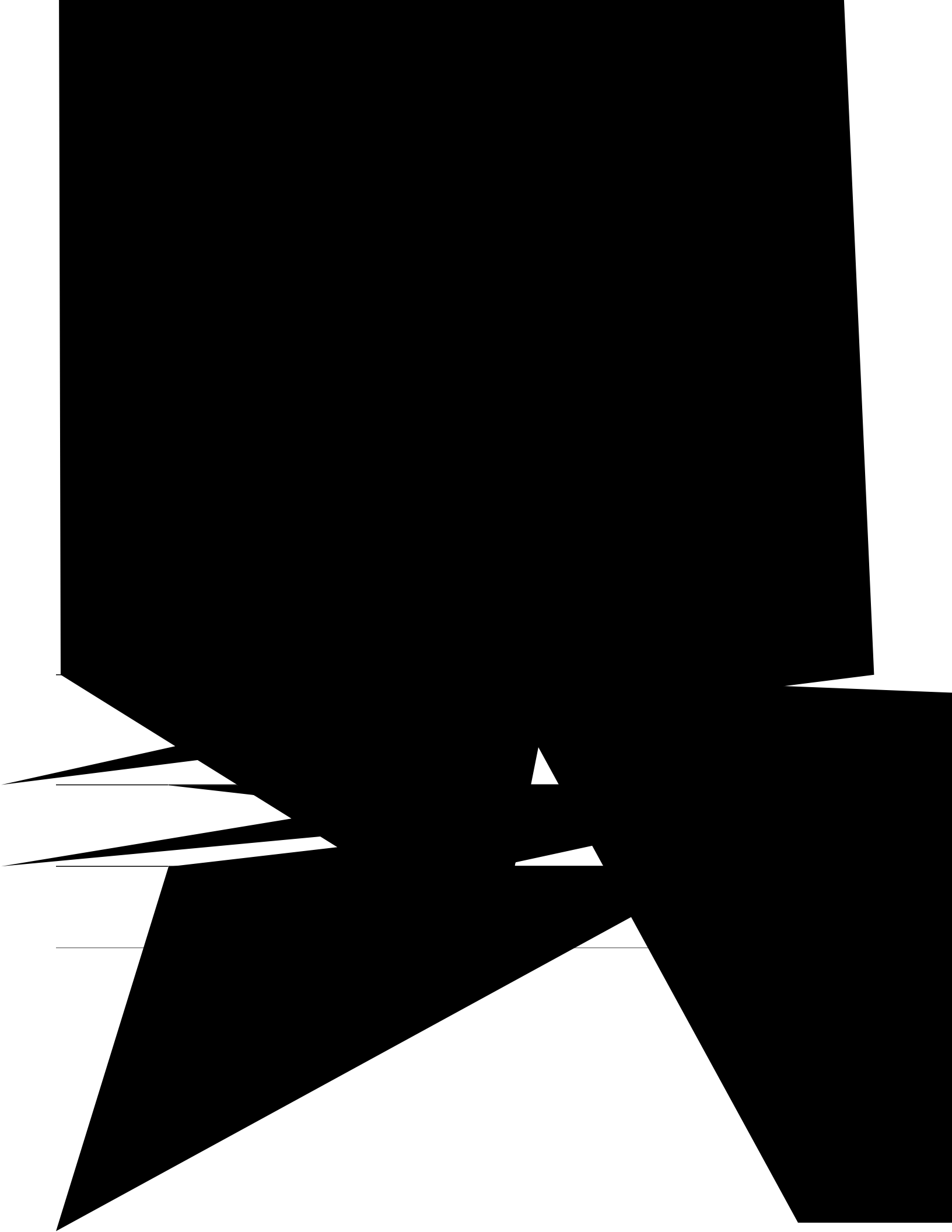
---



---

---

---



# Configuration Examples for System-Level Parameters

Example for Bulk Registration Support for SIP Phones



```
timer receive-rtp 1200
!
sip-ua

protocol mode dual-stack preference ipv6
!
!
telephony-service
protocol mode dual-stack preference ipv6
sdspfarm conference mute-on 111 mute-off 222
sdspfarm units 2
sdspfarm transcode sessions 20
```

## Example for System-Level Parameters

Vjg hqnnqykpi gzc o ring ujqyu vjg u{uvgo/ngxgn eqphki wtcvkqp hqt c Ekueq Wpkhkf EOG vjcv ecp uwr rqtvr

```
tftp-server flash:cnu70.2-7-6-26.sbn
tftp-server flash:Jar70.2-9-2-26.sbn
! 7970/71 firmware
!
telephony-service
load 7911 SCCP11.7-2-1-0S
```

## Example for Enabling the HFS Download Service for Cisco Unified SIP IP Phone

Vjg hqnnqykpi gzco rmg ujquy jquy vq gpcdng vjg JHU fqypnqcf ugtxkeg<

```
Router(config)# ip http server
Router(config)# ip http port 1234
Router (config)#
```



## Example for Redundant Router for SCCP Phones

Vjg hqnnqyki gzc o rng ku eqphki wtgf qp vjg rtko ct{ Ekueq Wpkhkf EOG tqwvgt} Kv guvcdnkujgu vjg tqwvgt cv  
32070409: cu c ugeqpfct{ tqwvgt



```
!  
!  
!  
dspfarm profile 1 conference  
codec g711ulaw  
maximuM
```



```
ipv4 20.20.20.1
media flow-around
allow-connections sip to sip
!
!
voice class media 10
media flow-around
!
!
voice register global
max-pool 10
overlap-signal
!
voice register pool 5
overlap-signal
!
!
```

---

---

---

---

---

---

---

---







Hqt Ekueq Wpkhkgf KR r j qpgu v jcv ctg twppkpi UKR cpf ctg eqppgevgf fktgevn{ vq Ekueq Wpkhkgf EOG.  
Ekueq Wpkhkgf EOG 506 qt c ncvg t xgtukqp o wuv dg kpuvcmgf qp v j g tqwvgt0 Ugg [kpuvcnn Ekueq Wpkhkgf EOG](#)  
[Uqhvyctg. qp rcig 3270](#)

Rtqegfwgtu kp [Pgyyqtm Rctcogvgtu. qp rcig 343](#) cpf [Eqphkiwtg U{uwg o/Ngxgn Rctcogvgtu. qp](#)



J cu qpg xqkeg rqtv ykvj vyq ejcpgnu0

Uwrrqtvgf qp KR rjppgu





Ecp dg fwcn/nkpg \*UEER qpn{+ qt ukp ing/nkpg fktgevt{ pw o dgtu/

errtqrkcyg tgnvcyf eqo ocpfu ctg eqphkiwtgf0 Uko knctn{. kh dwvqp 3 qp rjqpg 6 ku



Hkiwtg 33< Fwcn/Pwodgt Fktgevqt{. qp rcig

Vjg okzgf ujectgf nkpg uwrrqtvu wr vq 38 ecnu. fgrgpfkpi qp vjg eqphki wtcvkqp kp Eku

Hqt

Dial Plan

C fken rncp rcwgtp

[qw ecp qxgtnc{ wr vq 47 nkpgu qp c ukping dwvvp0 C v{ rkecn wug qh qxgtncf fktgevqt{ pwo dgtu yqwnf dg vq etgcvg c 32z32 ujectgf nkpg. ykvj 32 nkpgu kp cp qxgtnc{ ugv ujectgf d{ 32 rjqpgu. tguwnkpi kp vjg rquukdkkv{ qh 32 uk o wvcpqgwu ecnu vq vjg uc og pw o dgt0 Hqt eqphki wtcvkqp kphqt o cvkqp. ugg [Etgcvkpi](#) [Fktgevqt{](#) [Pwo dgtu hqt c Uko ring Mg{ U{uvgo qp UEER Rjqpg. qp rcig 4:40](#)

## Auto Registration of SIP Phones on Cisco Unified CME

Ekueq Wpkhkgf EOG uwr rqtvu cwwq tgi kuvtcvkqp qh dqvj UKR cpf UEER rjqpgu0 Yjgp vjg cwwq







---

V{ rkecm{. Ekueq Wpkhkf EOG



PSTN FXO Trunk Lines



swcnkv{ vjcp I094; dwv nguu vjcp I09330 Uwr rqtvkpi eqfgeu vjcv jcxg uwcpfctfk|gf wug kp qvjgt pgvyqtmu. uwej  
cu kNDE. gpcdngu gpf/vq/gpf KR ecnu ykvjqwv vjg





Vcdng 37<



# Busy Trigger and Channel Huntstop for SIP Phones

Ekueq Wpkkgf EOG 903 kvtqfwegf dwu{ vtki i gt cpf jwpvuvqr ejcppgn uwr rqtv



## Cisco Unified 6921, 6941, 6945, 6961, 8941, and 8945 SIP IP Phones

Кр Ekueq Wpkkgf EOG ;02.



Рқтосм{

*Table 16: Supported Values for Ephone-Type Command*

## XML Updates

Vjgtg ku pq ugrctcyg hkt o yctg hqt MGOu. kpugcf vjg{ ctg dwknv kp cu



# Configure Phones for a PBX System

Vjku ugevkqp eqpvckpu vjg hqnnqykp i vcumu<

## Create Directory Numbers for SCCP Phones

Vq etgcvg c fktgevqt{ pw o dgt kp Ekueq

## DETAILED STEPS

---

---




What to Do Next

Chygt etgcvkpi



---

---

---

---



Vjg hqmqykpi gzc o r ng ujqyu vjg Pqmkc G83 cffgf ykvj cp grjqpg/v{ rg vgo rncvg. yjkej ku

## SUMMARY STEPS

1. **gpcdig**
- 2.









Restriction

Xcnkf ejctcevgtu kp xqkeg tgi kuvgt fp kpenwfg 2/;. )0. )-. ),). cpf )%)0

Vq cmmqy kpugtkqp qh )%) cv cp{ rnceg kp xqkeg tgi kuvgt fp. vjg ENK \$cmmqy/jcuj/kp/fp\$ ku eqphkiwtgf  
kp xqkeg tgi kuvgt inqdcn oqfg0

Y jgp vjg ENK \$cmmqy/jcuj/kp/fp\$ ku eqphkiwtgf. vjg wugt ku tgswwktgf vq



**Gz o r ng hqt cuukipki fltgevqt{ pw o dgtu vq UKR Rj qpgu**

Vjg hqmqykpi g qt





```
!  
voice register pool 124  
  busy-trigger-per-button 2  
  id mac 0017.E033.0284  
  type 7965  
  number 1 dn 24  
!  
voice register pool 125  
  busy-trigger-per-button 3  
  id mac 00E1.CB13.0395  
  type 7965  
  number 1 dn 24
```

## What to Do Next

Kh {qw jcxg UKR cpf UEER r jqqgu eqppgevgf vq vjg uc o g Ekueq Wpkkkf EOG. ugg [Eqphkiwtg Eqfgeu](#)  
qh [kpfkxfwcn Rjqqgu hqt Ecmu Dgv yggp Nqecn Rjqqgu](#).

## DETAILED STEPS

---

---

---







Example:  
Router# **ujqy**

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlkg tgikuvgt rqqn** *rqqn/vci*
- 4 0 1 129.6 636.507 Tm(3.)Tj72.H

## What to Do Next

kh {qw ctg fqpg oqfkh{kpi rctcogvgtu hqt UKR rjqpgu. {qw owuv igpgtcvg c pgy eqphkiwtcvkqp rtqhkng cpf  
tguvctv vjg rjqpgu0 Ugg [Eqphkiwtcvkqp Hkngu hqt Rjqpgu. qp rcig 5:90](#)



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt okpcn**
3. **xqleg tgikuvgt fp *fp/vci***
4. **pwodgt *pwodgt***
5. **pq/tgi**
6. **gpf**

## DETAILED STEPS

---

## What to Do Next

Kh {qw ycpv vq eqphkiwtg vjg I0944/86M eqfge hqt cmn ecnu vj tqwi j {qwt Ekueq Wpkkgf EOG u{uvgo.  
ugg [Oqfkh{ vjg Inqdcn Eqfge. qp rcig 49:0](#)



---

---

---

---

---

---

---

# Configure Codecs of Individual Phones for Calls Between Local Phones

Vq fgukipcvg c eqfge hqt kpfkxkfwcn rjqpgu vq gpuwtg eqppge

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkwtg vgt s**

## What to Do Next

Kh {qw ycpvq ugngev vjg uguukqp/vtcpurqtv rtqvqeqn hqt c UKR rjqpg. ugg [Ugngev Uguukqp/Vtcpurqtv Rtqvqeqn hqt c UKR Rjqpg. qp rc ig 4970](#)

Kh {qw ctg hkpkujgf eqphkiwtkpi UKR rjqpgu



---

---

---

Vq qpn{ gpcdng fktgev uvcvwu oqpkvqtkpi qh vjg HZQ rqtv qp vjg nkpg dwwwqp qh vjg KR rjqpg. ugg [Eqphkiwtg](#)  
c Uko rng Mg{ U{uvgo Rjqpg V



---

Restriction

Fktgevt{ pwo dgt ykvj c vtwpm nkpg ecppqv dg eqphki wtgf hqt ecnn hqtyctf. dwu{. qt pq cpuygt}



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg/fp** *fp/vci*
4. **pwodgt** *pwodgt ]ugeqpfct{ pwodgt\_ ]pq/tgi ]dqvj · rtko ct{ \_*
5. **vtwpm** *vtwpm/vci ]vk o gqvw ugeqpfu\_ o qpkvqt/rqtv rqtv*
6. **gpf**

## DETAILED STEPS

---

---

## Examples

Vjg hqmqykpi gzc o ring ujqyu vjg eqphki wtcvkqp hqt ukz kpuvcpo

```
destination-pattern 812  
port 1/0/1
```

```
dial-peer voice 813 pots  
destination-pattern 813  
port 1/0/2
```

```
dial-peer voice 814 pots  
destination-pattern 814  
port 1/0/3
```

### What to Do Next

[qw ctg tgc f { vq eqphki wtg gce j kpfkxkfwcn r j qpg cpf cuukip dwwwqp pw o dgtu. nkpg



## SUMMARY STEPS

1. **gpcdig**
- 2.

---

---

---

---

```
number 801
trunk 811 transfer-timeout 30 monitor-port 1/0/0
huntstop channel
```

```
ephone-dn 52 dual-line
number 802
trunk 812 transfer-timeout
```









---

Hqt c Ekueq CVC vj cv ku



Group Call Pickup

Y jgp wukpi Ekueq CVCu ykvj Ekueq Wpkhgf EOG<

VO

SUMMAR

---

---

---

---

---

---







## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **xqleg/icvgy c{ u{uvgo vci**
4. **o ce/cf ftguu o ce/cf ftguu**
5. **v{ rg }xi424 · xi426 · xi446;**
6. **xqleg/rqtv rqtv/tpig**
7. **pgvy qtm/nqecng nqecng/eqfg**
8. **et**

---

---

---

# Configure Phones on SCCP Controlled Analog (FXS) Ports

Eqphki wtkpi Ekueq Wpkhkgf EOG vq uw r rqtvecmu cpf hgcwrtgu qp cpcnqi gpf rdkpvu

Vjg qtfgt qh

Ecngt KF Ecngt pc o gu ctg fghkpgf wukpi vjg **pc o g** eqo o cpf kp gr jppg/fp eqphki wtcvkqp o qfgl Ecngt pw o dgtu ctg fghkpgf wukpi vjg **pw o dgt** eqo o cpf kp gr jppg/fp eqphki wtcvkqp o qfgl

Urggf fkcñ Pw o dgtu vq dg urggf/fkcngf ctg uvqtgf ykvj vjgkt cuuqekcvgf urggf/fkcñ eqfgu wukpi vjg **urggf/fkcñ** eqo o cpf kp gr jppg eqphki wtcvkqp o qfgl

Urggf fkcñ vq xqkeg o ckn Vjg xqkeg/o ckn pw o dgt ku fghkpgf wukpi vjg **xqkeg o ckn** eqo o cpf kp vgngr jpp{/ugtxkeg eqphki wtcvkqp o qfgl

Step 5 Ugv wr



---

Restriction

Dgecwug Ekueq Wpkihgf EOG ku pqv fguki pgf hqu

piv gen ul pgfp

	Command or Action	Purpose
Step 2	<b>eqphkiwtg vgt o lpcn</b>  Example: Router# configure terminal	Gpvgtu inqdcn eqphkiwtcvkqp oqfg0
Step 3	<b>grjqpg rjqpg/vci</b>  Example: Router(config)# ephone 36	Gpvgtu grjqpg eqphkiwtcvkqp oqfg0  <i>rjqpg/vci</i> Wpkswg

## Verify Remote Phones

---

Wug vjg **ujqy twppkpi/eqphki** eqo ocpf qt vjg **ujqy vgngr jqp{/ugt xleg gr jppg** eqo ocpf vq xgkhh{ rctc ogygt ugwkpiu  
hqt tgoqvg gr jppgu0

---

## Configure Cisco IP Communicator Support on SCCP Phone

Vq gpcdng uwr rqtv hqt Ekueq KR







---

Restriction

Fgvgevkqp qt eqpxgtukqp dgvy ggp Pgv y qtm Vtcpu o kuukqp Gswkr o gpv \*PVG+ cpf







## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqleg tgikuvgt inqdcn**
4. **cwvq/tgikuvgt**
5. **rcuuyqt f**

	Command or Action	Purpose

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg**





## Before You Begin

Ekueq Wpkihgf EOG ;02 cpf ncvgf xgtukppu0

Eqttgev hkt o yctg.

---

---

---

---

---

Configure the Busy Trigger Limit on SIP Phone



# Configure KEMs on SIP Phones

Vq eqphkiwtg MGOu hqt Ekueq Wpkhkgf :;83. ;;73. qt ;;93 UKR KR rjqpgu. rghqt o vjg hqnmqykp i uvgru0

Before You Begin

Ekueq Wpkhkgf EOG ;03 qt c ncvg t xgtukqp0

## SUMMARY STEPS

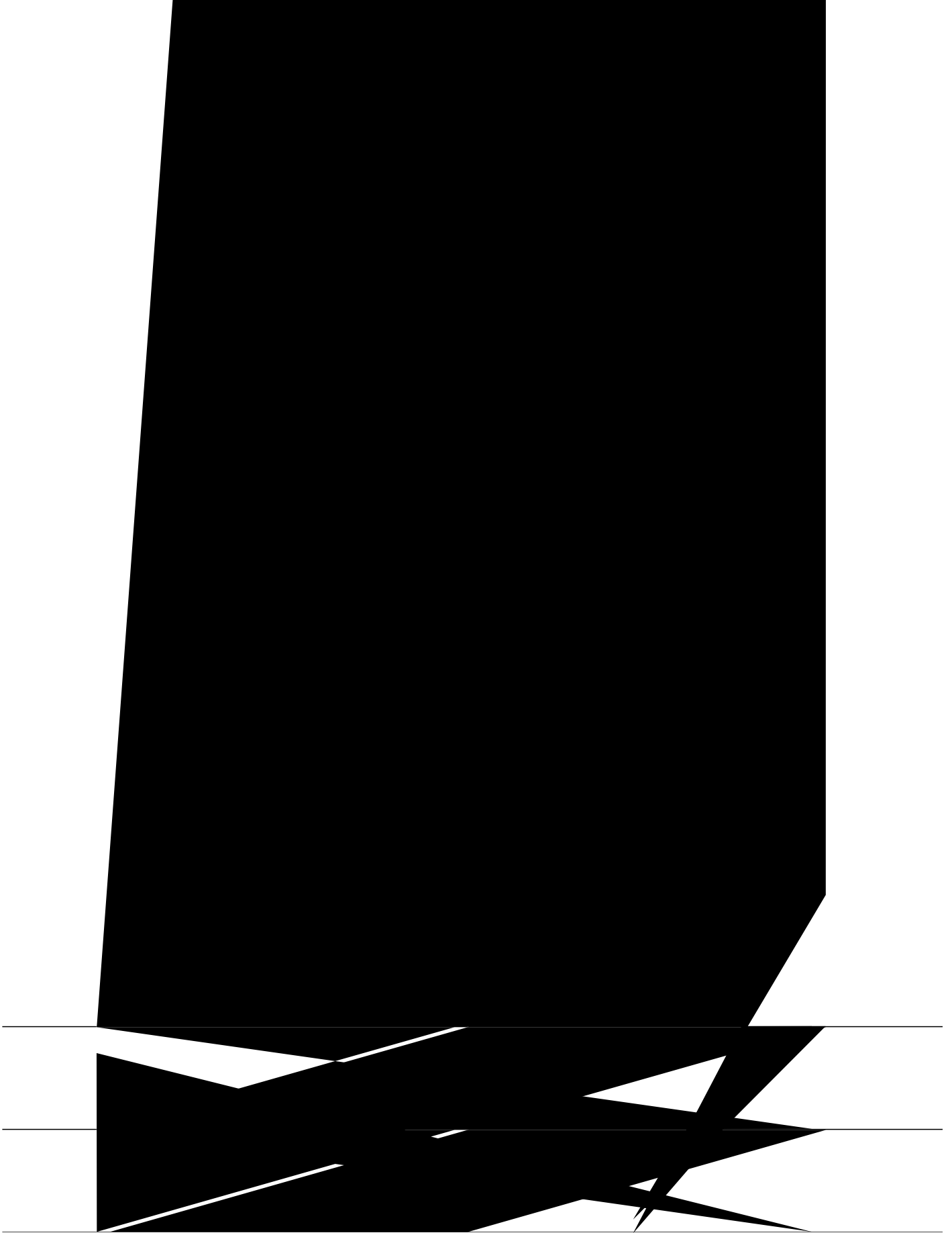
1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlkg tgikuvgt rqqn rqqn/vci**
4. **v{rg rjqpg/v{rg ]cfffq 3rjqp g**


## DETAILED STEPS

---

---







```
!  
!  
ftp-server enable  
ftp-server topdir flash:  
isdn switch-type primary-5ess  
!  
!  
!  
voice service
```

```
!  
!  
!  
sccp local GigabitEthernet0/0  
sccp ccm
```

```
ephone-dn-template 1
!
!
ephone-template 1
  keep-conference endcall local-only
  codec g729r8 dspfarm-assist
!
!
ephone-template 2
!
!
ephone-dn 1
  number 6001
  call-forward busy 7800
  call-forward noan 7800
```

```
transport input all
transport output all
line vty 0 4
  exec-timeout 0 0
  privilege level 15
  password sgpxw
  login
!
scheduler allocate 20000 1000
ntp server 192.168.-
```



```
number 1 dn 8
template 2
preference 1
codec g711alaw
!
voice-port 1/0/0
!
voice-port 1/0/1
!
dial-peer voice 100 pots
  destination-pattern 2000
  port 1/0/0
!
dial-peer voice
```



```
Router(config-ephone-dn)#number 2502
Router(config-ephone-dn)#ujtgf/nkpg ukr
DN
```

```
!  
ephone-dn 10 dual-line  
number 4443 secondary 9191114443  
pickup-group 5  
description vg224-1/3  
name tommy  
!  
ephone 7  
mac-address C863.9018.0402  
speed-dial 1 4445  
speed-dial 2 4445  
speed-dial 3 4442  
speed-dial 4 4441  
speed-dial 5 6666  
speed-dial 6 1111  
speed-dial 7 1112  
speed-dial 8 9191114441  
speed-dial 9 9191114442  
speed-dial 10 9191114442  
type anl  
button 1:10
```

## Example for Remote Teleworker Phones

Vjg hqnnqykpi gzco rng ujquy vjg eqphkiwtcO jg kiw ?

zcopg

cnf-file



# Cisco IOS Commands for Monitoring and Maintaining Cisco Unified CME

Vq o qpkvqt cpf o ckpvckp Ekueq Wpkhkgf Eq o o wplecvkqpu Ocpcigt Gzrtguu

---

---

---

---

---







---

---

---

---







# Create Phone Configurations Using Extension Assigner

---

[Rtgsgswkukygu hqt Gzvypukqp Cuukipgt. rcig 569](#)

[Tguvtkevqpu hqt Gzvypukqp Cuukipgt. rcig 56:](#)

[Kphqt o cvkqp Cdqw Gzvypukqp Cuukipgt. rcig 56:](#)

[Eqphki wtg Gzvypukqp Cuukipgt. rcig 576](#)

[Eqphki wtg Gzvypukqp Cuukipgt U{pejtqpk|cvkqp. rcig 597](#)

[Cuukip Gzvypukqp Pw o dgtu Qpukvg d{ Wukpi Gzvypukqp Cuukipgt. rcig 59:](#)

[Xgth{ Gzvypukqp Cuukipgt Eqphki wtcvkqp hqt UEER Rjqpgu. rcig 5:2](#)

[Xgth{ Gzvypukqp Cuukipgt Eqphki wtcvkqp hqt UKR Rjqpgu. rcig 5:2](#)

[Eqphki wtcvkqp Gzco rngu hqt Gzvypukqp Cuukipgt. rcig 5:2](#)

## Prerequisites for Extension Assigner

Ekueq Wpkhkgf EOG 3308 qt c nevgt xgtukqp hqt UKR rjqpgu0

Ekueq Wpkhkgf EOG 602\*5+ qt



Eqphkiwtg grjqpgu cpf xqkqg

wpkswg kfgpvkkg hqt vjg rjqpg. uwej cu c lcem pwo dgt0



Kp cf flvkqp vq eqphki wtkpi qpg gr j qpg/ fp hqt gcej vg o rqtct{ gzvgpukqp pw o dgt vj cv ku cuuki pgf cwwq o cvkecnn{.  
{ qw cnuq o wuv eqphki wtg cp gr j qpg/ fp gpvt{ hqt gcej gzvgpukqp pw o dgt vj cv ku cuuki pgf d{ vjg kpuvcnncvkqp  
vgej pkekcp0 Hqt

vjep vjg pwo dgt qh rjppgu vq yjkej {qw ycpv vq cuukip gzvvpukqp pwo dgtu. vjgp {qw ecp rnwi kp vgp rjppgu  
cv c vk o g<sup>0</sup> Kh {qw rnwi kp gngxgp rjppgu. qpg rjppg y<sup>km</sup> pqv tgi kuvgt qt igv c vg o rqtct{ gzvvpukqp pwo dgt wpvkn  
{qw cuukip cp gzvvpukqp vq qpg qh vjg hktuv vgp rjppgu cpf tgugv vjg gngxgpvj rjppg<sup>0</sup>

Chvgt {qw jcxg eqphkiwtgf {qwt grjppg qt xqkeg tgi kuvgt rqqn. cpf grjppg/fp qt xqkeg tgi kuvgt fp gpvtkgu. {qw  
ecp eqo ringvg {qwt tqwvgt eqphkiwtcvkqp d{ qrvkqpcnm{ eqphkiwtkpi vjg tqwvgt vq cwwq o cvkecm{ ucxg {qwt  
eqphkiwtcvkqp<sup>0</sup> Kh vjg tqwvgt eqphkiwtcvkqp ku pqv ucxgf. cp{ gzvvpukqp cuukip ogpvu ocfg d{ vjg kpuvcnncvqkqp

## Procedures for Installation Technicians

Vjku hgcwtg ku k o rng o gpygf wukpi c Ven uetkrv cpf cwfkq rtq o rv hkngr



## Determine Extension Numbers to Assign to the New Phones and Plan Your Configuration

Chvgt {qw fgvgt okpg y jkej gzvpgukqp pw o dgt vq cuuki p vq gcej r j qpg. {qw o wuv

	Command or Action	Purpose
	Fqypnqcf	

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **crrnkecvkqp**
4. **ugtxkeg *ugtxkeg/pcog nqecvkqp***
5. **rctco gc/rcuuyqtf *rcuuyqtf***
6. **rctcourceg gpinkuj kpfz *pwodgt***
7. **rctcourceg gpinkuj ncpwciw *gp***
8. **rctcourceg gpinkuj nqecvkqp *nqecvkqp***
9. **rctcourceg gpinkuj rtghkz**

---

---



## SUMMARY STEPS

1. **gpcdig**
- 2.



## DETAILED STEPS

---

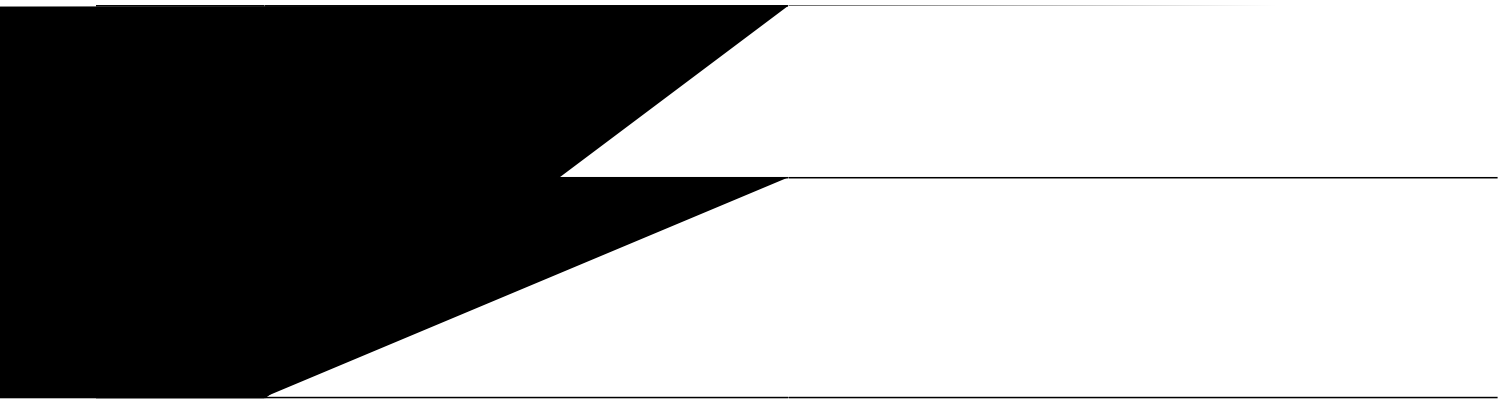
---

---

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg/fp** *fp/vci ]fwcn/nkpg\_*
4. **pwodgt** *pwodgt ]ugeqpfct{ pwodgt\_ ]pq/tgi ]dqvj - rtko ct{ \_*
5. **vtwpm** *fkik/wtkpi ]vk o gqww ugeqpfu\_*
6. **pcog** *pcog*
7. **gzkv**
8. **vgngrjqp{/ugtxleg**
9. **cwvq cuukip** *fp/vci vq fp/vci*
10. **gpf**

## DETAILED STEPS

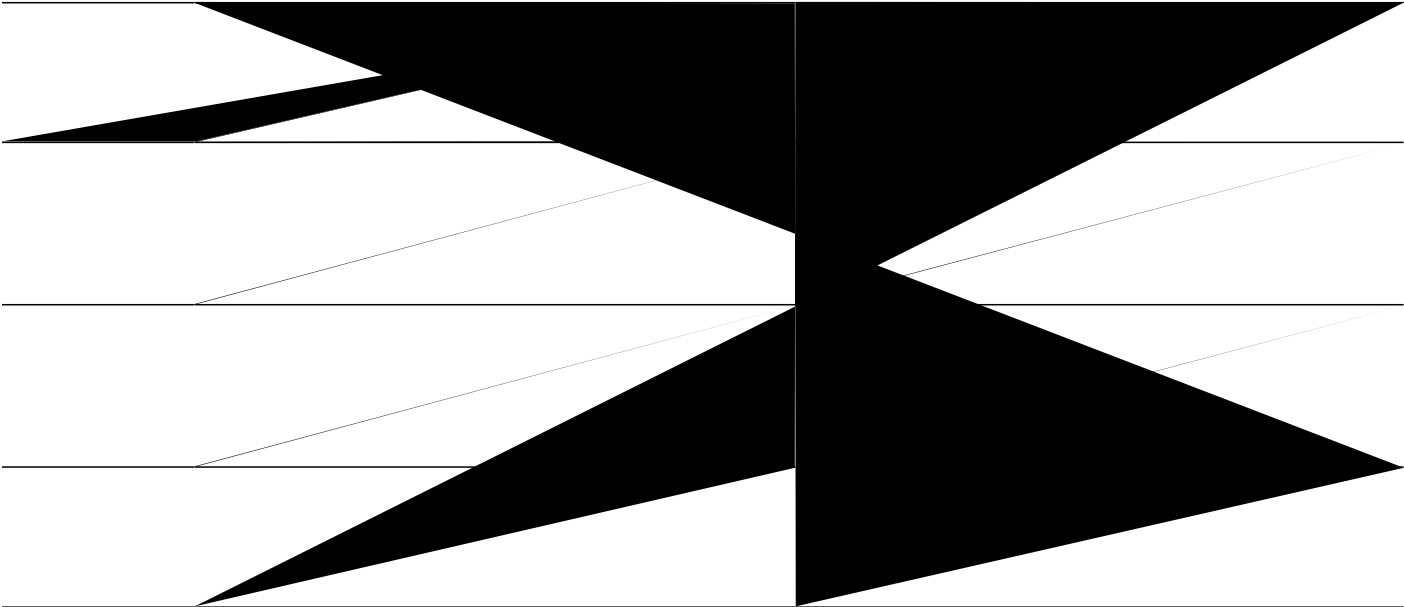


---

---

---

DETAILED STEPS



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg/fp *fp/vci* ]fwcn/nkpg\_**
4. **pwodgt *pwodgt* ]ugeqpfct{ *pwodgt\_* ]pq/tgi ]dqvj · rtko ct{ \_**

	Command or Action	Purpose
		Owuv hqmqy vjg pc o g qtfgt vjcv ku urgekkgf ykvj vjg <b>flkgevqt</b> { eq o o cpf0
		Gzkvu grjqpg/fp



## DETAILED STEPS



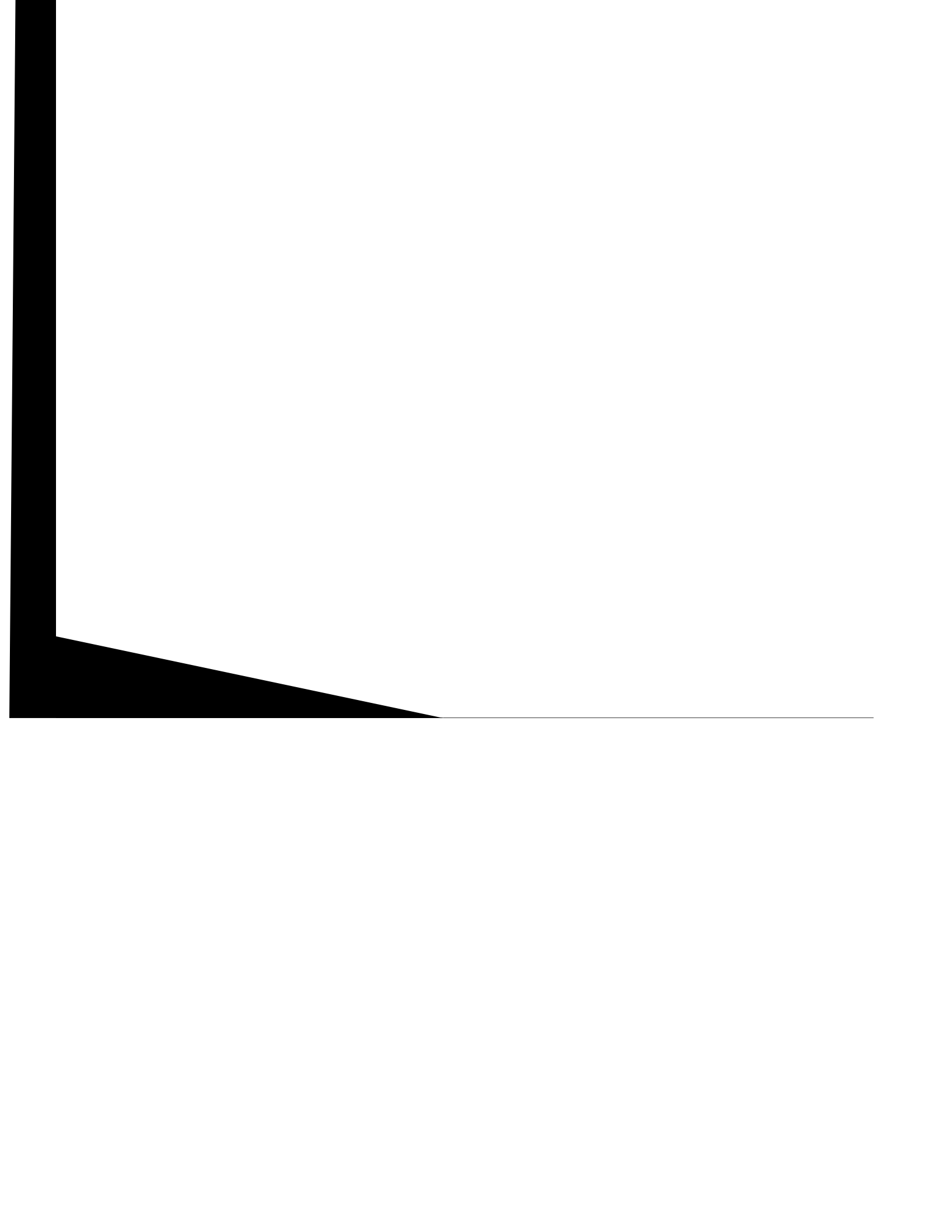
## Configure Ephones with Temporary MAC Addresses



	Command or Action	Purpose
		Tgwtpu vq rtkxngigf GZGE oqfg

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkwtg vgt o kpcn**
3. **xqkqg tgiuvgt**



## SUMMARY STEPS

1. **gpcdig**
- 2.



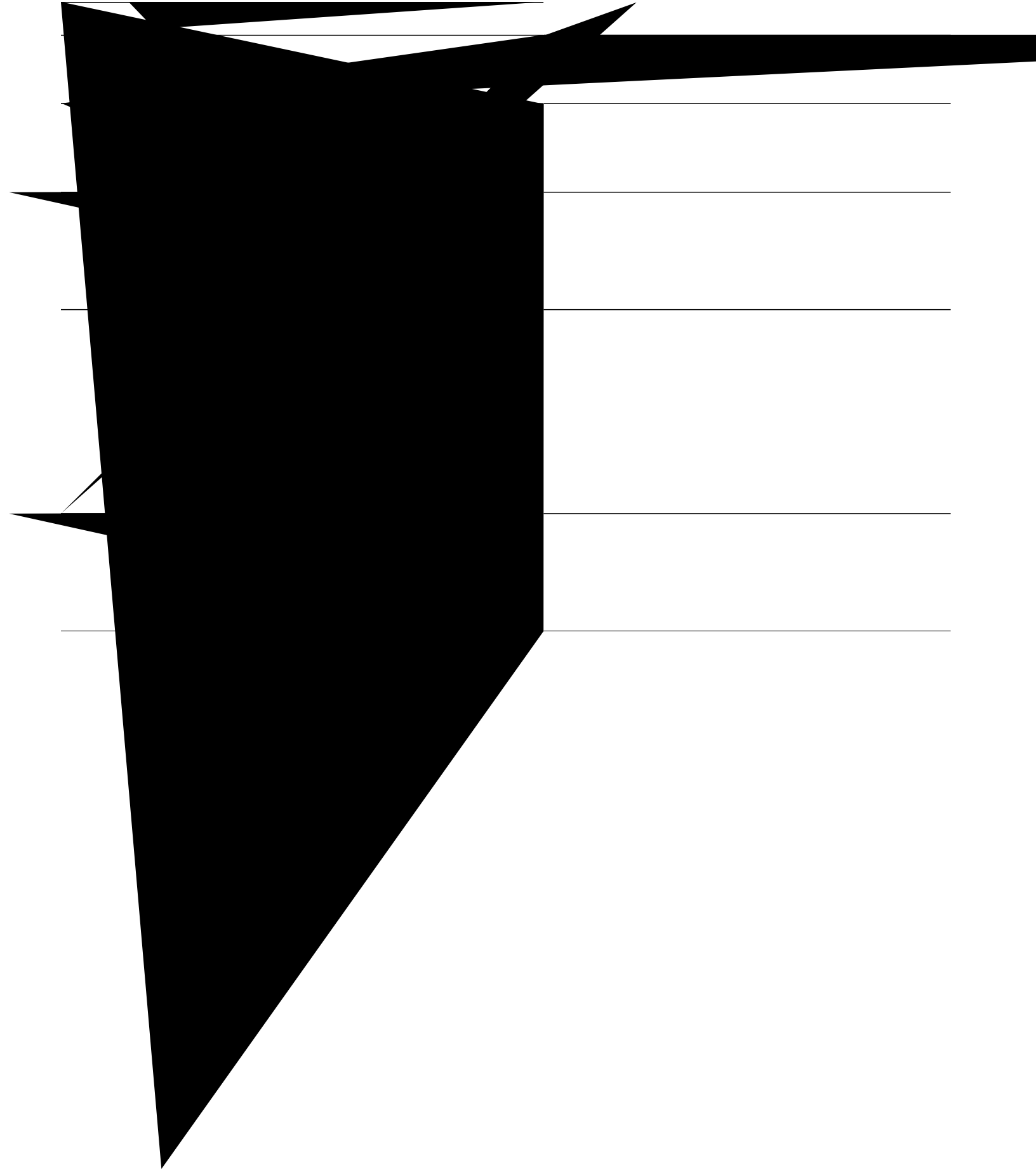


Y jkej gzygpukqp pwo dgt vq fkcñ vq ceeguu vjg gzygpukqp cuuki pgt cr rnkecvkqp0

Y jgvjgt vjg pwo dgt ku fkngf cwvq o cvkecññ{ y jgp c r jqp g i qgu qhh j qqm \*cr rnkecdng qpn{ vq UEER  
r j qp gu+0

Y jcv rcuuy qtf vq gpvgt vq ceeguu vjg cr rnkecvkqp0

Y jkej vci





# Assign Extension Numbers Onsite by Using Extension Assigner

Vjg hqmqykp i vcumu ctg rgthqt ogf d{ vjg kpuvcncvkqp vgejplekcp cv vjg ewuvq ogt u ukvg<

## Assign New Extension Numbers

Kpkvkcnn{. y jgp {qw kpuvcn c r j qpg. kv ku cuukipgf c vg o rqtct{. tcpfq o gzvgpukqp pwo dgt0 Vq ceeguu Gzvgpukqp  
Cuukipgt cpf cuukip vjg cr r t q r t k c v g gzvgpukqp pwo dgt vq v j k u r j q p g. rgthqt o vjg hqmqykp i uvgru0

---

Step 1 I gv vjg kphqt o cvkqp {qw pggf vq wug gzvgpukqp cuukipgt htq o {qwt u{uvg o



---

[qw ecp

- Step 7      Kh vjg gzvgf vq cpqvjgt rjqp<sup>g</sup> vjcv ku kp wug. gkvjgt<  
Tg<sup>w</sup>tp vq [Uvgr 7. qp rcig 59](#); vq gpvgt cpqvjgt gzvRgthqt o vjg rtqegfwtgu kp vjg [Wpcuukip cp Gzv ugev<sup>k</sup>qp cpf vjg \[Cuukip Pgy Gzv  
ugev<sup>k</sup>qp0\]\(#\)](#)

---

## Verify Extension Assigner Configuration for SCCP Phones

- 
- Step 1      Wug vjg **fgdwi gr jqp<sup>g</sup> gzv eq o ocpf vq fkurnc{ uvcv<sup>w</sup>u o<sup>g</sup>uucigu rtqfwegf d{ vjg gzvcrrnkecv<sup>k</sup>qp0**
- Step 2      Wug vjg **fgdwi xqkr crrnkecv<sup>k</sup>qp uetkrv** eq o ocpf v?      F w 8 8 35100D J H V

Vjg kpuvcnncvkqp vgejpkekcp ecp wug gzvgpukqp cuuki pgt vq cuuki p gzvgpukqp pw o dgtu 8223 vq 82270

Vjg gzvgpukqp cuuki pgt wugu vjg rtqzkukqp/vci vq

```
!  
no ip domain lookup  
!  
application  
  service EA flash:ea/app-cme-ea-2.0.0.0.tcl  
  paramspace english index 0  
  paramspace english language en  
  param ea-password 1234  
  paramspace english location flash:ea/  
  paramspace english prefix en  
!  
interface GigabitEthernet0/0  
no ip
```



```
ephone-dn 105
  number 0105
  label Temp-Line-not assigned yet
!
ephone 1
  provision-tag 101
  mac-address 02EA.EAEA.0001
  button 1:1
!
ephone 2
  provision-tag 102
  mac-address 02EA.EAEA.0002
  button 1:2
!
ephone 3
  provision-tag 103
  mac-address 02EA.EAEA.0003
  button 1:3
!
ephone 4
  provision-tag 104
  mac-address 02EA.EAEA.0004
  button 1:4
!
ephone 5
  provision-tag 105
  mac-address 02EA.EAEA.0005
  button 1:5
!
kron occurrence backup in 30 recurring
policy-list writeconfig
!
kron policy-list writeconfig
cli
```

```
provision-tag 1001  
mac-address 02EA.EAEA.0001  
number 1 dn 1001
```

```
voice register pool 2  
provision-tag
```





# Configuration Files for Phones

---

[Kphqt o cvkqp Cdqww Eqphki wtecvkqp Hknqu. rcig 5:9](#)

4 UGR










```
tftp-server SIPDefault.cnf url system:/cme/sipphone/SIPDefault.cnf>
tftp-server syncinfo.xml url system:/cme/sipphone/syncinfo.xml
tftp-server SIP0009B7F7532E.cnf url system:/cme/sipphone/SIP0009B7F7532E.cnf
tftp-server SIP000ED7DF7932.cnf url system:/cme/sipphone/SIP000ED7DF7932.cnf
tftp-server SIP0012D9EDE0AA.cnf url system:/cme/sipphone/SIP0012D9EDE0AA.cnf
tftp-server gk123456789012 url system:/cme/sipphone/gk123456789012
tftp-server gk123456789012.txt url system:/cme/sipphone/gk123456789012.txt
```

Step 2









CHAPTER

10

## Reset and Restart Cisco Unified IP Phones

---





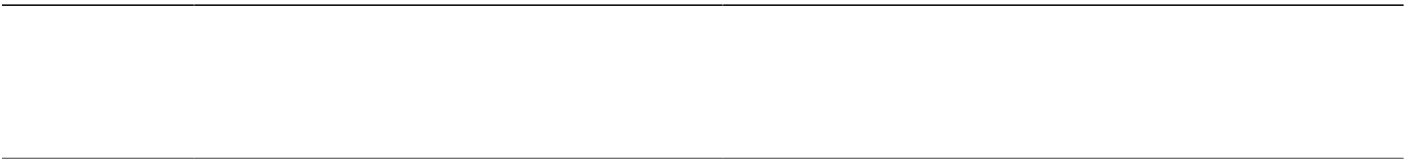




---

---

---



## DETAILED STEPS

---

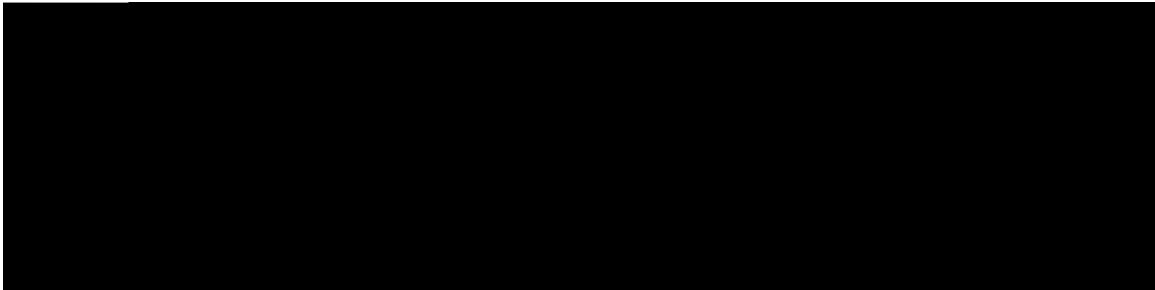
## SUMMARY STEPS

## Verify Basic Call

$\forall q, x, g, k, h \{ v, j, c, v \} E, k, u, e, q, k, R, r, j, q, p, g, u$







CHAPTER 11





# Localization Support for Cisco Unified SIP IP Phones

Ekueq Wpkhkgf EOG :08



Hqt eqphki wtcvkqp kphqt o cvkqp. ugg [Wug vj g Nqecng Kpuvcnngt kp Ekueq Wpkhkgf EOG 902\\*3+ cpf Ncvgt Xgtukqpu.](#)  
qp rcig 63;0

## Locale Installer for Cisco Unified SIP IP Phones

Ekueq Wpkhkgf EOG ;02 cpf ncvgt xgtukqpu uwr rqt vj g hqnnq ykpi gpjcpeg o gpvu hqt kpuvcnkp i nqecngu hqt Ekueq  
Wpkhkgf UKR KR rjqpgu<

Nqecng kpuvcnngt vjcv uwr rqtvu c ukping rtqegfwtg hqt cnn Ekueq Wpkhkgf UKR KR rjqpgu0

Pgy nqcf mg{yqtf vjcv tgswtgu {qw vq wug vjT vM



---

Restriction

Nqecnk | cvkqp ku pqv uwr rqtvgf hqt UKR r jqpgu0

Rjqpq hkt o yctg. eqphki wtcvkqp hkngu. cpf nqecng hkngu o wuv dg kp v jg uc o g

Hqt

---

---

---

---



Qp{n{ hncuj ogoqt{ ecp dg wugf hqt vjgug nqecngu} Eqr{ twuukpavc iuawh: ar jtcugu hqt

[qw owuv jcxg cp ceeqwpv qp Ekueqleq o vq ceegu vjg Uqhv yctg Fqypncf Egpvgtl Kh {qw fq pqv jcxg cp ceeqwpv qt kh  
{qw jcxg hqtiqwgp {qwt wugtpc o g qt rcuuyqtf. enkem vjg crrtqrkcvg dwwvqp cv

---

---

---

Tg o qxg vjg vyq/ngwgt ncpiwcig eqfg htqo vjg LCT hknqpcog cpf wug qpg qh hkxg uwrrqtvgf fktgevt{ pcoguykvj vjg hqnnqykpi eqpxgpvkqp<

wugtafghkpgapwodgt. yjgtg pwodgt ku 3 vq 7

Hqt gzc o rng. vjg cnkcu hqt Ejkpgug qp vjg Ekueq Wpkhkgf KR Rjqpg 9;92 ku<

Router(config)# **vhvr/ugtxgt hncuj<l|j/vf/ueer0lct cnkcu wugtafghkpga3lvf/ueer0lct**

Qp Ekueq 5:22 ugtkgu tqwvgtu. {qw o wuv kpenwfg lkvu kp vjg fktgevt{ pcog \*hncuj<lkvu qt unqv2<lkvu+0 Hqt gzc o rng. vjg VHVR cnkcu





---

Restriction

Y jgp wukpi cp gzvgtpcn VHVR ugtxgt. {qw o wuv o cpwcm{ etgcvg

Example:

Hqt gzc o r ng. EOG/nqecng/fgaFG/9020302 ku I gt o cp hqt I gt o cp{ hqt Ekueq Wpkhkf EOG 902\*3+0

Step 4







Restriction

---

Owvkrng wugt cpf pgyyqtm nqecngu ctg pqv uwr rqtvgf qp vjg Ekueq Wpkhkgf KR Rjqpg 9;24 I. 9;32.  
9;32 I. qt 9;42. qt vjg Ekueq Wpkhkgf KR Eqphgtgpeg Uvcvkqpu 9;57 cpf 9;580

Y jgp {qw wug vjg ugvwr vqqn htq o vjg **vgnr jqp{/ugtxkleg ugvwr** eq o o cpf

---

---

---

---

---





- Step 2 Gpuwtg vjcv rgt/rjqpg eqphki wtcvkqp hkngu ctg fghkpgf ykvj vjg **eph/hkng rgtrjqpg** eqo ocpf0
- Step 3 Wug vjg **ujqy vngrrjqp{/ugtxleg grjqpg/vgo rncvg** eqo ocpf vq ejgem vjg wugt nqecng cpf pgvyqtm nqecng ugwkpi u kp gcej grjqpg vgo rncvg0
- Step 4 Wug vjg **ujqy vngrrjqp{/ugtxleg grjqpg** eqo ocpf vq ejgem vjcv vjg eqttgev vgo rncvgu ctg crrnkgf vq rjqpgu0
- Step 5 Kh vjg eqphki wtcvkqp hkng nqecvkqp ku pqv VHVR. wug vjg **fgdwi vhr gxgpvu** eqo ocpf vq ugg yjkej hkngu Ekueq Wpkhkgf EOG ku nqqmkpi hqt cpf yjgvjgt vjg hkngu ctg hqwpf cpf qrgpgf eqttgevn{0 Vjgtg ctg wuwcn{ vjtg uvcvgu \* nqqmkpi hqt z hkng. qrgpgf z hkng. cpf hkpkujgf z hkng +0 Vjg hkng ku hqwpf yjgp cmn vjtg uvcvgu ctg fkurnc{gf0 Hqt cp gzvgtpcn VHVR ugtxgt {qw ecp wug vjg nqiu htqo vjg VHVR ugtxgt0
-

Hqt gzc o r ng. EOG/nqecng/fgaFG/:08 ku Igt o cp hqt Igt o cp{ hqt Ekueq Wpkhkgf EOG :080

Step 4 Fqypnqcf vjg

*Table 30: System-Defined User and Network Locales*

---





# Use the Locale Installer in Cisco Unified CME 9.0 and Later Versions



---

Restriction

Y jgp wukpi cp gzvgtpcn VHVR ugtxgt. {qw owuv ocpwcmn{ etgcvg vjg wugt nqecng

[qw o wuv eqr { vjg nqecng hkng kpvq vjg





---

---

---



## Verify Multiple Locales on SIP Phones

---

Step 1      Wug v jg **ujqy xqkeg tgikuvgt vhr/dkpf** eqo ocpf vq fkurnc{ c nkuv qh eqphki wtcvkqp hknugu vjcv ctg ceeguukdng vq KR r jppgu wukpi VHVR. kpenwfkpi v jg fkevkqct{. ncpicig. cpf vqpg eqphki wtcvkqp hknugu0

**Example:**

```
Router#sh voice register tftp-bind
tftp-server syncinfo.xml url system:/cme/sipphone/syncinfo.xml
tftp-server SIPDefault.cnf url system:/cme/sipphone/SIPDefault.cnf
tftp-server softkeyDefault_kpml.xml url system:/cme/sipphone/softkeyDefault_kpml.xml
tftp-server softkeyDefault.xml url system:/cme/sipphone/softkeyDefault.xml
tftp-server
```





```
user-locale 1 U1 ZH
network-locale 1 U1 CN

ephone-template 2
user-locale 1
network-locale 1

ephone 11
button 1:25
ephone-template 2

ephone 12
button 1:26
```

## Example for Configuring Chinese as the User-Defined Locale

Vjg hqnnqyki ku c uc o rng qwwrww htq o vjg **wugt/hqecng** eqo o cpf y jgp

LOCALE INSTALLER MESSAGE: Filename: ipc-sccp.jar  
LOCALE INSTALLER MESSAGE: Filename: mk-sccp.jar  
LOCALE INSTALLER MESSAGE: Filename: tc-sccp.jar  
LOCALE INSTALLER MESSAGE: Filename: td-sccp.jar  
LOCALE INSTALLER MESSAGE: New Locale configured

CNF-FILES: Clock is not set or synchronized, retaining t n

si

LOCALE INSTALLER

```
Router(config-telephony)# etgcvg eph/hkngu  
Router(config-telephony)# grjqpg 3  
Router(config-ephone)# tgugv
```

## Examples for Configuring Multiple User and Network Locales on SIP Phones

```
Vjg hqnnqykpi gzc o r ng u e a n e j g fghcwnv nqecng qh 2 vq Igt ocp{. yjkej fghkpgu Igt ocp{ cu vjg fghcwnv wugt  
cpf pgvyqtm nqecng Igt ocp{ ku wugf hqt cnn
```

voice register pool

---

---

---

---

---

## Dial Plans

---

Vjku ejcrvgt fguetkdgu hgcwrtgu vjcv gpcdnq Ekueq Wpkhkf Eq o wpkecvkqpu Opcigt Gzrtguu  
\*Ekueq Wpkhkf EOG+ vq gzrcpf qt o cprwncvg kpvgtpcn gzvgpukqp pw o dgtu uq vjcv vjg{ eqphqt ovjcv







# Voice Translation Rules and Profiles

Vtcpuncvkqp twngu o cprwncvg fkcngf pw o dgtu vq eqphqt o vq kpvgtpcn qt gzygtpcn



dialplan-pattern 1 +1222333.... extension-length 4

## Example 2

Kp vjg hqnnqykpi gzc o rng. rjqpgu ctg tgikuvgtgf ykvj ngcfkpi - G0386 pwodgt \*-344455553333+ cpf vjg  
rjqpgu ecp dg tgcejgf d{ fkcnpki gkvjgt vjg 6/fkikv gzc o rng pwodgt qt vjg - G0386 pwodgt

number

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>enable</b>  Example: Router> enable	Enter privileged EXEC mode.  Gpvt {qwt rcuuyqtf kh rtqo rvgf}
	<b>configure terminal</b>	Enter global configuration mode.

## SUMMARY STEPS

1. **gpcdn**
2. **eqphk i wtg vgt o kpcn**
3. **xqkq t**

# Verify Dial Plan Patterns

## SUMMARY STEPS



UKR uwrrqtv Ekueq Wpkkkf EOG 603 qt c ncvt xgtukpp0



Apply Voice T

---

---

---



## SUMMARY STEPS

1. **gpcdn**
- 2.

## Before You Begin

Ekueq EOG 506 qt c ncvt xgtukqp0

Xqkeg vtcpuncvqp twngtwn W tcpp

What to Do Next

Kh {qw ctg fqpg oqfkh{kpi rctc ogygtu hqt r jqpgu kp



Router# vguv xqkeg vt cpuncvkqp/twng





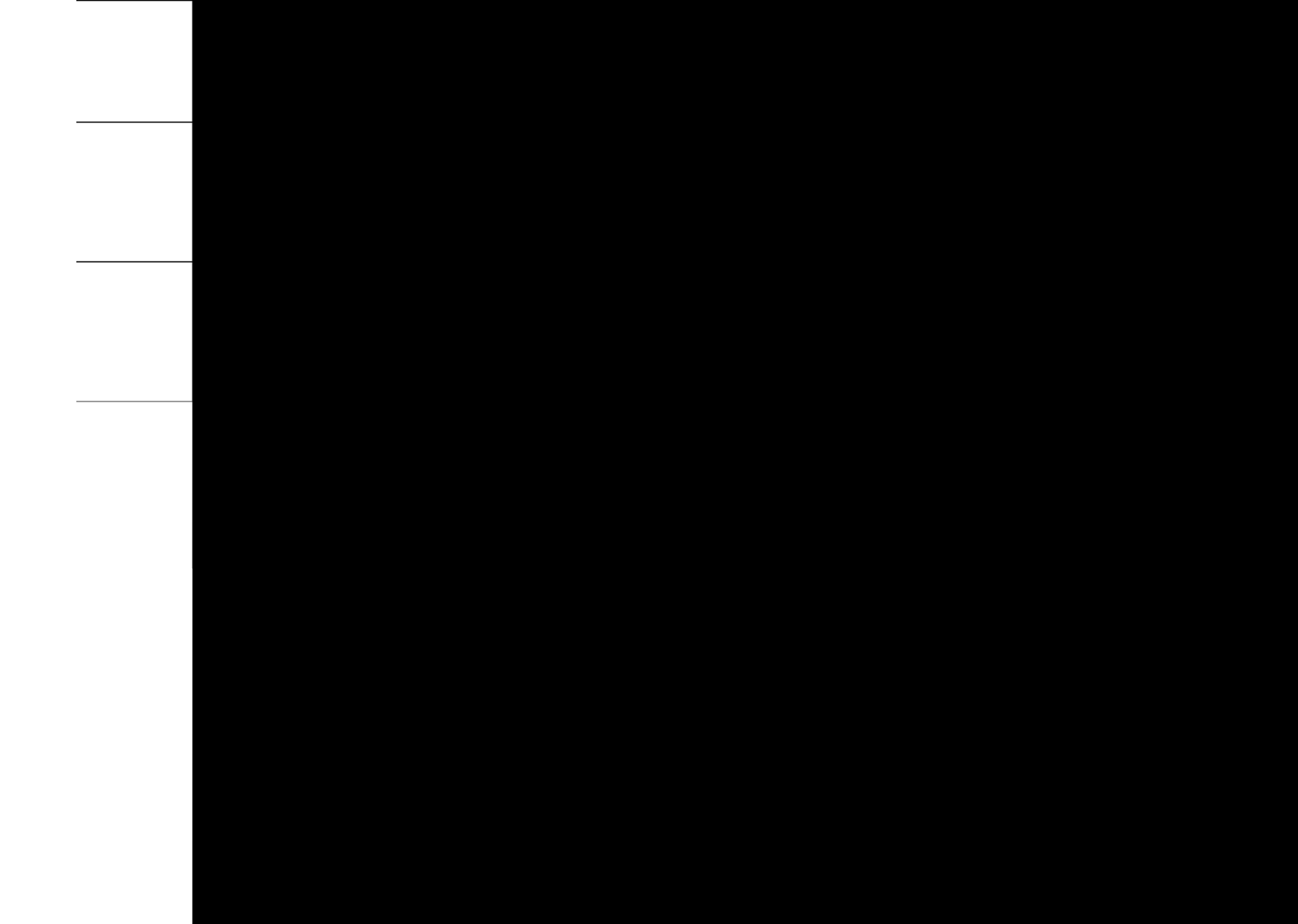
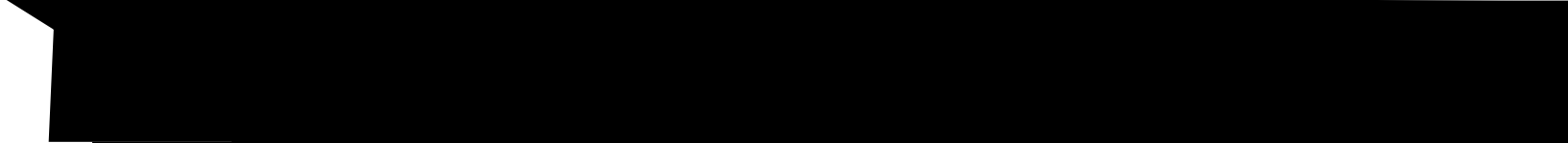

---

---

---

---

---



---

---

---

# Configuration Examples for Dial Plan Features

## Example for Configuring Secondary Dial Tone on SCCP Phones

```
telephony-service
fxo hook-flash
load 7910 P00403020214
load 7960-7940 P00305000600
load 7914 S00103020002
load 7905 CP7905040000SCCP040701A
load 7912
```

Kh c wugt qp Ekueq Wpkhgf EOG 3 ecnu c r j qpg qpf Ekueq Wpkhgf EOG 4 d{

q



# Feature Information for Dial Plan Features

Vjg hqmqy kpi vcdng rtqxfgu tngcug kphqt o cvkqp cdqww vjg hgcwvtg qt hgcwvtgu fguetkdgf kp vjku o qfwng0 Vjku  
vcdng nkuvu qpn{ vjg uqhvy ctg tngcug vjcv kpvtfwegf uwr rqtv hqt c ikxgp hgcwvtg kp c ikxgp uqhvy ctg tngcug  
vtckp0 Wpiguu pqvgf







Gcej qh vjg rtgegfkpi ecnn ukwvcvkqpu ku kmwuvtevgf kp Hkiwtg 37< Vjtg/Yc{ Eqphgtgpekpi. Ecnn Vtepuhgt cpf Hqtyctf. Ekueq Wpkv{ Gzrtguu. cpf OQJ Dgyyggp I0933 cpf





NVK/dcugf vtcpueqfki ku cp cnvgtpcvkxg vq UEER/dcugf vtcpueqfki0 Vjg NVK/dcugf vtcpueqfki





6 Xgthk{ {qwt uqnwvkqp0

7 kpuvcnm jctf yctg0

**FGVCKNGF UVGRU**

---

Step 1 Fgygt okpg vjg pwo dgt qh vtcpueqfkipi uguukqpu vjcv {qwt tqwvgt o wuv uwr rqtv0

Step 2 Fgygt okpg vjg pwo dgt qh FURu vjcv ctg tgswtgfvq uwr rqtv vtcpueqfkipi uguukqpu0 Ugg

# Configure DSP Farms for NM-HDs and NM-HDV2s

## SUMMARY STEPS

1. **gpcdnig**
2. **eqphkiwtg**

---

---

---

---

---

---

---

---

---

---

---

## DETAILED STEPS

---





Before You Begin

Kfgpvkh{ vjg OCE cf ftguu qh vjg UEER enkgpv

---

FUR het o0 Hqt kphqt o cvkqp qp eqphk i wtkp i





DET

Register



```
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
Stream-ID:8 mtp:1 0.0.0.0 0 Local:0 IDLE
usage:
codec:G711Ulaw64k duration:20 vad:0 peer Stream-ID:0
```

Step 4 **Wug vjg ujgy**

**Example:**

```
Router# show sccp connections details
```

```
bridge-info(bid, cid) - Normal bridge information(Bridge id, Calleg id)
```

```
mmbridge-info(bid, cid) - Mixed mode bridge
```

## Before You Begin

Ekueq Wpkkkf EOG 604 qt c ncvg t xgtukqp0

### SUMMARY STEPS

1. **gpcdn**
2. **eqphk i wtg vgt o kpcn**
3. **et{ rvq rnk ugtxgt *ncdn***
4. **fcvdcug ngxgn eq o rnyg**
5. **itcpv cwwq**
6. **fcvdcug wtn *tqqv/wtn***
7. **pq u j wvfqyp**
8. **gzkv**
9. **et{ rvq rnk vt wv r qkp *ncdn***
10. **t**

---

---








## Copy the CA Root Certificate of the DSP Farm Router to the Cisco Unified CME Router

```
Vjg FUR hct o tqwvgt cpf Ekueq Wpkhkgf EOG tqwvgt gzejcpi gu egtvkhkecvgu fwtkpi vjg tgi kvtcvkqp rtqegu0  
Vjgug egtvkhkecvgu ctg fki kvcnn{ uki pgf d{ vjg EC ugtxgt qh vjg tgurgevixg tqwvgt0 Hqt vjg tqwvgtu vq ceegr v
```





## DETAILED STEPS

---

---



# Configure LTI-based Transcoding

## SUMMARY STEPS

1. `gpcdn`
2. `eqphkwtg vgt o kpcn`
- 3.

	Command or Action	Purpose
		Gpygtu FUR hct o rtqhkng eqphki wtcvkqp oqfg

What to Do Next



Note

---

[qw ecp wug vjg eqo o cpf **ujqy furhct o rtqhkng** *rtqhkng/pwodgt* vq xgtkh{ vjg eqphkiwtgf FUR hct o  
rtqhkngu0 Wug vjg eqo o cpf vq xgtkh{ kh vjg rtqhkng uvcvwu ku WR. cpf vjg cr rnkcvkqp uvcvwu ku CUUQEKC VG F0

---

## Configuration Examples for T\

```
ip source-address 10.5.49.200
```

[qw ecp cnuq eqphkiwtg xqkeg encuu eqfge wpfgt c xqkeg tgiuwgt rqqi qp Wpkhkf EOG)

voice register pool 1  
id mac



## Toll Fraud Prevention

---

Rtgtgswkukvgu hqt Eqphki wtkpi Vqnn Htcwf Rtngxpvkqp. rcig 733

Kphqt o cvkqp Cdqw Vqnn Htcwf Rtngxpvkqp. rqig 733

Eqphki wtg Vqnn

vq **KR c f f t g u u v t w u y g f** n k u v c w v q o c v k e c m { 0 V j g k R x 6 u g u k q p v e t i g v



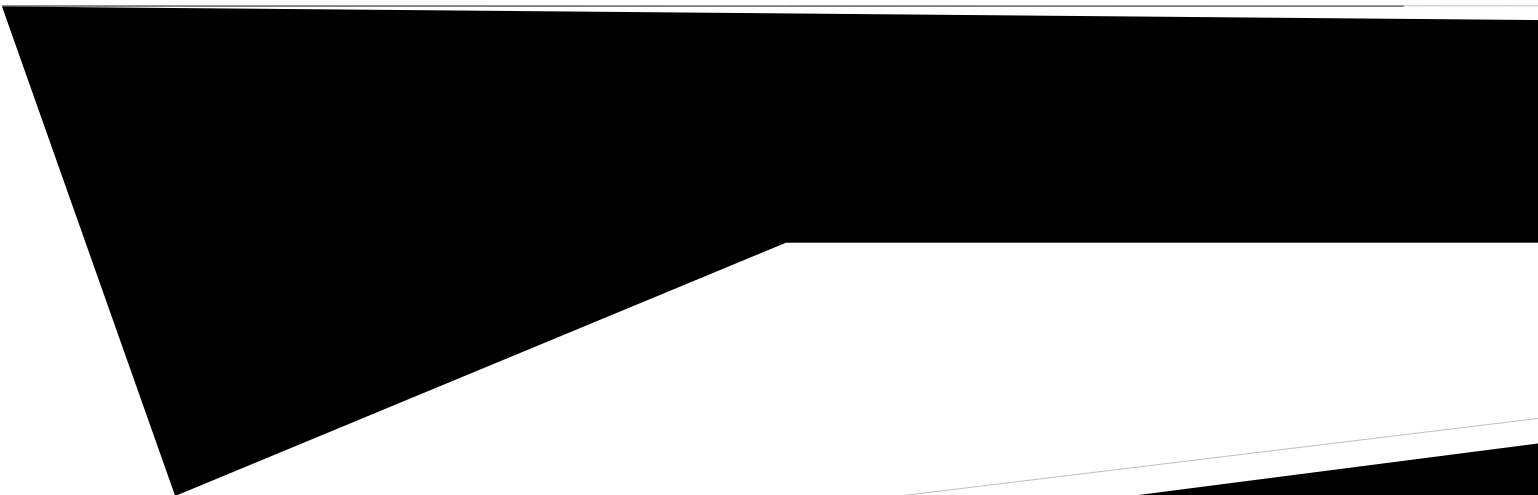
## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlieg ugtxleg xqkr**
4. kr cfftgau vtwuvf cwjgpkecyg
5. kr/cfftgau vtwuvf

	Command or Action	Purpose
	<p><b>ujqy kr cfftguu vtwuvgf nkuv</b></p> <p>Example: Router# <b>#ujqy kr cfftguu</b></p>	<p>Xgtkhkgu c nkuv qh xcnkf KR cfftguugu hqt kpeq okpi J0545 qt UKR vtwpm ecnu. Ecnn Dnqem ecwug hqt tglgevgf kpeq okpi ecnu0</p>

## DETAILED STEPS

---



IP Address Trusted Call

	Command or Action	Purpose
		Gpcedngu fktgev/kpyctf/fkcn *FKF+ hqt kpeq okpi KUF P pwo dgt0 Vjg kpeq okpi KUF P *gpdnqe fkcakpi+





Troubleshooting T

**Example:**

```
Feb 11 01:44:06.527: RADIUS: Cisco AVpair [1] 36  
internal-error-code=1.1.228.3.31.0
```



# Graphical User Interface

---

Vjku ejcrvgt fguetkdg vjg Ekueq Wpkhkgf Eq o owpkecvkqpu Opc i gt Gzr tguu \*Ekueq Wpkhkgf EOG+ i tcr jkecn wugt kpvgtceq \*IWK+ cpf gznckpu j q y vq ugv kv wr ceeqwpvu hqt u{ uvq o cf okpukvcvqtu. ewuvq o gt cf okpukvcvqtu. cpf rjqpg wugtu0

[Rtgtgswkukvgu hqt Gpcdnkpi vjg IWK. rcig 745](#)

cu vjg wugtpc o g hqt cp { Wpkhkgf EOG IWK ceeqwv cpf vjg wugt pc o g kp c nqi qwv qt wugt rtqhkng hqt  
Gzvypukqp Oqdknkv {0

Gzvypukqp Oqdknkv { qrvkqpu kp Ekueq Wpkhkgf EOG IWK 60403 cpf ncvgt xgtukqpu ecppqv dg ceeguugf htq o  
vjg U {uv g o Cf o kpkuvtcvqt qt Ewuvq o gt Cf o kpkuvtcvqt nqi kp uetggpu0

Vq ceeguu vjg IWK. {qw o wuv wug Oketquqhv Kpvgtpgv Gzrnqtgt 707 qt c ncvgt xgtukqp0 Qvjgt dtqyugtu ctg  
pqv uwr rqtvgf0

Kh {qw wug cp ZON eqphki wtcvkqp hkng vq etgcvg c ewuvq o gt cf o kpkuvtcvqt nqi kp. vjg ZON hkng ecp jcxg  
c oczk o w o uk | g qh 6222 d {vgu0

# AAA Authentication

Vjg

---



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **vngr jqp{/ugtxkeg**
4. **ygd cf o kp**

---

---

---

---



---

Restriction

Vjg Ekueq Wpkkgf EOG IWK

Vq gfkv cpf nqcf





## Define a Phone User Account Using Cisco IOS Software Commands

Vq wug

---

---











## Voice Mail Integration

---

Vjku ejcrvgt fguetkdg j qy vq kpvgitcvg {qwt xqkeg/o ckn u{uvgo ykvj Ekueq Wpkhkgf Eqo o wpkecvkqpu Ocpcigt Gzrtguu \*Ekueq Wpkhkgf EOG+0

[Rtgtgswkukvgu hqt Xqkeg Ockn Kpvgitcvkqp. rcig 75;](#)

[Kphqt o cvkqp Cdqw Xqkeg/Ockn Kpvgitcvkqp. rcig 762](#)

[Eqphki wtg Xqkeg/Ockn Kpvgitcvkqp. rcig 768](#)

[Eqphki wtcvqpp Gzc o rngu hqt Xqkeg/Ockn Kpvgitcvkqp. rcig 798](#)

[Hgcwvtg Kphqt o cvkqp hqt Xqkeg/Ockn Kpvgitcvkqp. rcig 79;](#)

Vq fvgto kpg y jgvjgt vjg Ekueq KQU uqhvyctg tngcug cpf Ekueq Wpkhgf EOG uqhvyctg xgtukqp  
ctg eqo rcvkdng ykvj vjg Ekueq Wpkv{ Gzrtguu xgtukqp. Ekueq tqwvgt o qf gn. cpf Ekueq Wpkv{ Gzrtguu  
jctfyctg vjev {qw ctg wukpi. ugg [Ekueq Wpkv{ Gzrtguu Eqo rcvkdngv{ Ocvtkz0](#)

Vq xgthk{ kpuvcmgf Ekueq Wpkv{ Gzrtguu uqhvyctg xgtukqp. gpvgt vjg Ekueq Wpkv{ Gzrtguu eqo o cpf  
gpxktqpo gpv cpf wug vjg **ujqy uqhvyctg xgtukqp** wugt GZGE



Vjg Ockndqz Ugngevkqp Rqnke{ hgcwvtg cmmq y u {qw vq r tqxkukqp vjg hqmq y kpi qrvkqpu htq o vjg Ekueq Wpkhkgf EOG  
eqphki wtcvkqp0



Hqt eqphki wtcvkqp kphqt o cvkqp. ugg Eqphki wtg c Xqkeg Ockndqz Rknqv Pw o dgt qp c UEER Rjqpg qt Eqphki wtg  
c Fktgevqt{ Pw o dgt hqt O YK

Yjgp vjg UKR

oguuicig vq cevkxcvg c xkuwcn kpfkecvqt0 Vjg FE Xq<sub>nvc</sub>ig



---

---

---

## Set a Mailbox Selection Policy for Cisco Unity Express or a PBX Voice-Mail Number

Vq ugv c rqnke{ hqt ugngevkpi c ockndqz hqt ecnu htq o c Ekueq Wpkhkgf EOG u{uyg o vjcv ctg fxxgtvgf dghqtg  
dgkpi ugpv vq c Ekueq Wpkv{ Gzrtguu qt



## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **gzkv**
4. **grjqpg/fp *fp/vci***
5. **o cknqz/uggevkqp ]ncuv/tgftgev/pw o \_**







	Command or Action	Purpose
		Fghkpgu vjg vnggr j qpg pw o dgt vjcv ku urggf/fkcngf y jgp vjg Oguuc i gu dwwqp qp

# Configure Live Record on SCCP Phones

Vq eqphkiwtg vjg Nkxg Tgeqtf hgcwvtg uq vjcv c rjqpg wugt ecp tgeqtf c eqpxgtucvkqp d{ rtguukpi vjg NkxgTef  
uqhvmg{. rgthqt o vjg hqnnqykpi u uvgru0



---

Restriction



---

---

---

---

---







# Enable DTMF Integration

Rgthqt o *apg* qh vjg hqnnqykpi vcumu. fgrgpfkpi qp yjkej FVOH/tgnc{ ogvjqf ku tgswtgf<

Gpcdng FVOH kpygi tcvkqp hqt Cpcnqi Xqkeg/Ockn Cr rnkcevkqpu Vq ugv wr FVOH kpygi tcvkqp rcwgtpu  
hqt eqppgevkpi vq cpcnqi xqkeg/ockn cr rnkcevkqpu0

Gpcdng FVOH kpygi tcvkqp Wukpi THE 4:55 Vq eqppgev vq c tgoqvg UKR/dcugf

---

---



Before You Begin

Eqphkiwtg vjg **eqfge** qt **xqleg/encuu** **eqfge** eq o o cpf hqt vtcpueqfkipi dgvyggp I093



## Enable DTMF Integration Using SIP NOTIFY

Vq eqphki wtg c UKR fkn





What to Do Next

Chvgt eqphkiwtkpi FVOH tgn{. {qw ctg tgc{ vq eqphkiwtg Oguuc ig Yckkpi kpfkcvqt \*O YK+0 Ugg [Eqphkiwtg](#)  
[c UEES](#) [Eqtg](#) [c](#)

---



Configure a Directory Number for MWI on SIP Phones





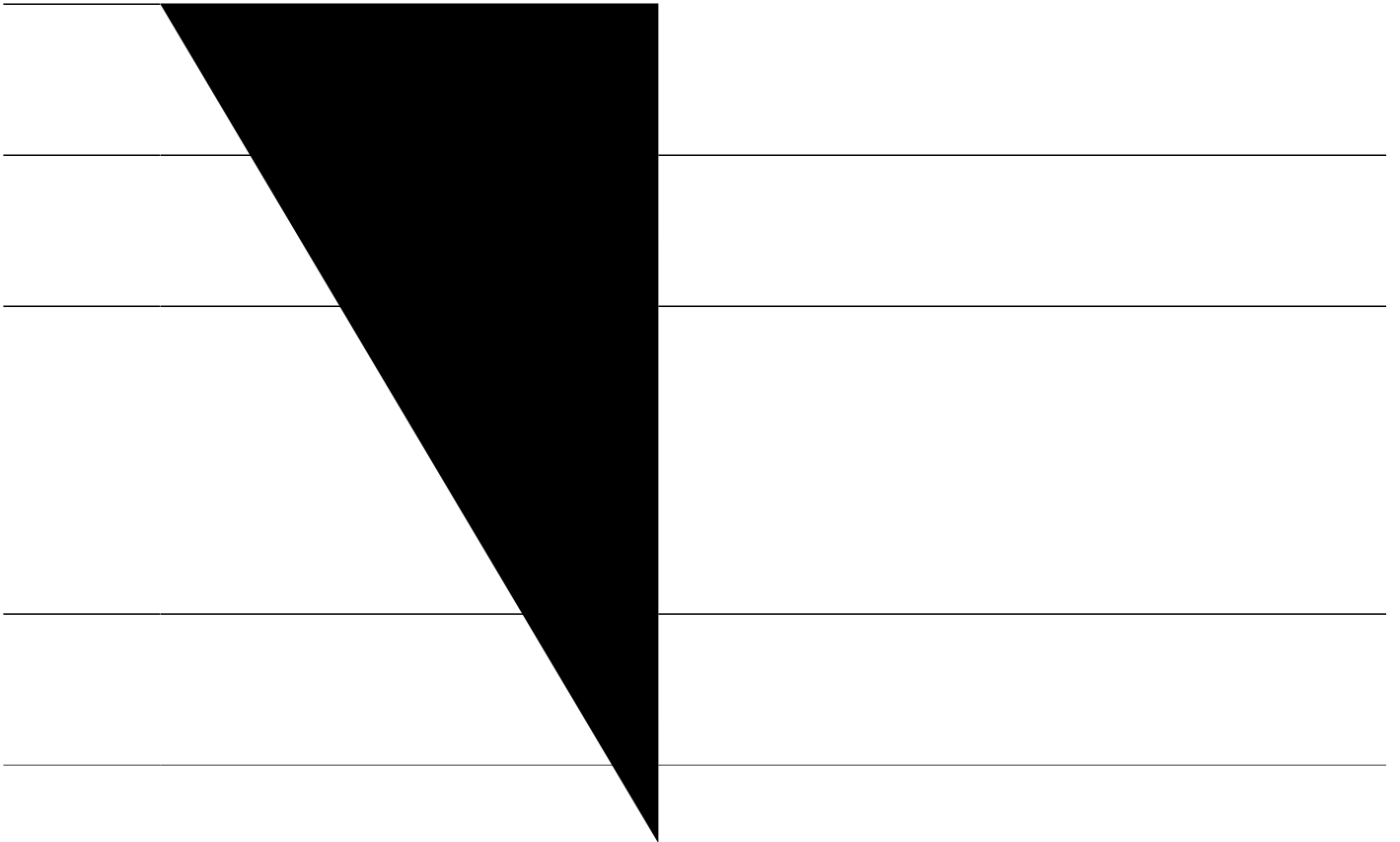
---

---

---









# Example for Configuring DTMF Integration Using RFC 2833

Vjg hqmqykipi gzc o rng

ephone-dn 24  
number 2024

ephone-dn 25  
number 2025

ephone 18  
button 1:20 2021,22,23,24,25 3x2 5:26  
mwi-line 2

Vjg hqnnqykpi gzc o ring gpedngu O YK qp gr j qpg 39 hqt nkpg 5 \*gzvpgukqp 82;+0 Kp vjku gzc o ring. vjg dwwvqp  
pwo dgtu fq pqv o cvej vjg nkpg pwo dgtu

Example for Configuring SIP Directory Number for MWI Unsolicited Notify

---

---

---



Eqphki wtg Pgy qtm Vkog Rtqvqeqn \*PVR+0 Hqt eqphki wtcvkqp kphqt o cvkqp. ugg [Gpedng Pgy qtm Vkog Rtqvqeqn. qp rcig 3550](#)

Ocpwcm{ ugv vjg uqhv yctg enqem wukpi vjg **enqem**

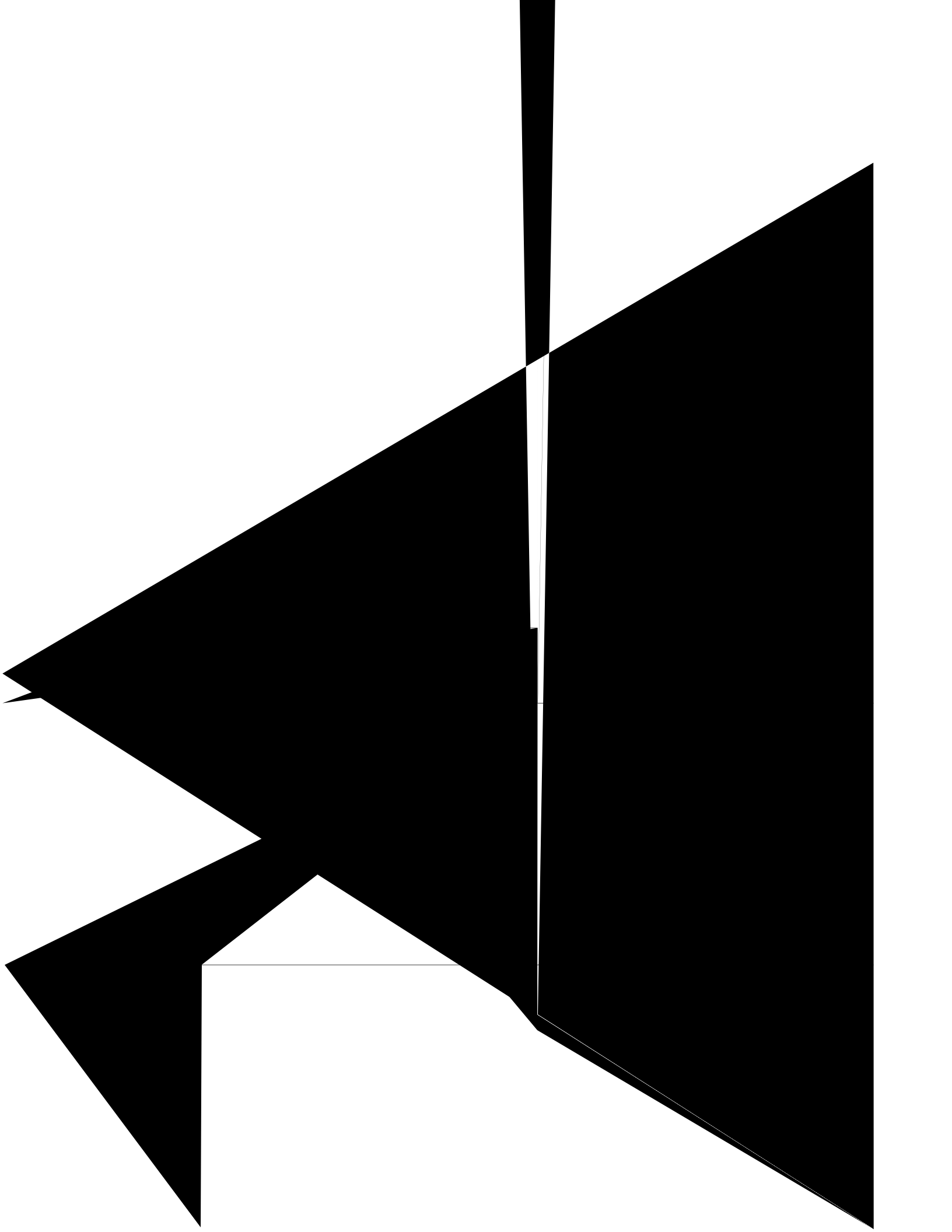




# Public Key Infrastructure

Ekueq Wpkhgf EOG r j qpg cwvjgpvkecvkqp wugu v jg rwdnke/mg{/kphtcwtwevwtg \*RMK+ ecr cdknkvgu kp Ekueq











# Configuration File Maintenance

Kp c ugewtg gpxktqp o gpv. ugxgtcn v{ rgu qh eqphki wtcvkqp hkngu o wuv dg fki kvcm{ uki pgf dghqtg vjg{ ecp dg jquvgf  
cpf



Ekueq Wpkkkf EOG tqwgtu jcxg ceeguu

vtwpmu ctg pqv uwr rqtvgf0 [Hki wtg 43< Ugewtg Ekueq Wplhkgf](#)





---

Restriction

Ugewtg UKR vtwpm ku uwr rqtvgf qpn{ qp UEER Ekueq Wpkhkgf





---

Vjg

## HTTPS support for an External Server

Vjgtg ku cp kpetgculpi pggf vq ugewtgn{ ceeguu ygd eqpvgrv qp Ekueq





---

---

	Command or Action	Purpose
	Example:	

Vjg hqmqykpi rctvken qwrww htq o vjg **ujqy twppki/eqphki** eqo o cpf ujqu vjg eqphki wtcvkqp hqt c Ekueq  
KQU EC pc ogf ucplqug3 twppki qp

## DETAILED STEPS

---

---



## **Qdvckpki c egtvkhkecvg hqt vjg VHVR ugtxgt hwpevkqp**

```
crypto pki trustpoint tftp-server  
  enrollment url http://192.168.1.1:80  
  revocation-check
```







Skinny Server Trustpoint for TLS: cme-sccp

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **evn/enkpv**
4. **ucuv3 vtuvvrqkpv ncdgn**
5. **ucuv4 vtuvvrqkpv ncdgn**
6. **ugtxgt }ecrh · eog · eog/vhvr · vhvr ; kr/cfftguu vtuvvrqkpv vtuvvrqkpv/ncdgn**
7. **ugtxgt eog kr/cfftguu wugtpc o g pc o g/wtkpi rcuuyqtf }2 · 3 ; rcuuyqtf/wtkpi**
8. ? **i**

---

---

List of Trusted Servers in the CTL

CME	10.1.1.1	cmeserver
TFTP	10.1.1.1	cmeserver
CAPF	10.1.1.1	cmeserver

What to Do Next

[qw ctg hkpkujgf eqphkiwtkpi vjg EVN enkgpv0 Ugg [Eqphkiwtg vjg ECRH Ugtxgt.](#)

---

## Examples

Vjg hqmqykpi uco ring qwwrww htqo vjg **ujqy evn/enkpv** eqo o cpf flurnc{u vjg vtwwvrqkpvu kp vjg u{uvgo<

Router# **ujqy evn/enkpv**

CTL Client Information

```
-----  
SAST 1 Certificate Trustpoint: cmeserver  
SAST 1 Certificate Trustpoint: sast2  
List of Trusted Servers in the CTL  
CME      10.1.1.1      cmeserver  
TFTP     10.1.1.1      cmeserver  
CAPF     10.1.1.1      cmeserver
```

## Configure the CAPF Server

C egtvkhkecvg o wuv dg qdvckpgf hqt vjg ECRH ugtxgt uq vjcv

---

---

---

---

\_\_\_\_\_







	Command or Action	Purpose
		<p>Vjku eqo o c p f e c p c n u q d g e q p h k i w t g f k p v g n g r j q p { / u g t x k e g e q p h k i w t c v k q p o q f g l V j g x c n w g u g v k p g r j q p g e q p h k i w t c v k q p o q f g j c u r t k q t k v { q x g t v j g x c n w g u g v k p v g n g r j q p { / u g t x k e g e q p h k i w t c v k q p o q f g l }</p>
		<p>*Q r v k q p c n + U g v u v j g u g e w t k v { o q f g l j q t ® }</p>

	Command or Action	Purpose
		<p><b>pwm/uvtpi</b> Pq cwvjgpykecvkqp0</p> <p>Vjku eqo ocpf ecp cnuq dg eqphkiwtgf kp ECRH/ugtxgt eqphkiwtcvkqp oqfg vq kpkvkevg egtvkhkecvg qrgtcvkqpu cv c inqdcn ngxgn0 Vjku eqo ocpf kp grjqpg eqphkiwtcvkqp oqfg jcu rtkqtkv{ qxgt vjku eqo ocpf kp ECRH/ugtxgt eqphkiwtcvkqp oqfg0</p> <p>[qw ecp cnuq wug vjg <b>cwj/0qfg</b> eqo ocpf kp ECRH/ugtxgt eqphkiwtcvkqp oqfg vq eqphkiwtg cwvjgpykecvkqp cv c inqdcn ngxgn0</p>
		Rgthqtou c eqo rnyvg tgdqqv qh vjg rjqpg0



---

Credentials PORT: 2444  
Trustpoint: ctlpv

---

What to Do Next

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **et{rvq rmk vtuvvrqkpv ncdgn**
4. **gptqm o gpv wtn ec/wtn**
5. **tgxqecvkqp/ejgem ogvjqf3 ]ogvjqf4 ]ogvjqf5\_**
6. **ugtkcn/pw o dgt ]pqqg\_**
7. **tucmg{rckt mg{/ncdgn ]mg{/uk/g**





	Command or Action	Purpose
	Example: Router(config-cs-server)# lifetime certificate 1800	

Enter the Authentication String on the Phone

Step 6

Xgtkh{ vjcv vjg egtvkkecvg ycu kpuvcmgf qp vjg rjqpg0 Htq o vjg Ugwkp iu ogpw qp vjg rjqpg uetggp. ejqqug **Oqfgn**  
**Kphqt o cvkqp** cpf vjgp rtguu vjg **Uggev** uqhvmg{

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **et{rvq rmk vtuvrqlpv pcog**
4. **tgxqecvkqp/ejgem pppg**
5. **gptqm o gpv vgt o kpcn**
6. **gzkv**
7. **et{rvq rmk cwjgpvkecvg pcog**
8. **Fqypnqcf vjg hqwt OK `**

t

---

---

## What to Do Next

Y jgp {qw jcxg oqtg vjcp qpg Ekueq Wpkhgf EOG tqwgt kp {qwt pgyqtm. {qw owuv eqphkiwtg c EVN  
rtqxfgt qp

Before You Begin

Ekueq Wpkihgf



---

---

---

---

---

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlkg**

	Command or Action	Purpose
		Gpcedng ugewtg ecmmu vj cv wug UT

## Configure Integration Between Cisco Unified CME and Cisco Unity

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **et{rvq rnk vtuvrqp *pcog***
4. **t**

	Command or Action	Purpose
		Tgvtkgxgu vjg EC egtvkhkecvg cpf cwvjgpvkecvgu kv0 E j gemu vjg O



## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **kr jvr ugtxgt**
4. **et{rvq rnk ugtxgt *eu/ncdgn***
5. **fcvdcug ngxgn } o kpk o w o ~**



## DETAILED STEPS

---

---

---



---

---

---

---

---

---

---

---



Fw0wMzEwMTAyMDE4ND1aFw0yMzEwMTAyMDI3MzdaMC4xFjAUBgNVBAoTDUNpc2Nv

Vd54qlpc/hQDfWlbrIFkCcYhHws7vwnPsLuy1Kw2L2cP0UXxYghSsx8H4vGqdPFQ  
NnYy7aKJ43SvDFt4zn37n8jrv1Ruz0x3mdbcBEdHbA825Yo7a8sk12tshMJ/YdMm  
vny0pmDNZXmeHjqEgVO3UFUn6GVCO+Kly1dUU1qpYJNYtqLkqj7wgccGjsHdHr3a  
U+bwlul Y= d 5Y

Issuing CA certificate configured:  
Subject Name:  
cn=srstcaserver



```
crypto pki trustpoint sast2
enrollment url http://10.1.1.100:80
```

```
load-cfg-file slot0:Jar41.2-9-0-101dev.sbn alias Jar41.2-9-0-101dev.sbn  
load-cfg-file
```

! No configuration change since

```
voice class codec 2
  codec preference 1 g711alaw
  codec preference 2 g711ulaw
!
voice class codec 3
  codec preference 1 g729r8
  codec preference 8 g711alaw
  codec preference 9 g711ulaw
!
voice class codec 1
  codec preference 1 g729r8
  codec preference 2 g728
  codec preference 3 g723ar63
  codec preference 4 g711ulaw
!
!
voice iec syslog
voice statistics type iec
voice statistics time-range since-reset
!
!
!
crypto pki server myra
  database level complete
  grant auto
  lifetime certificate 1800
!
crypto pki trustpoint myra
  enrollment url http://10.13.32.11:80
  revocation-check none
  rsakeypair iosra
!
crypto pki trustpoint mytrustpoint1
  enrollment url http://10.13.32.11:80
  revocation-check none
  rsakeypair mytrustpoint1
!
crypto pki trustpoint sast2
  enrollment url http://10.13.32.11:80
  revocation-check none
  rsakeypair sast2
!
!
crypto pki certificate chain myra
  certificate ca 0-
```

2A864886 F70D0101 04050003 81810003 564A6DA1 868B2669 7C096F9A 41173CFC  
E49246EE C645E30B A0753E3B E1A265D1 6EA5A829 F10CD0E8 3F2E3AD4 39D8DFE8  
83525F2B D19F5E15 F27D6262 62852D1F 43629B68 86D91B5F 7B2E2C25 3BD2CCC3  
00EF4028 714339B2 6A7E0B2F 131D2D9E 0BE08853 5CCAE47C 4F74953C 19305A20  
B2C97808 D92M 71U 1U 1U Æ BB



```
!  
voice-port 1/0/0  
!  
voice-port 1/0/1  
!  
voice-port 1/0:15  
!  
voice-port 1/1:15  
!  
!  
!
```

```
gateway
  timer receive-rtp 1200
  !
  !
  !
telephony-service
  load 7960-7940 P00308000300
  max-ephones 4
  max-dn 4
  ip source-address 10.13.32.11 port 2000
  auto assign 1 to 4
  secure-signaling
```



```
no multicast-moh
device-security-mode encrypted
mac-address 0017.94CA.9833
type 7960
```



Wug Ekueq Hgcwtg Pcxkicvqt vq hkp f kphqt o cvkqp cdqww rncvht o uwr rqtv cpf Ekueq uqhvyctg k o c i g uwr rqtv  
Vq ceegu Ekueq Hgcwtg Pcxkicvqt. i q vq [y y 0ekueq0eq o l i q lehp 0](#) Cp ceeqwpv qp Ekueq0eq o ku pqv tgswtgf0

*TablaXL.227m021*





## Directory Services

---

[Kphqt o cvkqp Cdqw Fktgevqt{ Ugtxkegu. rcig 87;](#)

[Eqphki wtg Fktgevqt{ Ugtxkegu. rcig 883](#)

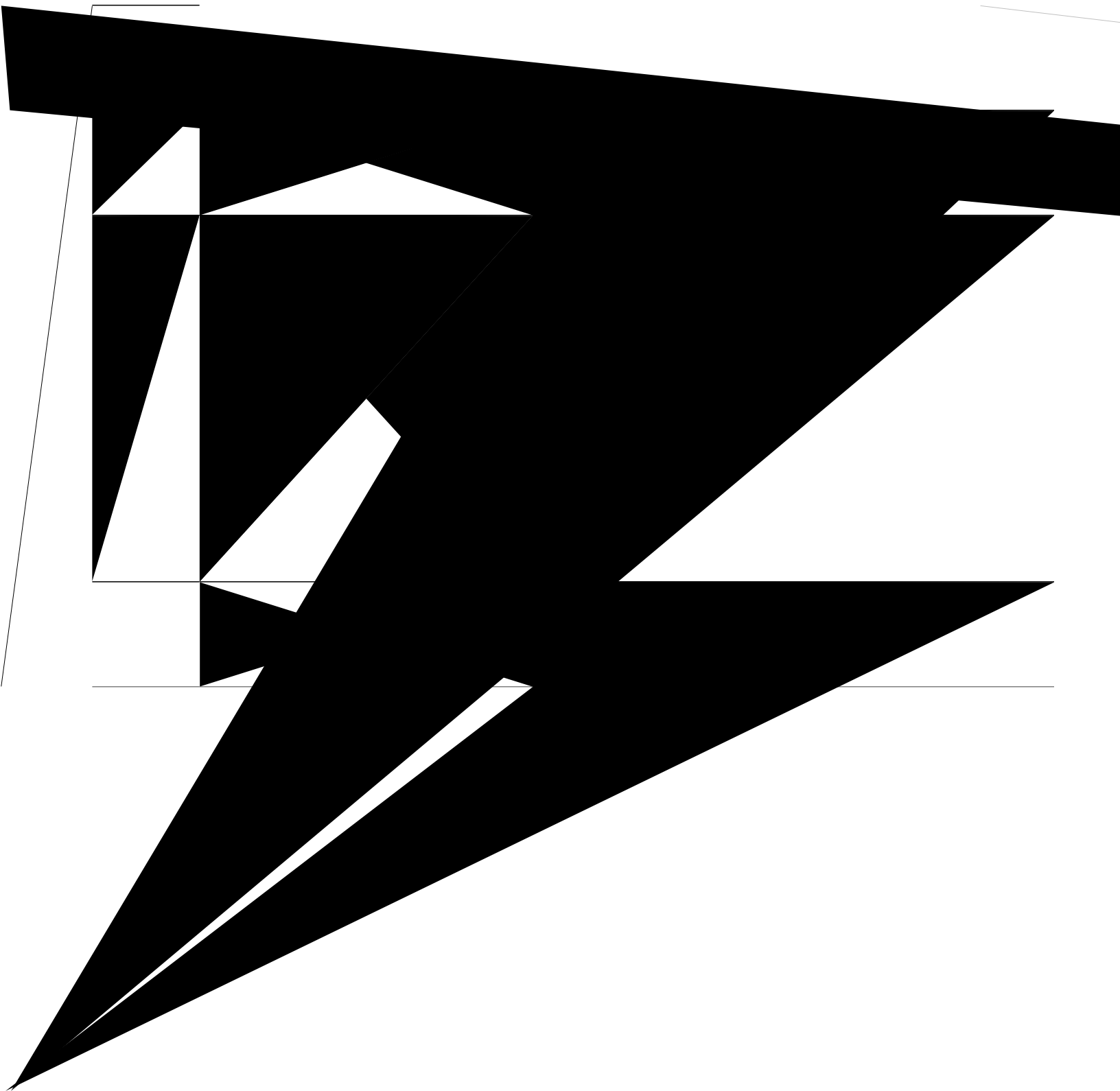


## Directory Search

---



DETAILED STEPS





---

Restriction

Kh v jg fktgevt{ gpt{ dgkpi eqphkiwtgf ku vq

# Configure External Directory Service on SCCP Phone

Vq gpcdng cp gzvgtpcn fktgevqt{ tguqwteg qp

---

---

---





# Define a Name for a Directory Number on SIP Phone

Vq fghkpg pc o g hqt c fktgevqt{ pwo dgt qp c UKR rjqpg. rgthqt o vjg hqnnqykpi uygru0

## Before You Begin

Ekueq EOG 506 qt c ncvtg xgtukqp0

Fktgevqt{ pwo dgt hqt




	Command or Action	Purpose
		Gpvgtu xqleg tg ikuvgt inqden eqphki wtcvkqp o qfg vq ugv rctcd gvgturct

local directory service: enabled.

Step 2 **ujqy vgnrjqp{/ugtxkeg**  
Vjku eq o ocpf fkurnc{u qpn{ vjg vgnrjqp{/ugtxkeg eqphki wtcvkqp kphqt o cvkqp0

Step 3 Wug vjg **ujqy vgnrjqp{/ugtxkeg fktgevqt{/gpvt{** eq o ocpf vq fkurnc{ vjg **vjg**



```
directory entry 8 5550021 name doctor8
directory entry 9 5550022 name doctor9
```

```
ephone-dn 1
  number 5500 secondary 555000.
```

```
ephone-dn 2
  number 5501 secondary 555001.
```

```
ephone-dn 3
  number 5502 secondary 555002.
```

```
ephone 1
  button 101,2,3
  mac-address 1111.1111.1111
```

```
ephone 2
  button 101,2,3
  mac-address 2222.
```

23 ne

final number 5556000

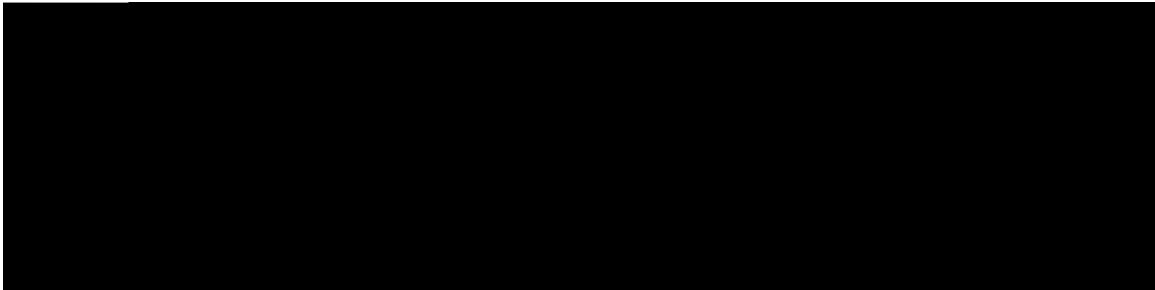
ephone-dn 1  
number 18005550000

ephone-dn 2  
name catalog1  
number 18005550001









CHAPTER



# Configure Do Not Disturb

## Blocking Do Not Disturb on SCCP Phone

Vq dnqem FPF qp rjqpgu vjcv jcxg dwwqpu eqphkiwtgf hqt hgcwtg tkpikpi. rgthqt o vjg hqnnqykpi uvgru0 FPF ku gpcdnf d{ wukpi vjg FPF uqhvmg{ qp Ekueq

---

---

## Configure Do Not Disturb on SIP Phones

Vq gpcdng vjg Fq Pqv Fkuwtd \*FPF+ hgcwtg qp c UKR

---

---

---

---

---

---

---

---

## Feature Information for Do Not Disturb



## Enhanced 911 Services

---

Rtgtgswkukvgu hqt Gpjcepgf ;33 Ugtxkegu. rcig 8:9

Tguvtkevqpu hqt Gpjcepgf ;33 Ugtxkegu. rcig 8::

Kphqt o cvkqp Cdqw Gpjcepgf ;33 Ugtxkegu. rcig

# Restrictions for Enhanced 911 Services

Gpj cpegf ;33 Ugtxkegu hqt

vjg RUCR ecp swkenn{ fkurcvej g ogtigpe{ jgnr. gxgp kh vjg ecmgt ku wpcdng vq eq o o wpkecvg vjg nqecvkqp0 Cnuq.  
kh vjg ecmgt fkueqppgevu rtg o cwtgn{. vjg RUCR jcu vjg kphqt o cvkqp kv pggfu vq eqpvcev vjg ;33 ecmgt0

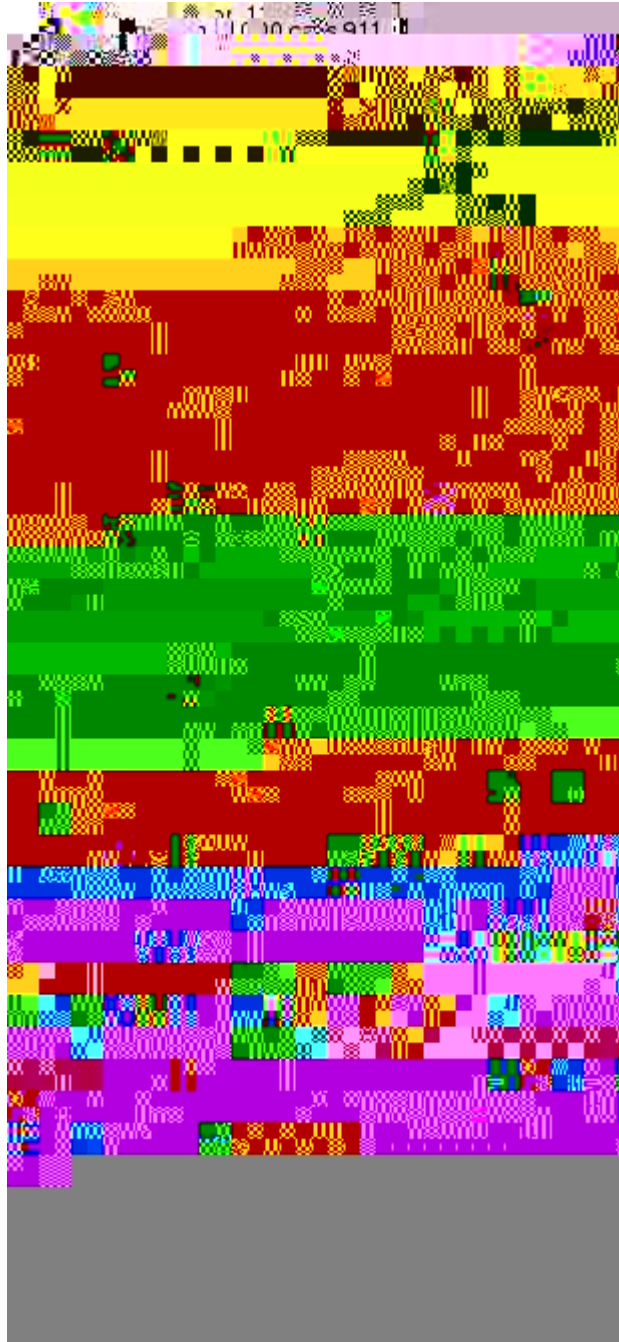
Vq wug Gpjcepgf ;33 Ugtxkegu. {qw o wuv fghkpg cp g ogtigpe{ tguqpug nqecvkqp \*GTN+ hqt gcej qh vjg  
igqitcrjke ctgcu pggfgf vq eqxgt





Hkiwtg 47<Rtqeguukpi c ;33 Ecm. qp rcig 8;4 uwo octk|gu vjg rtqegfwtg hqt rtqeguukpi c ;33 ecm0

Figure 25: Processing a 911 Call



Vjg

vjg fghcwnv ecndcem cu fguetkdgf kp [Ewuvqok](#)g

*Table 44: List of Sites and PSAPs*








Note

---

[qwt xgtukqp qh Elueq Wpkhkf EOG oc{ pqv uwr rqtv cm qh vjgug hgcvtgu}

---

## Multiple Usages of an ELIN

## Call Transfer

kh c r j qpg kp c Ekueq Wpkhkf EOG



Caution

---

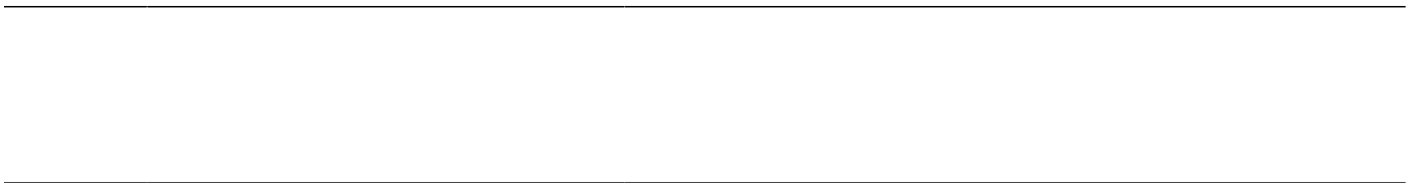
Yg tgeqo o gpf vjcv {qw fq pqv eqphkiwtg vjg uc o g fken rggt wukpi dqvj vjg **g o g t i g p e { t g u r q p u g | q p g**  
cpf **g o g t i g p e { t g u r q p u g e c m d c e m** eq o o cpf u 0

---

## Dial Plan Patterns

Fken rncp rcvgtpu gzrcpf vjg ecnngt u qtkikpcn gzvgpukqp pw o dgt kpvc c hwnn { swcnkhkgf G0386 pw o dgt 0 kh





## DETAILED STEPS

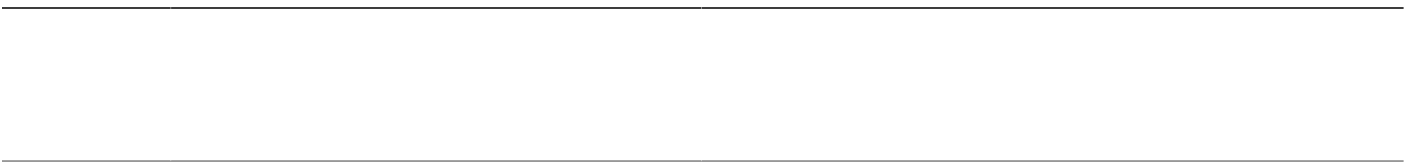
---

---

qt RTK pgvy qtm kpvghceg ectf<sup>0</sup> Vjg pgy eqo o cpf **g o g t i g p e { t g u r q p u g | q p g** urgekkgu vjcv vjku



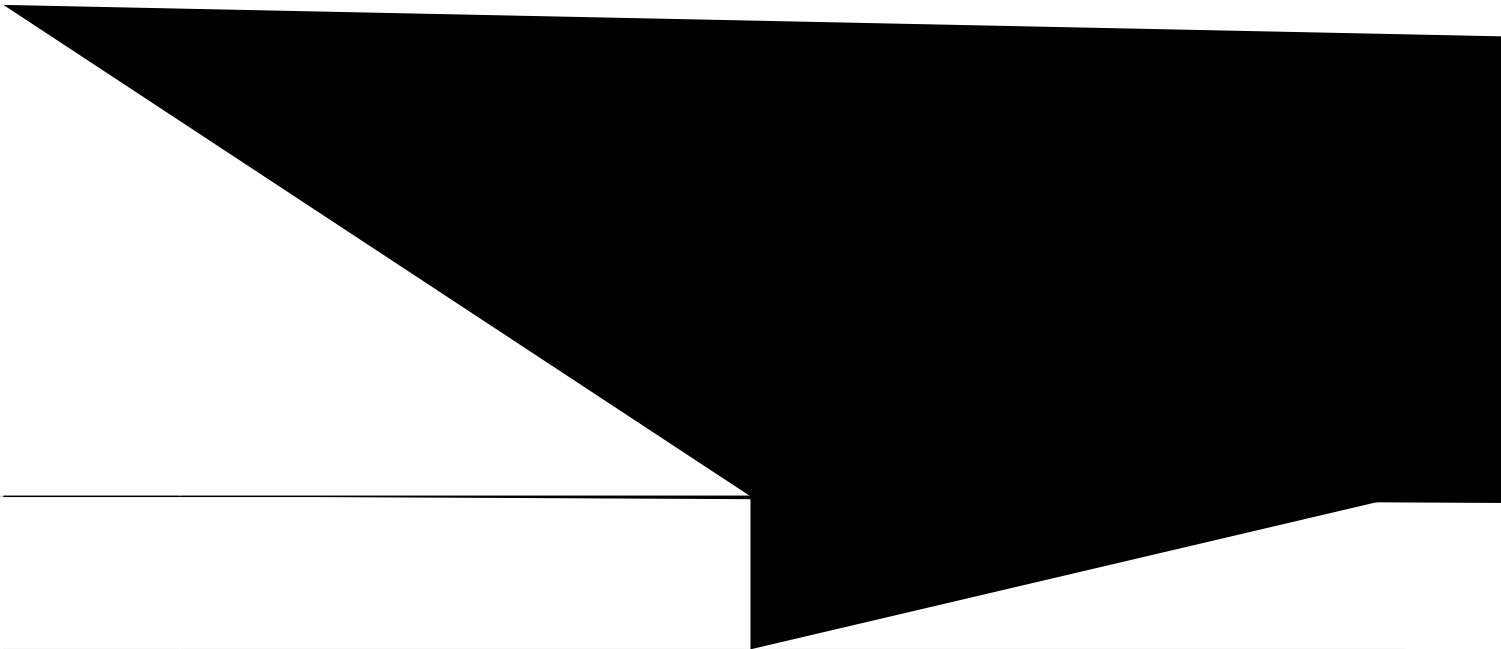




## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **fkc/rggx xqkeg *pwodgt* rqu**
4. **kpeq o kpi ecngf/pw o dgt *pwodgt***
5. **fktgev/kp y c t f/fkc**
6. **g o g t i g p e { t g u r q p u g e c m d c e m**
7. **g p f**

## DETAILED STEPS



## Assign ERLs to Phones

[qw o wuv urgek h{ cp

---

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<p><b>gpcdn</b></p> <p>Example: Router&gt; enable</p>	<p>Gpcdn rtkxng igf GZGE oqfg</p> <p>Gpvt {qwt rcuuyqtf kh rtqo rygf}</p>
Step 2	<p><b>eqphkiwtg vgt o kpcn</b></p> <p>Example: Router# configure terminal</p>	<p>Gpvtu inqdcn eqphkiwtcvkqp oqfg</p>
		<p>Gpvtu xqkqg tgi kvgtrqqn oqfg vq</p>

vg !

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg *vc i***
4. **g o g t i g p e { t g u r q p u g**

cuuqekcvgf ykvj KR uwdpgvu0 Hqt o qtg kphqt o cvkqp cdqww vjku fgekukqp. ugg *Uvgr 9* kp Rncp [qwt K o rng o gpcvkqp qh Gpjcepgf ;33 Ugtxkegu. qp rcig 8;50

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **fkc/rggt xqleg vci v/rq**
4. **g o gt i gpe{ t gur qpug nqecvkqp vci**
5. **gpf**

## DETAILED STEPS

---



fghcwnv GNKP ecp dg cntgcf { fghkpgf kp qpg qh vjg GTNu qt ecp dg wpkswg0 kh c fghcwnv GNKP ku pqv fghkpgf  
cpf vjgtg ku pq ovej hqt vjg ;33 ecnngt u KR cftguu. vjg RUCR uggu vjg CPK hqt ecndcem rwtrqugu0 C  
u{unqi oguucig ku ugpv tgsuwvki vjg fghcwnv GNKP.



Kp vjg gzc o rng. vjg ugeqpf rctc o gvt qh **cfftguu** hqmqy kpi K ctg fki kvu 3/5 qh geej

## Output from a Syslog Server

Kh icvgyc{ ceeqwpkpi ku fktgevgf vq vjg

Wug vjg **ujqy xqkeg gogtigpe{ cfftgugu** eq o cpf vq fkurnc{ cfftguu kphqt o cvkqp hqt gcej GTN0

Router# **ujqy xqkeg gogtigpe{ cfftgugu**

3850 Zanker Rd, San Jose,604,5550101  
225 W Tasman Dr, San Jose,604,5550102  
275 W Tasman Dr, San Jose,604,5550103  
518 Bellew Dr,Milpitas,604,5550104  
400 Tasman Dr,San Jose,604,5550105  
3675 Cisco Way,San Jose,604,5550106

Vjku gzc o rng ujqyu vjg fgdwi qwrwv yjgp c ecnn vq ;33 ku ocfg<

\qpg 3 jcu

# Example for Configuring Enhanced E911 Services with Cisco Unified CME 4.1 in SRST Fallback Mode

```
kp vjku gzc o rng. Gpj cpegf ;33 Ugtxkegu ku eqps      vq cuus   cp GTN vq vjg hqnnqy s
  Vjg 3204204202 KR u
  Vyq fs  r
  Cp gr
  C UK R r
```

```
Router#u      twpps
Buildq   conq
C        conq           : 7557 b
!
version 12.4
s        timestamps deb  datetime ms
s        timestamps log  datetime ms
no s     password-encr
!
hostname rm-uut3-2821
!
b                -mar      r
b
!
no loggq  console
!
no aaa new-model
network           par
```

network

qtbrcu = Romgeafec



```
!  
!  
no ip domain lookup  
ip host rm-uut3-c2821 10.20.20.3  
ip host RescuMe01 10.21.20.218  
multilink bundle-name authenticated  
!  
isdn
```

```
linecode b8zs
pri-group timeslots 8,24
!
controller T1 0/1/1
framing esf
linecode b8zs
pri-group timeslots 2,24
!
controller T1 0/2/0
framing esf
```

```
!
ip http server
!
!
voice-port 0/0/0
!
voice-port 0/0/1
!
voice-port 0/1/0:23
!
voice-port 0/2/0:1
!
voice-port 0/1/1:23
!
voice-port 0/2/1:23
Q      ard-digits
voice-port 0/3/0
!
voice-port 0/3/1
!
!
dial-peer voice 2002 pots
shutdown
destination-pattern 2...i          2 digi          -port          criptM
port 0/2/0:1
forward-digits all                  P          -peer
!
dial-peer voice 2005 pots
description For-cme2-408-pri
```

```
gogtigpe{ tguqpug ecndcem
incoming called-number 2....
direct-inward-dial
port 0/1/0:23
forward-digits all
!
!
telephony-service
srst mode auto-provision none
load 7960-7940
```



*Table 48: Feature Information for Enhanced 911 Services*

## Extension Mobility

---

Vjku ejcrvgt fguetkdgu hgcwvtgu kp Ekueq Wpkhkgf Eqo o wpkecvkqpu Opcigt Gzrtguu \*Ekueq Wpkhkgf EOG+  
vjcv rtqkxkfg uwrrqtv hqt rjqpg oqdknk{ hqt gpf wugtu0

# Information About Configuring Extension Mobility

## Extension Mobility

Gzvgpukqp Oqdknk{ kp Ekueq Wpkkgf EOG 604 cpf ncvtg xgtukpu rtqkfgu vjg dgpghk



Hqt kphqt o cvkqp cdqww



# MIB Support for Extension Mobility in Cisco Unified SCCP IP Phones

kp Ekueq Wpkhkf EOG ;(2Epf ncygtjggtukapu. pgy OKD qdlgevu ctg cffgf vq oqpkvqt Ekueq Wpkhkf UEER KR  
Gzvpuqp Oqdkkv{ \*GO+ rjppgu) Vjgug gpjcpeg o gpu cmmqy vjg tgvtkgxcn qh vjg hqmqykp i kphqt o cvkqp<  
wugt/rtqhkng vci hqt c Ekueq Wpkhkf UEERUO



## SUMMARY STEPS

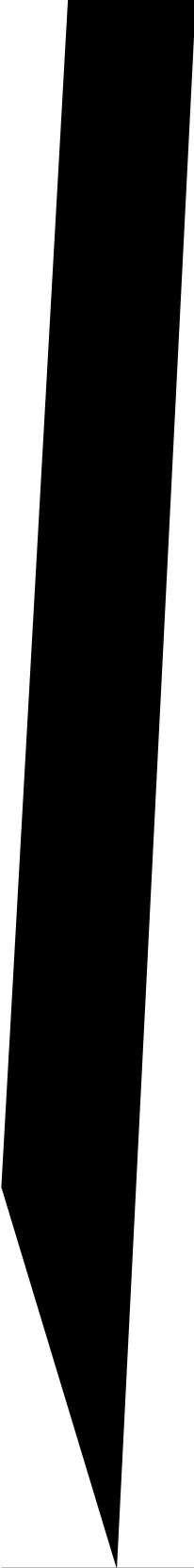
1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **kr jvr ugtxgt**
4. **vgng r jqp{/ugtxkeg**



\_\_\_\_\_







---

---

	Command or Action	Purpose
Step 8	<b>rtkxce{/dwwqp</b>	*Qrvkqpcn+ Gpcdngu vjg rtkxce{ hgcvwtg dwwqp qp vjg KR rjqpg0

## SUMMARY STEPS



---

---

---

---


## DETAILED STEPS

---

---

---

---

---







---

---



```
ephone 3  
  mac-address 1200.80FC.9B01  
  type
```









Note

---

Hqt Ekueq Wpkhgf EOG xgtukqpu dghqtg Ekueq Wpkhgf EOG 602\*5+. vjgtg ctg vyq o cpwcm{/eqvtqmgf  
qrvkqpu hqt ugwkpi wr hceuk o kngu<

Hcz I cvgy c{ Rtqvdeqn

Eqphkiwtg vjg Ekueq X I 446.



hqt Ekueq Wpkkgf EOG 602\*5+ cpf





	Command or Action	Purpose
Step 6	<b>gzkv</b>  Example: Router(config-voip)# exit	Gzkv vjg ewttgpn eqphki wtcvkqp oqfg0

## Verify and Troubleshoot Fax Relay Configuration

Vq xgthk{ vjg Ekueq Hcz Tgnc{ eqphki wtcvkqp. wug vjg





## Feature Access Codes

---

`kphqt o cvkqp Cdqw Hgcwtg Ceegu Eqfgu. rcig 979`

`Eqphki wtg Hgcwtg Ceegu Eqfgu. rcig 97;`

`Xgth{ Hgcwtg Ceegu Eqfgu. rcig 982`

`Eqphki wtcvkqp Gzc o rngu hqt Hgcwtg Ceegu Eqfgu. rcig 983`

`Hgcwtg`





# Configure Feature Access Codes

Vq gpedng uvcpfctf HCEu qt etgevg ewuvq o HCEu. rgthqt o vj

	Command or Action	Purpose

# Configuration Examples for Feature Access Codes

## Example for Enabling Standard FACs for All Phones

Vjg hqnnqyki gzc o rng ujqu jqu vq gpcdnq uvcpfctf HCEu hqt cm r jppgu<



## Forced Authorization Code

---

[Kphqt o cvkqp Cdqw Hqtegf Cwvjqtk|cvkqp Eqfg. rcig 985](#)

[Eqphki wtg Hqtegf Cwvjqtk|cvkqp Eqfg. rcig 992](#)

[Eqphki wtcvqpp Gzco rng hqt Hqtegf Cwvjqtk|cvkqp Eqfg. rcig 996](#)

[Hgcwvtg Kphqt o cvkqp hqt Hqtegf Cwvjqtk|cvkqp Eqfg. rcig 997](#)

## Information About Forced Authorization Code

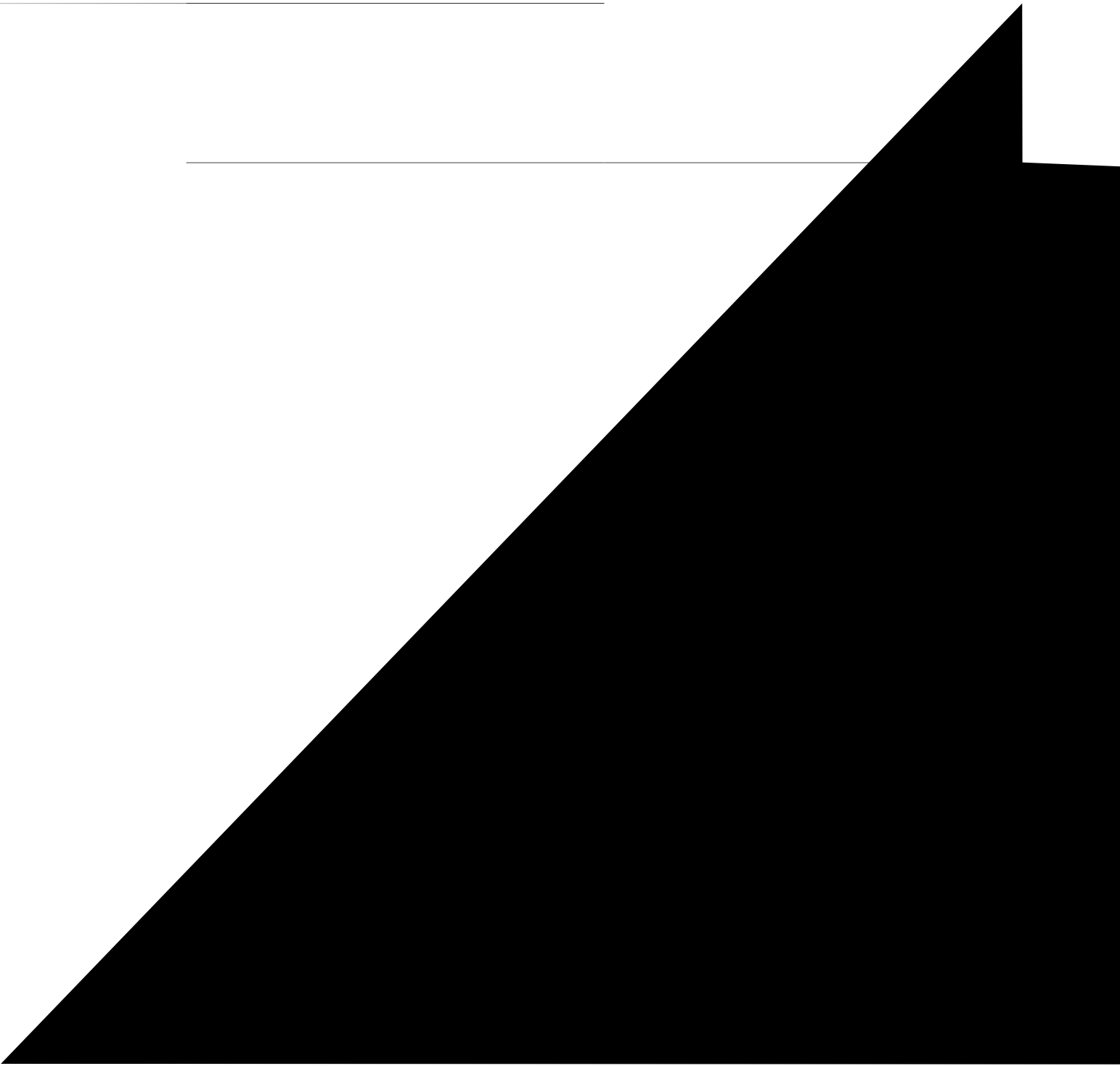
### Forced Authorization Code Overview

Ekueq Wpkhkgf EOG :07 cmqyu {qw vq o cpci g ecm ceeguu cpf ecm



$C_p\{e\}$

|





Types of Calls	FAC Behavior for Different Calls
	<b>3</b>



---

---

---

---




---



---

---

---

---

---

---

---

---

---



```
voice lpcor policy AnalogPhone
service fac
accept LocalUser fac
accept AnalogPhone fac
!
application
package auth
```



## Headset Auto Answer

---

Kphqt o cvkqp Cdqw Jgcfugv Cwq Cpuygt. rcig 999

Eqphki wtg Jgcfugv



# Configure Headset Auto Answer

Enable Headset Auto Answer



headset auto-answer line 2  
headset auto-answer line 3

Vjg hqmnykpi gzcw q





## Intercom Lines

---

Κρητή ο cvkqp Cdqw Κpvgteqo Nkpgu. rcig 9:5

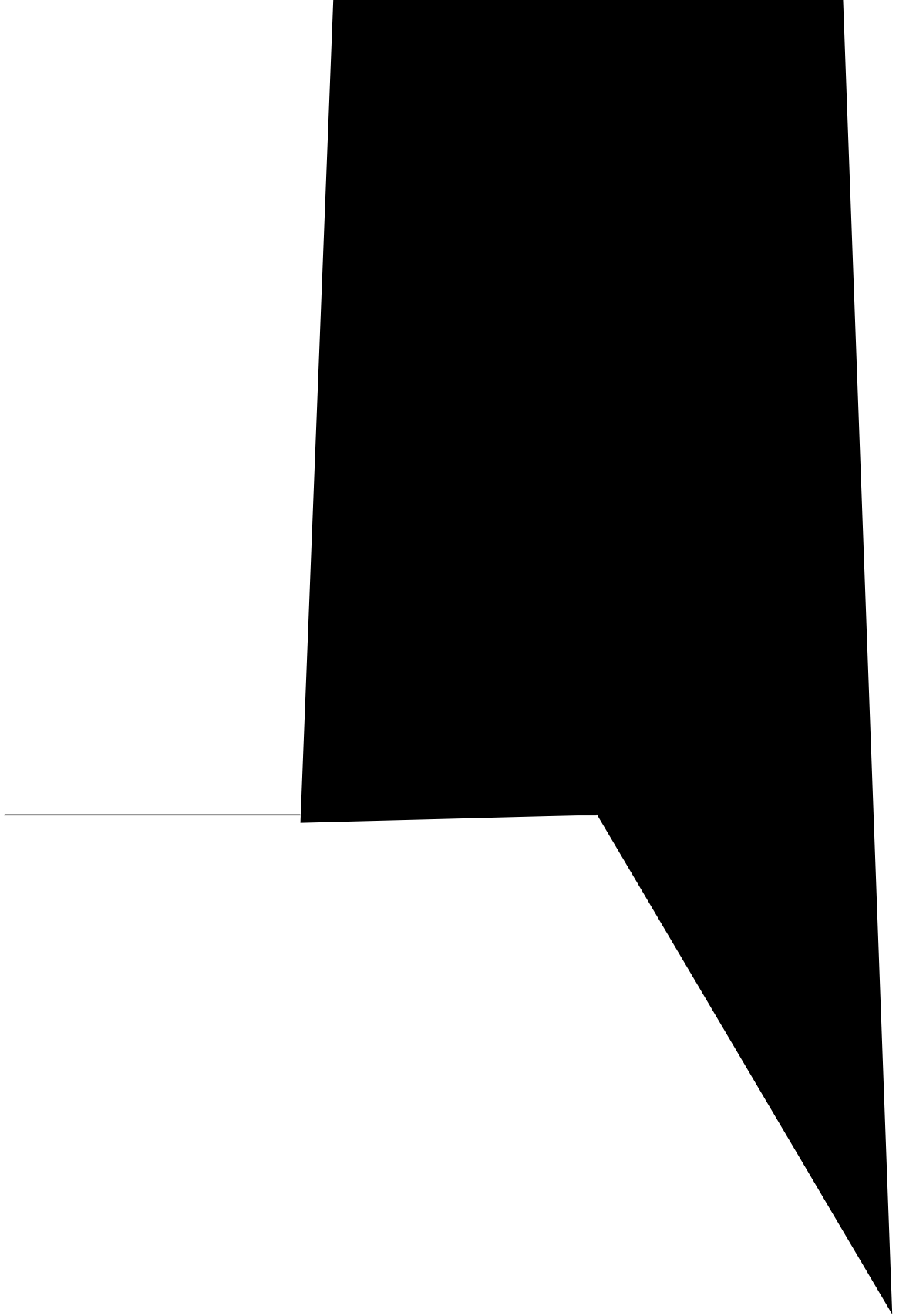
Eqphki wtg Κpvgteqo Nkpgu. rcig 9:8

Eqphki wtcvkqp Gzc o rngu hqt Κpvgteqo Nkpgu. rcig 9;7

Y jgtg vq

Vq rtgxgpv cp wpcwvjqt|gfg

pwodgt0 Ecmu dgvyggp c yjkurgt kpygteq o fktgevt{ pwodgt cpf c uwcpfctf fktgevt{ pwodgt qt kpygteq o  
fktgevt{ pwodgt ctg tglgevgf ykvj c dwu{ spg0  
Vjku hgcwvtg ku uwr rqtvgf kp Elueqh gf





---

---



---

Restriction

Ukping/nkpg rjqpg oqfgnu. uwej cu vjg Ekueq Wpkhkgf KR Rjqpg 9;28 qt 9;33. ctg pqv

---

---

---

---

--	--

---



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkwtg**









Paging

Vjg rcikpi hgcwrtg ugvu wr c qpg/yc{ cwfkq rcvj vq fgnkxgt kphqt o cvkqp vq c itqwr qh r jppgu cv qpg vk o g! Hqt oqtg kphqt o cvkqp. ugg [Rcikpi. qp rcig :790](#)

## Feature Information for Intercom Lines

Vjg hqnnqykpi vcdng rtqxkfgu tngcug kphqt o cvkqp cdqww vjg hgcwrtg qt hgcwrtgu



r j {ukecñ xqkeg rqtvu0 Nqqrdcem/fp eqphki wtcvkqpu go wncvg vjg ghheev qh c dcem/vq/dcem r j {ukecñ xqkeg/rqtv  
cttcpig o gpv ykvjqwv vjg gzrgpug qh vjg r j {ukecñ xqkeg/rqtv jctfyctg0 Dgecwug fki kvcñ uki pcñ rtqeguuqtu \*FURu+  
ctg pqv kpxqnxgf kp nqqrdcem/fp cttcpig o gpvu. vjg eqphki wtcvkqp fqgu pqv uwr rqtv kpvgt yqtmkpi qt



---

---

---

---



Cp kpeq okpi ecmm vq 8zzz gpvgtu vjg nqqu r vj ~~aw~~ij grjqpg/fp 37 cpf gzkvu vjg nqqu xkc em  
grjqpg/fp 38 cu cp



# Precedence

Rtgefgpeg kpfkcvgu vjg rtktkv{ ngxgn cuuqekcvgf ykvj cp ONRR ecnm) Rjqpg wugtu ecp cr rn{ c rtgefgpeg ngxgn yjgp ocmkpi c ecnm)

[qw fghkpg cp ONRR ceeguu fki kv kp Ekueq Wpkhkf EOG cpf cuukip c oczk ow o rtgefgpeg ngxgn vq kpfkxkfwcn r jqpgu) Rjqpg wugtu tgsuwv c rtgefgpeg ecnm d{ fkcakpi vjg ceeguu eqfg PR. yjgtg P urgekkgu vjg rtg/eqphkiwtgf ceeguu fki kv cpf

Ekueq Wpkhkgf EOG rtqxfgu rtgegfgpeg kpfkecvkqpu vq vjg uqwteq cpf fgukpcvkqp qh c rtgegfgpeg ecnn.  
tgurgevknxn{. kh gkvjgt jcu ONRR kpfkecvkqp gpcdngrf0

Kh cp



## DSN Dialing Format

Ekueq Wpkhkf EOG :02 cpf ncvgt tngcugu rtqxfq eq o rnyg uwrrqtv qh vjg FUP fkcnp i hqt o cv. cu qwnkpgf  
kp

## Route Code

Vjg tqwvg eqfg cmnqyu c rjqpg wugt vq kphqt o vjg

# MLPP Service Domains

Ekueq Wpkhkgf EOG :02 cpf ncvgt xgtukqpu uwr rqtv ONRR ugtxkeg fño ckpu0 C

Kp vjg gzc o rng uj qyp kp Hkiwtg 54< Ugtxkeg Fq o ckpu ykvj Fkhgtgpv Fq o ckp V{ rgu. vjg cevkxg ecnn ku pqv  
rtgg o rvf dgecwug vjg kpeq o kpi ecnn ku htq o c fkhgtgpv fq o ckp v{ rg vjcp vjg cevkxg ecnn= c ecnn htq o vjg FUP  
ecppqv rtgg o rv c ecnn htq o vjg FTUP0

Table 67: MLPP Announcements

---

---

---

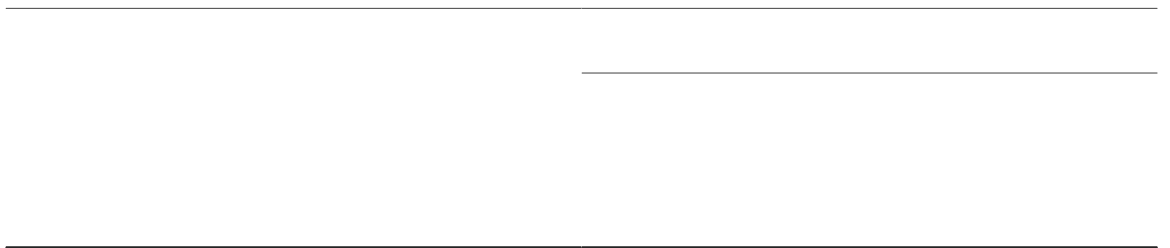
---

---

---

---

---





## SUMMARY STEPS

1. **gpcdn**<sub>g</sub>
2. **eqphkiwtg vgt o kpcn**
3. **xqleg onrr**
4. **ceegu/fkikv** *fkikv*
5. **dpge** *cwfkq/wtn*
6. **drc** *cwfkq/wtn*





## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg/vg o rncvg** *vg o rncvg/vc i*
4. **onrr ugtxkeg/fq o ckp} ftup - fup; kfgpvkhkg**

---

Examples

Vjg hqnmqykpi gzc o rng ujqyu c dcuke eqphki wtcvkqp hqt vjtgg r jppgu. cnn wukpi vg ~~dr~~ncvg 3 ykvj ONRR fghtg0  
Hki wtg 56< Rtg o rvkqp Ecnn Gzc o rng ujqyu cp ? v ? ?

?



---

Vjg **jwpvuvqr ejcppgn** eqo ocpf owuv



	Command or Action	Purpose
	Example: Router(config-voiceport)# no mlpp o	

## DETAILED STEPS





---

---

---

---

---

---

---

---

---

---



# Feature Information for MLPP

Vjg hqmqy kpi vcdng stqxfgu tngcug kphqtrqkqp cdqww vjg hgcwvtg qt hgcwvtgu Wguetkdgf kpujku oqfwng0 Vjku  
vcdng nkuvu qpn{ vjg uqhvyctg tngcug vjcv kvtqfwegf uwr rqtv hqt c ikxgp hgcwvtg kg c ikxgp uqhvyctg tngcug  
vtckp0 Wpiguu pqvgf qvjgt ykug. uwdugswgpn tngcugu qh vjcv uqhvyctg tngcug vtckp





Owvkecuv OQJ ku pqv uwr rqtvgf qp c rjqpg kh vjg rjqpg ku eqphkiwtgf ykvj vjg **ovr** eqo ocpf qt vjg **rcikpi/fp** eqo ocpf ykvj vjg **wpkecuv** mg{ yqtf0

Hqt ecnu htqo UEER vq UEER rjqpgu. Wpkecuv OqJ ku pqv uwr rqtvgf0 Owvkecuv OqJ ku uwr rqtvgf kh kv ku gpcdngf0 kh Owvkecuv OqJ ku pqv gpcdngf. Vqpg qp Jqif









vjg

Before You Begin

UKR rjppgu

	Command or Action	Purpose
		I094; OQJ hknq ecp dg eqphkiwtgf cnqpi ykvj vjg I0933 OQJ hknq0 Wpkhkgf EOG yqwnf rkem vjg OQJ

	Command or Action	Purpose







---

---



Vjg hqnnqykpi gzc o rng gpcdngu OQJ htq o c nkxg hggf cpf kh vjg nkxg hggf ku pqv hqwpf qt hcknu cv

## DETAILED STEPS

---

---

---

---

---

---

---

---

extension-range 2000 to 2999  
extension-range 3000 to 3999  
extension-range A1000 e1199





Examples

kp v jg hqmqy kpi gzc o rng fkh

# P

DETAILED STEPS

	Command or Action	Purpose
		Gpcdngu rtkxkngigf GZGE oqfg0

# Configure Buffer Size for MOH Files



---

Restriction

OQJ hkng


Example:

```
Router(config)# telephony-service  
Router(config-telephony)# moh-file-buffer 2000
```

```
e+ Wpfgt xqkeg oqj/itqwr >itqwr vci@.eqphkiwtg pq oqj .cpf
```



Active MOH clients 0 (max 830), Media Clients 0  
File flash:/4004.au type AU Media\_Payload\_G711Ulaw64k 160 bytes  
Moh multicast on 239.10.16.8 port 2000 via 0.0.0.0

Step 3

Wug vjg **ujqy xqleg oqj/itqwr uvcvkukcu** eq o ocpf vq fkurnc{ vjg **OQJ** uwd{uvg o uvcvkukcu kphqt o cvkqp0  
Kp vjg hqnnqykpi gzc o rng. vjg **OQJ** I tqwr Uvtgc okpi Kpvgtxcn Vkokpi Uvcvkukcu ujqyu vjg ogfkc rcemgv eqwpvu fwtkpi  
kckokc uvtgc okpi kpvgtxcnu0 Gcej

qj

Hqt Gzco rrg<

router# **engct xqlkg**







## Paging

---

Tguvtevkqpu hqt Reikpi. rcig :79

Kphqt oevkqp Cdqw Reikpi. rcig :79

Eqphkiwtg Reikpi. rcig :82

Eqphkiwtevkqp Gzco rngu

Chvgt {qw jcxg etgcvgf vyq qt oqtg

# Paging Group Support for Cisco Unified SIP IP Phones

Rcikpi rtqxkfgu c qpg/yc{ xqkeg rcvj htqo vjg rcikpi

# Configure Paging

## Configure a Simple Paging Group on SCCP Phones

Vq

---

---

---

---

---

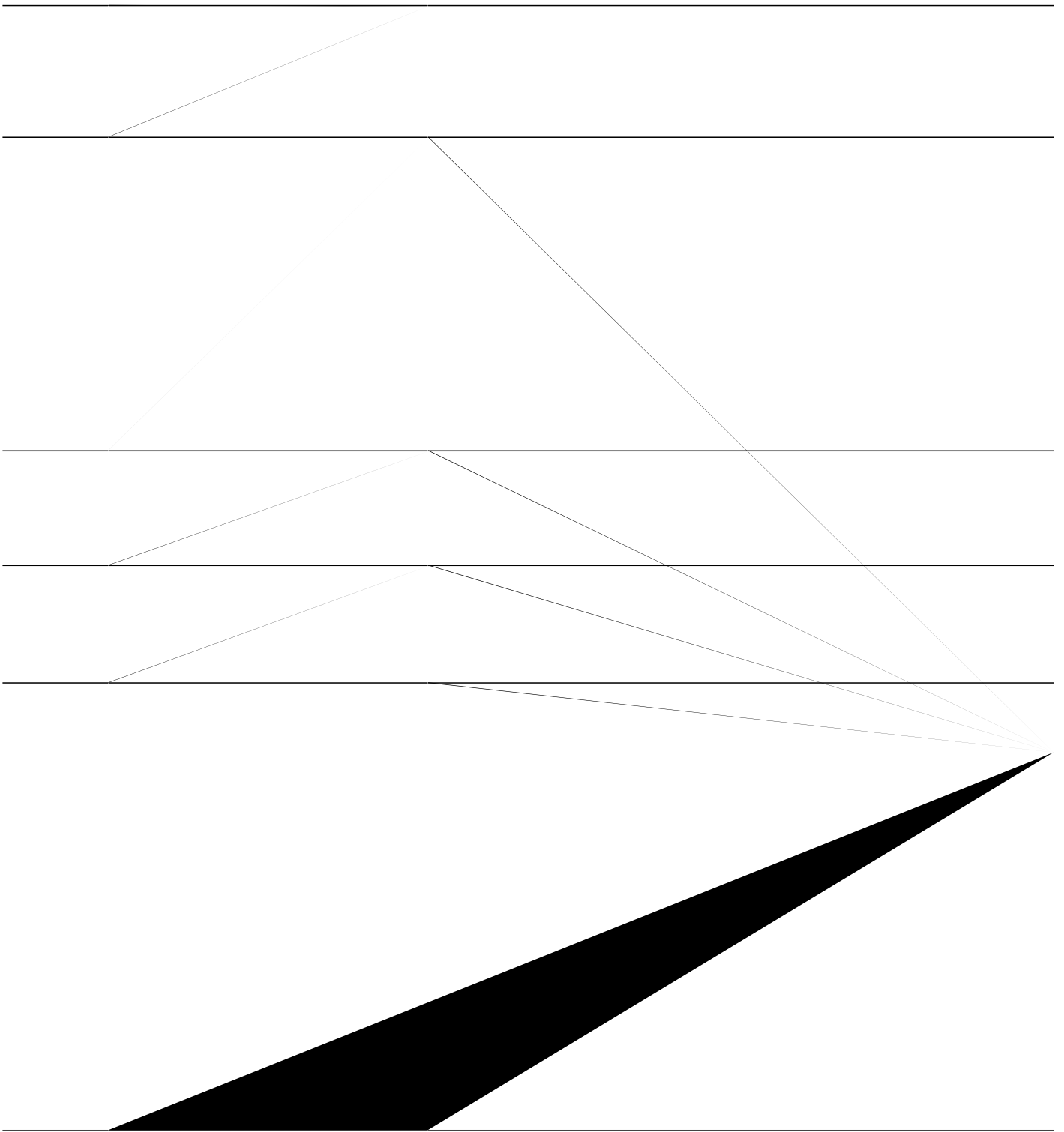
---

---

## SUMMARY STEPS

1. **gpcdn**
- 2.





	Command or Action	Purpose
	<b>gzkv</b>  Example:	Gzkvu gr j qpg eqphki wtevkqp o qfg0

## SUMMARY STEPS

1. **gpcdig**
- 2.

---

---



---

# Configuration Examples for Paging

## Example for Configuring Simple Paging Group

Vjg hqnnqykpi gzc o rng ugvu wr

Y jgp gzvgpukqp





```
number 2000
paging ip 239.0.1.20 port 20480

ephone-dn 21
number 2001
paging ip 239.1.1.21 port 20480

ephone-dn 22
number 2002
paging ip 239.1.1.22 port 20480
paging group 20,21

ephone-dn 6
number 1103

ephone-dn 7
number 1104

ephone-dn 8
number 1105

ephone-dn 9
number 1199

ephone-dn 10
number 1198

ephone 1
mac-address 1234.8903.2941
buttonip
```

voice register

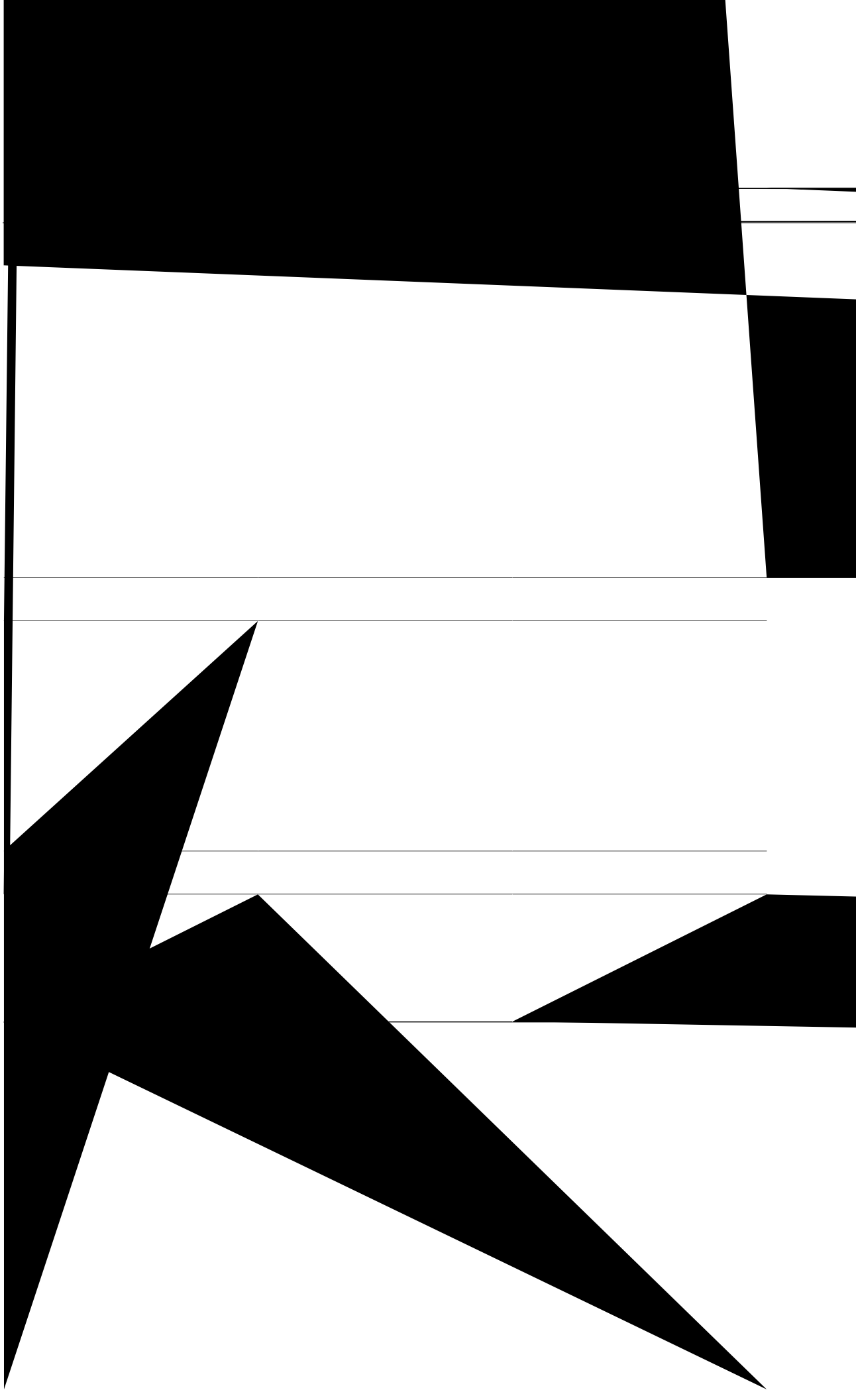


## Presence Service

---









Vq kfgpvkh{ vjg r j qpg dglpi o qpkvqtgf hqt DNH



---

Restriction

C r t g u g p v k v { e c p d g k f g p v k h k g f d { c f k t g e v q t { p w o d g t q p n { 0

D N H o q p k v q t k p i k p f k e c v g u v j g n k p g



## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg**

---

---

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg rjqpg/vci**
4. **dwvqp** *dwvqp/pwodgt }ugrctcvqt; fp/vci ],fp/vci000\_ ]dwvqp/pwodgt}z;qxgtnc{/dwvqp/pwodgt\_ ]dwvqp/pwodgt000*

---

---

# Enable BLF Monitoring for Speed-Dials and Call Lists on SIP Phones

C ycejgt ecp oqplvqt vjg



DET

---

---

---

---

---

---

---

---

---





Wug vjku eqo o cpf vq xgtkh{ {qwt eqphki wtcvkqp0

Router# **ujqy twppkpi/eqphki**

```
!  
voice register global  
mode cme  
source-address 10.1.1.2 port 5060  
load 7971 SIP70.8-0-1-11S  
load 7970 SIP70.8-0-1-11S  
load 7961GE SIP41.8-0-1-0DEV  
load 7961 SIP41.8-0-1-0DEV  
authenticate presence  
authenticate credential 1 tftp://172.18.207.15/labtest/cred1.csv  
create profile sync 0004550081249644  
.  
.  
.  
presence  
server 10.1.1.4  
sccp blf-speed-dial retry-interval 70 limit 20  
presence call-list  
max-subscription 128  
watcher all  
allow subscribe  
!  
sip-ua  
presence enable
```

Step 2

**ujqy rtgugpeg inqdcn**

Wug vjku eqo o cpf vq fkurnc{

```

=====
6002@10.4.171.60      6005@10.4.171.34      1 3600    0    idle
6005@10.4.171.81      6002@10.4.171.34      6 3600    0    idle
6005@10.4.171.81      6003@10.4.171.34      8 3600    0    idle
6005@10.4.171.81      6002@10.4.171.34      9 3600    0    idle
6005@10.4.171.81      6003@10.4.171.34     10 3600    0    idle
6005@10.4.171.81      6001@10.4.171.34     12 3600    0    idle
6001@10.4.171.61      6003@10.4.171.34     15 3600    0    idle
6001@10.4.171.61      6002@10.4.171.34     17 3600    0    idle
6003@10.4.171.59      6003@10.4.171.34     19 3600    0    idle
6003@10.4.171.59      6002@10.4.171.34     21 3600    0    idle
6003@10.4.171.59      5001@10.4.171.34     23 3600    24   idle
6002@10.4.171.60      6003@10.4.171.34     121 3600    0    idle
6002@10.4.171.60      5002@10.4.171.34     128 3600    129   idle
6005@10.4.171.81      1001@10.4.171.34     130 3600    131   busy
6005@10.4.171.81      7005@10.4.171.34     132 3600    133   idle
=====

```

```
!  
no network-clock-participate slot 1  
no network-clock-participate slot 2  
ip cef  
!  
!  
no ip domain lookup
```











# Ringtones

---

## Customized Ringtones

Ekueq Wpkkhf KR Rjqpgu jcxg vyq fghcwnv tkpi v{rgu<Ejkr3 cpf Ejkr40 Ekueq Wpkkhf EOG enuq uwr rqtvu ewuvq ok|gf tkpivqpgu wukpi rwnug eqfg oqfwncvqp \*REO+ hkngu0

Cp ZON hkng ecnngf TkpiNkuv0z on urgekkgu vjg tkpivqpg qrvkqu cxckncdng hqt vjg fghcwnv tkpi qp cp KR rjqpg tgikuvgtgf vq Ekueq Wpkkhf EOG0 Cp ZON hkng ecnngf FkuvkpevkxgTkpiNkuv0z on urgekkgu vjg tkpivqpgu cxckncdng qp gcej kpfkxkfwcn nkg crrgctpeg qp cp KR rjqpg tgikuvgtgf vq Ekueq Wpkkhf EOG0

## On-Hold Indicator

---

---

: dkvu rgt uc o r ng

oNcy eq o rtguukqp

Oczkowo tkpi uk|g 382:2 uc o r ng

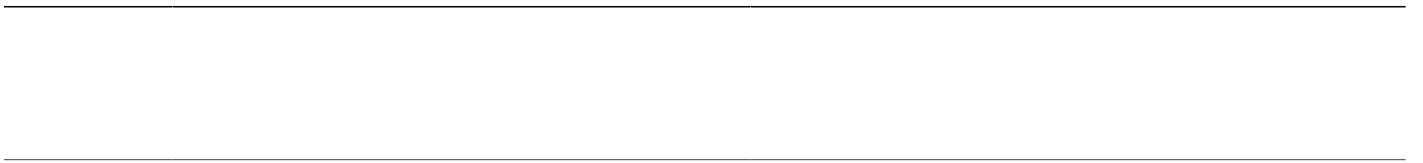
Okpkowo tkpi uk|g 462 uc o r ng

Pw o dgt qh uc o r ng k p v j g tkpi o wuv dg gxgpn{ fkxkukdng d{ 462

Tkpi ujqwif uvctv cpf gpf cv v j g |gtq







---

---

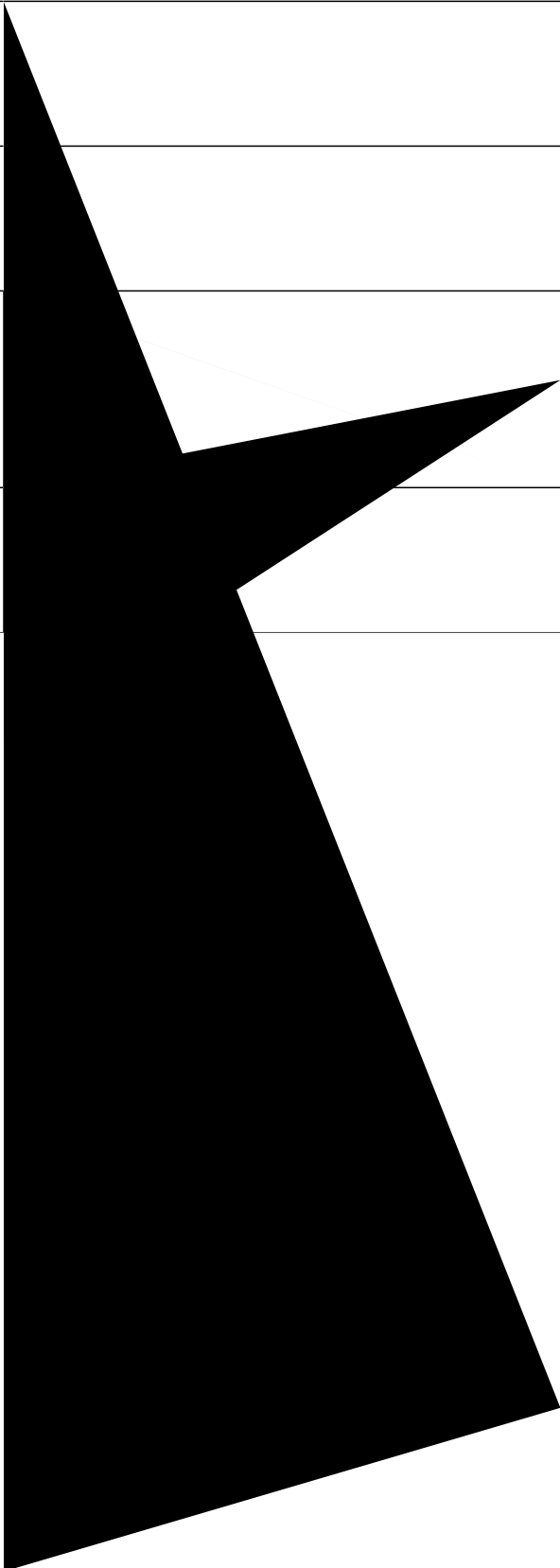
---

---

---

---

---



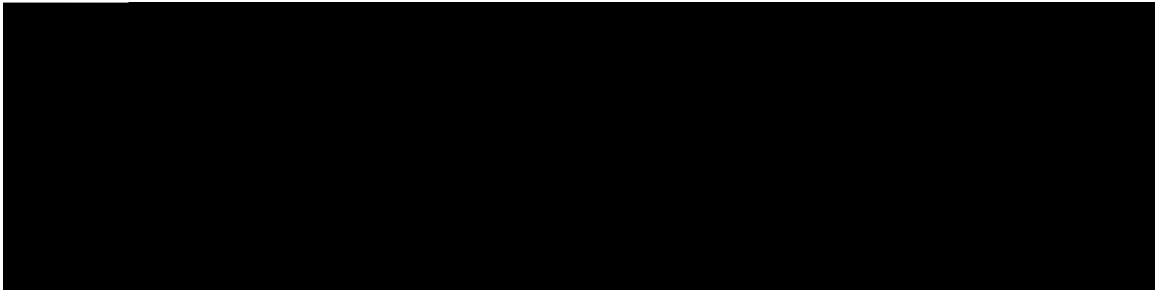
```
no forward local-calls
call-forward busy 2244
call-forward noan 2244 timeout 45
```

## Feature Information for Ringtones

Vjg hqnnqykpi vcdng rtqxfgu tngcug kphqt o cvkqp cdqww vjg hgcwvtg qt hgcwvtgu fguetkdgf kp vjku oqfwng0 Vjku vcdng nkuvu qpn{ vjg uqhvyctg tngcug vjcv kpvtfwegf uwr rqtv hqt c ikxgp hgcwvtg kp c ikxgp uqhvyctg tngcug vtckp0 Wpnguu pqvgf qvjgtykug. uwdugswgpv tngcugu qh vjcv uqhvyctg tngcug vtckp cnuq uwr rqtv vjcv hgcwvtg0

Wug Ekueq Hgcwvtg Pcxkicvt. iq vq [y y0ekueq0eq o li qlehp0](#) Cp ceeqwpv qp Ekueq0eq o ku pqv tgswtg f0

*Table 74: Feature Information for Ringtones*



CHAPTER

Gpcdng qt fkucdng Ukpi ng Pw o dgt Tgcej Y jkng vjg KR r j qpg ku kp vjg kfng uvcvg. vjg wugt ecp vqi ng

# Single Number Reach for Cisco Unified SIP IP Phones

Dghqtg

# Virtual SNR DN for Cisco Unified SCCP IP Phones

C xktwcn UPT FP ku c FP



# Configure Single Number Reach

## Configure Single Number Reach on SCCP Phones



---

Restriction

Gcej KR rjqpg uwrrqtvu qpn{ qpg UPT fktgevqt{ pwo dgtl

UPT hgcwvtg ku pqv uwrrqtvgf hqt vjg hqmqy kpi<

UEER/eqpvtqmgf cpenqi HZU

## SUMMARY STEPS

- 1.

---

---

---

---

---

---

---





load 7906

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlkg tgikuvgt**










	Command or Action	Purpose
		Gpcdngu vjg

*Table 75: Feature Information for Single Number Reach*

---

---

## Customize Softkeys

---







Hookflash Softkey

Feature ID	Feature Name	Description	Default State on CME
O	Dct	Dct i g kpvq	Gpcdingf

e

[qw ecp enuq rtq i tco nkp g mg {u vq hwpevkqp cu hgcwvtg dwwvqpu wukpi vjg wugt/rtqhkag kp rjqpgu vjcv jcxg  
Gzvypukqp Oqdknk{ \*GO+ gpcdnf qp

---

---

---

---

---

---

---

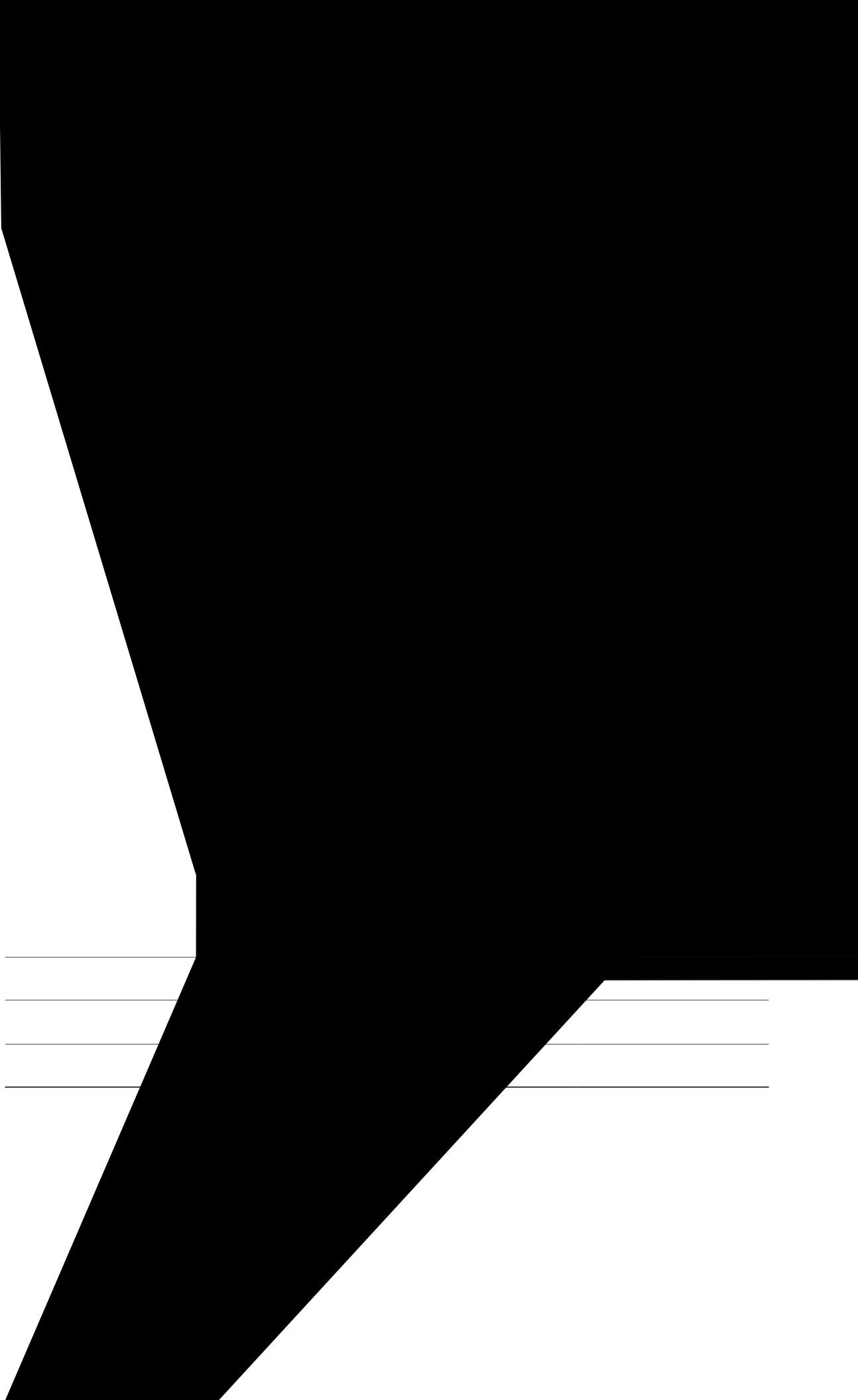
---

---

---

*Table 78: PLK Feature Availability on the Cisco Unified 6945, 8941, and 8945 SCCP IP Phones in Cisco Unified CME 8.8*





Four horizontal lines on the left side of the page, partially obscured by the black shape.

Four horizontal lines on the right side of the page, partially obscured by the black shape.



Vedng :2<RNM Hgevtg Cxckndknv{ qp vjg Ekueq Wpkkgf 9:22. : :22 Ugtkgu UKR KR Rj qpgu htq o Ekueq Wpkkgf  
EOG 3302 Qpyctfu. qp rcig ;57

---

---

---

---

---

---

---

---

---

---

---



---

Restriction

Gpcdng v jg

## DETAILED STEPS

---

---

---

---

---

---

---



# Modify Softkey Display on SIP Phone



---

Restriction

Vjku hgcwrtg ku uwr rqtvgf qpn{



---

---

	Command or Action	Purpose
	Example: Router(config-register-pool)# template 9	Vg o rncvg/vci Vg o rncvg vci vjcv ycu etgcvgf

dialplan 3  
!

Step 2 **ujqy vgngrjqp{/ugtxkeg grjqpg/vgo rncvg qt ujqy xqkeg tgikuvgt vgo rncvg vgo rncvg/vci**

Example:

Vjgug eqo ocpfu fkurnc{

## DETAILED STEPS

---

---

---

---

# Configure Feature Blocking

Vq eqphkiwtg hgcwtg dnqemkpi hqt UEER rjqpgu. rgthqt o vjg hqmqykipi uvgru0

Before You Begin

Ekueq

	Command or Action	Purpose
		<p>μ3 D 6 N D S D U N</p> <p>μ3 L F N S ' S U H F W O R G F D S L C F N 7 X S L V F O S I G F H M X S</p> <p>O D V W S D D O S L E N X S P Q R W K M H U Q V S L R U O R W</p> <p>μ7 U Q V S 8 D W O D Q V I H U</p>

# Verify Block Softkey Configuration

Step 1

---

## SUMMARY STEPS

1. **gpcdn**



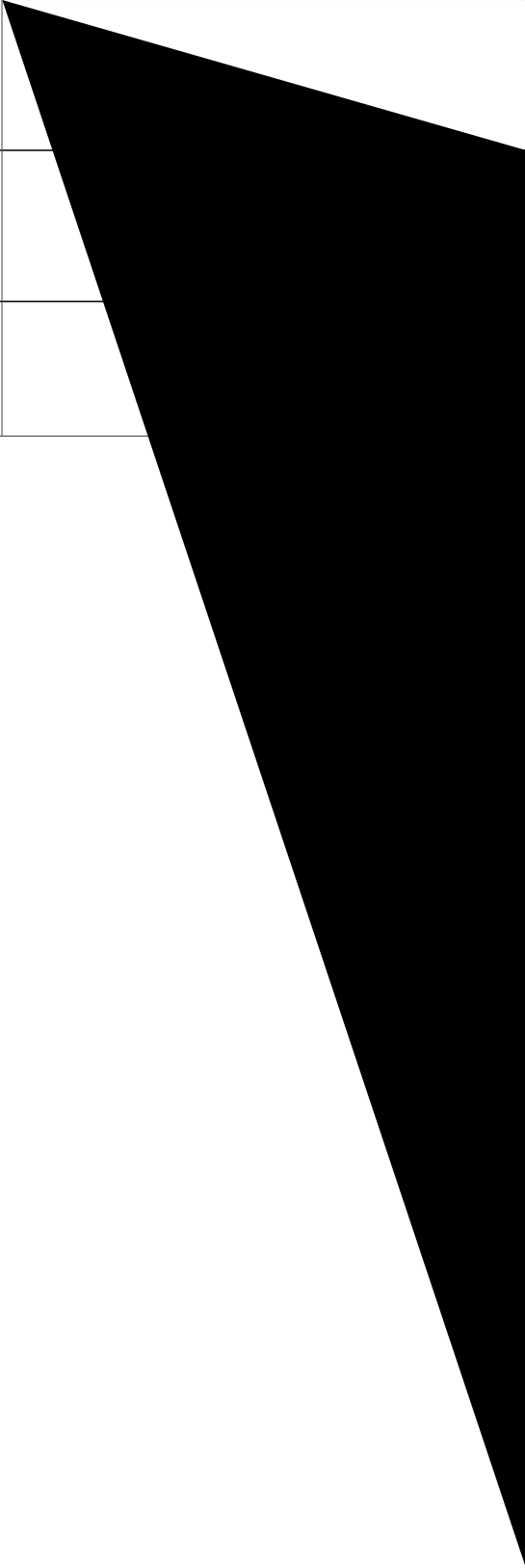


---

---

What to Do Next

kh {qw ctg fqpg eqphki wtkpi vjg WTN dwwqpu hqt r jqpgu kp Ekueq Wx

# Configure Feature Buttons on SCCP Phone Line Key



Restriction

Cpuygt. Ugngev. eDctig. Lqkp. cpf Tguw og hgcwvtgu ctg pqv uwr rqtvgf cu RNMu0

Hgcwvtg dwvqpu ctg qpn{ uwr rqtvgf qp Ekueq Wpkhkgf ~~NR~~j qpgu 8;33.9;63. 9;64. 9;67. 9;83. 9;84. 9;870 9;92. 9;93. cpf 9;97 ykvj UEER x34 qt ncvgt xgtukqpu0

Cp{ hgcwvtgu cxckncdng vjtqwi j jctf dwvqpu ctg pqv rtqxxkukqpgf0 Wug vjg show ephone register detail eq o ocpf vq xgthk{ y j{ vjg hgcwvtgu dwvqpu ctg pqv rtqxxkukqpgf0

Pqv cmn hgcwvtg dwvqpu ctg O



# Configure Feature Buttons on SIP Phone Line Key

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **xqleg t**





softkeys alerting

## Example for Park and Transfer Blocking

Vjg hqnnqykpi gzc o rñg dnqemu vjg wug qh Rctm cpf Vtcpuhtg uqhvmg {u qp gzvqpkqp 4555<

```
ephone-template 1
  features blocked Park Transfer
ephone-dn 2
```

## Example for Configuring URL Buttons on a SIP Phone Line Key

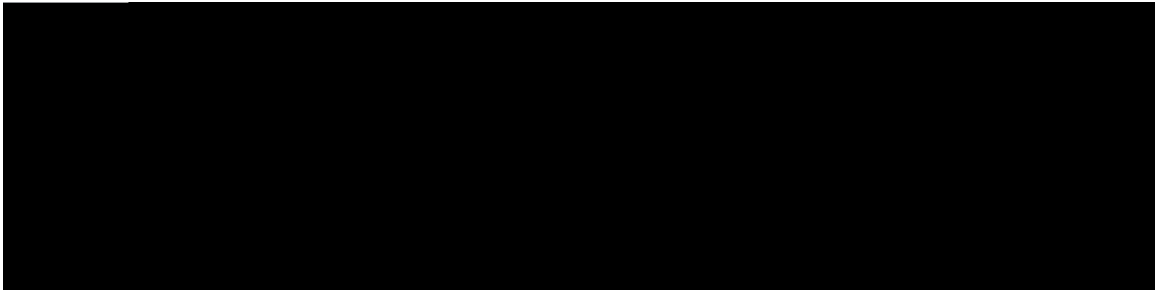
```
Vjg hqnnqykpi gzc o rmg ujy yu WTN dwwqpu eqphkiwtgf kp xqkeg tgikuvgt vgo rncyg 3<
```

```
Router# show run!voice register template 1  
url-button 1 http://9.10.10.254:80/localdirectory/query
```









CHAPTER 33

---




Dwnm urggf/fkcn nkuvu eqpvckp gpvtkgu qh urggf/fkcn eqfgu cpf vjg cuuqekcvgf rjqpg pwo dgtu vq fkcn0 Gcej gpvt{  
kp c urggf/fkcn nkuv o wuv crrgct qp c ugrctcvg nkgp0 Vjg hkgnfu kp geej gpvt{ ctg ugrctcvgf d{ eqo o cu \*.+0 C  
nkgp vjcv

c

Hqt eqphki wtevkqp







# Define Speed-Dial Buttons and Abbreviated Dialing on SCCP Phones

Vq fghkpg urggf/fkca





# Enable Bulk-Loading Speed-Dial

Vq gpcdng dwnm/nqcfkpi urggf/fkca pw o dgtu. rgthqt o



# Enable Phone User Interface for Configuring Speed-Dial and Fast-Dial

Vq gpcdng c r jppg wugt vq eqphki wtg urggf/fkcn cpf hcuv/fkcn pwo dgtu htqo c o gpw

	Command or Action	Purpose
Step 5	<b>gp f</b>  Example: Router(config-ephone)# end	Gzkvu vq rtkxknigif GZGE oqfg()

What to Do Next

Hqt kphqt ocvkqp qp j q y

	Command or Action	Purpose
	Example: Router# enable	

## SUMMARY STEPS

- 1.

# Configuration Examples for Speed Dial

## Example for Enabling a Local Speed Dial Menu

```
Vjg hqmqykipi eqo ocpfu gpcdng vjg Ekueq ygd dtqyugt cpf ugv vjg JVVV rcvj vq hncuj ogoqt{ uq vjcv vjg  
urggf fkcndz on hkng kp hncuj ogoqt{ ku ceeguukdng vq KR rjqpgu<
```

```
ip http server  
ip http path flash:
```

```
Vjg
```

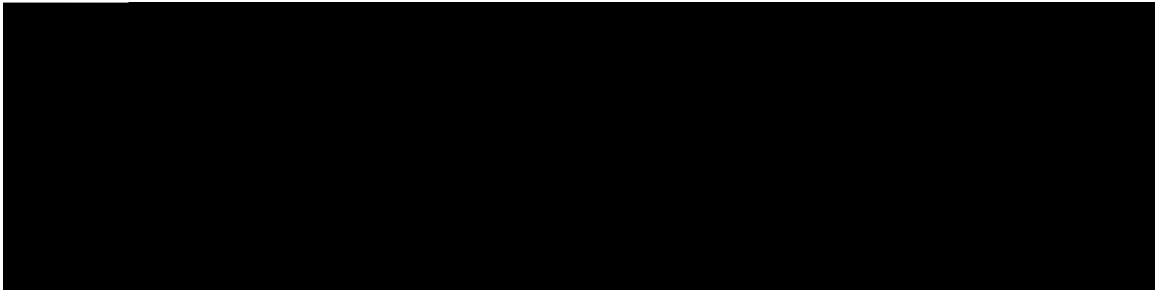


Vjku

## Feature Information for Speed Dial

*Table 85: Feature Information for Speed Dial*





# Video Support



μ

# Restrictions for Video Support

Vjku hgcvwtg uwr rqtvu qpn{ vjg hqnnqykpi xkfgq eqfgeu<

J0483 Ekueq Wpkhkgf EOG 602 cpf ncvgt xgtukqpu

J0485 O 0483

Y jgp c xkfgq/ecrcdng gpf rqlpv eqppgevu vq cp cwfq/qpn{ gpf rqlpv. vjg ecnn hcnnu dcem vq cwfq/qpn{0  
Fwtkpi cwfq/qpn{ ecnnu. xkfgq

J0486 xkfgq uwr rqtv J0486 rtqxkfgu jki j/swcnkv{ koci gu cv nqy dkv tcvgu cpf ku ykfgn{ wugf kp  
eqo o gtekcñ xkfgq eqphgtgpekpi u{uwg o u0 Vjg J0486 eqfge



## Call Fallback to Audio-Only

Y jgp c xkfgq/ecrcdng gpf rkp v eqppgevu vq cp cwfq/qpn{ gpf rkp v. vjg ecnn hcmm dcem vq cp cwfq/qpn{

## Call Setup Between Two SCCP Endpoints Across an H.323 Network

Kh ecm ugwr dgyy ggp

Hqt oqtg kphqto cvkqp. ugg Cr rri{ Xkfgq cpf Ec ogtc Eqphki wtcvkqp vq Ekueq Wpkhkgf UKR Rjqpgu. qp rcig  
;;90

# Configure Video Support

## Enable Video and Camera Support on Cisco Unified SIP Phones

Vq gpcdng xkfgq cpf ec o gtc uwr rqtv qp

	Command or Action	Purpose
	Example: Router>	





## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlkg t**



	Command or Action	Purpose
Step 8	<b>gpf</b>  Example: Router(config-register-pool)# end	Tgwtptu vq rtkxng igf GZGE oqfg0

#### Examples

Vjg hqnnqykpi gzc o rng ujqyu vjg **cr rri{/eqphki** eqo ocpf eqphkiwtgf kp xqkeg tgikuvgt rqqn 7<

```
Router# configure terminal
Router(config)#voice register pool 5
Router(config-register-pool)#apply-config
```

## Configure Video Bandwidth Control for SIP to SIP Video Calls






---

---

---

---

---

---

in ver 5  
mediaActive:0 offhook:0 ringing:0 reset:0 reset\_sent:0 paging 0 debug:0

# Verify Video Support

---

Wug

**fgdwi xqir eecrkppqw** Fkurnc{u vjg









XRP jgcf gpfu \*CUC cpf FVNU+. qp rcig 32320 Uwr rqtv hqt XRP hgcwvtg qp CUC jgcf gpf ycu cffgf kp Ekueq  
Wpkhkf EOG :070 Hqt oqtg kphqt ocvkqp. ugg UUN XRP Enkgrp hqt UEER

ykvjqww vjg wugtpc o g rtghknn0 \*Ykvj vjg wugtpc o g rtghkngf. vjg rjqpg fqgu pqv cum hqt c wugtpc o g  
cpf c wugtpc o g ku rkemgf wr fgrgpfkpi qp vjg eqphki wtcvkqp wpgt vjg tngxcpv vtuvvrqkp0+



---

Yg tgeq o o gpf wukpi NUE hqt egtvkhkecv g cwvjgpvkecvkqp0 Wug qh OKE hqt egtvkhkecv g cwvjgpvkecvkqp ku pqv  
tgeq o o gpf g f0 Yg cuuq tgeq o o gpf eqphki wtkpi grjqpg kp cwvjgpvkecv g f \*pqv gpet{ rvgf+ ugewtkv{ o qfg  
y jgp fqkpi egtvkhkecv g cwvjgpvkecvkqp0 Oqtg kphqt o cvkqp qp egtvkhkecv g /qp n { cwvjgpvkecvkqp

Vq guvednkuj c



---

C eqo rcvkdng Cfcrvkxg Ugewtkv{ Fgxkeg Ocpigt





---





## Configure Cisco Unified CME as CA Server

Vjg dcuke eqphki wtcvkqp qp vjg EC ugtxgt gpuwtgu KR eqppgevkxkv{. Pgv yqtm Vko g Rtqvqeqn \*PVR+. vko g u{pejtqpk|cvkqp yjkej ctg pgeguuct{ hqt gpcdnkpi vjg UUN XRP hgcvwtg0

Vjqwi j vjku ugevkqp fguetkdgu eqphki wtkpi EC ugtxgt qp vjg EOG vq rtqxkfg egtvkhkecvg ukipki hqt dqvj EOG cpf CUC. kp tgcn yqtnf fgrnq{ o gpvu vjktf rctv{ EC ku qhvvp wugf0 Vjg dcuke tgswwtg o gpv ku vjcv EOG cpf CUC gcej jcu cp0 fgpvk{ egtvkhkecvg ukipki d{ dqvjcpO cp cp

```
Router(cs-server)# grant auto
Router(cs-server)# lifetime certificate 7305
Router(cs-server)# lifetime ca-certificate 7305
Router(cs-server)# exit
```

Subject:  
Name: CME1.cisco.com  
hostname=CME1.cisco.com  
Validity Date:  
start date: 15:32:23 PST Apr 1 2010  
end date: 09:44:00 PST Mar 10 2030  
Associated Trustpoints: cisco2

ephone-1[0]

```
ciscoasa(config-ca-trustpoint)# crl nocheck  
ciscoasa(config-ca-trustpoint)# keypair cmeasa  
  
ciscoasa (config )#
```





Example:

## DETAILED STEPS



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkwt**

---

---

---

---

---

## Configure Alternate TFTP Address on Phone

---

Step 1    Htqo vjg



## Register Phone from a Remote Location

Vq tgi kvgt c

Set Up the Clock, Hostname, and Domain Name



Hqt oqtg kphqt o cvkqp. ugg jwr<ll y y\ekueq\eq o lgp!WUI

## Verify the IOS SSL VPN Connection

Qp {qwt RE u dtqyugt \*OU Kpvgtpgv Gzrntgt+. eqppgev vq [jwru<11307059035IUUNXRP](#) rjqpg cpf ceegr vjg  
egtvkhkecvgl Vq D Q G V V Z O R G G D ( ( ( R Q H ) ) 1 0 3 8 1 . 6 2 0 0 3 T I 1 0 0 1 1 ( D Q G ) ) 1 0 3 9 8 1 1 2 1 1 4 4 6 4 6 . 8 2 8 T m ( L V ( F H ) ) 1 0 4 2 1 7 0 0 3 T I 1 0 0 1 1 - 0 ) ) ) 1 0 4 3 0 1 1 9 4 2 9 2 6 4 6 . 8 2 8 T m ( 1 1 X 0 ) ) ) 1 0 0 2 1 2 0 0 3 T I 1 0 0 1 1 V S K X 1 1 5 Q G

Step 5 Chvgt c jctf tgugv \*rtguu

```
device-security-mode none
mac-address 001E.7AC4.DD25
type 7965
vpn-group
```

```
vpn-group 1
  vpn-gateway 1
```



crypto pki trustpoint

```
hide-url-bar  
default-group-policy SSLVPNphone
```



Cwwq o cvke nkg ugngvkqp Rkemkpi wr vjg jcpfugv cpuygtu vjg hktuv tkpikpi nkg qt. kh pq

kh

---

---

---

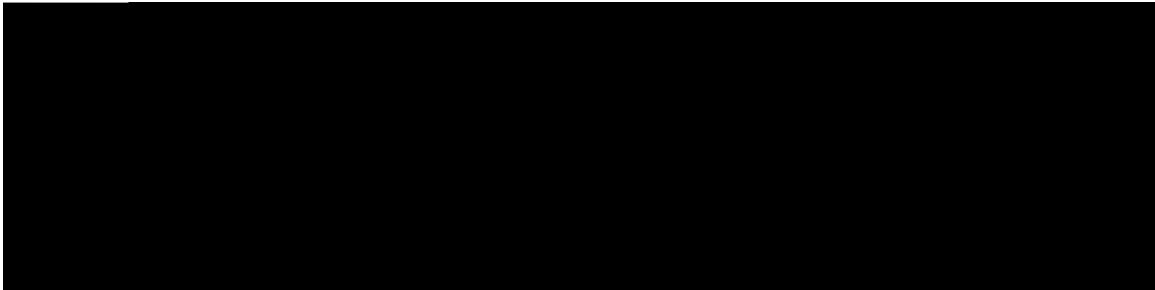
---



```
auto-line 1 answer-incoming  
button 1:1 2:2 3:3
```



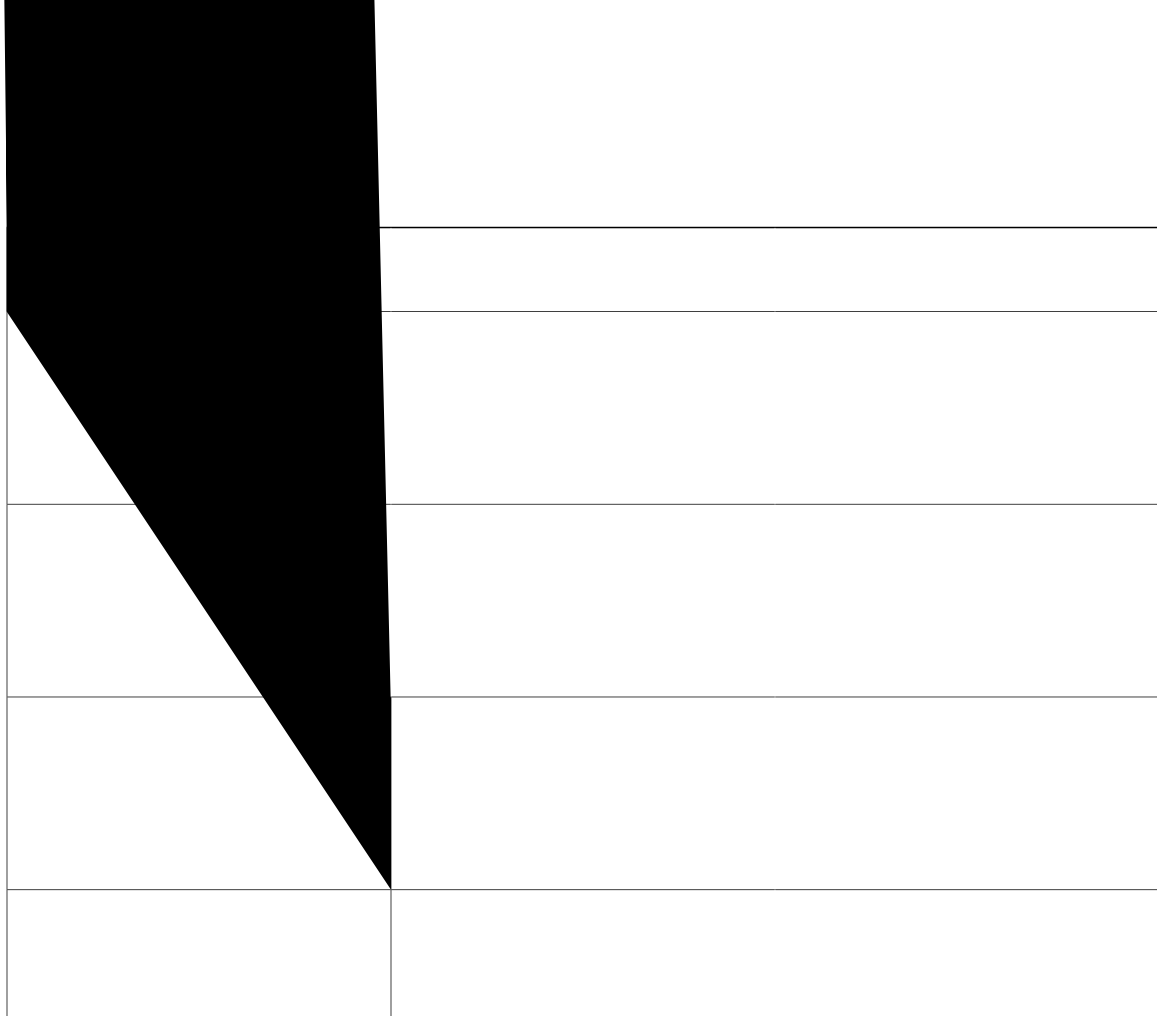




CHAPTER 33

## Barge (SIP)

Dctig wugu vjg dwknv/kp eqphgtgpeg dtkfig qp vjg vctigv rjqpg \*vjg rjqpg vjcv ku



Rtkxce{ ku uwrrqtvvf qp UEER qevq/nkpg fktgevqt{ pwo dgtu cpf UKR ujctgf/nkpg fktgevqt{ pwo dgtu0  
Rtkxce{



---

Hqt Dctig cpf eDctig vq yqtm. rtkxce{ pggfu vq dg flucdnf wpgt xqkeg tgikvgt inqden wukpi vjg  
eq o ocpf **pq rtkxce**{0 Hqt eqphkiwtkpi Rtkxce{. Ugg **Gpcdnf Rtkxce**{ cpf **Rtkxce**{ qp J qnf qp UKR Rj qpgu.  
[qp rcig 3279](#)

## SUMMARY STEPS

1. **gpcdnf**
2. **eqphkiwtg vgt o kpcn**
3. **xqkeg tgikvgt vgo rncvg vgo rncvg/vci**

---





---

Restriction

Rtkxce{ cpf Rtkxce{ qp J qnf ctg uwr rqtvgf hqt ecnu qp u jctgf qevq/nkpg fktgevt{ pwo dgtu qpn{0

Rtkxce{ cpf Rtkxce{ qp J qnf ctg pqv uwr rqtvgf qp v jg Ekueq Wpkhkf KR Rj qpg 9;57. 9;58.



Vjg hqmkykpi gzc o rñg ujy u rtkxce{ flucdñgf cv vjg u{uvgo /ñgxgn cpf gpcdñgf



---

---

---

```
mode cme
privacy-on-hold
no privacy
max-dn 300
max-pool 150
voicemail
```

## Call Blocking

---

Kphqt o cvkqp Cdqw Ecnn Dnqemkpi. rcig 3283

Eqphkiwtg Ecnn Dnqemkpi. rcig 3286

Eqphkiwtcvkqp Gzco rngu hqt Ecnn Dnqemkpi. rcig 3298

Y jgtg vq Iq Pgzv. rcig 329:

Hgcwvtg







# Configure Call Blocking

## Configure Call Blocking

vq

---

---

---

---

---

---





## Before You Begin

Ekueq Wpkhkf EOG 604\*3+ qt c ncvt xgtukqp0

### SUMMARY STEPS

1. **gpcdnq**
2. **eqphkiwtg vgt o kpcn**
3. **vgngr jqp{/ugtckeg**
4. **chvgt/jqwtu qxgttkfg/eqfg rcwgtp**
5. **gpf**

### DETAILED STEPS

---

---

---

# Configure Call Blocking Exemption for an Individual SCCP Phone

Vq gzg o rv cm fktgevt{ p w o dgtu cuuqekcygf ykvj cp kpfkxkfwcn UEER rjqpg




	Command or Action	Purpose
	qt Router(config)# voice	Gpvgtu xqkeg tgikuygt fp oqfg vq fghkpg c fltgevqt{ pwo dgt hqt c UKR r jqqg. kpvgteq o nkpg. xqkeg rqtv. qt cp O YK0

create

---

Vjg EQT nkuv eqphkiwtcvkqp wpfgt xqkeg tgi kuvgt vgo rncvg eqphkiwtcvkqp oqfg ku uwrrqtvgf qpn{ hqt  
Wpkkkgf EOG 3403 cpf ncvgt tngcugu0

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. Gpvt qpg qh vjg

---

---



```
after-hours day mon 19:00 07:00
after-hours day tue 19:00 07:00
after-hours day wed 19:00 07:00
after-hours day thu 19:00 07:00
after-hours day fri 19:00 07:00
after-hours day sat 13:00 12:00
after-hours day sun 12:00 07:00
!
ephone 23
mac 00e0.8646.9242
button 1:33
after-hour exempt
!
ephone
```

```
corlist outgoing call-911
destination-pattern 9911
port 2/0/0
prefix 911
```



Wug



## Call Park

---

[Kphqt o cvkqp Cdqw Ecnn Retm. rcig 32:3](#)

[Eqphki wtg Ecnn Retm. rcig 32:;](#)

[Eqphki wtcvkqp](#)



u{uyg o ugcte jgu hktuv hqt c ecnn/rctm unqvunqv

Vq tghtguj vjg nkuv

---

---





eqphkiwtgf ykvj vjg gzvqpkqp pwo dgtu 4223. 4224. cpf 4225. cpf c

# Call-Park Redirect

D{ fghcwnv. J0545



## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **vgng r jqp{/ugt xke**







!  
!  
ephone 3  
park



```
!  
!  
ephone-dn 31 dual-line  
number 452 secondary 502  
preference 10  
huntstop channel  
!
```

Step 2 `Wug vjg ujqy vgnr jqp{/ugtxkeg gr jqpg/fp eq o ocpf vq fkurnc{ ecmm rctm eqphki wtcvkqp kphqt o cvkqp0`

Example:

```
Router# ujqy vgnr jqp{/ugtxkeg gr jqpg/fp  
ephone-dn 26  
number 8136 secondary 136  
park-slot reserved-for 136 timeout 10 limit 1 recall
```

---

## Configure Timeout Duration for Recalled Calls

	Command or Action	Purpose
Step 2	<b>eqphkiwtg vgt o kpcn</b>  Example: Router# configure terminal	Gpvgtu inqdcn eqphkiwtcvkqp oqfg0
		Gpvgtu c vk o gqww rgtkqf

# Configuration Examples for Call Park

## Example for Configuring Basic Call Park

Vjg hqnnqykpi gzc o rng etgcvgu c ecm/rctm unqv ykvj vjg pw o dgt 37820 Chvgt c ecm ku



# Feature Information for Call Park

Vjg hqmqy kpi vcdng rtqkfgu tngcug kphqt o cvkqp cdqww vjg hgcwvtg qt hgcwvtgu fguetkdgf kp vjku o qfwng0 Vjku  
vcdng nkuvu qpn{ vjg uqhvy ctg tngcug vjcv kptqfwegf uwr rqtv hqt



# Call Restriction Regulations

---

[Rtgtswkukvgu hqt](#)

ecnu htq o eqppgevkpi vq tg o qvg nqecvkqpu qxgt cp KR vtwpm. cu uj q y p kp





kpeq o kpi ecnn ku pqv cuuqekcvgf ykvj c NREQT rqnke{ qt vjg NREQT rqnke{ ku pqv fghkpgf hqt vjg vctigv  
fguvkpcvkqp0

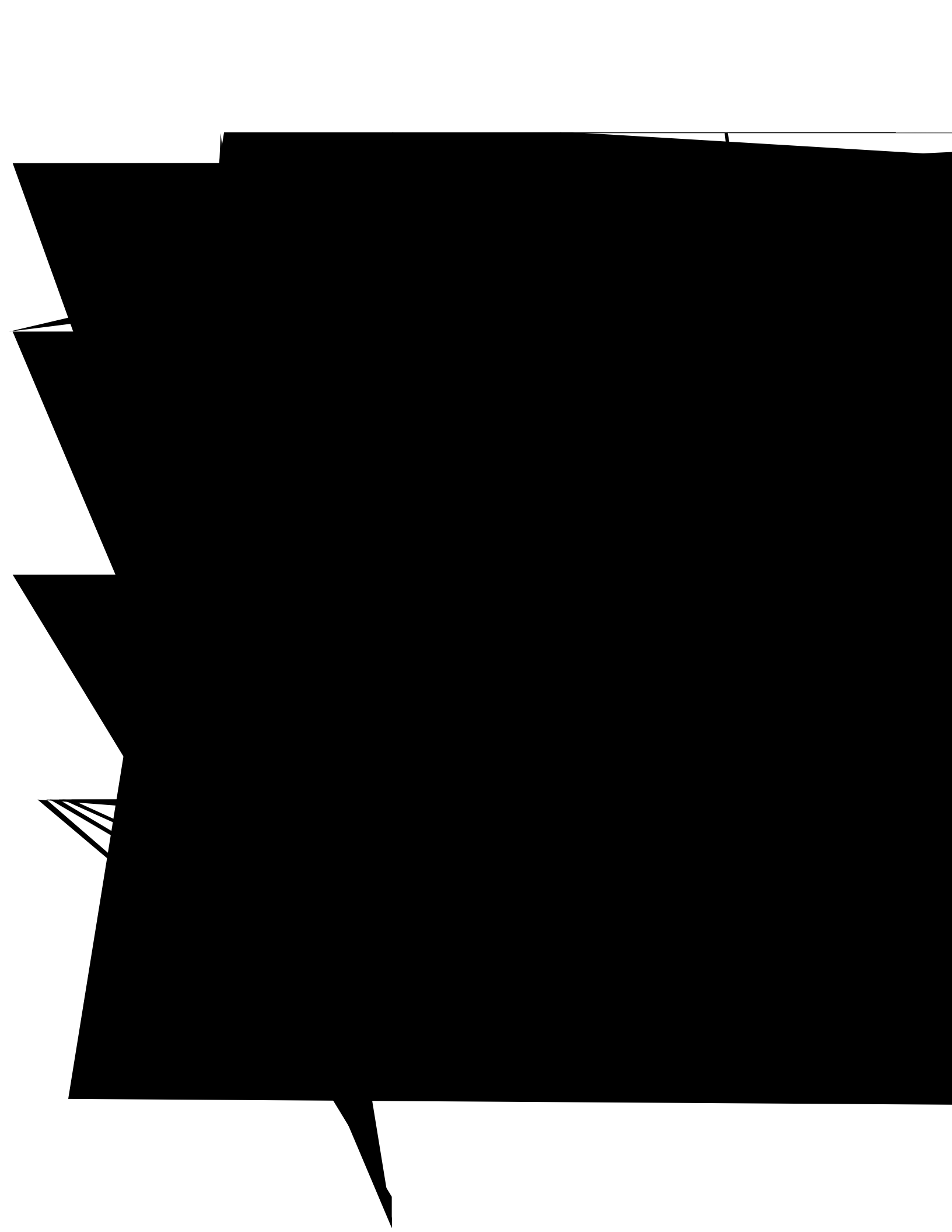
VTCK tgi wncvkqpu cmqy vjg uc og fktgevqt{ pw o dgt qp c nqecn KR r j qpg qt UEER cpcnqi Hqtgkip Gzejcpig  
Uvcvkqp \*HZU+ r j qpg kp

VoIP Trunks









## Phone Display and Warning Tone for LPCOR

Ekueq Wpkhgf EOG rnc{u vjg tgqtfgt vppg vq ecnngtu y jgp kv dnqemu ecnu fwg vq NREQT rqnke{ cwvjgpvkecvkqp0  
Vcdng ;7< Oguucig Fkurnc{ hqt Dnqemgf NREQT Ecnu. qp rcig 3332





DETAILED STEPS

---

---

---

---

---

---

---

---

---

---


xqkeg o ckn Ceegrvu dqvj KR vtwpm cpf RUVp ecmm0

```
voice lpcor enable
voice lpcor custom
group 1 siptrunk
group 2 h323trunk
group 3 pstn
group 4 voicemail
!
voice lpcor policy siptrunk
accept h323trunk
accept voicemail
!
voice lpcor policy h323trunk
accept siptrunk
accept voicemail
!
voice lpcor policy pstn
!
voice lpcor policy voicemail
accept siptrunk
accept h323trunk
accept pstn
```

Vjg hqnnqykpi gzc o rng ujqyu c NREQT rqnke{ vjcv ku eqphki wtgf vq tglgev ecmm cuuqekcvgf ykvj kvugnh0 Fgxkegu  
vjcv dgnqpi vq vjg nqecnar jppg tguqwteg itqwr ecppqv ceegrv ecmm htq o gcej qvjgt0

```
voice lpcor policy local_phone
no accept local_phone
accept analog_phone
```

## Before You Begin

Vjg NREQT rqnke{ owuv dg fghkpgf0 Ugg Fghkpg c NREQT Rqnke{. qp rcig 33330

### SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **vtwpm i tqwr pcog**
4. **nreqt kpeq o kpi** *nreqt/iqwr*
5. **nreqt qwv i kpi** *nreqt/iqwr*
6. **gzkv**
7. **xqleg/rqtv rqtv**
8. **nreqt kpeq o kpi** *nreqt/iqwr*
9. **nreqt qwv i kpi** *nreqt/iqwr*
10. **gp f**

### DETAILED STEPS

---

---

```
!  
dial-peer voice 202 pots  
description VP outbound dial-peer  
destination-pattern 202T  
port
```





---

---

---

---

---

---

---

---

---

---

Examples

Vjg hqmqykpi gzc o ring ujqyu c NREQT eqphki wtcvkqp hqt X



---

---



Hkiwtg 64<UEERHZU

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkwtg**





```
...  
voice register pool 6  
  lpcor type mobile  
  id mac 0030.94C2.9A66  
  type 7960  
  number 1 dn 3
```

ykvj vjg nqecn KR rjqpg ykvj KR cfftguu 32020320450 NREQT nqecnaitqwr4 ku cuuqekcvgf ykvj vjg qvjgt nqecn  
KR rjqpgu vjtqwij vjg FJER/rqqn ocvej0

```
ip dhcp pool pool1
network 10.0.0.0 255.255.0.0
option 150 ip 10.0.0.1
default-router
```

нқесна ітқwr Срсіқі срf KR rjqpgu.

Сингу ен еснн вк хкгеа о кна и твр

*Figure 44: LPCOR Policy Logic*

```
# analog phone6
voice-port 1/0/1
  lpcor incoming local_group
  lpcor outgoing local_group
!
# TDM trunks
voice-port 2/1:23
  lpcor incoming pstn_group
  lpcor outgoing pstn_group
!
!
# Specific LPCOR setting for incoming calls from voice_mail_group
voice lpcor ip-trunk subnet incoming
  voice_mail_group 172.19.28.11 255.255.255.255
!
!
# Default LPCOR setting for any incoming VoI                                nK                                p
```

```
session target sip-server
lpcor outgoing remote
```

## Example for Configuring LPCOR on Cisco 3800 Series Integrated Services Router

```
Router# show running-config
Building configuration...

Current configuration : 10543 bytes
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Router
!
boot-start-marker
boot-end-marker
!
card type t1 2 1
logging message-counter syslog
logging buffered 2000000
no logging console
```



```
voice lpcor custom
group 1 voip_siptrunk
group 2 voip_h323trunk
group 3 pstn_trunk
group 4 cue_vmail_local
group 5 cue_vmail_remote
group 6
```



```
interface GigabitEthernet0/0
 ip address 192.168.160.1 255.255.255.0
```



call-forward noan 5050 timeout 10

```
!  
!  
ephone 4  
  lpcor type local  
  lpcor incoming analog_vg224  
  lpcor outgoing analog_vg224  
  mac-address F9E5.8B28.2401  
  ephone-template 1  
  max-calls-per-button 2  
  type anl  
  button 1:4  
!  
!  
!  
ephone 5  
  lpcor type local  
  lpcor incoming analog_vg224  
  lpcor outgoing analog_vg224  
  mac-address F9E5.8B28.2402
```

!  
boot-start-marker

name cme-sip1

```
accept local_sccp
accept local_sip
!
voice lpcor policy local_sccp
accept local_sip
accept remote_sccp
accept remote_sip
accept analog_vg224
accept
```

```
service-module ip
```



session protocol sipv2







## Call Transfer and Forward

---

5 Ecmn hqtyctf dwu{ cpf ecmn hqtyctf pq/cpuygt

J067205 ecrdknkvkgu ctg gpcdnf inqdcnn{ qp vjg tqwvgt d{ fghcwnv. cpf ecp dg fkucdnf gkvjgt inqdcnn{ qt hqt  
kpfkxfwcn fken rggtu0 [qw ecp eqphkiwtg kpeqokpi rcwgtpu hqt wukpi vjg J067205 uvcpfctf0 Ecmnki/rctv{  
pwodgtu vjev fq pqv ovej vjg rcwgtpu fghkpgf ykvj vjku eqo ocpf ctg hqtyctfgf wukpi Ekueq/rtqrtkgvct{  
ecmn hqtyctfki hqt dcemyctf



Hqt eqphki wtevkqp kphqt o cvkqp. ugg [Eqphki wtg UKR/vq/UKR Rjqpg Ecm Hqtyctfki. qp rcig 34350](#)

## Call Forward All Synchronization for SIP Phones

Vjg Ecm Hqtyctf Cnn hgcvtg cnnqyu wugtu vq hqtyctf cnn kpeq okpi ecnu vq



## Call Transfer Blocking

Vtcpuhtu vq cmm pwo dgtu gzegr vjqug qp nqecn r jppgu ctg cwvq o cvkecnn{ dnqemgf d{ fghcwnv0 Fwtkpi  
eqphki wtcvkqp. {qw ecp cmmqy vtcpuhtu vq pqpneecn pwo dgtu0 Kp Ekueq Wpkhkgf EOG 602 cpf ncvgt x

Commands	Cisco Unified CME
<b>eqphgtgpeg o cz/ngpivj</b>	gr j qpg gr j qpg/vg o rncvg xqkeg tgi kuvgt rqqn xqkeg tgi kuvgt vg o rncvg
<b>eqphgtgpeg/r cvgtp dnqemgf</b>	gr j qpg gr j qpg/vg o rncvg xqkeg tgi kuvgt rqqn xqkeg tgi kuvgt vg o rncvg




---

Vjg ecnn vtepuhgt cpf eqphgtgpeg tguvtkevqpu cr rn{ y jgp vtepuhgtu qt eqphgtgpegu ctg kpkvkcvgf vqyctf  
 gzvgtpcn rctvkgu. nkmg ditpcn

## Backward Compatibility

$\forall q \text{ o c k p c k p d c e m y c t f e q o r c v k d k n k v } \{ . c n n e c n n v t c p u h g t u h t q o$



Note

---

Kh dqvj **eqphgtpeg o cz/ngpivj** cpf **vtepuhgt o cz/ngpivj** eq o o cpf u ctg eqphkiwtgf. Xg eqphgtpeg u  
**o cz/ngpivj** eq o o cpf vcmgu rtgegfgpeg hqt eqphgtpegu0

---

## Conference-Pattern Blocked

Vjg eqphgtpeg/rcwgtp dnqemgf eq o o cpf ku wugf vq rtgxgpn gzvpgukqpu qp cp gr j qpg qtqtvr tgx





## SUMMARY STEPS

1. **gpcdn**
2. **eqphkwtg vgt o kpcn**
3. Gpvt qpg qh vjg





Conference Transfer-Pattern

vjg EHPC vk o gqww. vjg ecnn ku hqyctfgf vq vjg EHPC vcti gv pwo dgt cu vjg EHPC vk o gqww gzkrtgu dghqtg vjg  
vtcpuhgt/tgecnn vk o gqww)

Y jgp Ecnn Hqyctf Cnn ku eqphki wtgf kp Ekueq Wpkhkf EOG. vjg ecnn ku hqyctfgf



Еснн һгт у ст фкпн





*Table 100: T*











## Tips for Using Hairpin Call Routing

Wug jcktrkp



- 6 Vjg J0672 vepfg o icvgye{ vgtokpcvgu vjg ecnn ngi htq o gzvgpukqp 3223 cpf tgqtkikpcvgu c ecnn ngi vq gzvgpukqp 4223.

Wug fken rrgtu vq ugv wr ep J0672 vepfgo icvgye{0 Ugg [Fken Rrgtu. qp rcig 33950](#)

## Dial Peers

Fken rrgtu fguetkdg vjg xktwcn kpvgtcegu vq qt

Eqppgevgf NkpglPc o g kfgpvkhkecvkqp \*EQNRlEQPR+ kphqt o cvkqp rtqxkfgf y jgp c RDZ r j qpg ecnu cp KR r j qpg cpf ku eqppgevgf- kp v jg tgxgtug fktgevkqp. uwej kphqt o cvkqp rtgugpvgf qp cp KR r j qpg<sup>0</sup>

Ecnn Hqtyctf wukpi SUKI cpf J067205 vq uwr rqtv cp{ eq o dkpcvkqp qh KR r j qpg cpf RDZ r j qpg. kpenwfkpi cp KR r j qpg kp v jg Ekueq Wpkhkgf EOG u{uvgo vjev ku eqppgevgf vq c RDZ qt cp KR r j qpg kp cpqvjgt Ekueq Wpkhkgf EOG u{uvgo cetquu cp J0545 pgv y qtm<sup>0</sup>

Ecnn hqtyctf vq v jg RDZ o guucig egpvgt ceeqtfkpi vq v jg eqphkiwtgf rqnke{<sup>0</sup> Vjg qvjgt vyq gpf r qkpvu ecp dg c okzvtg qh KR r j qpg cpf RDZ r j qpgu<sup>0</sup>

Jcktrkp



Cisco CME 3.1 or Later and Cisco IOS Gateways

κρ c

3 Ugwkp i wr ecmm/vtcpuhtg cpf ecmm/hqyctfkpi rctc ogytu hqt vtcpuhtg cpf hqyctfu

Cisco CME 3.1 or Later, Cisco Unified Communications Manager, and Cisco IOS Gateways

Кр с ргvyqtm ykvj Ekueq EOG 503 qt ncvt. Ekueq Wpkhkf Eq o wpkcvkqpu Opcigt. cpf Ekueq KQU icygc{u.  
Ekueq EOG 503 cpf ncvt



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **vngr jqp {/ugtxkeg**
4. **vtcpuhgt/u{uyg o }dnkpf · hwmm/dnkpf · hwmm/eqpuwv ] fuu \_ · nqecn/eqpuwv**

---

---









## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**

	Command or Action	Purpose
Step 6	<b>xqkeg ugtxkeg xqkr</b>  Example: Router(config)# voice service voip	*Qrvkqpcn+ Gpvgtu xqkeg/ugtxkeg eqphki wtcvkqp o qfg()
	<b>pq uwr ring o gpvct{/ugtxkeg ukr tghgt</b>  Example:	Rtgxgpwu vjg tqwvgt htq o hqt yctfkipi c TGHGT o guucig vq vjg fguvkpcvkqp hqt ecnm/vtcpuhtg tgecmu()

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **vgng r jqp{/ugtxleg**
4. **ecm/hqtyctf rcvgtp**







Vtcpuhtu ofg









---

---





## SUMMARY STEPS

1. **gpcdn**
2. **eqphk i wtg vgt o kpcn**
3. **xqkq**







---

Restriction

Eqfgeu



---

---

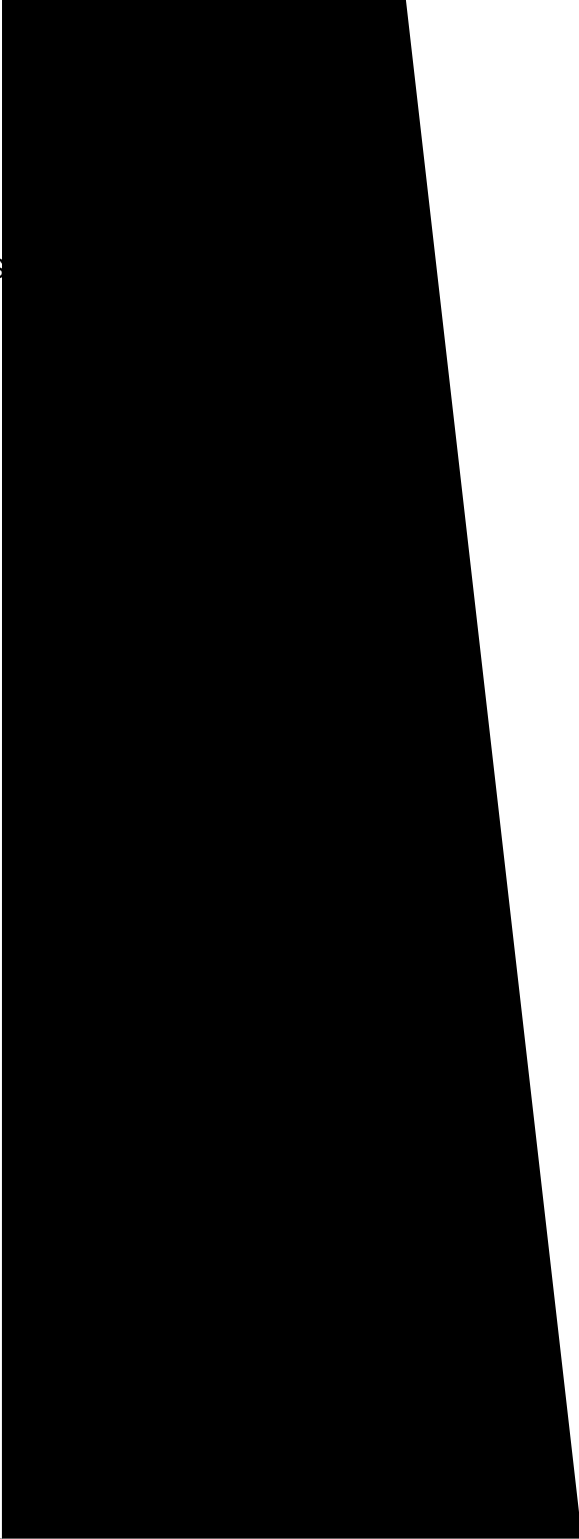
---

---

---

	Command or Action	Purpose
		Kh vjku eq o o cpf ku fkucdngf inqdcnn{ cpf gkvjgt gpcdngf qt fkucdngf qp c fkn rggt

DETAILED STEPS



# Enable H.450.7 and QSIG Supplementary Services on a Dial Peer

Vq gpcdng J 0657209



# Disable SIP Supplementary Services for Call Forward and Call Transfer

Vq flucdng TGHGT o guuc i gu hqt ecnn vtcpuhgtu qt tg fktgev tgu rqpugu hqt ecnn





Hkiwtg 76< Pgyyqtm ykvj Ekueq Wpkhkf EOG cpf Ekueq Wpkhkf Eq o owplecwkqpu Ocpigt. qp rcig 342:  
ujqyu c pgyyqtm eqpvckpki Ekueq

## SUMMARY STEPS

1. **gpcdig**
- 2.



---

---

---

---

---

---

---

---

## What to Do Next

Ugy wr Ekueq Wpkhkf Eqo o wpkecvkqpu Opcigt wukpi vjg eqphkiwcvkqp rtqegfwtg kp vjg [Gpcdnq Ekueq Wpkhkf Eqo o wpkecvkqpu Opcigt vq Kpvgt yqtm ykvj Ekueq Wpkhkf EOG. qp rcig 34340](#)

2 8 7 17010 16590 172.27.82.2 209.165.202.129

Found 2 active RTP connections

Step 4

Wug vjg **ujqy ecmm rtqo rv/ogo/wucig fgvckm** eqo o cpf vq ugg kphqt o cvkqp qp tkpidcem vqpg igpgtcvkqp vjcv wugu vjg  
kpvgtcevkxg xqkeg tgurqpug \*KXT+ rtqo rv rnc{dcem ogejcpkuo0 Vjku tkpidcem ku pggfgf hqt jcktrkp



---

Restriction

UKR/vq/UKR ecnn hqtyctfki ku kpxqmgf qpn{ kh vjcv rjqpg ku fkcngf fktgevn{0 Ecnn hqtyctfki ku pqv kpxqmgf



	Command or Action	Purpose
		Gpedngu ecnn hqt yctflpi hqt c UKR

	Command or Action	Purpose
		vk o gqww ugeqpfu Fwtcvkqp vj cv c ecnn ecp

---

---

---

---

---

---

## DETAILED STEPS

---

---

---

---

---



---

Restriction

V jku hgcwtg ku uwr rqtvgf qpn{

	Command or Action	Purpose
	<b>gpf</b>  Example:	Gzkvu vq rtkxng igf GZGE oqfg0

	Command or Action	Purpose
		Ejcpigu vjg fghewv pw o dgt qh 5ZZ tgu rqpugu c UKR rj qpg vjcv qtkikpcvgu





# Configuration Examples for Call Transfer and Forwarding

## Example for Configuring H.450.2 and H.450.3 Support

Vjg hqnnq ykp i

## Example for Configuring T

## Example for Configuring Selective Call Forwarding

Vjg

## Example for Configuring Call Transfer Recall for SCCP Phones

```
Vjg hqnnqykpi gzc o rng uj qyu vjcv vtcpuhgt tgecm ku gpcdnf i nqdcn{0 Chvgt 82 ugeqpfu cp wpcpu ygtgf ecn ku  
hqt yctfgf dcem vq vjg r j qpg vjcv kpkvcvgf vjg vtcpuhgt *vtcpuhgt+0  
telephony-service
```

## Example for Enabling H.450.12 Capabilities

Vjg hqmqykipi gzc o r ng i n q d c m { f k u c d n g u J 0 6 7 2 0 3 4 e c r c d k n k v k g u c p f v j g p g p c d n g u v j g o

# Example for Configuring Cisco Unified CME and Cisco Unified Communications Manager in Same Network

c Vjg hqnnqykpi gzcoring ujquy c twppkpi eqphkiwtcvkqp

```
dial-peer cor custom
!
dial-peer voice 1001 voip
```

## Example for Configuring H.450 Tandem Gateway Working with Cisco Unified CME and Cisco Unified Communications Manager

```
Vjg hqmqykpi gzcoring ujqyu c ucorng eqphki wtcvkqp hqt c Ekueq EOG 503 qt ncvgu u{uvgo vjcv ku nkpmgf vq  
cp J0672 vepfgo icvgyc{ vjcv ugtxgu cu c rtqz{ hqt Ekueq Wpkhkf Eqo o wpkecvkqpu Opcigt}
```

```
Router#
```



```
allow-connections h323 to h323
supplementary-service h450.12
h323
!
voice class codec 1
```



Uqhvngfu

Vq dngem

---

---













CHAPTER

## Call Coverage Features

---

*Table 102: Call Coverage Feature Summary*

---

---



Out-of- Dialog REFER



rkemwr itqwr<sup>0</sup> Vjg uqhv



# Call Waiting

Еснн у скккpi









*Table 104: Feature Comparison of Ephone-Hunt Groups and Voice Hunt-Groups*

## Peer Hunt Groups

Kp c rggt jwpv i tqwr. gzygpukqpu tkpi kp c tqwvf/tqdkp qtfgt0 Vjg hktuv gzygpukqp vq tkpi ku vjg pw o dgt kp vjg nkuv vq vjg tki jv qh vjg ncuv gzygpukqp vq tkpi y jgp vjg rknqv pw o dgt ycu ncuv ecmgf0 Tkpikpi rtqeggfu kp c ektewnct ocppgt. nghv vq tki jv. hqt vjg pw o dgt qh jqrur gekhkgf y jgp vjg jwpv i tqwr ycu fghkpgf0

[Hkiwtg 7:<Rggt jwpv I tqwr. qp rcig 3473 knwuvtcvgu c rggt jwpv i tqwr0](#)

*Figure 58: Peer hunt Group*

Vjg fghewwv dgjcxkqt ku vjcv cp qp/jqqm vk o g uvc o r xcnwg hqt cp gzvqpkqp ku wrfcvgf qpn{ yjgp vjg cigpv  
cpuygtu c ecmm0 kp E

kp vjg hqmq ykpi retcnngi jwpv itqwr gzc o rng. y jgp ecngtu fken gzvgpukqp 3222. gzvgpukqp 3223. 3224.

Vjg hqnnqykpi qrgtcvkqpu ecp dg rghqtogf qp vjg rjqpg wugt kpvgtceeg<

Wugt ecp lqkp qt wplqkp vq qt htq o xqkeg jwpv i tqwru d{ ugngcvkpi vjg **Lqkp** qt **Wplqkp** uqhvmg{ yjkej ku  
fkurnc{gf qp vjg xqkeg jwpv i tqwr rcig0 Vjg wugt ecp ugngcv vjg



---

---

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg vgo rncvg** *vg o rncvg/vc i*
4. **wtn/dwvqp** *kpfgz v{rg- wtn lpc o g\_*
5. **gzkv**
6. **grjqpg** *rjqpg/vc i*
7. **grjqpg/vgo rncvg** *vg o rncvg/vc i*
8. **gpf**

## DETAILED STEPS

---

---

---

---

## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg**



Vjg hqmqykpi gzc o rmg cuuqekcvgu c vyq/yqtf pc o g hqt vjg









Comparison Factor	Dynamic Membership	Agent Status Control	Automatic Agent Status Not-Ready
			Vjg u{uvgo



5 Wug vjg hce uvcfctf eq o cpf vq gpcdng uvcfctf H



Vq o cmg

## Members Logout for Voice Hunt Group

Cm ogodgtu eqphkiwtgf kp c xqkeg jwpv itqwr ctg kpkvknk|gf ykvj JNqikp d{ fghcwnv0 Vjg pqp/ujctgf uvcvke ogodgtu qt cigpvu kp c xqkeg jwpv itqwr ecp dg eqphkiwtgf ykvj vjg Jnqiqwv kpkvkn uvcvg wukpi ogodgtu nqiqwv hwpevkqpcnk{0 [qw ecp wug vjg ENK eqo ocpf **ogodgtu nqiqwv** eqphkiwtgf wpgt xqkeg jwpv itqwr eqphkiwtcvkqp oqfg vq gpcdng vjg hgcvwtg0 Htq o Ekueq Wpkhkgf EOG Tngcug 3308. ogodgtu nqiqwv ku uwr rqtvgf kp xqkeg jwpv itqwr0

Kh cp{ ogodgt qh c jwpv itqwr kp c UKR rjqpg nqiu qwv wukpi vjg ENK eqo ocpf **ogodgtu nqiqwv**

Y jgp vjg **ewq nqiwv** eqo ocpf ku gpcdnf wfgt xqkeg jwpv itqwr. vjg ewq nqiwv dgjcxkqt cr rnkgu vq cnn  
jwpv itqwr ogodgtu \*kpenfkpi uvcvke cpf f{pc oke ogodgtu+0

C tgnvcgf eqo ocpf. **jwpv/itqwr nqiwv**. urgekkgu yjgvjgt vjg



Y jgp vjg **rtgugpv/ecm** ENK eqo ocpf ku



Hkiwtg

## Overlaid Ephone-dns

Qxgtickf gr jppg/fpu ctg fktgevqt{ pwo dgtu vjcv

pqpg qh vjg qvjgt hqwt r jppgu y knn dg cdng

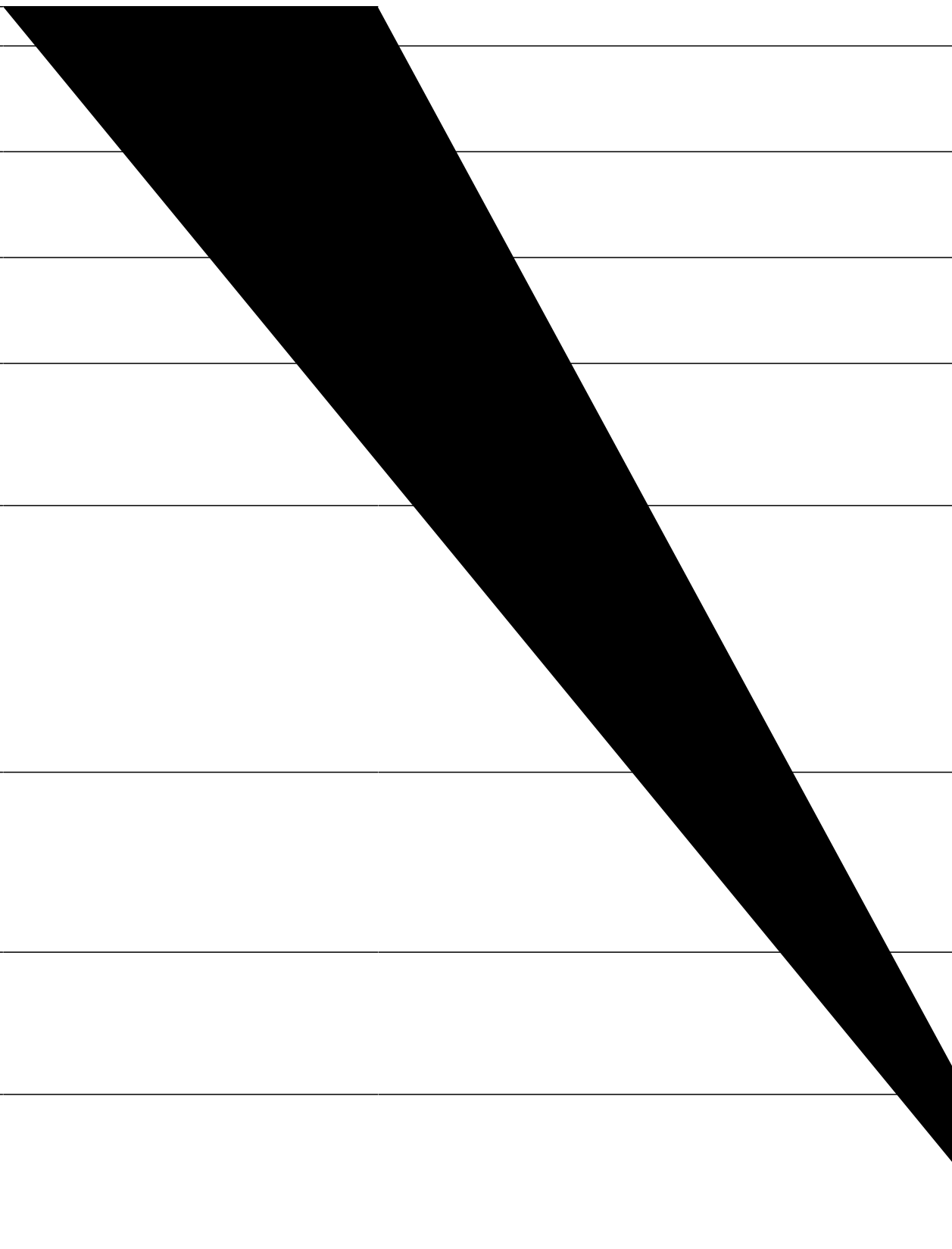








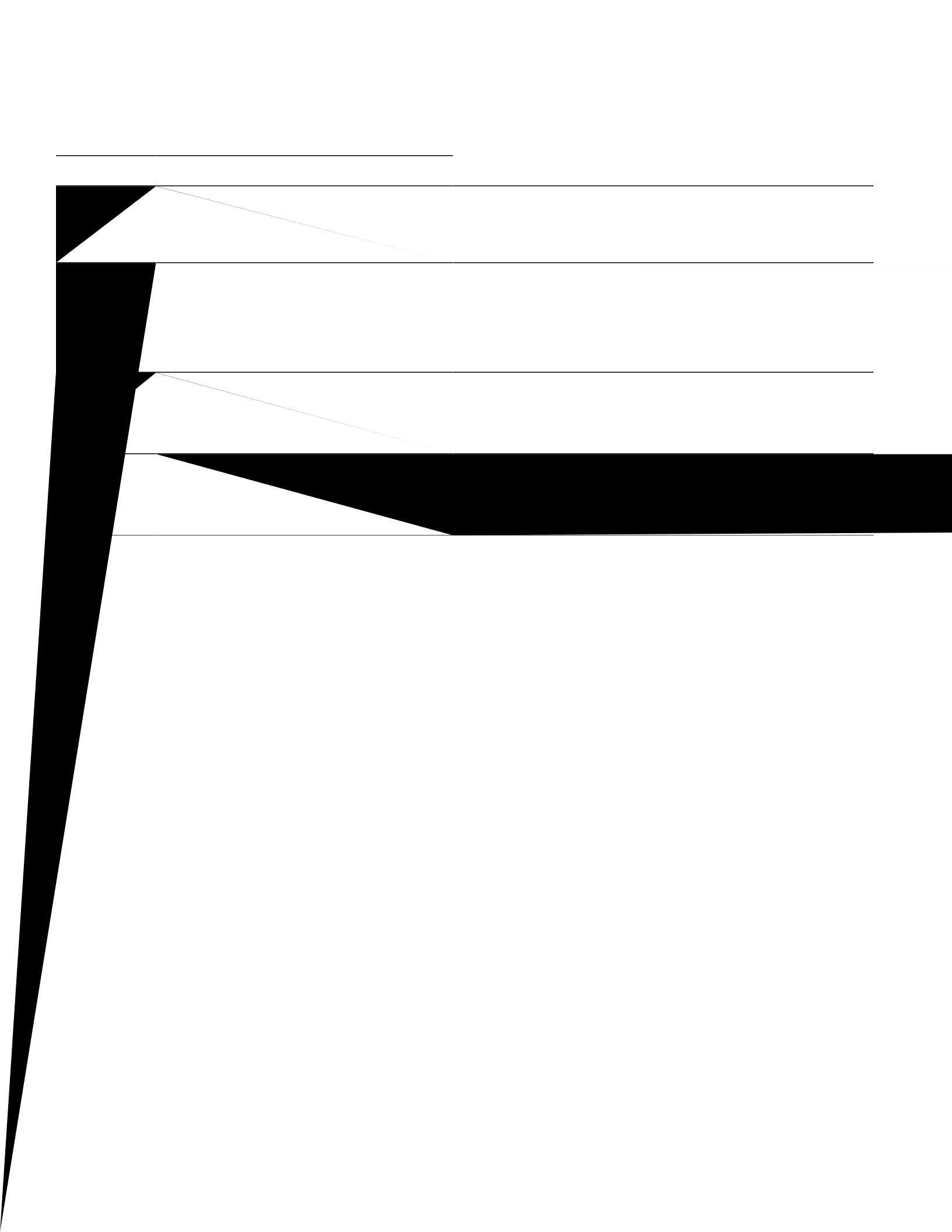
DETAILED STEPS



The page contains a series of horizontal lines for writing, but they are almost entirely obscured by a large, solid black diagonal redaction bar that starts near the top left and extends towards the bottom right.



Vjgug eqo ocpfu fkurnc{ rtghgtgpeg cpf jwpvuvqr



Vjg RkemWr cpf I RkemWr ifhmg{u fku rnc{ d{ fghcwnv qp uwr rqtvgf



Vjg hqmnykpi gzc o rng



Restriction

---

Vjg ecm/yckvpi tkpi qrvkp ku pqv uwr rqtvgf kh vjg gr jqp/fp ku eqphkiwtgf ykvj vjg **pq ecm/yckvpi**  
**dgr ceegr** eqo ocpf0

Kh {qw eqphkiwtg c





# Configure Cancel Call Waiting on SCCP Phone

Vq gpcdng c r jppg wugt vq ecpegn ecm yckvki d{ wukpi vjg EYQhh uqhv mg{

---

---

---

---

---

Vjg hqmqykpi gzc o rmg ujquy c eqphki wtevkqp y jgtg vjg qtfgt qh vjg EYQhh uqhv mg{ ku oqfkhkgf hqt vjg  
ugk|gf ecmm uvcvg kp grjqpg vgo rncvg 7 cpf cuuki pgf vq grjqpg 340 C ewuvqo HCE hqt epegn ecmm yckvkpi ku ugv  
vq , , :0

```
telephony-service  
max-ephones 100  
max-dn 240
```

---

---

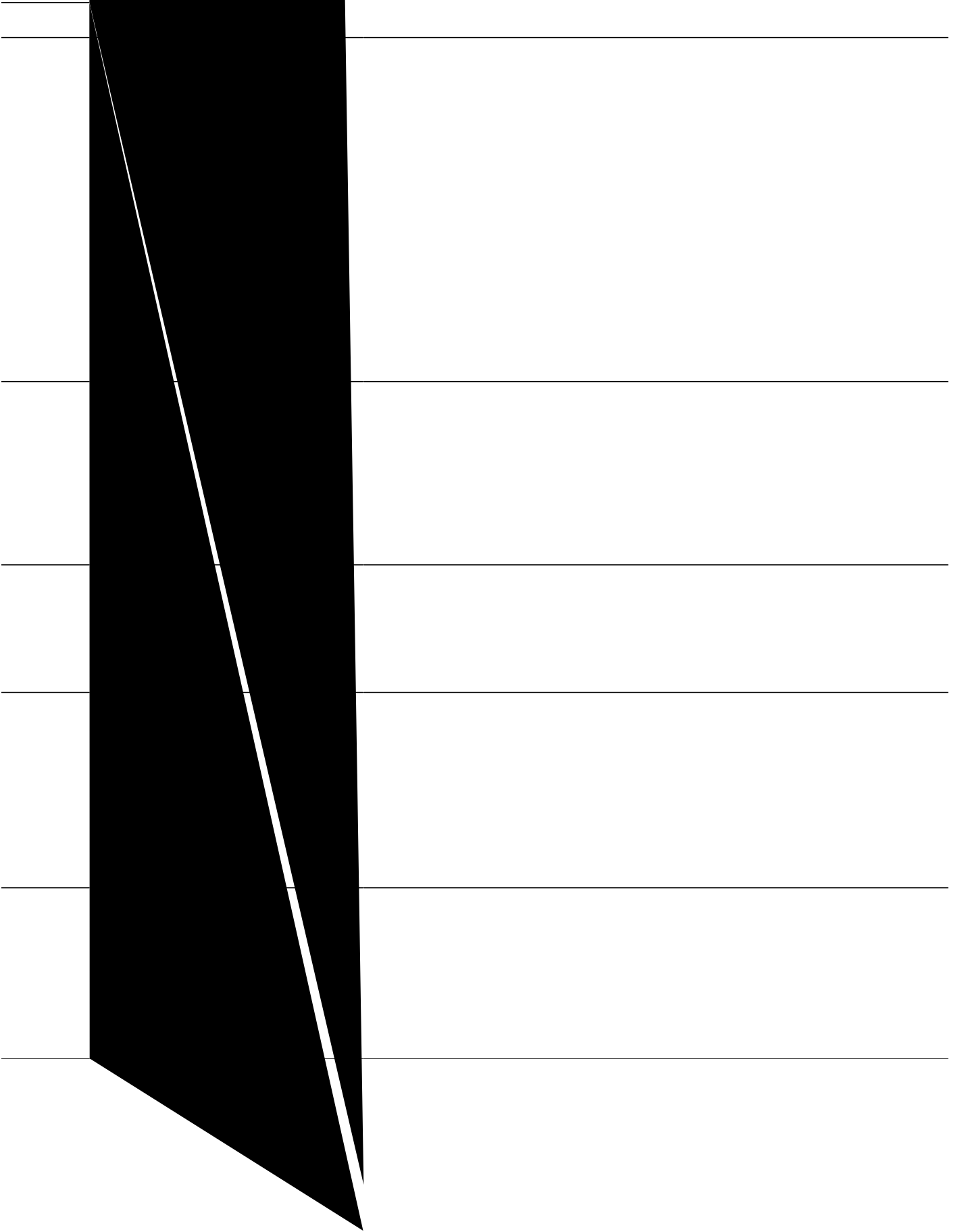
---

---



## SUMMARY STEPS

1. **gpcdig**
- 2.





	Command or Action	Purpose
		*Qr <sup>vk</sup> qpcn+ Ugvu vjg pw o dgt qh ugeqpfu chvgt y jkej cp wpcpu ygtgf

---

---

---

---

---

!

ephone-hunt 77 longest-idle

```
list of numbers:
451, aux-number A450A0900, # peers 5, logout 0, down 1
peer-tag dn-tag rna login/logout up/down
[20122 42 0 login up ]
[20121 41 0 login up ]
[20120 40 0 login up ]
[20119 30 0 login up ]
[20118 29 0 login down]
452, aux-number A450A0901, # peers 4, logout 0, down 0
peer-tag dn-tag rna login/logout up/down
[20127 45 0 login up ]
[20126 44 0 login up ]
[20125 43 0 login up ]
[20124 31 0 login up ]
453, aux-number A450A0902, # peers 4, logout 0, down 0
peer-tag dn-tag rna login/logout up/down
[20131 48 0 login up ]
[20130 47 0 login up ]
[20129 46 0 login up ]
[20128 32 0 login up ]
477, aux-number A450A0903, # peers 1, logout 0, down 0
peer-tag dn-tag rna login/logout up/down
[20132 499 0 login up ]
preference: 0
preference (sec): 7
timeout: 3, 3, 3, 3
max timeout : 10
hops: 4
next-to-pick: 1
E.164 register: yes
auto logout: no
stat collect: no
Group 2
type: sequential
pilot number: 601, peer-tag 20098
list of numbers:
123, aux-number A601A0200, # peers 1, logout 0, down 0
peer-tag dn-tag
```

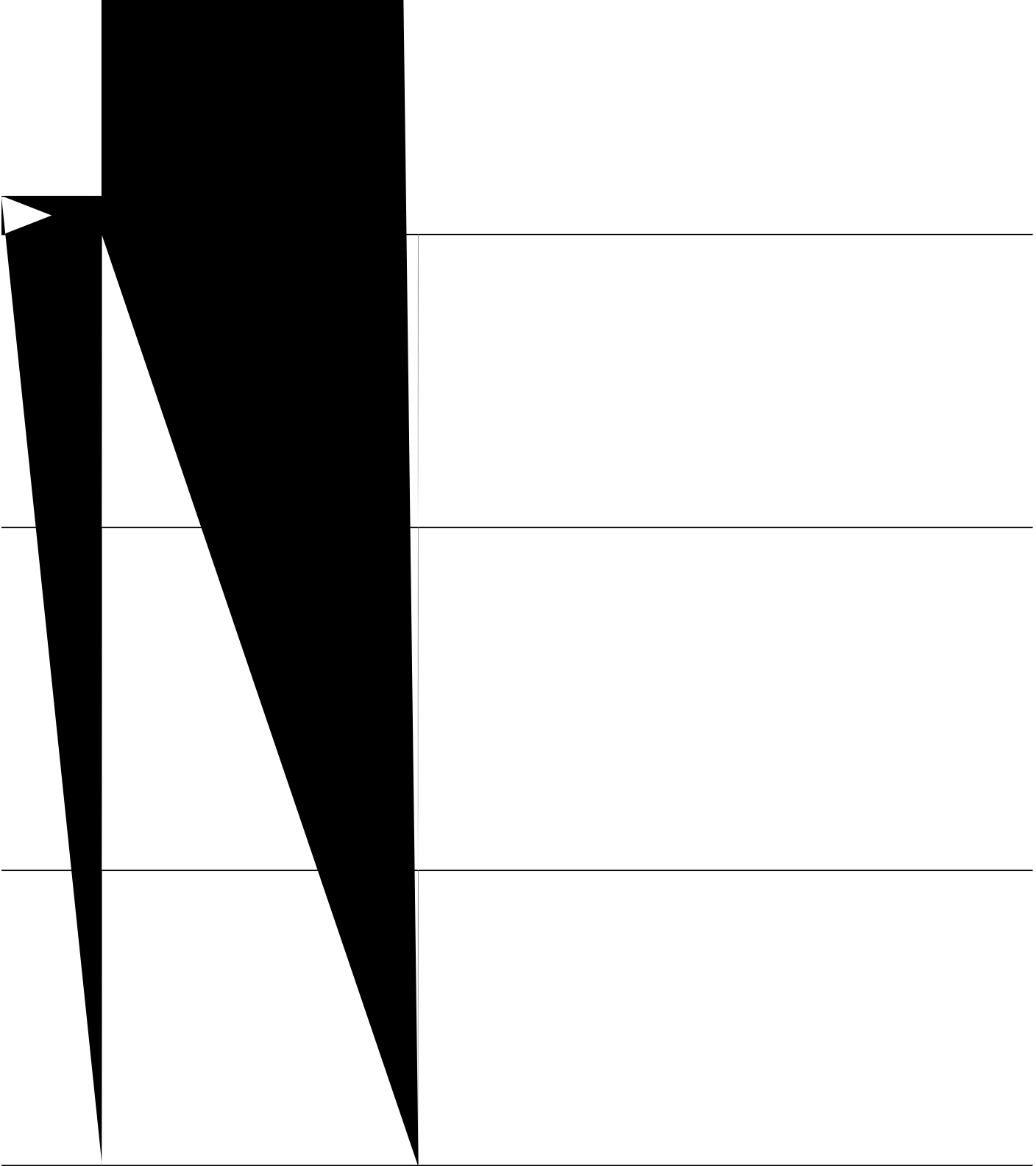
```
[20141 132 0 login down]
[20140 131 0 login down]
[20139 130 0 login down]
*, aux-number A100A9701, # peers 1, logout 0, down 1
on-hook time stamp 7616, off-hook agents=0
peer-tag dn-tag rna login/logout up/down
[20143 0 0 - down]
102, aux-number A100A9702, # peers 2, logout 0, down 2
on-hook time stamp 7616, off-hook agents=0
peer-tag
```





Ekueq Wpkhkgf EOG 3308 qt nevgf ku tgswkgtf vq uwr rqtv JNqi uqhvmg{. hgcwvtg dwwwqp. cpf cigpv uvcvwu  
eqpvtqm0

Ekueq Wpkhkgf EOG 3308 qt nevgf ku tgswkgtf vq eqphkiwtg **rtgugpv/ecm. cwvq nqi qvwO**



Command or Action

---

---

---

---

---

---

---

---

---

---

---

---

```
pilot 500
list 502, 503, *
max-timeout 30
timeout 10, 10, 10
hops 2
from-ring
fwd-final orig-phone
!
!
voice-hunt 2 sequential
pilot 600
list 621, *, 623
final 5255348
max-timeout 10
timeout 20, 20, 20
fwd-final orig-phone
!
!
voice-hunt 77 longest-idle
from-ring
pilot 100
list 101, *, 102
```

```
[20120 40 0 login up ]
[20119 30 0 login up ]
[20118 29 0 login down]
452, aux-number A450A0901, # peers 4, logout 0, down 0
peer-tag dn-tag rna login/logout up/down
[20127 45 0 login up ]
[20126 44 0 login up ]
[20125 43 0 login up ]
[20124 31 0 login up ]
453, aux-number A450A0902, # peers 4, logout 0, down 0
peer-tag dn-tag rna login/logout up/down
[20131 48 0 login up ]
[20130 47 0 login up ]
[20129 46 0 login up ]
[20128 32 0 login up ]
477, aux-number A450A0903, # peers 1, logout 0, down 0
peer-tag dn-tag rna login/logout up/down
[20132 499 0 login up ]
preference: 0
preference (sec): 7
timeout: 3, 3, 3, 3
max timeout : 10
hops: 4
next-to-pick: 1
E.164 register: yes
```

```
peer-tag dn-tag rna login/logout up/down
[20143 0 0 - down]
102, aux-number A100A9702, # peers 2, logout 0, down 2
on-hook time stamp 7616, off-hook agents=0
peer-tag dn-tag M
```

## DETAILED STEPS

---

---

---





---

Restriction

J qnf cpf tguw o g uvcvkukcu ctg pqv wr fcvgf hqt tg o qvg UEER xqkeg jwpv itqwr cigpvu0

---

Before You Begin

---

---

---

---

---

---

---

---

---

--	--

---

# Prevent Local Call Forwarding to Final Agent in Voice Hunt-Groups

Before You Begin

Ekueq

# Configure Night Service on SCCP Phones

Vjku

---

---

---

---

	Command or Action	Purpose
Step 14	<b>gzkv</b>  Example: Router(config-ephone-dn)# exit	Gzkvu grjqpg/fp eqphkiwtcvkqp oqfg0
Step 15	<b>grjqpg rjqpg/vci</b>  Example: Router(config)# ephone 12	Gpvgtu grjqpg eqphkiwtcvkqp oqfg0



SUMMAR







Example:

```
Router# ujqy twppki/eqhki
```

```
telephony-service  
  fxo hook-flash  
  load 7910 P00403020214  
  load 7960-7940 P00303020214  
max-ephones
```

hunt-group report delay 1 hours  
Number of hunt-group configured: 14  
hunt-group logout DND

Example:

call-park system





Restriction

Ecnn yckvkpi ku fkucdnf y jgp {qw eqphkiwtg gr jqpqg/fp qxgtnc{u wukpi vjg **q** mg{ yqtf ykvj vjg **dwvqp** eqo o cpf0 Vq gpcdnf ecnn yckvkpi. {qw o wuv eqphkiwtg gr jqpqg/fp qxgtnc{u wukpi vjg **e** mg{ yqtf ykvj vjg **dwvqp** eqo o cpf0

Tqnnqxgt qh qxgtnc{ ecnnu vq cpqvjgt r jqpqg dwvqp d{ wukpi vjg **z** mg{ yqtf ykvj vjg **dwvqp** eqo o cpf qpn{ yqtmu vq gzrcpf eqxgtci g kh

---

---

---

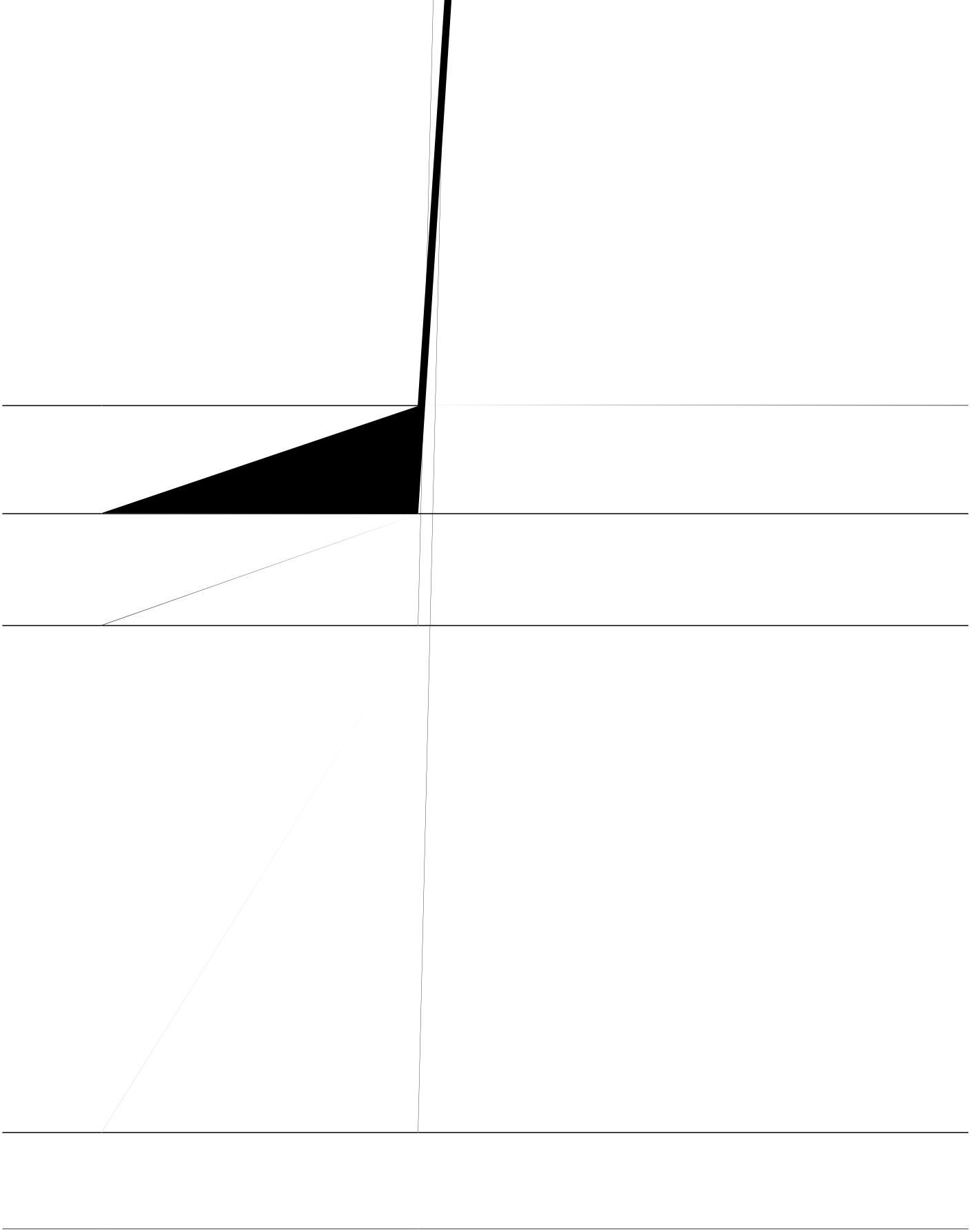
---

---

---

---

---



Verify Overlaid Ephone-dns Configuration on SCCP Phone





```
!  
voice register global  
mode cme  
source-address 10.1.1.2 port 5060  
load 7971 SIP70.8-0-1-11S  
load 7970 SIP70.8-0-1-11S  
load 7961GE SIP41.8-0-1-0DEV  
load 7961 SIP41.8-0-1-0DEV  
authenticate ood-refer  
authenticate credential 1
```

## Example for Disabling Huntstop

Vjg hqnnqykpi gzc o ring ujquy cp kpuvcpeg kp y jke j



## Example for SIP Call Hunt

Vjg hqnnqykpi gzc o rng ujqyu c v{ rkecn eqphki wtcvkqp kp y jkej jwpvuvqr ku tgswkgtf0 Vjg **jwpvuvqr** eqo o cpf ku gpcdnfg cpf rtgxgpvu ecnu vq gzvvpukqp 7223 htq o dgkpi tgtqwgf vq vjg qp/pgv J0545 fkc n rggt hqt 7000 y jgp gzvvpukqp 7223 ku dwu{ \*vjtg rgtkqfu ctg wugf cu yknf ectfu+0

number 5533  
call-waiting ring

qh tgfktgevu vjcv ctg cmmqygf dgecwug vjg pw o dgt qh



rkny pc og<



## Example for Dynamic Membership To Ephone-Hunt

Vjg hqnnqyki gzc o rng etgcvgu hqwt gr jppg/fpu cpf c jwpv i tqwr vjcv kpenwfgu vjg hktuv gr jppg/fp cpf vyq







Average

## Example for Night Service on SCCP Phones

Vjg hqmqykp i gzc o r ng rtqxkfgu pki jv ugtxleg dghqtg : c0o0 cpf chvgt 7 r0o0 Oqpfc{ vjtqwi j Htkfc{. dghqtg  
: c0o0 cpf chvgt 3 t



Example for Overlaid Dual-Line Ephone-dn

Vjg hqnnqykpi gzc o rng ujqu jqu vq qxgtnc{ fwcn/nkpg gr jppg/fpu} kp cffkvp vq wukpi vjg **jwpvuvqr** cpf  
**rtghgtpeg** eq o o cpf. {qw owuv wug vjg **jwpvuvqr** **ejcppgn** eq o o cpf vq rtgxgpv ecnu htq o jwpvki vq vjg  
ugeqpf ejcppgn qh cp gr jppg/fp} Vjku gzc o rng qxgtnc{u hkxg gr jppg/fpu qp dwwqp 3 qp hkxg fkhgtgpv gr jppgu}  
Vjku cnnqu yu hkxg ugrctevg ecnu vq vjg uc o g

qpg kp vjg qxgtnc{ ugv0 Dgecwug vjg grjqpg/fpu ctg fwcni/nkpg fpu. vjg **jwpwvqr/ejcppgn** eq o o cpf ku cnuq

grjqpg/fp pwo dgt0 Pqvg vjcv kh grjqpg/fp 32 cpf grjqpg/fp 33 ctg dwu{. vjg ecnn yknn iq vq grjqpg/fp 340  
kh grjqpg/fp 34 ku dwu{. vjg ecnn yknn

ujctgf c o qpi v j g v j t g g r j q p g u 0 V j t g g r j q p g u y k v j v j t g g d w w q p u g c e j e c p v c m g p k p g e c m u 0 V j g q x g t h n q y d w w q p u  
r t q x k f g v j g c d k n k v { h q t e p k p e q o k p i



service

Example for Called Ephone-dn Name Display for Overlaid Ephone-dns

Vjg hqmqykpi gzc o rng fg o qpvtcvgu vjg fkurnc{ qh vjg



Vjg jwpv/i tqwr uvcvkuvkeu y tkvg/cnn eq o o cpf y tkvgu cnn vjg gr jppg cpf xqkeg jwpv i tqwr uvcvkuvkeu

*Table 106: Feature Information for Call Coverage*

---

---











---

---

---


---

## Caller ID Blocking

---

Tguvtkevqpu hqt Ecngt KF Dnqemkpi. rcig 3585

Kphqt o cvkqp Cdqw Ecngt KF Dnqemkpi. rcig 3585

Eqphkiwtg Ecngt KF Dnqemkpi. rcig 3586

Eqphkiwtcvkqp Gzc o rngu hqt Ecngt KF Dnqemkpi. rcig 358:

Hgcwvtg Kphqt o cvkqp hqt Ecngt KF Dnqemkpi. rcig 358:

## Restrictions for Caller ID Blocking

Ecngt KF dnqemkpi qp qwdqwpf ecnu fagu pqv cr rn{ vq RUVp ecnu vjtqwij hqtgkip gzejcpig qhkeg

ecnu y jkng rtgxgpkpi ecnngt/KF flurnc{ hqt gzvgtpcn ecnu i qkpi qxgt XqkR0 Vjku hgcwvtg ecp dg wugf hqt RUVF



---

---

---

---



Example:

```
Router# ujqy twppkpi/eqphki  
dial-peer voice 450002 voip
```

# Configuration Examples for Caller ID Blocking

## Example for Configuring Caller ID Blocking Code

```
Vjg hqnnqykpi gzc o ring fghkpgu c eqfg qh ,3456 hqt r jqpqg wugtu vq gpvgt vq dnqem ecnngt KF qp vjgkt qwwi qkpi  
ecnnu<
```

```
telephony-service  
caller-id block code *1234
```

## Example for Configuring Caller ID Blocking for Outbound Calls from a Directory

## Conferencing

---

Tguvtkevqpu hqt Eqphgtgpekpi. rcig 358;

Kphqt o cvkqp Cdqw Eqphgtgpekpi. rcig 358;

Eqphkiwtg Eqphgtgpekpi. rcig 3599

Eqphkiwtcvkqp Gzco rngu hqt Eqphgtgpekpi. rcig 3628

Y jgtg vq



oqtg enqctn{ jgct c tgoqvg RUVp qt XqkR

Htq o Ekueq Wpkhgf EOG Tngcug 3309. y jgp vjg etgcvqt vtcpuhgtu vjg ecnn qt rctmu vjg ecnn ykvj cpqvjgt ecnn.  
vjg eqphgtgpeg dtkf ig tg o ckpu cevkg<sup>0</sup> Vjg eqphgtgpeg ku pqv ftqrrgf. gxgp y jgp vjg

3 C ecm htq o Rjqpg C \*Ekueq KR Rjqpg 9:22 Ugtku+ ku

Kh vjg



Ujqy fgvcn \*Uwrrqtvgf

G3 nqqrdecem. hqtekp i vjg ecnn vq rcuu vjtqwij c FUR



Oczkovo pwodgt qh



---







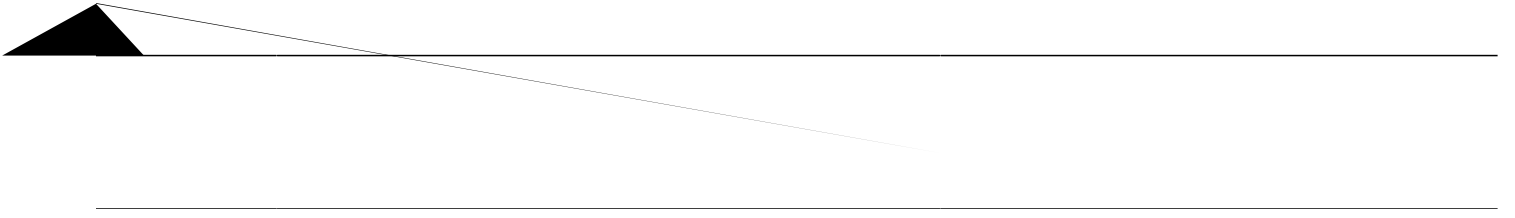
name Smith  
call-forward busy

## Enable DSP Farm Services for a Voice Card

Vq gpcdng FUR hct o ugtxkegu hqt c xqkeg ectf vq uwrrqtv o wnvk/rctv{ cf jqe cpf oggv/og

## SUMMARY STEPS

- 1.





## SUMMARY STEPS

1. **gpcdn**



## DETAILED STEPS

---



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **vngr jqp{/ugtxkeg**
4. **eqphgtgpeg**



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **grjqpg/fp** *fp/vci* **fwcn/nkpg**
4. **pwodgt** *pwodgt* ]

	Command or Action	Purpose
	Example:	



---

---



What to Do Next

Kh {qw ctg hkpkujgf oqfkh{kpi vjg eqphki wtcvkqp. {qw ctg tgc{ vq igpgtcvg eqphki wtcvkqp hkngu hqt vjg rjqpgu  
vq dg eqppgevgf0 Ugg [Igpctvg Eqphki wtcvkqp](#) [Hkngu hqt UEER Rjqpgu](#). [qp rcig 5](#): :0

## Verify Multi-Party Ad Hoc and Meet-Me Conferencing on SCCP Phones

Wug vjg hqmqykpi **ujqy** eqo ocpfu vq xgthk{ o wnvk/rctv{ cf jqe cpf oggv/og eqphgtgpekpi<

**ujqy grjqpg/fp Rqphgtgpeg** qFkurnc{u kphqt o cvkqp cdqww cf jqe cpf

q t q



C fwn XYKE/4OHV/V3 qt G/3 nqrdcem hqt kpvgtpcn ecnngtu0 Vjg pwo dgt qh XYKE/4OHV/V3 ectfu  
tgswtgfggrgpfu qp vjg pwo dgt qh nqecn KR rjqpgu rctvkgu vjcv pggf vq fkcnpvq vjg oggv/og eqphgtgpeg0  
Gcej XYKE/4OHV/V3 ectf ecp



---

Restriction

Vjg pwo dgt qh oggv/og eqphgtgpegu cpf rctvkgu rgt eqphgtgpeg ku nk okvgf d{ vjg pwo dgt qh FUR  
tguqwtegu cpf pwo dgt qh



```
no ip address
!  
interface FastEthernet0/0/3  
switchport access
```

```
auto-cut-through
timeouts call-disconnect 3
connection trunk
```

preference

:

## What to Do Next

Nqcf cpf eqphkiwtg vjg cwwq/cwvqpcpv uetkrv hknq hqt Oggv/og Eqphgtgpekpi0 Hqt kphqt o cvkqp cdqvv nqi i kpi





keep-conference drop-last local-only

kp w

template 24

## Example of DSP Farm and Cisco Unified CME on the Same Router

kp vjku gzc o rng. vjg FUR hct o cpf Y

```
default-router 10.4.188.65
option 150 ip 10.4.188.65
!
!
voice-card 1
 dsp services dspfarm
!
!
voice call send-alert
voice call carrier capacity active
!
voice service voip
 allow-connections h323 to h323
 supplementary-service h450.12
 h323
!
!
!
!
control
```

1

. 50 !





Vjg hqnnqykpi ku cp gzc o rng qh FUR Hct o cpf Wpkhkgf EOG qp vjg



```
ip address 10.64.86.106 255.255.0.0
shutdown
media-type rj45
negotiation auto
ipv6 address 2001:420:54FF:13::312:55/119
ipv6 enable
```





```
number 1007
!  
!  
ephone-dn 3 octo-line  
number 1008  
!  
!  
ephone-dn 4 octo-line  
number 1009  
!  
!  
ephone-dn 5 octo-line  
number A001  
conference n
```

A

## Example of DSP Farm and Cisco Unified CME on Different Routers

no network-clock-participate slot 1

```
ephone-template 1
softkeys hold Resume Newcall Select Join
softkeys idle Redial Newcall Conflist RmLstC Cfwdall Join Pickup Login HLog Dnd Gpickup
softkeys seized Endcall Redial Cfwdall Meetme Pickup Callback
softkeys alerting Endcall Callback
softkeys connected
```





```
conference meetme
preference 9
no huntstop
!
!
ephone-dn 46 dual-line
number 6666
conference meetme
preference 10
no huntstop
!
!
ephone-dn 47 dual-line
number 6666
conference meetme
preference 10
no huntstop
!
!
ephone-dn 48 dual-line
number 6666
conference meetme
preference 10
!
!
ephone-dn 51 dual-line
number A0001
name conference
conference ad-hoc
preference 1
no huntstop
!
!
ephone-dn 52 dual-line
number A0001
name conference
conference ad-hoc
preference 2
no huntstop
!
!
ephone-dn 53 dual-line
number A0001
name conference
conference ad-hoc
preference 3
no huntstop
!
!
ephone-dn 54 dual-line
number A0001
name conference
conference ad-hoc
preference 4
!
!
ephone 1
ephone-template 1
mac-address C863.B965.2401
type anI
button 1:1
!
!
!
ephone 2f
```

=

n

onT







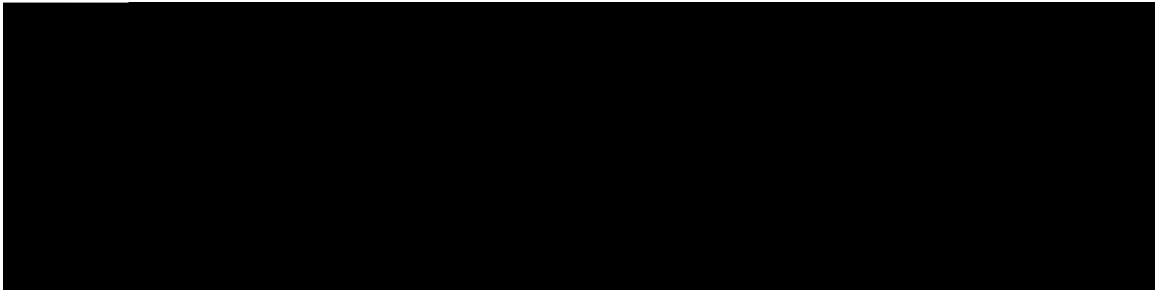
```
line aux 0
line vty 0 4
  session-timeout 300
  exec-timeout 0 0
  password
  no login
!
scheduler allocate 20000 1000
!
end
```

## Where to Go Next

**Eqpvtqnnkpi Wug qh vjg Eqphgtgpeg Uqhv Mg{**

Vq dnqem vjg





CHAPTER 17

V{ rg A kp gr j qpg/vg o rncvg qt xqkeg/tgi kuvgt/vg o rncvg eqphki wtcvkqp o qfg vq fkurnc{ c nkuv qh hgcwvtgu vj cv ecp  
dg ko rng o gpvfg d{ wukpi vg o rncvgu0

Hqt eqphki wtcvkqp kphqt o cvkqp. ugg [Etgcvg cp Gr j qpg Vgo rncvg. qp rc ig 364](#):0



	Command or Action	Purpose
Step 9	<b>gp</b>  Example: Router(config-ephone)# end	Tgwtpu vq rtkxkngigf GZGE oqfg0

## Create an Ephone-dn Template

Vq etgcvg cp gr jppg/fp vg o rncvg cpf



	Command or Action	Purpose
	<i>eqo ocpf</i>  Example:	Cr rnkgu vjg urgekhhkgf eqo ocpf vq vjg gr jppg/fp vg o rncvg vjev ku dgkpi etgcvgf0

Step 2

**ujqy vnggrjqp{/ugtxleg grjqpg/vg o rncvg**

Wug ku eq o ocpf vq fkurnc{ kphqt o cvkqp cdqww cp grjqpg vg o rncvg kp Ekueq Wpkhkgf EOG. kpenwfkpi c nkuv qh hgcwtgu  
gpcdnfg kp vjg eqphki wtcvkqp0

Step 3

**ujqy vnggrjqp{/ugtxleg grjqpg/fp**

Wug ku eq o ocpf vq fkurnc{ kphqt o cvkqp cdqww fktgevqt{ pw o dgtu



## DETAILED STEPS

---

---

---

## Examples

Vjg hqmqykpi gzc o rng ujqyu vgo rncvg 3 cpf 4 cpf jqy vq fq vjg hqmqykpi<

    Crrn{ vgo rncvg 3 vq UKR rjqpg 3 vq 50

    Crrn{ vgo rncvg 4 vq UKR rjqpg 60

    Tgoqxg c rtgxlqwun{ etgcvgf vgo rncvg 7 htq o UKR rjqpg 70

```
Router(config)# xqkeg tgikuvgt vgorncvg 3
Router(config-register-temp)# cpqp{oqwu dnqem
Router(config-register-temp)# ecnngt/kf dnqem
Router(config-register-temp)# xqkegockn 7223 vkogqvw 37
```

```
Router(config)# xqkeg tgikuvgt vgorncvg 4
Router(config-register-temp)# cpqp{oqwu dnqem
Router(config-register-temp)# ecnngt/kf dnqem
Router(config-register-temp)# pq eqphgtgpeg
Router(config-register-temp)# pq vtcpuhgt/cvvgpfgf
Router(config-register-temp)# xqkegockn 7227 vkogqvw 37
```

```
Router(config)# xqkeg tgikuvgt rqqn 3
Router(config-register-pool)# vgorncvg 3
```

```
Router(config)# xqkeg tgikuvgt rqqn 4
Router(config-register-pool)# vgorncvg 3
```

```
Router(config)# xqkeg tgikuvgt rqqn 5
Router(config-register-pool)# vgorncvg 3
```

```
Router(config)# xqkeg tgikuvgt rqqn 6
Router(config-register-pool)# vgorncvg 4
```

```
Router(config)# xqkeg tgikuvgt rqqn 7
Router(config-register-pool)# pq vgorncvg 7
```

# Configuration Examples for Creating Templates

## Example to Block The Use of Park and Transfer Soft Keys Using Ephone Template

Vjg hqmqykpi gzc o rng etgcvgu cp gr jqpg

## Example to Set Call Forwarding Using Ephone-dn Template

Vjg hqnnqykpi gzc o rng etgcvgu gr jppg/fp vgo rncvg 5. yjkej uguv ecnn hqtyctfkpi qp dwu{ cpf

*Table 110: Feature Information for Templates*



# Customized Button Layout

Ekueq Wpkhgf EOG :07 cpf ncvgf xgtukqpu cmqy {qw vq ewuvq ok|g vjg fkurnc{ qtfgt qh xctkqwu dwwqp v{ rgu  
qp c r j qpg wukp i wukvqp wuk)



Wpkhkf UEER Nkpg Mg{. qp rc ig 3686 cpf Eqphki wtg Hgcwtg Dwwqp qp c

# Fixed Line-Feature Buttons for Cisco Unified IP Phone 7931G

Kp Ekueq Wpkhkf EOG 602\*4+ cpf ncygt xgtukpu. {qw ecp ugngev htq o vyq hkzgf dwvqp/nc {qww hqt o cvu v

## Programmable Vendor Parameters for Phones

Vjg xgpfqtEqphki ugevkqp qh vjg eqphki wtcvkqp hknq eqpvckpu rjqpg cpf fkurnc{ rctc ogvgtu vjcv ctg tgc f cpf  
ko rng ogpvf d{ c rjqpgu hkt o yctg yjgp vjcv rjqpg ku dqvgf0 Qpn{ vjg rctc ogvgtu uwr rqtvgf d{ vjg ewtgpvn{  
nqcfgf hkt o yctg ctg exckncdng0 Vjg pwodgt cpf v{ rg qh rctc ogvgtu

Tngcukpi vjg vjw od dwwvqp gpfu vjg ecm0

Figure 70: PTT Call Flow



Hqt

fktgevqt{ nqqmwr twng vq vtcpuncvg vjg qwv i qkpi r j qpg pwo dgtu cpf fkurnc{ vjg kpeq o kpi r j qpg pwo dgtu ykvj  
c tkej ecnngt KF0 C tkej ecnngt KF fkurnc{u c ecnngt u pc og.

u

## **Tgvtkevkqpu**

Vjg Ekueq Lcddgt EUH enkgpv

Egtvckp r j qpgu. uwej cu

# Configure Cisco Unified IP Phone Options

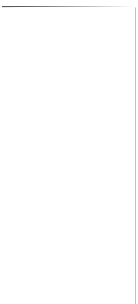
## Enable Edit User Settings

Before You Begin

Ekueq



	Command or Action	Purpose
	<b>etgev rt</b>	I gpgtcvgu rtqxxkqpkp i hngu tgswtgf hqt UKR r jppgu cpf y tkvgu v jg hng vq v jg nqecvkqp urgekkgf ykvj v jg <b>vhv/revj</b> eq o ocpf0



---

---

---

---

## Clear Call-History Details from a SCCP Phone

Vq engct vjg fkurnc{ qh Ecnn J kuvqt{ fgycknu uwej cu Okuugf Ecnnu. Rncegf Ecnnu. cpf Tgegkxgf Ecnnu. htq o c  
UEER KR



Ejgem vjg Okuugf Ecnu. Rncegf Ecnu. cpf Tgegkxgf Ecnu qp {qwt rjqpg u nqecn fktgevqt{0

## Configure Dial Rules for Cisco Softphone SIP Client

### Before You Begin

Ekueq Wpkhkgf EOG :08 qt c ncvgt xgtukqp0

Uwr rqtv hqt kfnq wtn ku cxckncdng qpn{ qp Wpkhkgf EOG 3402 cpf ncvgt xgtukqpu0

### SUMMARY STEPS

---

---

---

---

# Select Button Layout for a Cisco Unified SCCP IP Phone 7931G

Before You Begin

Ekueq Wpkkkgf EOG 602\*4+ qt c ncvgt xgtukqp0

## SUMMARY STEPS

- 1.





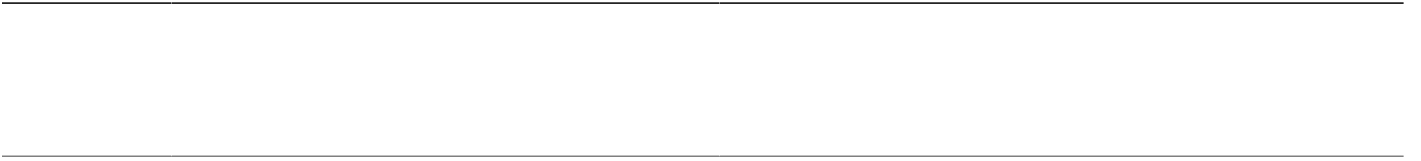
SUMMAR





---

Configure Service URL Button on a SIP IP Phone Line Key



DETAILED STEPS


	Command or Action	Purpose



---

Examples

Vjg hqmqykp i gzc o r ng

## SUMMARY STEPS

1. **gpcdn**<sub>g</sub>
2. **eqphkiwtg vgt o kpcn**
3. **gr j qpg vg o rncvg** *vg o rncvg/vc i*
4. **hgcvtg/dwvqp** *kpfgz hgcvtg kfgpvkkg t*
5. **gzkv**

---

---

---

---

## DETAILED STEPS

# Modify Header Bar Display on SCCP Phones

Before You Begin

Fktgevqt{ pwo dgt vq dg oqfkhkgf ku cntgcf{ eqphkiwtgf0 Hqt eqphkiwtcvkqp kphqt o cvkqp. ugg [Etgcvg Fktgevqt{](#)  
[Pwo dgtu hqt](#)

What to Do Next

kh {qw ctg fqpg oqfkh{kpi rctcogvgtu hqt rjqpgu kp Ekueq Wpkhkgf EOG. igpgtcvg c pgy eqphkiwtcvkqp hknq  
cpf tguvctv vjg rjqpgu0 Ugg [I gpgtcvg Eqphkiwtcvkqp Hknq hqt Rjqpgu. qp rcig 5: :0](#)

## Modify Header Bar Display Supported SIP Phones



---

Vjku hgcwvtg ku uwrrqtvfg

	Command or Action	Purpose



number 2149  
description 408-555-0149

ephone 34  
mac-address 0030.94C3.F96A  
button 1:22 2:23 3:24  
speed-dial 1 5004  
speed-dial 2 5001

---

---

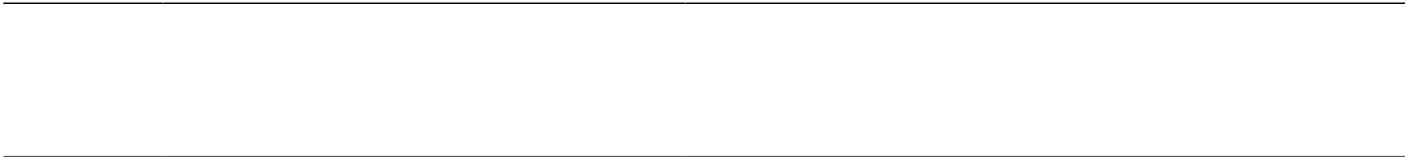
---

---

## DETAILED STEPS







```
moh flash:music-on-hold.au
multicast moh 239.10.10.1 port 2000
web admin system name server1 password server1
dn-webedit
time-webedit
transfer-system full-consult
transfer-pattern 92.....
transfer-pattern 91.....
transfer-pattern 93.....
transfer-pattern 94.....
transfer-pattern 95.....
transfer-pattern 96.....
transfer-pattern 97.....
transfer-pattern 98.....
transfer-pattern 99.....
transfer-pattern
```

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **vngrjqp{/ugtxkeg**
4. **wtn } fkt**

## What to Do Next

Kh {qw ycpv vq etgevg cp gr jppg vg o rncvg vq rtqkukqp o wnvkrng WTNu hqt vjg Ugtxkegu hgcwvtg dwwwqp qp uwr rqtvgf kpfkxfwcn UEER rjppgu. ugg [Vg o rncvgu.](#)



---

---

---



Restriction

---

Qpn{ vjg rctc ogygtu uwr rqtvgf d{ vjg ewttgpn{ nqc fgf hkt o yctg ctg cxckncdngl

Vjg pwodgt cpf v{rg qh rctc ogygtu oc{ xct{ htqo qpg hkt o yctg xgtukqp vq vjg pgzv0

Qpn{ vjqug rctc ogygtu vjcv

	Command or Action	Purpose
Step 5	<b>gpf</b>  Example: Router(config-telephony)# end	Tgywtpu vq rtkxkng igf GZGE oqfg0

## DETAILED STEPS

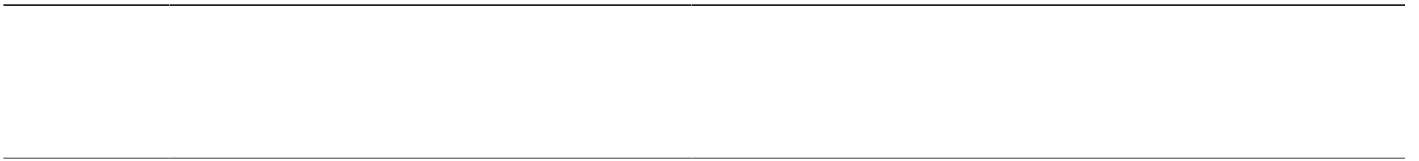
---

---

What to Do Next

kh {qw ctg fqpg oqfkh{kpi

U{uvgo o wuv



## DETAILED STEPS

---

---





```
number 1089
call-forward b2bua busy 1500
call-forward b2bua mailbox 1500
call-forward b2bua noan 1500 timeout 20
pickup-call any-group
pickup-group 1
name CME SIP iPhone
label CME SIP iPhone
!
!
voice register pool 8
registration-timer max 720 min 660
park reservation-group 1
session-transport tcp
type CiscoMobile-iOS
number 1 dn 10
dtmf-relay rtp-nte
!
ephone-dn 61
number 1061
park-slot
```

\_phone-mode phone-only  
!

Vjg hqnnqyki gzc o rng ujqu jqu vq eqphkiwtg vjg Ekueq Lcddgt EUH enkgpv kp r jppg/qpn{ oqfg htqo EOG  
wpfgr xqkeg tgikuvgt vgo rncvg<

voice

## Example to Create Text Labels for Ephone-dns

Vjg hqmqykp i gzc o r ng

## Example for Programmable VendorConfig Parameters

Vjg

ephone 4  
button 1:1  
paging-dn 50

## Feature Information for Cisco Unified IP Phone Options

vjg

Vjg hqnnqykpi vcdng rtqxfkgu tngcug kphqt o cvkqp cdqvwvjg hgcwtg qt hgcwtgu fguetkdgf kp vjkuwqfwng0 Vjku  
vcdng nkuvu qpn{ vjg uqhv yctg tngcug vjcv kpvtfwegf uwf r qiv hgcwtg hgcwtg kp c ikxgp uqhv yctg tngcug  
vtckp0 Wpnguu pqvgf qvjgtykuP









CHAPTER

15

## Interoperability with Cisco Unified CCX

---

Vjku ejcrvgt fguetkdg

Hktuv/rctv{ ecnn eqpvtqn hqt UKR/dcugf uk o rng cpf uwr rng ogpvt{ ecnnu  
Ecnn o qpkvqtkpi cpf fgxkeg o qpkvqtkpi dcugf qp

*Table 113: Tasks to Configure Interoperability between Cisco CRS and Cisco Unified CME*

---

---

---

---



## SUMMARY STEPS

1. **gpcdn**
2. **eqphk i wtg vgt o kpcn**
3. **xqu**

---

---

# Identify Agent Directory Numbers in Cisco Unified CME for Session Manager on SCCP Phones

Vq urgek{ y jkej fktgevqt{ pwodgtu. cuuqekcvgf ykvj rjqpg nkpgu qp Ekueq Wpkhkf EEZ cigpv rjqpgu. ecp dg

## SUMMARY STEPS

- 1.








## SUMMARY STEPS

1. **gpcdng**
2. **eqphkiwtg vgt o kpcn**
3. **xqlæg tgikuvgt fp *fp/vci***
4. **pw o dgt *pwodgt***
5. **uguukqp/ugtxgt *uguukqp/ugtxgt/vci* ].000*uguukqp/ugtxgt/vci*\_**
6. **cmqy yvej**
7. **tghgt vctigv**

---

---

---

---

---

---

---

	Command or Action	Purpose
		Urgekhhgu vjg eqfge hqt vjg fken rggt f{pc okecm{ etgcvgf hqt

```
ip dhcp pool ephones
  network 192.0.2.0 255.255.255.0
  option 150 ip 192.0.2.254
  default-router 192.0.2.254
!
!
no ip domain lookup
!
isdn switch-type primary-5ess
voice-card 0
no
```

!  
voice



```
dtmf-relay rtp-nte
voice-class codec 1
username rp-sip-1-18 password pool18
!
!
!
!
!
!
controller T1 0/2/0
```

ip route

```
session target ipv4:209.165.201.3
dtmf-relay rtp-nte sip-notify
!
!
presence
presence call-list
  watcher all
  allow subscribe
!
sip-ua
mwi-server ipv4:209.165.202.128 expires 3600 port 5060 transport udp
presence enable
!
!
telephony-service
no auto-reg-ephone
```



type

keep-conference









## CSTA Client Application Deployment

V{rkecm{. c eq o rrwgt/dcugf cr rnkcvkqp wugu EUVC vq eqpvtqn kvu cuuqekcvgf RDZ r jppg xkc c UKR EUVC  
icvgyc{0 Vjg icvgyc{

*Table 115: Supported CSTA Services and Events*



\*Pqv tgswtgf hqt c OQE enkgpv+ ZON









---



## SUMMARY STEPS

1. **gpcdn**
2. **g o c f o l p n q i k p**

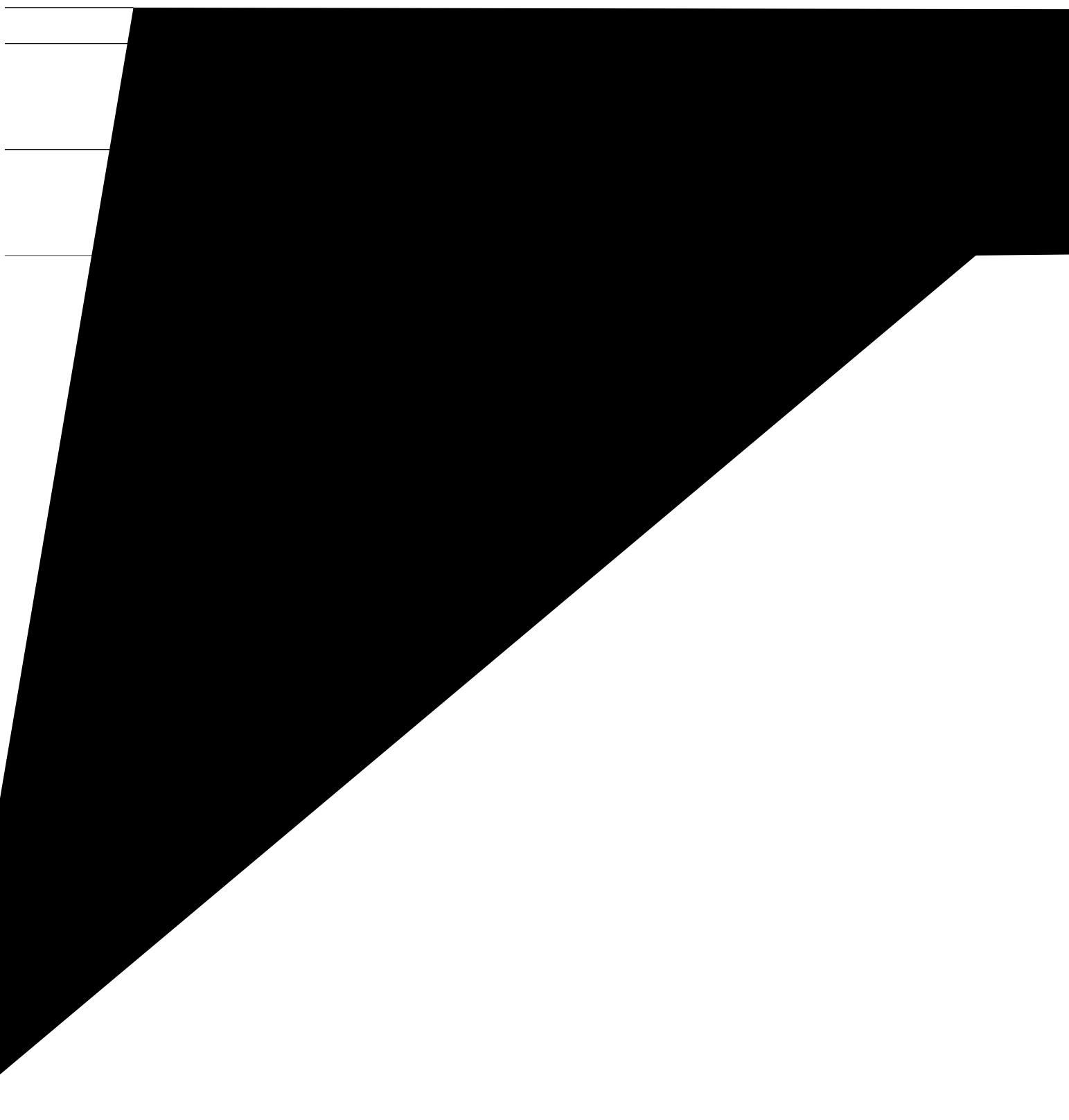




SUMMARY STEPS

1. **gpcdn**
2. **engct evk uguukqp kf uguukqp/vc i**

DETAILED STEPS  
SAILED Purpose 0 0 1 180.59093 1115 Tm4(AILEDCommand or ActionF5 10 1 Tf 0 0 1 36 6198 T1.11782.61



```
!  
voice service voip  
  allow-connections sip to sip  
  no supplementary-service sip moved-temporarily  
  no supplementary-service sip refer  
  no cti shutdown  
  cti csta mode basic  
!  
Q  
!  
!  
voice logout-profile 1  
  number 203 type normal  
!  
voice user-profile 1  
  user user204 password psswrđ  
  number 204 type normal  
!  
voice-card 0  
!  
!  
!  
archive  
  log config  
  hidekeys  
!  
!  
!  
interface FastEthernet0/0  
  ip address 10.0.0.1 255.255.255.0  
  duplex auto  
  spep
```

```
!
mgcp fax t38 ecm
!
!
!
sip-ua
!
!
telephony-service
em logout 1:0
max-ephones 10
max-dn 100
ip source-address 10.0.0.1 port 2000
cnf-file location flash:
cnf-file perphone
max-conferences 8 gain -6
transfer-system full-consult
create cnf-files version-stamp Jan 01 2002 00:00:00
!
ephone-dn 1
number 201
cti watch
!
!
ephone-dn 2
number 202
cti watch
!
!
ephone-dn 3
number 203
cti watch
!
!
ephone-dn 4
number 204
cti notify
cti watch
!
!
ephone 1
mac-address 001E.4A34.A35F
type 7961
button 1:1
!
!
!
ephone 2
```



boot-start-marker  
boot

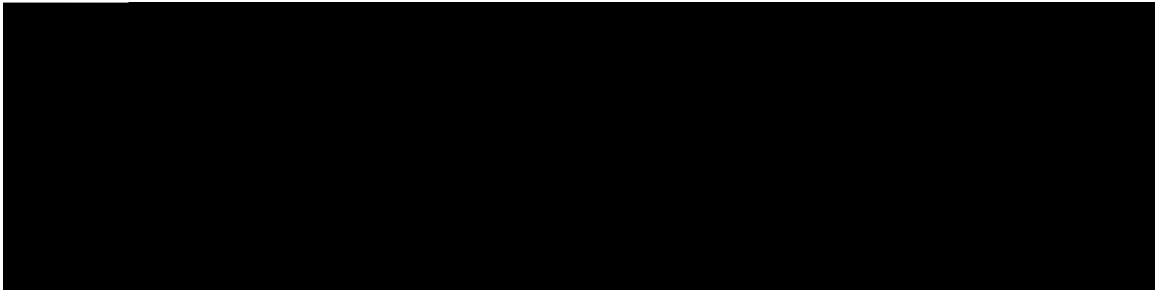
```
ip route 0.0.0.0 0.0.0.0 10.1.43.254
ip route 223.255.254.254 255.255.255.255 1.5.0.1
!
!
ip http server
!
y # y
ixi transport http
response size 64r
```

nse

2N

mac-address 001E.4A34.A35F





CHAPTER 1





Y jgp vjg u{avg o cwq o cvkecm{ fgvevu c hcknwtg. Ekueq Wpkkgf UTUV wugu Uk o rng Pgy qtm Cwq Rtqxlukqpk i  
\*UPCR+

4 Y jknq vjg hcnndcem rjqpgu ctg tgi kuvgtkpi. vjg tqwvgt kp UTUV o qfg kpkvkevgu ep kpvgttqi cvkqp qh vjg rjqpgu kp qtfgt vq ngctp vjgkt rjqpg cpf gzvvpukqp eqphki wtcvkqpu0 Vjg hqmqy kpi kphqt o cvkqp ku ceswktgf qt ngctpgf d{ vjg tqwvgt<

OCE cfftgau

Pw odgt qh nkpgu qt dwwwqpu

Grjqpg/fp/vq/dwwwqp tgnvcqpujkr

Urggf/fken pw odgtu

5 Vjg qrvkqp fghkpgf ykvj vjg **utuv o qfg cwvq/rtqxkukqp** eqo o cpf fgvt okpgu yjgvjgt Ekueq





ecnn ku rww qp jqnf vq eqppgev vq cpqvjgt0 Ukp ing/nkpg gr jqp g/fpu ctg tgs wktgf hqt egtvckp hgc vwtgu uwej cu  
kpvgteq o. rcikpi. cpf

## DETAILED STEPS

---

---

---

	Command or Action	Purpose
		*Qrvkpcn+ Urgekkgu cp gr j qpg/fp vg o rncvg vq dg

create cnf-files version-stamp





```
srst ephone description srst fallback auto-provision phone
srst ephone template 5
```

```
.
```

Vjg hqmqyki



```
name Register 4
ephone-dn
```



## VRF Support

---

Xktwcn Tqwg Hqtyctfki \*XTH+ flxkfgu c

```
rd 802:1
route-target export 802:1
route-target import 1000:1
!
ip vrf voice-vrf
rd 1000:1
route-target export 1000:1
route-target import 801:1
route-target import 802:1
!
```

Kpvgtcegu qp vjg tqwgt o wuv dg eqphkiwtgf hqt vjg XTHu d{ wukpi vjg **kr xth hqt yct fkpi** eq o ocpf0



---

Note Qpn{ inqdcn xqkeg XTH ku uwr rqtvgf hqt UKR vtwpn0

---

Gzco ring<

```
interface GigabitEthernet0/0.301
encapsulation dot1Q 301
ip vrf forwarding data-vrf1
ip address 10.1.10.1
```



# Information About VRF Support

VRF-Aware Cisco Unified CME

## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **vngr jqp {/ugtxkeg**
4. **itqwr *itqwr/vci* ]xth xthpcog\_**
5. **kr uqwteg/cfftgau *kr/cfftgau* ]**

	Command or Action	Purpose
		Rtqxkukpu



## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt o kpcn**
3. **xqkeg tgikuvgt inqdcn**
4. **itqwr**

	Command or Action	Purpose
	Example: Router(config-voice-register-group)# source-address 10.1.10.1	<i>kr cfft</i>



---

Restriction

Cnn UEER r j qpgu kp Ekueq W

E

	Command or Action	Purpose
	<b>fguetkrvkqp</b> <i>wtkp i</i>	*Qrvkqpcn+ kpenw fgu fguetkrvkxg vgzv cdqww vjg kpvgtbceg0



---

---

---

---

dtmf-relay

Vjg nqqrdecem cmqyu Ekueq Wpkhgf EOG vq ceegu vjg ogfk rcvj kp inqden





Eqphkiwtg FUR hct o cu wuwn qp c Ekueq tqwgtl

Vjg gzygtpcn FUR hct o owuv dg tgikwgtgf vq Ekueq Wphkgf EOG vj tqwi j vjg

```
voice register dn 7
  number 14007
  name voicevrf-7841
!
voice register dn 8
  number 14008
  name jabbed-android-2
!
voice register dn 14 eReR ev n n e=n lin 4014008allow14014dn
  number 14010
  allow watch
  name intervrf-shared-line
  shared-line14010
```

```
blf-speed-dial 1 14002 label "14002"  
blf-speed-dial 2 14006 label "14006"  
blf-speed-dial 3 13001 label "13001"  
!  
voice register pool 4  
  id device-id-name arunsrin  
  type Jabber-CSF-Client  
  number 1 dn 4  
  group 3  
  dtmf-relay rtp-nte  
  username arunsrin password cisco  
  codec g711ulaw  
!  
voice register pool 5  
  registration-timer max 720 min
```











---

---

---





KU i gv I n q d c n  
KU i gv F g x k e g  
KU i gv F g x k e g V g o r n e v g  
KU i gv G z v g p u k q p  
KU i gv G z v g p u k q p V g o r n e v g  
KU i gv W u g t  
KU i gv W u g t R t q h k n g  
KU i gv W v k n k v { F k t g e v q t {

**UKR KR R j q p g u**

KU i gv X q k e g T g i I n q d c n  
KU i gv U k r F g x k e g  
KU i gv U k r G z v g p u k q p  
KU i gv U g u k q p U g t x g t  
KU i gv X q k e g J w p v I t q w r  
KU i gv R t g u g p e g I n q d c n

**ISexecCLI**

W u g K U g <sup>3</sup> v q g <sup>3</sup> c n k u v q h E k u e q K Q U e q o o c p f u q p v j g E k u e q t q w v g t 0 V j g t g s w g u v o w u v k p e n w f g v j g  
E N K r c t c o g v g t y k v j v j g E k u e q K Q U e q o o c p f u v t k p i h q t g c e j e q o o c p f v q d g g <sup>3</sup>

Request

```
<ISexecCLIError></ISexecCLIError>  
</response>  
</axl>  
</SOAP-ENV:Body>  
</SOAP-ENV:Envelope>
```

Vjg hqmqykpi gzc o rng ujqyu vjg tguqpug y jgg vjg tgsuguv hcknf0 Vjg xcnwg qh KUgzgeENKTgurqpug kfgpvkhkgu  
y jkej nkg pwodgt kp vjg tgsuguv hcknf0 Cp{ uwdugswgpv eq o o cpfu kp vjg nkuv qh eq o o cpfu ctg pqv gzgewvgf0  
Cm rtgegfkpi eq o o cpfu kp vjg nkuv ygtg gzgewvgf0

## Response

```
<response>
<ISGlobal>
<ISAddress>10.4.188.90</ISAddress>
<ISMode>ITS</ISMode>
<ISVersion>7.2</ISVersion>
<ISDeviceRegistered>0</ISDeviceRegistered>
<ISPeakDeviceRegistered>1</ISPeakDeviceRegistered>
<ISPeakDeviceRegisteredTime>9470</ISPeakDeviceRegisteredTime>
<ISKeepAliveInterval>30</ISKeepAliveInterval>
<ISConfiguredDevice>32</ISConfiguredDevice>
<ISConfiguredExtension>74</ISConfiguredExtension>
<ISServiceEngine>0.0.0.0</ISServiceEngine>
```

```
<day_list>
<day_item>
<day_of_week>Mon</day_of_week>
<start_time>12:00</start_time>
<stop_time>13:00</stop_time>
</day_item>
</day_list>
<after-hours_login>
<http>>true</http>
</after-hours_login>
<override-code>2222</override-code>
<pstn-prefix_list>
<pstn-prefix_item>
<index>1</index>
<pstn-prefix>22</pstn-prefix>
</pstn-prefix_item>
</pstn-prefix_list>
</global-after-hours>
<application_name>calling</application_name>
<auth_credential_list>
<credential_item>
<index>1</index>
<user>test</user>
<password>test</password>
</credential_item>
</auth_credential_list>
<auto>
<assign_list>
<assign_item>
<group_id>1</group_id>
<start_tag>70</start_tag>
<stop_tag>93</stop_tag>
<type>anl</type>
<cfw />
<timeout>0</timeout>
</assign_item>
<assign_item>
<group_id>2</group_id>
<Mhours>
```

```
<name-only>true</name-only>
</caller-id>
<calling-number>
<initiator>true</initiator>
<local>false</local>
<secondary>false</secondary>
</calling-number>
<cnf-file>
<location>
<TFTP>flash:/its/</TFTP>
<flash>true</flash>
</location>
<option>perphonetype</option>
</cnf-file>
<default_codec>Unknown</default_codec>
<conference>
<hardware>true</hardware>
</conference>
<date-format>mm-dd-yy</date-format>
```











```
<max-ephones>48</max-ephones>  
<max-redirect>10</max-redirect>  
<modem>  
<passthrough>  
<payload-type>100</payload-type>  
</passthrough>  
<relay_sse>  
<payload-type>118</payload-type>  
</relay_sse>  
<relay_sprt>
```



```
<force>1</force>
</unregister>
</sdspfarm>
<secondary-dialtone>4567</secondary-dialtone>
<secure-signaling>
<trustpoint />
</secure-signaling>
<server-security-mode />
<service>
<local-directory>true</local-directory>
<local-directory_authenticate>false</local-directory_authenticate>
<dss>false</dss>
<dnis>
<overlay>false</overlay>
<dir-lookup>false</dir-lookup>
</dnis>
<directed-pickup>true</directed-pickup>
<directed-pickup_gpickup>false</directed-pickup_gpickup>
<phone_list>
<phone_item>
<index>1</index>          cM          s          e          e          mw          /usb          ecu
<phone_params>displayOnTime</phone_params>
<phone_text>time.xml</phone_text>
</phone_item>
</phone_list>
</service>
<ssh>
<userid>ngm</userid>
<password>ngm</password>
</ssh>
<standby>
<user>ngm</user>
<password>ngm</password>
</standby>
<system_message>LITTLE TWIN STARS (2800)</system_message>
<tftp-server-credentials>
<trustpoint />
</tftp-server-credentials>
<time-format>12</time-format>
<time-webedit>false</time-webedit>
<time-zone>0</time-zone>
<timeouts>
<busy_timeout>10</busy_timeout>
<interdigit_timeout>10</interdigit_timeout>
<ringing_timeout>180</ringing_timeout>
<transfer-recall_timeout>0</transfer-recall_timeout>
<night-service-bell_timeout>12</night-service-bell_timeout>
</timeouts>
```

```
<messages>
<url>http://1.4.188.101/localdir</url>
</messages>
<services>
<url>http://1.4.188.101/localdir</url>
<name />
</services>
<proxy_server>
<url>http://1.4.188.101/localdir</url>
</proxy_server>
<idle>
<url>http://1.4.188.101/localdir</url>
<idle_timeout>90</idle_timeout>
</idle>
<authentication>
<url>http://1.4.188.101/localdir</url>
<user />
<password />
</authentication>
</url_list>
<user-locale_list>
<user-locale_item>
<index>0</index>
<locale>US</locale>
<package>en</package>
<load />
</user-locale_item>
<user-locale_item>
<index>1</index>
<locale>US</locale>
<package>en</package>
<load />
</user-locale_item>
<user-locale_item>
<index>2</index>
<locale>US</locale>
<package>en</package>
<load />
</user-locale_item>
<user-locale_item>
<index>3</index>
<locale>US</locale>
```







```
</speed-dial_list>
<ssh>
<userid>ngm</userid>
<password>ngm</password>
</ssh>
<phone_type>
<name>7911</name>
<addon_list>
<addon_item>
<addon>1</addon>
<addon_type>7914</addon_type>
</addon_item>
</addon_list>
</phone_type>
```

```
</ExtMapStatus>
</ISPhoneLineList>
<ISKeyPhone>false</ISKeyPhone>
<SNRui>true</SNRui>
<ISLogoutProfileID>0</ISLogoutProfileID>
<ISUserProfileID>0</ISUserProfileID>
<ISTapiClientAddr>
<Xipv4Address />
</ISTapiClientAddr>
<ISDevStatus>unregistered</ISDevStatus>
<ISDevLastStatus>deceased</ISDevLastStatus>
<ISDevChangeTime>4040</ISDevChangeTime>
<ISDevKeepAlives>0</ISDevKeepAlives>
<ISDevTapiCStatus />
<ISTapiCLastStatus />
<ISTapiCChangeTime />
<ISTapiCKeepAlive />
<ISDevDND>no</ISDevDND>
</ISDevice>
</ISDevices>
</response>
```

## ISgetDeviceTemplate

<day\_of\_month>1<day\_of\_month>  
<start\_time>12:00<start\_time>  
<stop\_time>14:00<stop\_time>  
<date\_item>  
<date\_list>  
<day\_list>  
<day\_item>  
<day\_of\_week>Mon<day\_of\_week>  
<start\_time>12:00<start\_time>  
<stop\_time>14:00<stop\_time>  
<day\_item>  
<day\_list>  
<exempt>>true<exempt>  
<after-hours\_login>  
<http>true<http>  
<after-hours\_login>  
<override-code>1234<override-code>











```
</mailbox-selection>  
<moh>  
<ip_addr>0.0.0.0</ip_addr>  
<port>0</port>  
<route>0.0.0.0</route>
```

## ISgetExtensionTemplate

Wug v jg KU i gyGzv g puk qp Vg o rncv gu

```
<incoming />  
<outgoing />  
</corlist>  
<cti>  
<notify>false</notify>  
<watch>false</watch>  
</cti>
```





## ISgetVoiceRegGlobal

Wug vjg KUigvXqkegTgi Inqden vq tgvtkgxcg uvcvwu cpf eqphkiwcvkqp kphqt o cvkqp qh inqden rctc o gygtu hqt UKR.

Request

```
<ISSipDevice>  
<ISPoolID>1</ISPoolID>  
<ISDevMac>0013.1978.3CA5</ISDevMac>  
<ISSessionServerID>0</ISSessionServerID>  
<ISDevAddr>  
<Xipv4Address>0</Xipv4Address>  
</ISDevAddr>  
<ISSipPhoneLineList>  
<ExtMapStatus>  
<LineId>1</LineId>  
<ExtId>1</ExtId>
```



```
</ISSessionServerIDs>  
<ISAllowWatch>true</ISAllowWatch>  
<firstName>Henry</firstName>  
<lastName>Mann</lastName>  
<ISSipDevList>  
<ISPoolID>1</ISPoolID>  
<ISPoolID>2</ISPoolID>  
</ISSipDevList>  
</ISSipExtension>  
</ISSipExtensions>  
</response>
```

## ISgetSessionServer

Wug KU igvUguukqpUgtxgt vq tgytkgxg eqphki wtcvkqp kphqt o cvkqp hqt uguukqp ugtxgtu kp Ekueq

KUMg{ y qtf y kvj qpg qh vjg hqm qy kpi mg{ y qtf u

cm Cm





## SUMMARY STEPS

1. **gpcdn**
2. **eqphkiwtg vgt okpcn**
3. **kzk crnkcvkqp eog**
4. **t**

## Define Authentication for XML Access

Vq cwjgpkcvg wugtu hqt ZON ceegu. rgthqt o vjg hqnnqyki







## Example for XML Authentication

Vjg hqnnqykpi gzc o rng ugngevu J VVR cu vjg ZON vtcpurqtv o gvjqf0 Kv cmqyu ceeguu hqt wugt45 ykvj vjg rcuuyqtf 5Tu;4w|S. cpf ugvu

