

Cisco Unified CallManager Release 5.0 - PBX Interoperability: Avaya S8500 Communication Manager 3.0 with SIP Trunk.

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Introduction

The purpose of this document is to detail the steps and configurations necessary for Cisco Unified CallManager 5.0 to interoperate with the Avaya S8500 Communication Server 3.0.

Tested were the following items:

- 1. SIP and SCCP phone registration to the Cisco Unified CallManager
- 2. Basic call between the two systems and verification of voice path
- 3. CLIP/CLIR/CNIP/CNIR features Calling Party Name and Number delivery (Allowed and Restricted)
- 4. COLP/CONP/COLR/CONR features Connected Name and Number delivery (Allowed and Restricted)
- 5. Call Transfer (Blind, Attended, Early Attended)
- 6. Call Forwarding (CFA Call Forward All, CFA Call Forward Busy, CFNA Call Forward No Answer)
- 7. Hold and Resume with Music On-Hold
- 8. Voice Messaging and MWI activation-deactivation
- 9. DTMF-relay via RFC2833

Integration highlights:

- 1. Basic call worked. However, it required MTP resource for Supplementary features such as Call Transfer, Hold/Resume, RFC2833 DTMF-relay, etc. Therefore, the "Media Termination Point Required" box must be checked under the SIP Trunk configuration in order for the two systems to interoperate successfully.
- 2. The method used to pass the phone name and number information across the SIP trunk is different. Cisco Unified CallManager used the "Remote-Party-Id" field while Avaya S8500 and Proxy used the "P-Asserted-Id" field. Since both parties do not understand each other method, they extracted the calling party name and number information from the SIP INVITE From header.
- 3. Cisco Unified CallManager supports the sending and receiving of both the calling name and number on the SIP and SCCP phones. Avaya S8500/Proxy supports the sending and receiving of the calling name and number only for their digital station phone. However, for their SIP Phone, it only supports the sending of the calling number information and not the name portion. As for the receiving of the name and number information, their digital station phones will display both calling name and number but their SIP phone will only display the name information portion. For example, when Cisco Unified CallManager called Avaya digital station phone, the calling name and number will be correctly displayed on the Avaya digital phone. However, when Cisco Unified CallManager called Avaya SIP phone, only calling name will be displayed on the Avaya SIP phone. On the other hand, when Avaya SIP phone call Cisco Unified CallManager, only the number will be sent to Cisco Unified CallManager. If they used Avaya digital station phone, both name and number will be sent to Cisco Unified CallManager.
- 4. Cisco Unified CallManager supports both the calling name and number restriction (CLIR/CNIR) features. However, Avaya does not allow the ability to configure the Calling Party Name Restriction. This feature is not available across SIP Trunks. As for the calling number restriction, there is a parameter under the Station configuration called "Per Station CPN send calling number" which we can set to "No" or "Restricted". However, this has no effect at all. Furthermore, with SIP station phone and this parameters set to be "Restricted", the number information is still transmitted across the SIP trunks. Also, when the Avaya SIP phone placed outbound call, it doesn't include the name information in the outgoing SIP INVITE message toward the Avaya SIP Proxy server (no name information within the P-Asserted-Id field or the SIP From header).
- 5. For connected name and number presentation and restriction features, Cisco Unified CallManager support both features using the "Remote-Party-Id" and "Privacy" fields. However, Avaya S8500 does not support these features across SIP Trunk. Furthermore, Avaya S8500 SIP server does not honor the restricted connected party number from Cisco Unified CallManager SIP Stations since it doesn't understand the Remote-Party-Id and Privacy fields.
- 6. There is no Alerting Name support across SIP Trunk due to different method used by each system to pass the name and number information across. Avaya use PAI and Cisco Unified CallManager use RPID. Since they both do not interoperability with one another, they kept the display of the dialed number on the phone display and didn't updated it with the Alerting name information
- 7. Both systems support Attended and Early Attended Call Transfer feature. However, they are not able to update the phone displays properly after the transfer is completed. This is due to the differences between the two systems method of passing the name and number information.



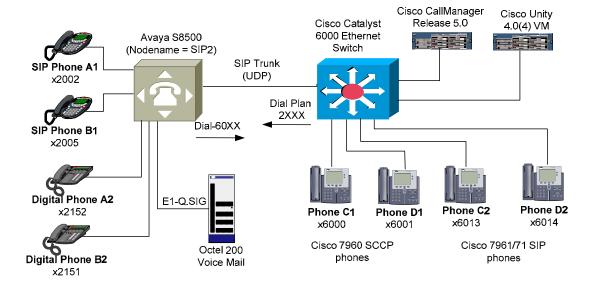
- Both Avaya S8500 and Cisco Unified CallManager TNP phones (7961, 7970, 7971 and 7911) phones do not support SIP Blind Call Transfer.
- 9. Both systems support Call Forwarding (CFU, CFB, and CFNA) features. However, they are not able to update the phone displays properly after the call is forwarded. This is due to the differences between the two systems method of passing the name and number information.
- 10. Both systems support call conferencing using their local media resources. However, if the conferencing phone is an Avaya SIP phone, the remaining conferenced parties will be dropped once the conferencing phone dropped off the bridge.
- 11. Call Completion (Callback) Feature is not supported on either systems using standard SIP protocol.
- 12. Voice Messaging doesn't work across SIP Trunk between Cisco Unified CallManager and Avaya S8500 PBX. Cisco Unified CallManager uses the SIP Diversion header to pass the redirect information to the device which hosts the VM system. However, Avaya SIP Proxy and S8500 do not support the SIP Diversion header. Therefore, without the redirect information, the VM system treats the call as a direct access call and not a forwarded call.
- 13. MWI does not work across SIP Trunk. Cisco Unified CallManager use SIP Notify message for MWI notification. However, Avaya SIP Proxy and S8500 Server did not forward the Notify SIP message with SDPinfo Message Waiting=yes/no to the endpoint device. Furthermore, Avaya S8500 and SIP Proxy Server does not send out MWI notification via SIP Trunk.

Key Results:

- 1. Cisco Unified CallManager and Avaya S8500 used different method of passing the name and number information. Cisco Unified CallManager used the "Remote-Party-Id" field while Avaya S8500 and Proxy used the "P-Asserted-Id" field
- 2. Basic call, Call Transfer, Call Forwarding, Conference Call, Hold and Resume all work fine with exception of the phone name and number display not being updated correctly.
- 3. DTMF-relay using RFC2833 worked bidirectional.
- 4. "Media Termination Point Required" check box must be enabled on the Cisco Unified CallManager SIP Trunk.

Network Topology

Figure 1. Network Topology or Test Setup





Limitations

MWI- Message Waiting Indication (lamp ON, lamp OFF) across the SIP trunk is not supported

Callback across SIP trunk is not supported

CLIP/CLIR/CNIP/CNIR features - Please read the Integration Highlight section

COLP/CONP/COLR/CONR features - Please read the Integration Highlight section

System Components

Hardware Requirements

Cisco Unified CallManager MCS -7835H server

Unity server MCS-7835H

Catalyst switch 6509 with WS-X6K-Sup1A-2GE and WS-X6348

Cisco 7961 and 7960 IP phones

Avaya S8500 PBX and Avaya IP Media Processor

Avaya SIP Proxy Server

Avaya SIP (4620SW) and digital (6408D) station phones

Software Requirements

Cisco Unified CallManager Release 5.0.2-1000.3

Cisco Unity Release 4.0(4)

Avaya Communication Manager Release 3.0

Catalyst 6000 with Cisco IOS release: WS-C6506 Software, Version NmpSW: 7.6(8)

Features

CLIP-Calling Line (Number) Identification Presentation

CLIR-Calling Line (Number) Identification Restriction

CNIP-Calling Name Identification Presentation

CNIR-Calling Name Identification Restriction

Alerting Name

Attended Call Transfer

Early Attended Call Transfer

CFU-Call Forwarding Unconditional

CFB-Call Forwarding Busy

CFNA-Call Forwarding No Answer

COLP-Connected Line (Number) Identification Presentation

COLR- Connected Line (Number) Identification Restriction

CONP-Connected Name Identification Presentation

CONR-Connected Name Identification Restriction



Hold and Resume

Conference Call

DTMF-relay using RFC2833.

Features Not Supported

MWI- Message Waiting Indication (lamp ON, lamp OFF) across the SIP trunk

Call Completion (Callback; Automatic Callback)

Blind Call Transfer

Configuration

Configuration Sequence and Tasks

Avaya S8500 Communication Server 3.0

- 1. Configure IP Node, IP-Codec-Set, IP-Network-Region
- 2. Configure IP server interface
- 3. Configure the Signaling Group for SIP Trunk to Avaya SIP Proxy
- 4. Configure the Trunk Group for SIP Trunk to Avaya SIP Proxy
- 5. Configure SIP and Digital Station Phone extension
- 6. Configure the Uniform Dialing Plan to Cisco Unified CallManager extensions
- 7. Configure Route Pattern to Cisco Unified CallManager extensions
- 8. Configure the Signaling Group for E1 Q.SIG to Octel 200 Voice Mail system
- 9. Configure the Trunk Group for E1 Q.SIG to Octel 200 Voice Mail system
- 10. Configure the Uniform Dialing Plan to Octel 200 Voice Mail system
- 11. Configure Route Pattern for VM pilot number to the Octel 200 Voice Mail system

Avaya SIP Proxy Server:

- 1. Configure SIP Proxy System
- 2. Configure SIP Users
- 3. Configure remote hosts, IP address mapping and contact information
- 4. Configure Avaya Media Server, IP address mapping and contact information
- 5. Configure Media Server extensions for the SIP phones and associate them to the user list

Octel 200 Voice Mail System:

- 1. Configure Octel system parameters
- 2. Configure E1 Q.SIG to Avaya S8500 PBX
- 3. Configure Class of Server (COS)
- 4. Configure User mailbox

Cisco Unified CallManager:

- 1. Enterprise Parameter Top Level Domain Setting
- 2. SIP Trunk Security Profile
- 3. SIP Phone Security Profile
- 4. Device Setting SIP Profile
- 5. Media Resource Group and Media Resource Group List
- 6. Partitions and Calling Search Space
- 7. Assigned MGRL in the Default Device Pool
- 8. SIP Trunk to Avaya SIP Proxy Server
- 9. SIP and SCCP Phones Device and DN configuration
- 10. Route Pattern to Avaya S8500 Node SIP 2
- 11. Route Pattern to Octel Voice Mail System Pilot Number
- 12. Voice Mail Ports for Unity



- 13. Voice Mail Pilot for Unity
- 14. Voice Mail Profile for Unity
- 15. Line Group, Hunt List and Hunt Pilot for Unity VM

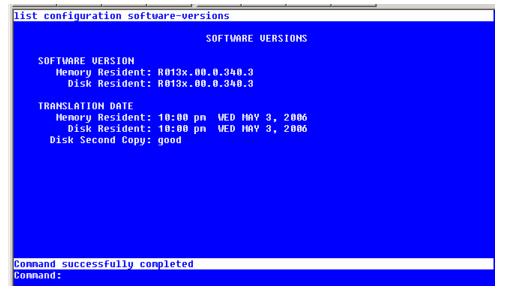
Cisco Unity:

- 1. Configure Unity and Cisco Unified CallManager Integration
- 2. Configure Subscriber mailbox

Configuration Menus and Commands

Avaya \$8500 Configuration

Avaya S8500 Software Version and Hardware Configuration List:





| | | SYSTEM CONF | I GURAT | TION | | | | | | | | | | |
|--------|--------------------|-------------|---------|-------|--------------|---------|---------|------|--|-----|----|----|--|--|
| Board | | | | | | | 955 | ianı | hed 1 | ori | ts | | | |
| Number | Board Type | Code Vi | | | Vintage u=ur | | | | Assigned Ports assigned t=tti p=psa | | | | | |
| 01A00 | POWER SUPPLY | 655A | | | | | | | | | | | | |
| 01A01 | IP SERUER INTFC | TN2312BP | HWAZ | FU021 | 01 | 62 | 63 | ßЬ | 05 | 96 | 87 | 08 | | |
| 01A 02 | CONTROL-LAN | TN799DP | | | | u | u | u | u | u | u | u | | |
| | | | | | ū | ū | ü | ü | ü | ū | ū | ū | | |
| | | | | | 17 | | | | | | | | | |
| 01A 03 | IP MEDIA PROCESSOR | TN2302AP | HW20 | FW095 | 91 | 02 | 93 | 94 | 95 | 96 | | 98 | | |
| 01A 04 | DIGITAL LINE | TN2224CP | HW01 | FW001 | 91 | 92 | 93 | | | | 97 | 98 | | |
| | | | | | 99 | | | 12 | | | | u | | |
| 04405 | AUAL 00 1 TUE | T1171.40 | 0000 | | U | u | u | u | u | u | u | u | | |
| 01A 05 | ANALOG LINE | TN746B | 0000 | IJ | | u | u | u | u | u | u | u | | |
| 01A12 | MAINTENANCE/TEST | TN771DP | пиво | EM840 | U | u 02 | u 03 | | u | u | u | u | | |
| UIHIZ | MHTMTENHIGE/TEST | 11177 101 | กพยอ | LMOIA | | UZ | 90 | 84 | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | press CANCEL t | | | | | | | | • | | | | | |



Avaya IP Nodes

```
list node-names
                                                 HODE NAMES
 Type
                                                       IP Address
                                                       172.20 .31 .254
172.20 .231.254
                  CCM3.3
                 CCM4.1
CCM4.1.2
CCM5.0-VENUS
CM-KLINGON
                                                      172.28 .231.254

172.28 .236.2

172.29 .214.254

172.29 .32 .254

172.20 .8 .26

172.20 .7 .252

172.20 .7 .252

172.20 .212.254

172.20 .213.254

172.20 .213.254

172.20 .213.254
                  CM-POLARIS
IPIPGW
                  MAvantage
                  avayasip1
                  avayasip2
                  clan1
clan1server1
                                                       172.20 .212.253
                                                       0 .0 .0 .0
172.20 .213.252
                  default
                  medpro1
                  procr
Command successfully completed
```

Avaya Signal Group for SIP Trunk to SIP Proxy

```
SIGNALING GROUP

Group Number: 1 Group Type: sip
Transport Method: tls

Near-end Node Name: clan1 Far-end Node Name: avayasip2
Near-end Listen Port: 5061 Far-end Listen Port: 5061
Far-end Domain: lab2.com

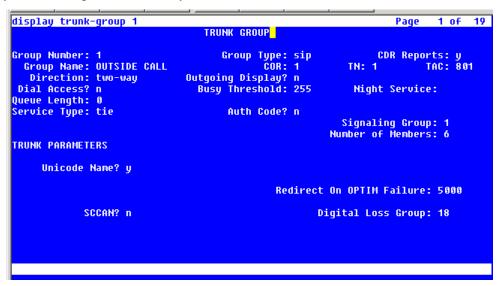
Bypass If IP Threshold Exceeded? n

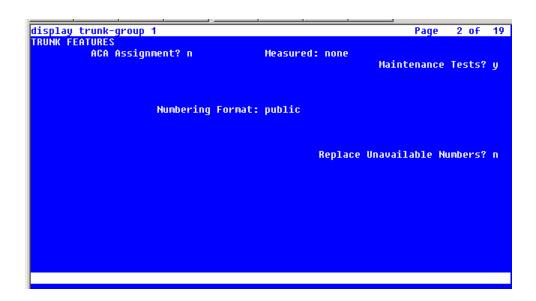
DTMF over IP: rtp-payload Direct IP-IP Audio Connections? n
IP Audio Hairpinning? n

Session Establishment Timer(min): 120
```



Avaya Trunk Group 1 to the SIP Proxy







Avaya IP-Codec-Set 1 for the SIP Trunk



```
IP Codec Set

Allow Direct-IP Multimedia? n

Mode Redundancy

FAX pass-through 0

Modem pass-through 0

TDD/TTY US 3

Clear-channel n 0
```

Avaya IP-Network-Region 1 for the SIP Trunk

```
1 of 19
display ip-network-region 1
                                                                                                               Page
                                                       IP NETWORK REGION
    Region: 1
Location: 1 Au
Name: CiscoLAB2
                               Authoritative Domain: lab2.com
                                                        Intra-region IP-IP Direct Audio: no
                                                        Inter-region IP-IP Direct Audio: no
MEDIA PARAMETERS
     Codec Set: 1
UDP Port Min: 2048
                                                                           IP Audio Hairpinning? y
                                                         RTCP Reporting Enabled? y
RTCP MONITOR SERVER PARAMETERS
Use Default Server Parameters? y
UDP Port Max: 3028
DIFFSERU/TOS PARAMETERS
 Call Control PHB Value: 34
Audio PHB Value: 46
              Video PHB Value: 26
Uideo PHB Value: 26
802.1P/Q PARAMETERS
Call Control 802.1p Priority: 7
Audio 802.1p Priority: 6
H.323 IP ENDPOINTS
H.323 Link Bounce Recovery? y
Idle Traffic Interval (sec): 20
Keep-Alive Interval (sec): 5
Keen-Alive Count: 5
                                                                  AUDIO RESOURCE RESERVATION PARAMETERS
RSVP Enabled? n
                    Keep-Alive Count: 5
```



```
display ip-network-region 1
                                                                                 Page 2 of 19
                                       IP NETWORK REGION
INTER-GATEWAY ALTERNATE ROUTING
Incoming LDN Extension:
Conversion To Full Public Number - Delete:
Maximum Number of Trunks to Use:
                                                           Insert:
 LSP NAMES IN PRIORITY ORDER
display ip-network-region 1
                                                                                Page 3 of 19
                        Inter Network Region Connection Management
                     direct
WAN
                                                                             Dynamic CAC
 src dst
            codec
              set
                               WAN-BW-limits Intervening-regions
                                                                                Gateway
                                                                                              IGAR
 rgn rgn
```



Avaya IP Server Interface

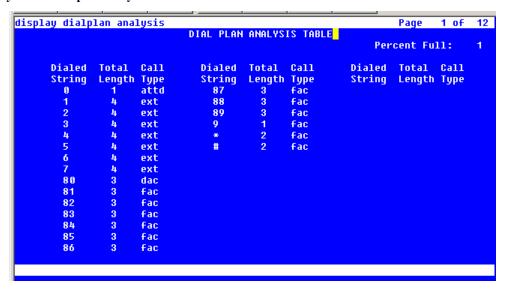
```
display ipserver-interface 1
IP SERVER INTERFACE (IPSI) ADMINISTRATION - PORT NETWORK 1

IP Control? y Socket Encryption? y
Ignore Connectivity in Server Arbitration? n Enable QoS? n

Primary IPSI
Location: 1A01
Host: 172.20.213.2
DHCP ID: ipsi-A01a

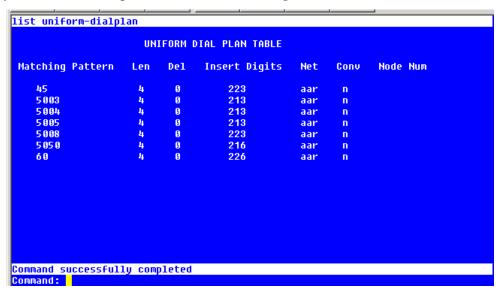
Command:
```

Avaya S8500 Dialplan Analysis

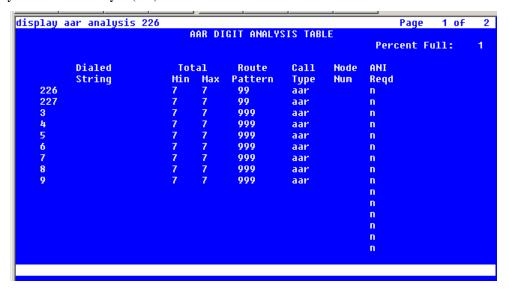




Avaya S8500 Uniform Dialplan to Cisco Unified CallManager Extensions (60xx)

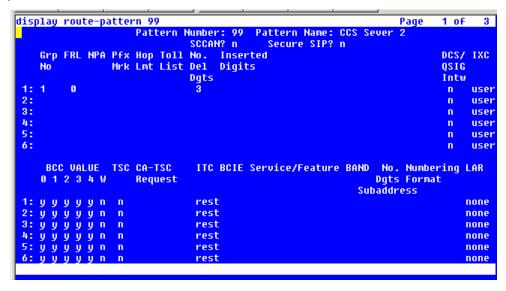


Avaya S8500 AAR Analysis (226)





Avaya S8500 Route Pattern 99



Avaya S8500 DS1 Circuit for the E1 Q.SIG to the Octel 200 Voice Mail System



Avaya S8500 Signal Group for the E1 Q.SIG to the Octel 200 Voice Mail System

Avaya S8500 Trunk Group for the E1 Q.SIG to the Octel 200 Voice Mail System

```
TRUNK GROUP
                                                                               CDR Reports: y
I TAC: 800
Group Number: 13
                                             Group Type: isdn
                                     COR: 1
Outgoing Display? n
Busy Threshold: 255
  Group Name: Octel 200
                                                                         TN: 1
Direction: two-way
Dial Access? y
                                                                          Carrier Medium: PRI/BRI
                                                                          Night Service:
Queue Length: 0
Service Type: tie
                                              Auth Code? n
                                                                              TestCall ITC: rest
                                Far End Test Line No:
TestCall BCC: 4
TRUNK PARAMETERS
                                                   Codeset to Send National IEs: 6
Charge Advice: none
Digit Handling (in/out): enbloc/enbloc
         Codeset to Send Display: 0
Max Message Size to Send: 260
 Supplementary Service Protocol: b
              Trunk Hunt: ascend
                                                                    QSIG Value-Added? y
                                                                  Digital Loss Group: 13
Incoming Calling Number - Delete:
                                                 Insert:
                                                                                 Format: unk-unk
Bit Rate: 1200 Syr
Disconnect Supervision - In? y Out? y
Answer Supervision Timeout: 0
                                                Synchronization: async
                                                                                  Duplex: full
```

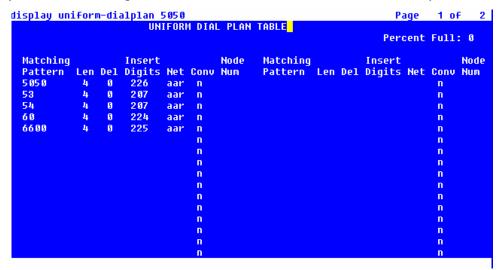


```
display trunk-group 13
TRUNK FEATURES
                                                                             Page 2 of 19
            ACA Assignment? n
                                               Measured: none
                                                                       Wideband Support? n
                                        Internal Alert? n
                                                                      Maintenance Tests? y
                                     Data Restriction? n
                                                                  NCA-TSC Trunk Member: 1
                                             Send Name: y
Hop Dgt? n
                                                                    Send Calling Number: y
              Used for DCS? n
   Suppress # Outpulsing? n
                                     Format: unknown
 Outgoing Channel ID Encoding: preferred
                                                     UUI IE Treatment: service-provider
                                                          Replace Restricted Numbers? n
Replace Unavailable Numbers? n
                                                  Send Called/Busy/Connected Number: y
Hold/Unhold Notifications? y
 Send UUI IE? y
Send UCID? n
Send Codeset 6/7 LAI IE? y
                                                         Modify Tandem Calling Number? n
                                                               Ds1 Echo Cancellation? n
 Path Replacement with Retention? n
 Path Replacement Method: better-route
SBS? n Network (Japan) Needs Connect Before Disconnect? n
```

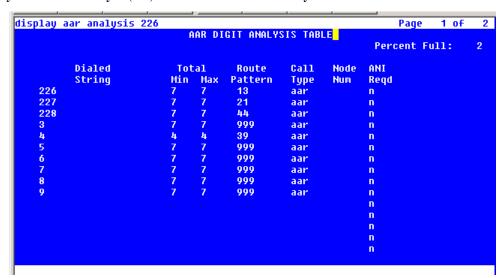
```
display trunk-group 13
                                                                                      3 of 19
                                                                              Page
                                        TRUNK GROUP Administered Members (min/max):
GROUP MEMBER ASSIGNMENTS
                                                   Total Administered Members:
                 Code Sfx Name
                                           Night
                                                               Sig Grp
        Port
                TN464 F
                                                                  13
13
  1: 01A1301
     01A1302
                TN464
 4:
5:
6:
7:
8:
9:
10:
11:
12:
13:
 14:
15:
```



Avaya S8500 Uniform Dialplan for the VM Pilot number to the Octel 200 Voice Mail system



Avaya S8500 AAR analysis (226) to the Octel 200 Voice Mail system





Avaya S8500 Route Pattern (13) to the Octel 200 Voice Mail system

```
display route-pattern 13
                                                                        Page 1 of
                      Pattern Number: 13 Pattern Name:
                                SCCAN? n
                                               Secure SIP? n
    Grp FRL NPA Pfx Hop Toll No. Inserted
                                                                                DCS/ IXC
                  Mrk Lmt List Del
                                     Digits
                                                                                QSIG
                                Dgts
                                                                                Intw
                                 3
    13
                                                                                     user
                                                                                 n
                                                                                     user
                                                                                 n
                                                                                     user
                                                                                     user
                                                                                     user
                                                                                 п
                                                                                     user
     BCC VALUE TSC CA-TSC
                                 ITC BCIE Service/Feature BAND No. Numbering LAR
    0 1 2 3 4 W
                      Request
                                                                   Dgts Format
                                                                Subaddress
                      as-needed rest
                                                                                    next
2: yyyyyn n
3: yyyyyn n
4: yyyyyn n
5: yyyyyn n
6: yyyyyn n
                                 rest
                                                                                    none
                                 rest
                                                                                    none
                                 rest
                                                                                    none
                                 rest
                                                                                    none
                                 rest
                                                                                    none
```

Avaya S8500 Class of Restriction (COR)

```
display cor 1
                                                                                     Page 1 of
                                        CLASS OF RESTRICTION
                    COR Number: 1
             COR Description: FRL 7
                             FRL: 7
                                                                               APLT? y
   Can Be Service Observed? n
                                                    Calling Party Restriction: none
                                              Called Party Restriction: none
Forced Entry of Account Codes? n
Direct Agent Calling? y
Facility Access Trunk Test? n
Can Be A Service Observer? n
          Time of Day Chart: 1
Priority Queuing? n
       Restriction Override: all
Restricted Call List? n
                                                            Can Change Coverage? n
                Access to MCT? y
                                                     Fully Restricted Service? n
Group II Category For MFC: 7
Send ANI for MFE? n
                MF ANI Prefix:
                                                     Automatic Charge Display? n
Hear System Music on Hold? y
                                         PASTE (Display PBX Data on Phone)? n
                                Can Be Picked Up By Directed Call Pickup? n
Can Use Directed Call Pickup? n
                                                Group Controlled Restriction: inactive
```



```
display cor 1

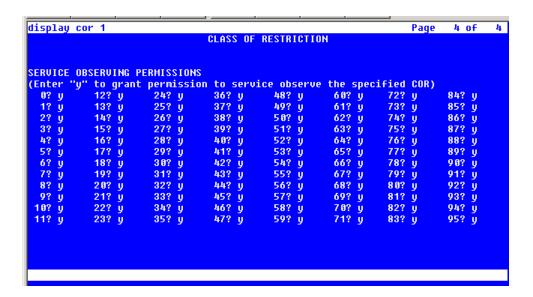
CLASS OF RESTRICTION

MF Incoming Call Trace? n
Brazil Collect Call Blocking? n
Block Transfer Display? n
Block Enhanced Conference/Transfer Displays? y
Remote Logout of Agent? n

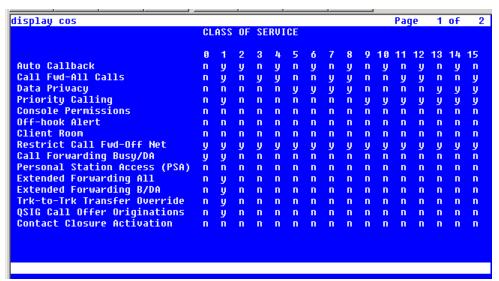
Station Lock COR: 1
Outgoing Trunk Disconnect Timer (minutes):
```

| display | cor 1 | - | | | | Page | 3 of | 4 |
|---------|------------|------------|----------|-------------|------------------|-------------|-------|---|
| | | | CLASS OF | RESTRICTION | N <mark>.</mark> | | | |
| | | | | | | | | |
| | | | | | | | | |
| CALLING | PERMISSION | (Enter "y" | to grant | permission | to call | specified (| COR) | |
| 0? u | 12? y | 24? y | 36? u | 48? u | 60? u | 72? y | 84? y | |
| | | | | | _ | | | |
| 1? y | 13? y | 25? y | 37? y | | 61? y | _ | 85? y | |
| 2? y | 14? y | 26? y | 38? y | | 62? y | | 86? y | |
| 3? y | 15? y | 27? y | 39? y | | 63? y | _ | 87? y | |
| 4? y | 16? y | 28? y | 40? y | 52? y | 64? y | 76? y | 88? y | |
| 5? y | 17? y | 29? y | 41? y | 53? y | 65? y | 77? y | 89? y | |
| 6? U | 18? u | 30? U | 42? U | 54? u | 66? U | 78? u | 90? u | |
| 7? Ú | 19? Ú | 31? Ú | 43? y | 55? Ú | 67? y | 79? v | 91? v | |
| 8? U | 20? y | 32? U | 44? U | 56? u | 68? U | 80? y | 92? y | |
| 9? U | 21? U | 33? U | 45? U | 57? u | 69? U | 81? U | 93? y | |
| 10? y | | _ | | 58? U | 70? u | _ | _ | |
| | 22? y | 34? y | 46? y | | _ | 82? y | 94? y | |
| 11? y | 23? y | 35? y | 47? y | 59? y | 71? y | 83? y | 95? y | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |





Avaya S8500 Class of Service (COS)





Avaya S8500 Feature Access Codes (FACs)

```
Page 1 of
display feature-access-codes
                                                  FEATURE ACCESS CODE (FAC)
               Abbreviated Dialing List1 Access Code:
Abbreviated Dialing List2 Access Code:
Abbreviated Dialing List3 Access Code:
Abbreviated Dial - Prgm Group List Access Code:
Announcement Access Code:
                                     Answer Back Access Code: #8
       Auto Alternate Routing (AAR) Access Code:
Auto Route Selection (ARS) - Access Code 1: 9
Automatic Callback Activation: *3
                                                                                       Access Code 2:
                                                                                        Deactivation: #3
Call Forwarding Activation Busy/DA: *8 All: *2
Call Park Access Code: *5
Call Pickup Access Code: *6
                                                                                        Deactivation: #2
CAS Remote Hold/Answer Hold-Unhold Access Code:
                             CDR Account Code Access Code:
                              Change COR Access Code:
Change Coverage Access Code:
Contact Closure Open Code:
                                                                                           Close Code:
                               Contact Closure Pulse Code:
```

```
display feature-access-codes
                                                                                                    Page 2 of
                                                FEATURE ACCESS CODE (FAC)
                            Data Origination Access Code:
Data Privacy Access Code:
       Directed Call Pickup Access Code:
Emergency Access to Attendant Access Code:
EC500 Self-Administration Access Code:
Enhanced EC500 Activation:
                                                                                      Deactivation:
   Extended Call Fwd Activate Busy D/A
                                                                                      Deactivation:
            Extended Group Call Pickup Access Code:
Facility Test Calls Access Code:
                    Flash Access Code:
Group Control Restrict Activation:
                                                                                      Deactivation:
                               Hunt Group Busy Activation:
                                                                                      Deactivation:
                                               ISDN Access Code:
                         Last Number Dialed Access Code:
    Leave Word Calling Message Retrieval Lock:
Leave Word Calling Message Retrieval Unlock:
                 Leave Word Calling Send A Message: *4
Leave Word Calling Cancel A Message: #4
Malicious Call Trace Activation:
                                                                                      Deactivation:
              Meet-me Conference Access Code Change:
```



```
Page 3 of
display feature-access-codes
                                            FEATURE ACCESS CODE (FAC)
 PASTE (Display PBX data on Phone) Access Code:
   Personal Station Access (PSA) Associate Code:
                                                                              Dissociate Code:
        Per Call CPN Blocking Code Access Code:
Per Call CPN Unblocking Code Access Code:
                         Posted Messages Activation:
Priority Calling Access Code:
Program Access Code:
                                                                              Deactivation:
          Refresh Terminal Parameters Access Code:
                    Remote Send All Calls Activation:
Self Station Display Activation:
                                                                              Deactivation:
                             Send All Calls Activation: *7
                                                                              Deactivation: #7
            Station Firmware Download Access Code:
Station Lock Activation:
                                                                              Deactivation:
  Station Security Code Change Access Code:
Station User Admin of FBI Assign:
Station User Button Ring Control Access Code:
                                                                                              Remove:
                   Terminal Dial-Up Test Access Code:
```

```
display feature-access-codes

FEATURE ACCESS CODE (FAC)

Terminal Translation Initialization Merge Code:

Transfer to Voice Mail Access Code: #0

Trunk Answer Any Station Access Code: #6

User Control Restrict Activation:

Voice Coverage Message Retrieval Access Code:

Voice Principal Message Retrieval Access Code:

Whisper Page Activation Access Code:
```



```
display feature-access-codes

FEATURE ACCESS CODE (FAC)

Hospitality Features

Automatic Wakeup Call Access Code:

Housekeeping Status (Client Room) Access Code:

Housekeeping Status (Station) Access Code:

Uerify Wakeup Announcement Access Code:

Voice Do Not Disturb Access Code:
```



FEATURE ACCESS CODE (FAC)

Multimedia Features

Basic Mode Activation:
Enhanced Mode Activation:
Multimedia Call Access Code:
Multimedia Data Conference Activation:
Multimedia Multi-Address Access Code:
Multimedia Parameter Access Code:



Avaya S8500 SIP Station 2002

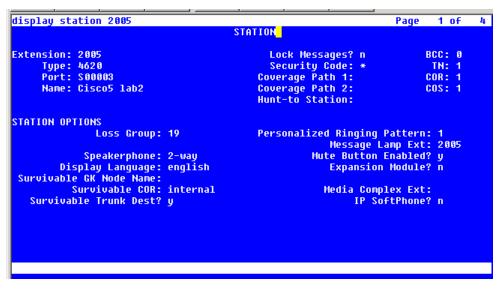


```
display station 2002
                                                                                         Page 2 of 4
                                                   STATION
FEATURE OPTIONS
               LWC Reception: spe
                                                            Auto Select Any Idle Appearance? n
  LWC Activation? y
LWC Log External Calls? n
                                                                        Coverage Msg Retrieval? y
Auto Answer: none
                                                                Data Restriction? n
Idle Appearance Preference? n
Bridged Idle Line Preference? n
   CDR Privacy? n
Redirect Notification? y
 Per Button Ring Control? n
                                                          Restrict Last Appearance? y
Conf/Trans on Primary Appearance? n
   Bridged Call Alerting? n
   Active Station Ringing: single
           H.320 Conversion? n
                                                   Per Station CPN - Send Calling Number? y
         Service Link Mode: as-needed
Multimedia Mode: enhanced
                                                                       Audible Message Waiting? n
     MWI Served User Type:
AUDIX Name:
                                                                   Display Client Redirection? n
                                                                 Select Last Used Appearance? n
Coverage After Forwarding? s
                                                                 Multimedia Early Answer? n
Direct IP-IP Audio Connections?
n IP Audio Hairpinning? y
 Emergency Location Ext: 2002
                                                 Always Use? n
```



```
display station 2002
                                                                                Page 3 of
                                              STATION
 SITE DATA
                                                                 Headset? n
Speaker? n
Mounting: d
Cord Length: 0
         Room:
         Jack:
       Cable:
       Floor:
   Building:
                                                                    Set Color:
ABBREVIATED DIALING
                                       List2:
                                                                       List3:
      List1:
BUTTON ASSIGNMENTS
 1: call-appr
                                                   6:
7:
8:
 2: call-appr
 3: call-appr
4: call-fwd
                  Ext:
```

Avaya S8500 SIP Station 2005



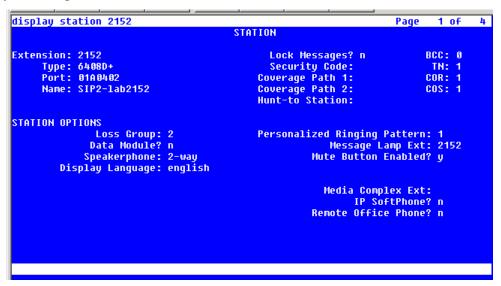


```
display station 2005
                                                                                                 Page 2 of
                                                        STATION
FEATURE OPTIONS
                LWC Reception: spe
                                                                 Auto Select Any Idle Appearance? n
 LWC Activation? y
LWC Log External Calls? n
CDR Privacy? n
Redirect Notification? y
Per Button Ring Control? n
                                                                              Coverage Msg Retrieval? y
Auto Answer: none
Data Restriction? n
                                                                     Idle Appearance Preference? n
Bridged Idle Line Preference? n
Restrict Last Appearance? y
    Bridged Call Alerting? n
                                                               Conf/Trans on Primary Appearance? n
   Active Station Ringing: single
          H.320 Conversion? n
Service Link Mode: as-needed
Multimedia Mode: enhanced
                                                        Per Station CPN - Send Calling Number? y
                                                                             Audible Message Waiting? n
                                                                       Display Client Redirection? n
Select Last Used Appearance? n
      MWI Served User Type:
AUDIX Name:
                                                                          Coverage After Forwarding? s
Multimedia Early Answer? n
                                                                       Direct IP-IP Audio Connections? y
 Emergency Location Ext: 2005
                                                     Always Use? n
                                                                                  IP Audio Hairpinning? y
```

```
display station 2005
                                                                       Page 3 of 4
                                         STATION
 SITE DATA
                                                             Headset? n
Speaker? n
Mounting: d
       Room:
       Jack:
      Cable:
      Floor:
                                                          Cord Length: 0
   Building:
                                                            Set Color:
ABBREVIATED DIALING
     List1:
                                  List2:
                                                               List3:
BUTTON ASSIGNMENTS
 1: call-appr
 2: call-appr
 3: call-appr
```



Avaya S8500 Digital Station 2152



```
display station 2152
                                                                                             Page 2 of 4
                                                      STATION
FEATURE OPTIONS
               LWC Reception: spe
                                                               Auto Select Any Idle Appearance? n
  LWC Activation? y
LWC Log External Calls? n
                                                                           Coverage Msg Retrieval? y
Auto Answer: none
                                                                   Data Restriction? n
Idle Appearance Preference? n
Bridged Idle Line Preference? n
    CDR Privacy? n
Redirect Notification? y
 Per Button Ring Control? n
                                                             Restrict Last Appearance? y
Conf/Trans on Primary Appearance? n
   Bridged Call Alerting? n
   Active Station Ringing: single
           H.320 Conversion? n
                                                      Per Station CPN - Send Calling Number? y
          Service Link Mode: as-needed
Multimedia Mode: basic
                                                                      Audible Message Waiting? n
Display Client Redirection? y
     MWI Served User Type:
AUDIX Name:
                                                                    Select Last Used Appearance? n
Coverage After Forwarding? s
                                                                    Multimedia Early Answer? n
Direct IP-IP Audio Connections?
IP Audio Hairpinning? y
 Emergency Location Ext: 2152
```



```
display station 2152
                                                                                   Page 3 of 4
                                                STATION
 SITE DATA
                                                                   Headset? n
Speaker? n
Mounting: d
Cord Length: 0
Set Color:
         Room:
        Jack:
Cable:
        Floor:
   Building:
ABBREVIATED DIALING
List1:
                                        List2:
                                                                          List3:
BUTTON ASSIGNMENTS
 1: call-appr
                                                     5: call-pkup
                                                     6: call-park
7: call-fwd Ext:
 2: call-appr
                                                     8: cfwd-bsyda Ext:
```

```
display station 2152

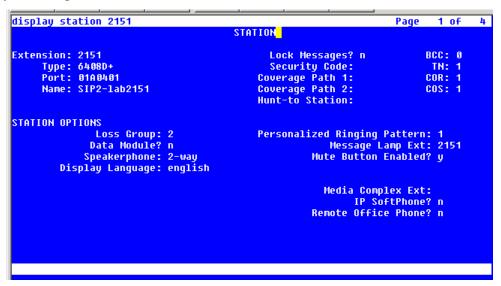
STATION

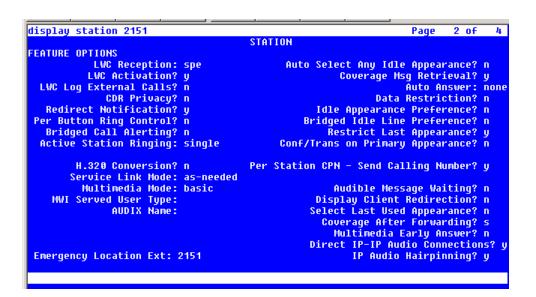
SOFTKEY BUTTON ASSIGNMENTS

1: directory
2: drop
3: int-aut-an
4: timer
5: priority
6: auto-cback
7: abr-prog
8: abr-spchar Char: ~p
9: lwc-store
10: ringer-off
11: btn-view
12: admin
```



Avaya S8500 Digital Station 2151







```
display station 2151
                                                                                  Page 3 of 4
                                               STATION
 SITE DATA
                                                                  Headset? n
Speaker? n
Mounting: d
Cord Length: 0
Set Color:
         Room:
       Jack:
Cable:
        Floor:
   Building:
ABBREVIATED DIALING
List1:
                                        List2:
                                                                         List3:
BUTTON ASSIGNMENTS
 1: call-appr
                                                    5: call-pkup
                                                    6: call-park
7: call-fwd Ext:
 2: call-appr
 3: call-appr
                                                     8: cfwd-bsyda Ext:
```

```
display station 2151

STATION

SOFTKEY BUTTON ASSIGNMENTS

1: directory
2: drop
3: int-aut-an
4: timer
5: priority
6: auto-cback
7: abr-prog
8: abr-spchar Char: ~p
9: lwc-store
10: ringer-off
11: btn-view
12: admin
```



Avaya S8500 System Parameters Features

```
display system-parameters features

FEATURE-RELATED SYSTEM PARAMETERS
Self Station Display Enabled? n
Trunk-to-Trunk Transfer: all
Automatic Callback - No Answer Timeout Interval (rings): 3
Call Park Timeout Interval (minutes): 18
Off-Premises Tone Detect Timeout Interval (seconds): 20
AAR/ARS Dial Tone Required? y

Music (or Silence) on Transferred Trunk Calls? no
DID/Tie/ISDN/SIP Intercept Treatment: attd
Internal Auto-Answer of Attd-Extended/Transferred Calls: transferred
Automatic Circuit Assurance (ACA) Enabled? n

Abbreviated Dial Programming by Assigned Lists? n
Auto Abbreviated/Delayed Transition Interval (rings): 2
Protocol for Caller ID Analog Terminals: Bellcore
Display Calling Number for Room to Room Caller ID Calls? y
```

```
display system-parameters features
                                                                                                  Page 2 of 16
                              FEATURE-RELATED SYSTEM PARAMETERS
LEAUE WORD CALLING PARAMETERS
                       Maximum Number of Messages Per Station: 10
Maximum Number of External Calls Logged Per Station: 0
Message Waiting Indication for External Calls? y
   Stations with System-wide Retrieval Permission (enter extension)
                                           13:
                                                             19:
                                                                               25:
                                           14:
                                                             20:
                         10:
                                           16:
      4:
                                           17:
                         11:
                                                             23:
                                                                               29:
                                                             24:
                                           18:
                                                                               30:
                              Prohibit Bridging Onto Calls With Data Privacy? y
Enhanced Abbreviated Dial Length (3 or 4): 3
Record All Submission Failures in History Log? y
                                      Record PMS/AD Transactions in History Log? n
Record IP Registrations in History Log? n
                   Default Multimedia Outgoing Trunk Parameter Selection: 2x64
```

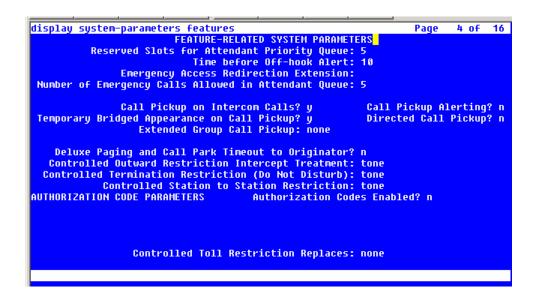


```
display system-parameters features
FEATURE-RELATED SYSTEM PARAMETERS
TTI/PSA PARAMETERS

WARNING! SEE USER DOCUMENTATION BEFORE CHANGING TTI STATE

Terminal Translation Initialization (TTI) Enabled? n

Customer Telephone Activation(CTA) Enabled? n
```





```
display system-parameters features
                                                                  Page 5 of 16
                        FEATURE-RELATED SYSTEM PARAMETERS
SYSTEM PRINTER PARAMETERS
  Endpoint:
                           Lines Per Page: 60
SYSTEM-WIDE PARAMETERS
                             Switch Name:
    Emergency Extension Forwarding (min): 10
  Enable Inter-Gateway Alternate Routing? n
MALICIOUS CALL TRACE PARAMETERS
               Apply MCT Warning Tone? n
                                            MCT Voice Recorder Trunk Group:
Delay Sending RELease (seconds)? 0
SEND ALL CALLS OPTIONS
     Send All Calls Applies to: station
                                            Auto Inspect on Send All Calls? n
UNIVERSAL CALL ID
     Create Universal Call ID (UCID)? n
                                            UCID Network Node ID:
```

```
display system-parameters features
                                                                                                                        Page 6 of 16
                                             FEATURE-RELATED SYSTEM PARAMETERS
       Public Network Trunks on Conference Call: 5
Conference Parties with Public Network Trunks: 6
                                                                                                                             Auto Start? n
                                                                                                                    Auto Hold? n
Attendant Tone? y
Bridging Tone? n
 Conference Parties with Public Network Trunks: 6
Conference Parties without Public Network Trunks: 6
Night Service Disconnect Timer (seconds): 180
Short Interdigit Timer (seconds): 3
Unanswered DID Call Timer (seconds): 3
Line Intercept Tone Timer (seconds): 30
Long Hold Recall Timer (seconds): 8
Reset Shift Timer (seconds): 8
Station Call Transfer Recall Timer (seconds): 0
DID Busy Treatment: tone
                                                                                                                   Conference Tone? n
                                                                                                                     Intrusion Tone? n
                                                                                                           Mode Code Interface? n
                            Allow AAR/ARS Access from DID/DIOD? n
                                Allow ANI Restriction on AAR/ARS? n
           Use Trunk COR for Outgoing Trunk Disconnect? n
7405ND Numeric Terminal Display? n
                                                                                                                                    7434ND? y
DISTINCTIVE AUDIBLE ALERTING
                         Internal: 1 External: 2
                                                                           Priority: 3
                                           Attendant Originated Calls: external
```



```
display system-parameters features
FEATURE-RELATED SYSTEM PARAMETERS

CONFERENCE/TRANSFER

Abort Transfer? n
No Dial Tone Conferencing? n
Transfer Upon Hang-Up? n
No Hold Conference Upon Hang-Up? n
No Hold Conference Timeout: 60

ANALOG BUSY AUTO CALLBACK
Without Flash? n

Recording Delay Timer (msec): 500

Apply Ready Indication Tone To Which Parties In The Call? all
Interval For Applying Periodic Alerting Tone (seconds): 15

POSTED MESSAGE
Require Security Code? n
```

```
display system-parameters features
FEATURE-RELATED SYSTEM PARAMETERS

ISDN PARAMETERS

Send Non-ISDN Trunk Group Name as Connected Name? n
Display Connected Name/Number for ISDN DCS Calls? n
Send ISDN Trunk Group Name on Tandem Calls? n
Send Custom Messages Through QSIG? n

QSIG TSC Extension: 1111

MWI - Number of Digits Per Voice Mail Subscriber: 4
Feature Plus Ext: 1114
National CPN Prefix:
International CPN Prefix:
Pass Prefixed CPN to ASAI? n
Unknown Numbers Considered Internal for AUDIX? y
USNI Calling Name for Outgoing Calls? n
Path Replacement with Measurements? y
QSIG Path Replacement Extension: 1112
Path Replace While in Queue/Vectoring? n
```



```
display system-parameters features
FEATURE-RELATED SYSTEM PARAMETERS

CPN/ANI/ICLID PARAMETERS

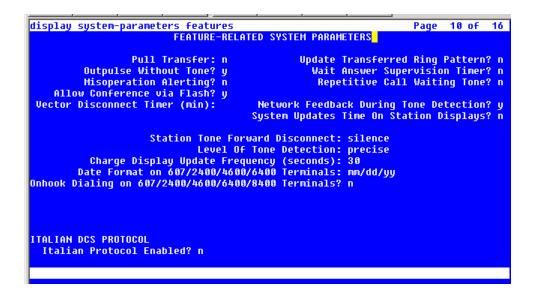
CPN/ANI/ICLID Replacement for Restricted Calls: Restricted
CPN/ANI/ICLID Replacement for Unavailable Calls: Unavailable

INTERNATIONAL CALL ROUTING PARAMETERS

Local Country Code:
International Access Code:

ENBLOC DIALING PARAMETERS

Enable Enbloc Dialing without ARS FAC? n
```





```
display system-parameters features
FEATURE-RELATED SYSTEM PARAMETERS

CALL CENTER SYSTEM PARAMETERS
EAS

Direct Agent Announcement Extension:

Delay:

VECTORING

Prompting Timeout (secs): 10

Reverse Star/Pound Digit For Collect Step? n

SERVICE OBSERVING
Service Observing: Warning Tone? y or Conference Tone? n

Service Observing Allowed with Exclusion? n
```

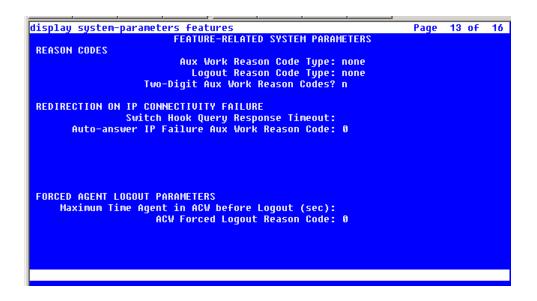
```
display system-parameters features
FEATURE-RELATED SYSTEM PARAMETERS

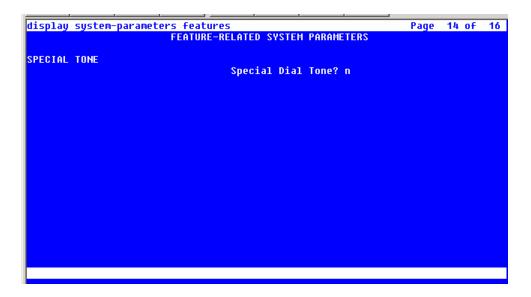
AGENT AND CALL SELECTION
MIA Across Splits or Skills? n
ACW Agents Considered Idle? y
Call Selection Measurement: current-wait-time
Service Level Supervisor Call Selection Override? n
Auto Reserve Agents: none

ASAI
Copy ASAI UUI During Conference/Transfer? n
Call Classification After Answer Supervision? n
Send UCID to ASAI? n

CALL MANAGEMENT SYSTEM
Adjunct CMS Release:
ACD Login Identification Length: 0
BCMS/UUStats LoginIDs? n
BCMS/UUStats Abandon Call Timer (seconds):
Validate BCMS/UUStats Login IDs? n
Clear VUStats Shift Data: on-login
Remove Inactive BCMS/UUStats Agents? n
```









```
display system-parameters features
                                                                   Page 15 of 16
                         FEATURE-RELATED SYSTEM PARAMETERS
AUTOMATIC EXCLUSION PARAMETERS
                        Automatic Exclusion by COS? n
                               Recall Rotary Digit: 2
         Duration of Call Timer Display (seconds): 3
WIRELESS PARAMETERS
  Radio Controllers with Download Server Permission (enter board location)
               2:
                           3:
                                      4:
IP PARAMETERS
                   Direct IP-IP Audio Connections? y
IP Audio Hairpinning? y
RUSSIAN MULTI-FREQUENCY PACKET SIGNALING
     T2 (Backward Signal) Activation Timer (secs): 20
```

```
Page 16 of 16
display system-parameters features
                                FEATURE-RELATED SYSTEM PARAMETERS
INTERCEPT TREATMENT PARAMETERS
         Invalid Number Dialed Intercept Treatment: tone
                         Invalid Number Dialed Display:
     Restricted Number Dialed Intercept Treatment: tone
Restricted Number Dialed Display:
    Intercept Treatment On Failed Trunk Transfers? n
WHISPER PAGE
    Whisper Page Tone Given To: all
DIGITAL STATION LINE APPEARANCE LED SETTINGS
            Station Putting Call On Hold: green
Station When Call is Active: steady
Other Stations When Call Is Put On Hold: green
Other Stations When Call Is Active: green
                                                                             wink
                                                                             wink
                                                       Ringing: green
              Idle: steady
Display Information With Bridged Call? n
Pickup On Transfer? y
```



Avaya S8500 System Parameters Customer-Options

```
display system-parameters customer-options
OPTIONAL FEATURES
                                                                                Page 1 of 10
      G3 Version: V13
                                                         RFA System ID (SID): 47411
RFA Module ID (MID): 1
         Location: 1
         Platform: 12
                                                                              USED
                                        Platform Maximum Ports: 3200
                                                                             63
                                     Maximum Stations: 59
Maximum XMOBILE Stations: 0
                                                                              22
                         Maximum Off-PBX Telephones - EC500: 5
                                                                              9
                         Maximum Off-PBX Telephones - OPS: 10
Maximum Off-PBX Telephones - SCCAN: 0
                                                              OPS: 10
                                                                             5
          (NOTE: You must logoff & login to effect the permission changes.)
```

```
display system-parameters customer-options
                                                                                         Page 2 of 10
                                            OPTIONAL FEATURES
IP PORT CAPACITIES
                                                                                       USED
                                                                                       15
2
                             Maximum Administered H.323 Trunks: 30
               Maximum Concurrently Registered IP Stations: 74
Maximum Concurrently Registered IP Stations: 74

Maximum Administered Remote Office Trunks: 800

Maximum Concurrently Registered Remote Office Stations: 2400

Maximum Concurrently Registered IP eCons: 0
                                                                                       6
6
                                                                                       9
   Max Concur Registered Unauthenticated H.323 Stations: 0
Maximum Video Capable H.323 Stations: 0
                          Maximum Video Capable IP Softphones: 0
Maximum Administered SIP Trunks: 10
                                                                                       10
    Maximum Number of DS1 Boards with Echo Cancellation: 50
                                        Maximum TN2501 VAL Boards: 1
                                                                                       0
               Maximum G250/G350/G700 VAL Sources: 10
Maximum TN2602 Boards with 80 VoIP Channels: 0
                                                                                       9
                                                                                       9
              Maximum TN2602 Boards with 320 VoIP Channels: 0
    Maximum Number of Expanded Meet-me Conference Ports: 0
            (NOTE: You must logoff & login to effect the permission changes.)
```



```
display system-parameters customer-options
                                                                                          Page 3 of 10
                                             OPTIONAL FEATURES
      Abbreviated Dialing Enhanced List? y
                                                                        Audible Message Waiting? y
           Access Security Gateway (ASG)? n Authorization Codes? y
Analog Trunk Incoming Call ID? y Backup Cluster Automatic Takeover? n
A/D Grp/Sys List Dialing Start at 01? y
Answer Supervision by Call Classifier? y
                                                                                         CAS Branch? n
CAS Main? n
                                                           Change COR by FAC? n
Computer Telephony Adjunct Links? n
Cvg Of Calls Redirected Off-net? y
              ARS/AAR Partitioning? y
ARS/AAR Dialing without FAC? n
              ASAI Link Core Capabilities? y
ASAI Link Plus Capabilities? n
                                                                                DCS (Basic)? ŷ
DCS Call Coverage? y
          Async. Transfer Mode (ATM) PNC? n
                                                                               DCS with Rerouting? y
   Async. Transfer Mode (ATM) Trunking? n
ATM WAN Spare Processor? n
                                                              Digital Loss Plan Modification? y
                                              ATMS? y
                                                                                              DS1 MSP? n
                         Attendant Vectoring? y
                                                                           DS1 Echo Cancellation? y
           (NOTE: You must logoff & login to effect the permission changes.)
```

```
display system-parameters customer-options
                                                                                                  Page 4 of 10
                                                 OPTIONAL FEATURES
                                                                        IP Stations? y
Internet Protocol (IP) PNC? y
ISDN Feature Plus? y
ISDN Network Call Redirection? n
ISDN-BRI Trunks? y
    Emergency Access to Attendant? y
Enable 'dadmin' Login? y
                 Enhanced Conferencing? y
                           Enhanced EC500? y
      Enterprise Survivable Server? n
           Enterprise Wide Licensing? n
ESS Administration? n
                                                                                                       ISDN-PRI? y
                                                                             Local Survivable Processor? n
                                                                                      Malicious Call Trace? y
               Extended Cvg/Fwd Admin? y
   External Device Alarm Admin? y
Five Port Networks Max Per MCC? n
                                                             Media Encryption Over IP? y
Mode Code for Centralized Voice Mail? y
    Five Port Networks Max rer Moo. H
Flexible Billing? n
Forced Entry of Account Codes? y Multimedia Appl. Server Interface (MASI)? n
Global Call Classification? y Multimedia Appl. Server Interface (MASI)? y
Multimedia Call Handling (Basic)? y
  Hospitality (G3V3 Enhancements)? y
                                                               Multimedia Call Handling (Enhanced)? y
                                   IP Trunks? y
                 IP Attendant Consoles? y
             (NOTE: You must logoff & login to effect the permission changes.)
```



```
5 of 10
display system-parameters customer-options
OPTIONAL FEATURES
                                                                           Page
                   Multinational Locations? n
                                                                Station and Trunk MSP? n
 Multiple Level Precedence & Preemption? n
Multiple Locations? y
                                                        Station as Virtual Extension? y
                                                     System Management Data Transfer? y
                                                         Tenant Partitioning? y
Terminal Trans. Init. (TTI)? y
Time of Day Routing? y
           Personal Station Access (PSA)? y
                            Posted Messages?
                            PNC Duplication? n
                                                       Uniform Dialing Plan? y
Usage Allocation Enhancements? y
                      Port Network Support? y
                                                         TN2501 VAL Maximum Capacity? y
                 Processor and System MSP? n
                        Private Networking?
                        Processor Ethernet? n
                                                                    Wideband Switching? y
                                                                               Wireless? y
                              Remote Office? y
           Restrict Call Forward Off Net? y
                     Secondary Data Module? y
         (NOTE: You must logoff & login to effect the permission changes.)
```

```
display system-parameters customer-options
                                                                                     Page 6 of 10
                                  CALL CENTER OPTIONAL FEATURES
                                   Call Center Release: 3.0
                                           ACD? U
                                                                                     Reason Codes? n
                                                         Service Level Maximizer? n
Service Observing (Basic)? y
Service Observing (Remote/By FAC)? y
                              BCMS (Basic)? y
            BCMS/VuStats Service Level? y
   BSR Local Treatment for IP & ISDN? n
                        Business Advocate? n
                                                                     Service Observing (VDNs)? n
Timed ACW? y
                          Call Work Codes? n
        Vectoring (Basic)? n
                                                                    Vectoring (Prompting)? y
Vectoring (G3V4 Enhanced)? n
                                                         Vectoring (3.0 Enhanced)? n
Vectoring (ANI/II-Digits Routing)? n
                                                         Vectoring (G3V4 Advanced Routing)? n
Vectoring (CINFO)? n
Vectoring (Best Service Routing)? n
             Least Occupied Agent? n
Lookahead Interflow (LAI)? n
Multiple Call Handling (On Request)? y
   Multiple Call Handling (Forced)? y
PASTE (Display PBX Data on Phone)? y
                                                                          Vectoring (Holidays)? y
Vectoring (Variables)? n
           (NOTE: You must logoff & login to effect the permission changes.)
```



```
display system-parameters customer-options Page 7 of 10
CALL CENTER OPTIONAL FEATURES

VDN of Origin Announcement? n VuStats? y
VDN Return Destination? n VuStats (G3V4 Enhanced)? y

Logged-In ACD Agents: 1000 0

Logged-In IP Softphone Agents: 74 0

(NOTE: You must logoff & login to effect the permission changes.)
```

```
display system-parameters customer-options

QSIG OPTIONAL FEATURES

Basic Call Setup? y
Basic Supplementary Services? y
Centralized Attendant? y
Interworking with DCS? y
Supplementary Services with Rerouting? y
Transfer into QSIG Voice Mail? y
Value-Added (VALV)? y

(NOTE: You must logoff & login to effect the permission changes.)
```





Avaya S8500 System Parameters IP-Options

```
display system-parameters ip-options IP-OPTIONS SYSTEM PARAMETERS

IP MEDIA PACKET PERFORMANCE THRESHOLDS
Roundtrip Propagation Delay (ms) High: 860 Low: 460
Packet Loss (%) High: 40 Low: 15
Ping Test Interval (sec): 26
Number of Pings Per Measurement Interval: 16

RTCP MONITOR SERVER
Default Server IP Address: . . .
Default Server Port: 5805
Default RTCP Report Period(secs): 5

AUTOMATIC TRACE ROUTE ON
Link Failure? y

H.248 MEDIA GATEWAY
H.323 IP ENDPOINT
Link Loss Delay Timer (min): 5
Primary Search Time (sec): 75
Periodic Registration Timer (min): 20
```

```
display system-parameters ip-options Page 2 of 2
IP-OPTIONS SYSTEM PARAMETERS

Always use G.711 (30ms, no SS) for intra-switch Music-On-Hold? n

IP DTMF TRANSMISSION MODE
Intra-System IP DTMF Transmission Mode: rtp-payload
Inter-System IP DTMF: See Signaling Group Forms
```



Avaya S8500 System Parameters IP-Server Interface

```
display system-parameters ipserver-interface
IP SERVER INTERFACE (IPSI) SYSTEM PARAMETERS

SERVER INFORMATION

IPSI Host Name Prefix:
Primary Control Subnet Address: 172. 20.213. 0*
Secondary Control Subnet Address: . . .

OPTIONS

Switch Identifier: A
IPSI Control of Port Networks: enabled

NOTE: * indicates data changed on the Server

Command:
```

Avaya S8500 System Parameters Coverage-Forwarding



display system-parameters coverage-forwarding Page 2 of 2
SYSTEM PARAMETERS CALL COVERAGE / CALL FORWARDING

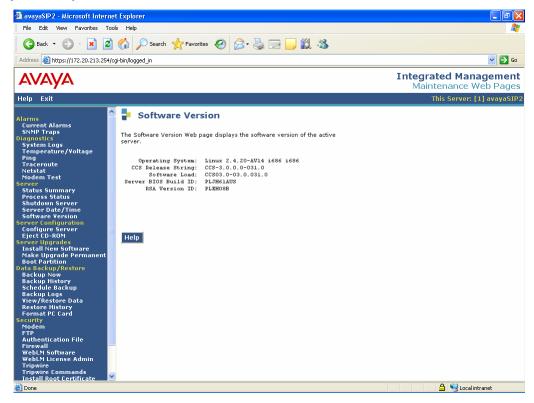
COVERAGE OF CALLS REDIRECTED OFF-NET (CCRON)

Coverage Of Calls Redirected Off-Net Enabled? n



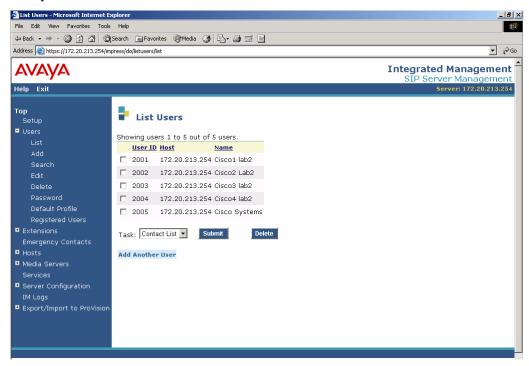
Avaya SIP Proxy Configuration

Avaya SIP Proxy Software Version

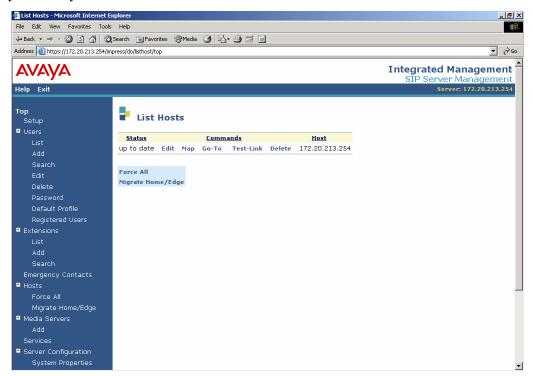




Avaya SIP Proxy List Users

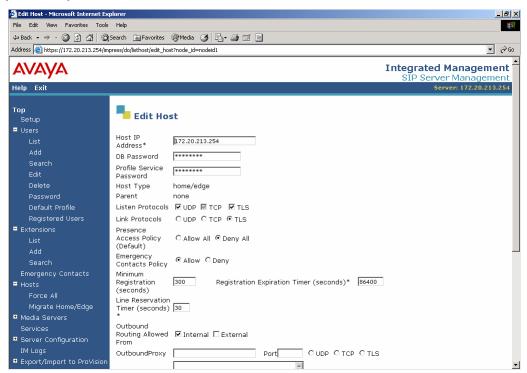


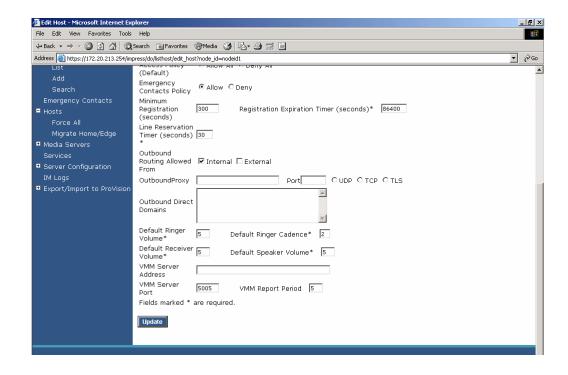
Avaya SIP Proxy List Hosts





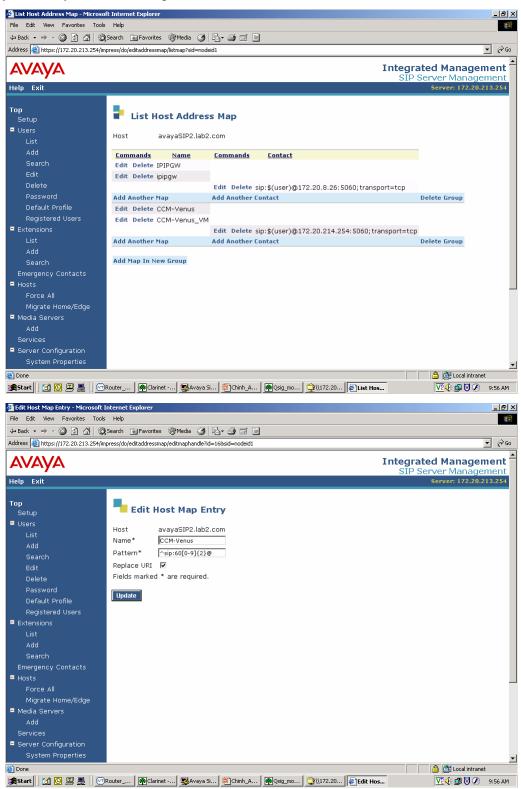
Avaya SIP Proxy Edit Host



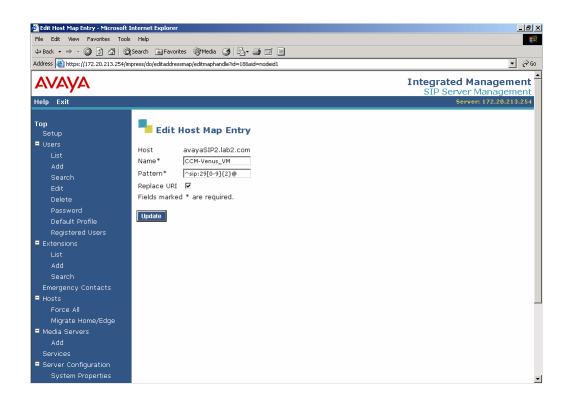


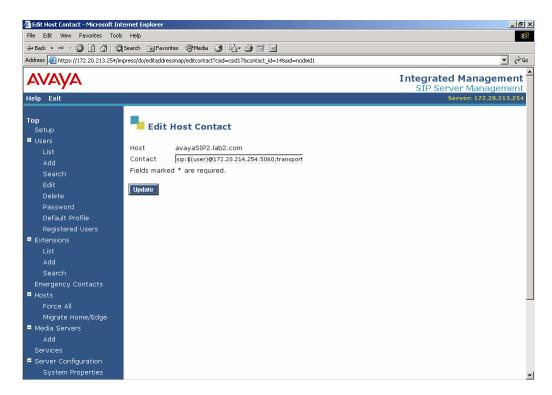


Avaya SIP Proxy Host Address Maps



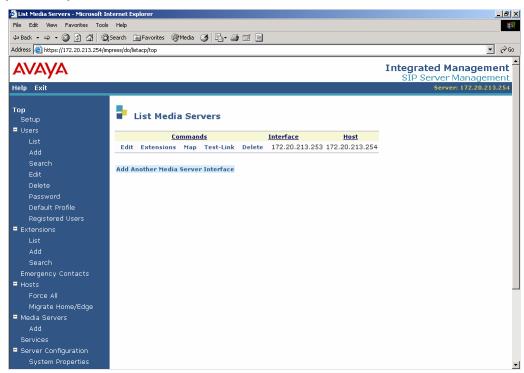


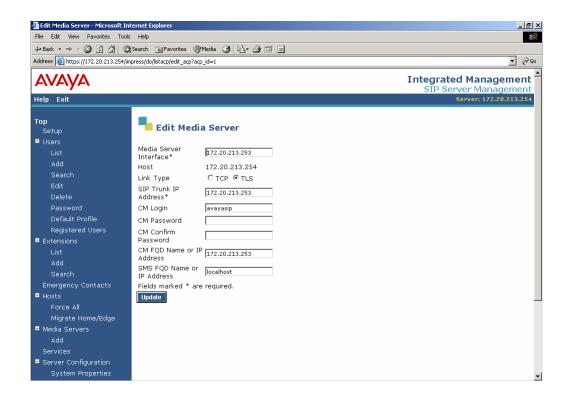






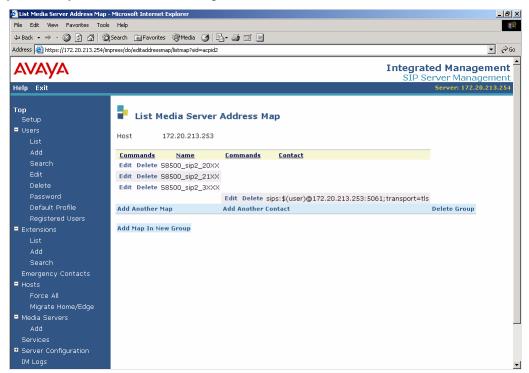
Avaya SIP Proxy Media Server List

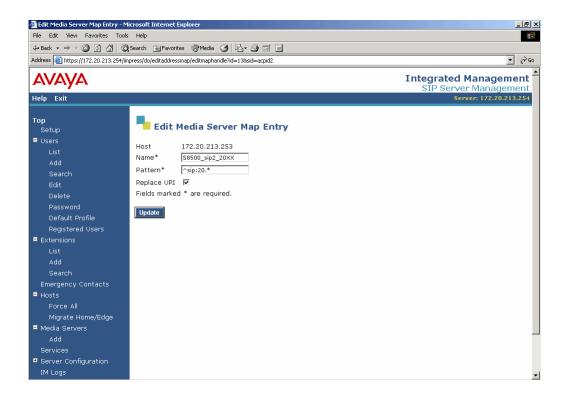




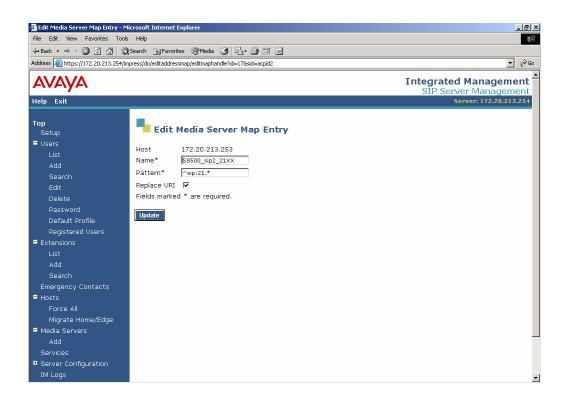


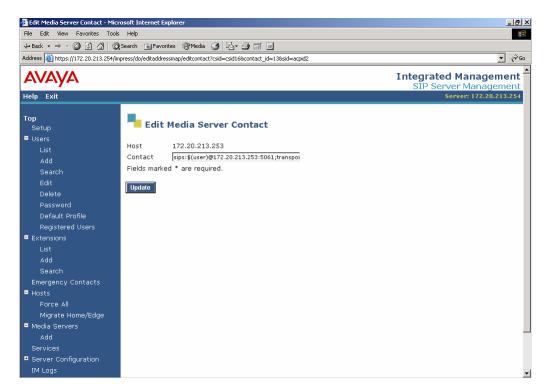
Avaya SIP Proxy Media Server Address Map





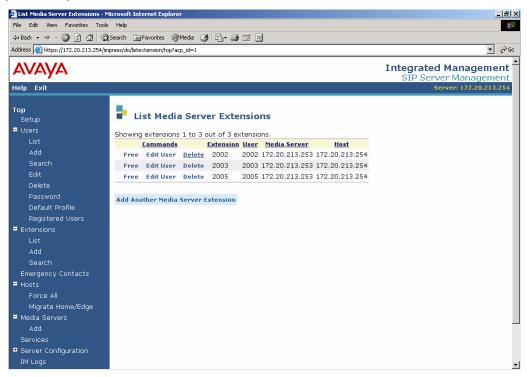


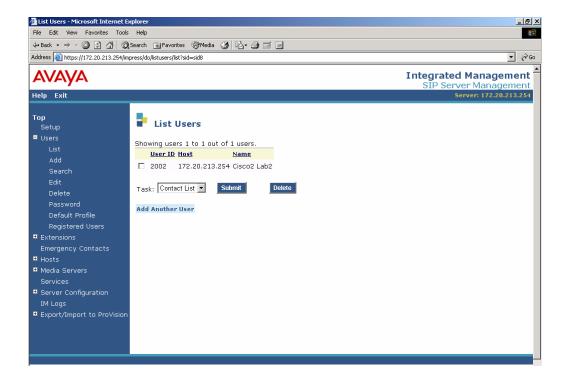




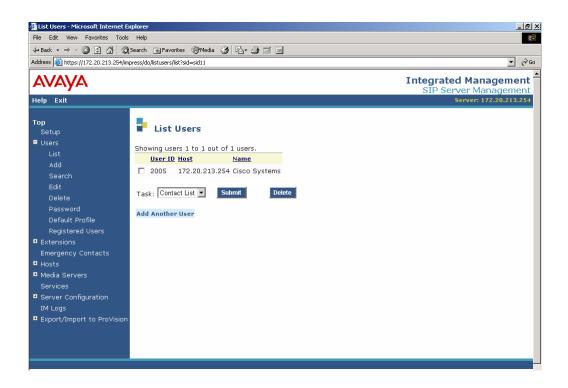


Avaya SIP Proxy Media Server Extensions List

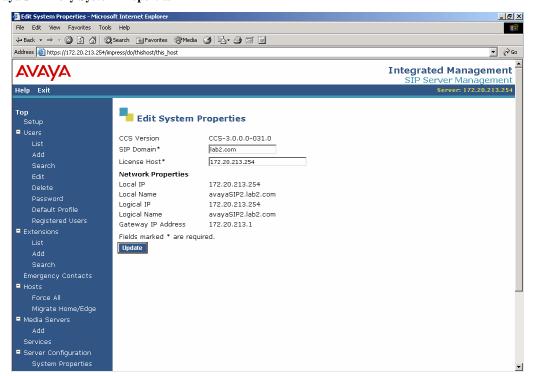








Avaya SIP Proxy System Properties





Octel 200 Configuration

Octel 200 Software Version:

------ SYSTEM SOFTWARE RELEASE S.4.1.0-2 (01/26/01) ------

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TUE 05/09 10:17:33 2006 CISCO ID:220749 S/N:220749 PBX:85

(Modem enabled) (Telnet enabled) Last Logon: 05/09 10:06

Octel 200 System Parameters:

SYSTEM PARAMETER TABLE:

FRI 05/05/2006 14:58:37 CISCO ID:220749 S/N:220749 PBX:23

| INDEX | VALUE | (LST/MOD) | PARAMETER NAME: |
|-------|-----------|-----------|---|
| 1 | CISCO | L/M | INSTALLATION NAME |
| 2 | 220749 | L/M | SYSTEM ID NUMBER |
| 3 | ATT | L/M | PBX TYPE |
| | SYSTEM-75 | | PBX MODEL |
| 4 | 4 | L | VOICE PORTS USED |
| | 0 | | FAX PORTS USED |
| 7 | 3 | L | REPROMPT LIMIT |
| 8 | 4 | L/M | BACKUP/GO AHEAD TIME (BLOCKS) |
| 9 | 750 | L/M | FLASH TIME (MSEC.) |
| 12 | 255 | L | INSTALL QUESTION NUMBER |
| 13 | FE | L/M | TRANSFER INITIATE CODE |
| | FDF | | RE-CONNECT CODE AFTER NO ANSWER |
| | FDF | | RE-CONNECT CODE AFTER BUSY |
| | NONE | | RE-CONNECT CODE AFTER FAST BUSY |
| | NONE | | TRANSFER COMPLETE CODE |
| 16 | FE | L/M | ALTERNATE TRANSFER INITIATE CODE |
| | FDF | | ALTERNATE RE-CONNECT CODE AFTER NO ANSWER |
| | FDF | | ALTERNATE RE-CONNECT CODE AFTER BUSY |
| | NONE | | ALTERNATE RE-CONNECT CODE AFTER FAST BUSY |
| | NONE | | ALTERNATE TRANSFER COMPLETE CODE |
| 19 | NO | L/M | MAILBOX NUMBERS MATCH USER EXTENSIONS |
| 22 | 8 | L/M | DEFAULT MESSAGE WAITING START HOUR |
| 23 | 18 | L/M | DEFAULT MESSAGE WAITING END HOUR |
| | | | |



| 25 | 15 | L/M | DEF MSG WTG RETRY PERIOD (MINUTES) |
|----|-------|-----|---|
| 26 | NO | L/M | DOUBLE-INTERRUPTED RINGBACK |
| 28 | 500 | L/M | "D" CHAR DELAY TIME. (MSEC.) |
| 31 | NONE | L/M | ALARM NUMBER |
| 32 | 5 | L/M | MAXIMUM MESSAGE LENGTH (MINUTES) |
| 33 | NONE | L/M | PBX INITIALIZE CODE |
| 43 | 1 | L/M | PERSONAL GREETING 1=NOCALL 2=CALL FIRST |
| 45 | NONE | L/M | SYSTEM-RELOAD FORWARD STRING |
| 46 | NONE | L/M | SYSTEM-RELOAD CANCEL-FORWARD STRING |
| 51 | NO | L/M | RS-232 INTEGRATED WITH PBX |
| 56 | 0 | L/M | NUMBER OF TRANSFER RETRIES IF FLASH FAILS |
| 58 | NO | L/M | DEV: DEVICE SUPPORT |
| | NO | | MASTER SYSTEM |
| 59 | NONE | L/M | DID: SYSTEM PILOT EXTENSION NUMBER |
| 60 | NONE | L/M | DID: ATTENDANT EXTENSION NUMBER |
| 61 | 3 | L/M | DID: NUMBER OF DIGITS EXPECTED FROM CO |
| 62 | 18:00 | L/M | NET: NIGHT DELIVERY START TIME |
| 63 | 06:00 | L/M | NET: NIGHT DELIVERY END TIME |
| 64 | 30 | L/M | NET: MAX BEEPS FOR MULTI-CABINET CONNECT |
| 65 | 20 | L/M | NET: MULTI-CABINET DELIVERY ATTEMPT LIMIT |
| 66 | 3 | L/M | NET: MULTI-CAB. DELAY BEFORE RETRY (MIN.) |
| 67 | 30 | L/M | NET: MAX BEEPS FOR REMOTE CONNECT |
| 68 | 5 | L/M | NET: REMOTE DELIVERY ATTEMPT LIMIT |
| 69 | 1 | L/M | NET: REMOTE DELAY BEFORE RETRY (MIN.) |
| 70 | IMMED | L/M | NET: MESSAGE DELIVERY MODE DEFAULT |
| 71 | 0 | L | TONE-DETECT THRESHOLD |
| 72 | 55 | L/M | LINES-PER-PAGE FOR REPORTS |
| 73 | 4 | L/M | MIN LENGTH FOR MSG TO BE SENT (BLOCKS) |
| 74 | 5 | L/M | INITIAL SILENCE MAX SEC. (QCK/SCRPTD) |
| 75 | 4 | L/M | SUBSEQUENT SILENCE MAX SEC. (QCK/SCRPTD) |
| 76 | 3 | L/M | NOVICE PROMPT KEYPAD-COMMAND USAGE LIMIT |
| 77 | NO | L/M | PBX PROVIDES MOMENTARY DISCONNECT |
| 78 | YES | L | PBX PROVIDES STUTTER DIAL TONE |
| 79 | NONE | L/M | LAMP MW: "ON" PRE-EXTENSION DIGITS |
| 80 | NONE | L/M | LAMP MW: "ON" POST-EXTENSION DIGITS |
| | | | |



| 81 | NONE | L/M | LAMP MW: "OFF" PRE-EXTENSION DIGITS |
|-----|----------|-----|--|
| 82 | NONE | L/M | LAMP MW: "OFF" POST-EXTENSION DIGITS |
| 83 | NO | L/M | LAMP MW: LIGHT LAMP FOR EACH NEW MSG |
| 84 | NO | L/M | LAMP MW: CALL EXTN BEFORE LIGHTING LAMP |
| 85 | NONE | L/M | RECONNECT CODE AFTER 3RD PARTY HUNG-UP |
| 86 | NO | L/M | CALLERS GET MUSIC-ON-HOLD |
| 88 | NO | L/M | NET: INITIAL-DIGITS INCLUDE MBOX 1ST DIG |
| 89 | NO | L/M | NET: USE TRUNK RECONNECT CODES |
| 90 | NONE | L/M | NET: RECONNECT CODE AFTER TRUNK ACCESS |
| 91 | NONE | L/M | NET: RECONNECT CODE AFTER 3RD PARTY HANG |
| 92 | NONE | L/M | NET: COMPLETE TRANSFER TO TRUNK |
| 95 | NO | L/M | PBX ACCEPTS DTMF DIGITS ON DID TRUNKS |
| 96 | 60 | L/M | MOVE BACKWARD DURING GREETING (BLOCKS) |
| 97 | 120 | L/M | MOVE FORWARD DURING GREETING (BLOCKS) |
| 98 | ENGL USV | L/M | DEFAULT LANGUAGE |
| 99 | 0 | L/M | RINGBACKS BEFORE ANSWERING CX PORT |
| 100 | 0 | L/M | RINGBACKS BEFORE ANSWERING MX PORT |
| 101 | 0 | L | DELAY BEFORE TURN ON DTMF REPORTING (MSEC) |
| 102 | NONE | L/M | PAGER ACCESS DIGITS |
| 103 | 3 | L/M | NET: REMOTE DELAY BEFORE DTMF SIGNALING |
| 104 | 0 | L/M | NET: MULTI-CAB DELAY BEFORE DTMF SIGNALING |
| 105 | NONE | L/M | DEFAULT SECURITY CODE FOR MAILBOX LOGON |
| 106 | 0 | L/M | LAMP MW: PORT FOR LAMP MESSAGE WAITING |
| 107 | NO | L | PBX NEVER GIVES PARTIAL RINGBACK OR BUSY |
| 108 | 100 | L/M | DISK USAGE THRESHOLD BEFORE ALARM NOTIF. |
| 111 | NO | L/M | DIAL EXTENSION AFTER RECONNECT CODE |
| 112 | NO | L/M | SEND DTMF A ON CX/MX PORTS |
| 113 | 120 | L/M | MAX SIL. FOR SPECIAL PURPOSE GREETINGS (SEC) |
| 114 | NO | L/M | DEV: DELAY BEFORE INTERCEPTING CALLS |
| 115 | YES | L/M | SYSTEM SAYS ON-THE-PHONE INSTEAD OF IS-BUSY |
| 116 | YES | L/M | INTEGRATION ACTIVE |
| 117 | 0 | L/M | RINGBACKS BEFORE ANSWERING AX PORT |
| 118 | 0 | L/M | E&M: LENGTH OF RECORD (NETWORK) |
| 119 | 0 | L/M | E&M: NUM OF EXTN DIGITS EXPECTED (DIRECT) |
| 120 | 0 | L/M | E&M: NUM OF EXTN DIGITS EXPECTED (NETWORK) |
| | | | |



| 121 NONE L/M E&M: SYSTEM PILOT EXTENSION NUMBER 122 NONE L/M E&M: SYSTEM PILOT EXTENSION NUMBER 123 NONE L/M E&M: ATTENDANT EXTENSION NUMBER (124 NONE L/M E&M: ATTENDANT EXTENSION NUMBER (125 0 L/M E&M: NUM OF DIGITS BEFORE EXTN (NET 126 0 L/M E&M: NUM OF DIGS BEFORE LOC. CODE (NOTE) 127 NONE L/M E&M: LOCATION CODE 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION 134 NO L/M IGNORE DTMFS AFTER ENTERING EXTENSION | |
|--|-------------|
| 123 NONE L/M E&M: ATTENDANT EXTENSION NUMBER (124 NONE L/M E&M: ATTENDANT EXTENSION NUMBER (125 0 L/M E&M: NUM OF DIGITS BEFORE EXTN (NET) 126 0 L/M E&M: NUM OF DIGS BEFORE LOC. CODE (127 NONE L/M E&M: LOCATION CODE 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | R (DIRECT) |
| 124 NONE L/M E&M: ATTENDANT EXTENSION NUMBER (125 0 L/M E&M: NUM OF DIGITS BEFORE EXTN (NET 126 0 L/M E&M: NUM OF DIGS BEFORE LOC. CODE (NONE L/M E&M: LOCATION CODE 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | R (NETWORK) |
| 125 0 L/M E&M: NUM OF DIGITS BEFORE EXTN (NET 126 0 L/M E&M: NUM OF DIGS BEFORE LOC. CODE (NET 127 NONE L/M E&M: LOCATION CODE 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | (DIRECT) |
| 126 0 L/M E&M: NUM OF DIGS BEFORE LOC. CODE (No. 127 NONE L/M E&M: LOCATION CODE 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | (NETWORK) |
| 127 NONE L/M E&M: LOCATION CODE 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | WORK) |
| 128 NO L/M SEND MBX TO PBX RATHER THAN EXTEN 129 32 L/M NET: LIMIT ON LINE QUALITY TEST 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | NETWORK) |
| 12932L/MNET: LIMIT ON LINE QUALITY TEST130NOL/MSEND DTMF A FOR FORWARDED CALLS131NOL/MSPEAK "DIAL ZERO FOR ASSISTANCE"133NONEL/MINTEGRATION CARD EXTENSION | |
| 130 NO L/M SEND DTMF A FOR FORWARDED CALLS 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | SION |
| 131 NO L/M SPEAK "DIAL ZERO FOR ASSISTANCE" 133 NONE L/M INTEGRATION CARD EXTENSION | |
| 133 NONE L/M INTEGRATION CARD EXTENSION | |
| | |
| 134 NO L/M IGNORE DTMFS AFTER ENTERING EXTENS | |
| | SION NUMBER |
| 140 2 L/M MAXIMUM FORWARDING DEPTH | |
| 141 NO L/M CAN USE 0 AS WILDCARD IN NAME | |
| 142 3 L/M MINIMUM LETTERS REQUIRED FOR NAME | Ε |
| 143 1 L/M 5000UI: GROUP CODE (GRP LST) FIRST DIG | HT |
| 144 0 L/M MINIMUM LENGTH FOR SECURITY CODES | 3 |
| 147 NONE L/M NAMES DIRECTORY MAILBOX | |
| 149 NO L/M ALLOW BLIND TRANSFER TO PERSONAL A | ASSISTANCE |
| 150 NO L/M REMOVE "CONNECT" FOR ANNOUNCE TO | INTERCEPT |
| 151 NO L/M REMOVE "STATUS" FOR ANNOUNCE TO IN | NTERCEPT |
| 152 NO L/M NET: REMOVE NETWORK PROMPT FOR QU | JICK LOGON |
| 153 NO L/M DELAY ON CX PORT BEFORE PLAYING GR | REETING |
| 154 NO L/M REMOVE "STATUS" AFTER CALL FIRST GR | REETING |
| 155 0 L/M IGNORE LINE DROP AFTER CALL START (S | SECS/10) |
| 157 YES L/M SPEAK DISCRETE VERSIONS OF NUMBERS | \$ 21-59 |
| 158 NO L/M OFFSITE MW CALL LIMIT ABSOLUTE NOT | DAILY |
| 159 NO L/M DETECT CALL PROGRESS ON EXTERNAL O | CALLS |
| 160 NO L/M QUICK BUSY DETECT | |
| 161 0 L/M MODEM ACCESS PORT (0 = ALL PORTS OK | (2) |
| 162 40 L/M VOICE SECTORS TO DELETE ON BUSY DE | TECT |
| 163 24 L/M VOICE SECTORS TO DELETE ON FAST BUS | SY DETECT |
| 164 NO L/M USE 24-HOUR CLOCK FOR REPORTS | |
| 166 NO L/M LAMP MW: TURN OFF ONLY IF NO NEW M | ESSAGES |



| 167 | YES | L/M | SPEAK AUTO COPIED(FOLLOW-ME-FORWARD) MESSAGE PROMPT |
|-----|------------|-----|---|
| 168 | 0 | L | TALK-DETECT THRESHOLD |
| 169 | LINEAR | L/M | OUTCALL PORT SELECTION METHOD |
| 170 | NO | L/M | INTEGRATION LAMP ON/OFF LINKS MUST MATCH |
| 176 | 0 | L/M | FIXED LENGTH FOR DTMFINT SOURCE FIELDS |
| 177 | 0 | L/M | FIXED LENGTH FOR DTMFINT DEST FIELDS |
| 178 | 0 | L/M | FIXED LENGTH FOR DTMFINT TRUNK FIELDS |
| 179 | 0 | L/M | FIXED LENGTH FOR DTMFINT UNUSED FIELDS |
| 180 | 7 BITS E/P | L/M | RS-232 INTEGRATED WITH PBX |
| 181 | 225 | L/M | NET2: MAX PROTOCOL 2 MSG LENGTH (BLOCKS) |
| 182 | 0 | L/M | APRG: DEF THRESHOLD (DAYS) FOR SAVED MSGS |
| 183 | 0 | L/M | APRG: DEF THRESHOLD (DAYS) FOR NEW MSGS |
| 184 | 0 | L/M | APRG: DEF THRESHOLD (DAYS) FOR NET NAMES |
| 185 | NO | L/M | MANDATORY MAILBOX SECURITY CODE |
| 187 | 1 | L/M | NET: MAXIMUM SIMULTANEOUS NETWORK OUTCALLS |
| 188 | NO | L/M | DISABLE SILENCE SUPPRESSION |
| 189 | 0 | L | MIN. DTMF DETECT ACCEPTANCE DURATION (MSEC) |
| 190 | NO | L/M | USE VOICE MAIL FIELD ON NEC PHONE |
| 191 | NONE | L/M | HOUR TO REACTIVATE MSG WTG INDICATORS |
| 192 | 10 | L/M | NET4: DELAY BEFORE STARTING TO SEND DTMF-C |
| 193 | 7 | L/M | NET4: MAXIMUM NUMBER OF BEEPS FOR CONNECTION |
| 194 | 20 | L/M | NET4: REMOTE DELIVERY ATTEMPT LIMIT |
| 195 | 10 | L/M | NET4: REMOTE DELAY BETWEEN RETRIES |
| 196 | YES | L/M | NET4: ACCEPT MSGS FROM SYSTEMS NOT CONFIG'D |
| 198 | 1 | L/M | PCM ENCODING FOR SYSTEM (0=MU-LAW, 1=A-LAW) |
| 199 | NONE | L/M | NET: CREATOR MBX FOR RETURNED MESSAGES |
| 200 | NO | L/M | NET: PLAY PROMPT DURING NETWORK OUTCALL |
| 201 | NO | L/M | GIVE RECORD MESSAGE LIMIT WARNING |
| 202 | 2 | L/M | FAX: NUM FREE FAX CHANNELS TO MAKE FAX CALLS |
| 203 | 10 | L/M | FAX: NUMBER OF MINUTES FOR FAX CALL RETRIES |
| 204 | NO | L/M | FAX: ENABLE CALL-PROGRESS-TONE DETECTION |
| 205 | 0 | L/M | COUNTRY CODE FOR LSP PARAMETERS |
| 206 | NO | L/M | HANGUP ON GLARE DETECTION |
| 207 | NO | L/M | NO TONE DETECT MEANS BAD LINE INSTEAD OF ANS |
| 208 | | L/M | FAX SYSTEM ID |
| | | | |



| 209 | 6 | L/M | FAX: DEFAULT MAX NUM OF FAX DELIV ATTEMPTS |
|-----|-----------|-----|--|
| 212 | 0 | L/M | USER I.D. LENGTH |
| 215 | OFF | L/M | DEFAULT NAMESCAN TOGGLE |
| 219 | NO | L/M | GIVE CALLERS "MORE OPTIONS" PROMPT |
| 220 | NO | L/M | ENABLE DOUBLE STAR TO DROP CALL |
| 222 | NONE | L/M | DEFAULT SECURITY CODE FOR USER I.D. LOGON |
| 223 | NO | L/M | DISABLE ###5 ACCESS TO THE MODEM |
| 224 | NO | L/M | PBX USES NEC LONG EXTENSION FORMAT |
| 225 | NO | L/M | DNET: DIGITAL NETWORKING ENABLED |
| 226 | 0 | L | RESERVED |
| 227 | 0 | L | RESERVED |
| 228 | 0 | L | RESERVED |
| 229 | NO | L/M | USE EXTENSION FOR INTEGRATED CALLS |
| 230 | NO | L/M | USE EXTENSION FOR AUTO-ATTENDANT CALLS |
| 231 | NO | L | LAN: RESTART FLAG |
| 232 | UNLIMITED | L | RESERVED |
| 233 | NONE | L/M | LAN: NAME SERVER IP ADDRESS |
| 234 | NONE | L/M | LAN: GATEWAY IP ADDRESS |
| 235 | NONE | L/M | LAN: SNMP MANAGER IP ADDRESS |
| 236 | NONE | L/M | LAN: SNMP MANAGER HOST ASCII NAME |
| 237 | NONE | L/M | LAN: SNMP LOCATION OF VOICE MAIL CABINET |
| 238 | NONE | L/M | LAN: SNMP NAME OF SYSTEM CONTACT |
| 239 | NONE | L/M | LAN: SNMP READ COMMUNITY |
| 240 | NONE | L/M | LAN: SNMP READ WRITE COMMUNITY |
| 241 | 5 | L | DNET: MSG TANDEM LIMIT BETWEEN SYSTEMS |
| 242 | NO | L/M | LAN: SEND TRAP TO THE SNMP MANAGER ON ALARM |
| 243 | NONE | L/M | INTEGRATION: ROLM 9006 PICKUP CODE |
| 244 | NO | L/M | FLASH MEANS EARTH-RECALL |
| 245 | NO | L/M | BLOCK DEFAULT TO ASSIST. ON FORWARDED CALLS |
| 246 | NO | L | DELETE "EXTENSION" PROMPT FROM USER STATUS |
| 247 | YES | L/M | OCTEL NETWORKING: ALLOW CASUAL MESSAGE RECEIVE |
| 248 | 8001 | L/M | OCTEL NETWORKING: SYSTEM MAILBOX |
| 249 | 10 | L/M | OCTEL NETWORKING: WAKEUP ATTEMPT LIMIT |
| 250 | NO | L/M | OCTEL NETWORKING: RETRIEVE NAMES ONLY AT NIGHT |
| 251 | YES | L/M | OCTEL NETWORKING: ENABLE ASCII NAME VERIFICATION |
| | | | |



| 252 | 60 | L/M | OCTEL NETWORKING: MAX FAX TRANSMIT TIME |
|-----|------|-----|--|
| 253 | NO | L/M | DNET: SWITCH TO ANALOG STANDBY |
| 254 | NONE | L/M | DIGITAL TRANSFER INITIATE CODE |
| | NONE | | DIGITAL RE-CONNECT CODE |
| | NONE | | DIGITAL TRANSFER COMPLETE CODE |
| 255 | NO | L/M | USE ACI FOR CALL ANSWERING INTERFACE |
| 256 | 0 | L/M | ACI: EASY ACCESS LOGON DIGIT |
| 257 | NO | L/M | DNET: ENABLE ASCII NAME VERIFICATION |
| 258 | NO | L/M | ENABLE POUND KEY TO OVERRIDE GREETING |
| 259 | NONE | L/M | DIGIT STRING AT END OF OFFSITE/PAGER DIGITS |
| 260 | 0 | L | TONE DETECTORS MASK |
| 261 | 10 | L/M | DNET: ANALOG STANDBY MESSAGE TRANSFER LIMIT |
| 262 | YES | L/M | ENABLE SPEAKING FAX ID STRING TO CALLER |
| 264 | NO | L/M | DNET: HIGH SPEED LINK MONITOR ENABLED |
| 265 | 9 | L/M | DNET: HIGH SPEED LINK MONITOR START HOUR |
| 266 | 9 | L/M | DNET: HIGH SPEED LINK MONITOR END HOUR |
| 267 | 10 | L/M | DNET: MAXIMUM CONTINUOUS DOWNTIME |
| 268 | 60 | L/M | DNET: MAXIMUM CUMULATIVE DOWNTIME |
| 269 | 5 | L/M | DNET: MAXIMUM LINK FAILURE COUNT |
| 270 | 0 | L | MINIMUM NUMBER OF FREE PORTS FOR OUTCALL/NETWORK IN-CALL |
| 271 | 1200 | L/M | RS232 INTEGRATION BAUD RATE |
| 272 | NO | L/M | IS INITIAL DIALTONE EXPECTED STUTTERED |
| 274 | NO | L/M | NET: SPEAK RECORDED LOCATION NAME |
| 275 | YES | L/M | ENABLE UNINTERRUPTIBLE SDL/PDL NAME PLAY |
| 276 | OFF | L/M | NAMESEND: DELIVERY MODE |
| 277 | 10 | L/M | NAMESEND: MAXIMUM NAMES TO SEND IN A SESSION |
| 278 | NO | L/M | NAMESEND: ENABLE BY DEFAULT FOR NEW USERS |
| 279 | 10 | L/M | NAMESEND: PURGE THRESHOLD |
| 280 | NO | L/M | NAMESEND: ENABLE AUTOMATIC NAME PROPAGATION |
| 281 | NO | L/M | GWL: GATEWAY LINK INSTALLED |
| 282 | NONE | L/M | GWL: EXTENDED MAILBOX LIST FOR MESSAGE POOL |
| 283 | NO | L/M | GWL: BK/FW/PS DURING SPEAK |
| 284 | NONE | L/M | GWL: GENERIC ERROR MAILBOX |
| 285 | NONE | L/M | GWL: GATEWAY DOWN ERROR MAILBOX |
| 286 | 3 | L/M | TERMINAL INACTIVITY LOGOUT TIMER (MINUTES) |
| | | | |



| 287 | NO | L/M | ACTIVATE RANDOM SECURITY CODE GENERATION |
|-----|-------|-----|---|
| 288 | ##### | L/M | ISDN/DPNSS: DELIMITER STRING FOR PAGER OUTCALLS |
| 289 | A6 | L/M | DTMF CPT DIGITS FOR INTERNAL BUSY |
| | A6 | | DTMF CPT DIGITS FOR INTERNAL FASTBUSY |
| | A2 | | DTMF CPT DIGITS FOR INTERNAL RING |
| | A5 | | DTMF CPT DIGITS FOR INTERNAL ANS |
| 290 | A6 | L/M | DTMF CPT DIGITS FOR EXTERNAL BUSY |
| | A2 | | DTMF CPT DIGITS FOR EXTERNAL RING |
| | A5 | | DTMF CPT DIGITS FOR EXTERNAL ANS |
| 291 | A1 | L/M | DTMF CPT DIGITS FOR DIAL TONE INDICATION |
| 292 | A6 | L/M | DTMF CPT DIGITS FOR HANG-UP NOTIFICATION |
| 294 | 0 | L/M | MIN. PRIORITY LEVEL FOR NAMES PROPAGATION |
| 295 | NO | L/M | BLOCK MWI/MWN ON BROADCAST MESSAGES |
| 296 | NO | L/M | ACD LOGIN ENABLED FOR CALL PROCESSING PORTS. |
| 297 | NO | L/M | TELNET: ENABLE TELNET SERVER |
| 298 | YES | L | ENABLE PATCHING AT MAINTENANCE LEVEL |
| 300 | 0 | L/M | TELNET: TELNET SERVER PORT NUMBER |
| 304 | NONE | L/M | DPNSS: MESSAGE WAITING INDICATION ON STRING |
| 305 | NONE | L/M | DPNSS: MESSAGE WAITING INDICATION OFF STRING |
| 306 | 9000 | L/M | DPNSS/QSIG: VOICE MAIL ORIGINATING LINE ID |
| 307 | NONE | L/M | ISDN: MWI CONTROL EXTENSION |
| 309 | NONE | L/M | ENHANCED LAMP MWI: "ON" PRE-EXTN DIGITS |
| 310 | NONE | L/M | ENHANCED LAMP MWI: "ON" POST-EXTN DIGITS |
| 311 | NONE | L/M | ENHANCED LAMP MWI: "OFF" PRE-EXTN DIGITS |
| 312 | NONE | L/M | ENHANCED LAMP MWI: "OFF" POST-EXTN DIGITS |
| 313 | 5050 | L/M | DPNSS/QSIG: VOICE MAIL DESTINATION ADDRESS |
| 314 | NO | L/M | DPNSS: ALLOW NON IVM USERS TO SET DIVERT TO VOICEMAIL |
| 315 | NO | L/M | DPNSS: ALLOW NON IVM USERS TO FORWARD TO VOICEMAIL |
| 316 | NONE | L/M | DIAL BY NAME HELP MAILBOX |
| | | | |
| | | | |
| 317 | 75 | L/M | % of MAX NUMBER of MSGS for ALMOST FULL MBX Cond |
| 318 | NO | L | TELNET: Enable Telnet client access through MODEM |
| | | | |
| 319 | NONE | L/M | Aria TUI: System Broadcast Mailbox |



Aria TUI: Play initial entry tutorial 320 YES L/M AUTO 321 L Ethernet Controller Speed Select Octel 200 Slot 1 E1 Q.SIG to the S8500 PBX SLOTS TABLE: SLOT CARD TYPE PORT EXTENSION# COS MODE OUTCALL TEST A/B SYS 1 DTC17-QSIG 1 254 AX NO NO B 1 2 254 AX NO NO B 2 LSP table: QSIG_SLV PRIMARY SYNC RECEIVER OF CLOCK Octel 200 Class of Service for the user mailbox .l profile COS:20 _____ COS 20 (MAILBOX COS) 74 ATTRIBUTE 7 This user may send a PRIVATE message. 9 LAMP or DISPLAY PHONE message waiting. 10 May RECORD NAMES for all mailboxes. 12 This user may REPLY to ADDITIONAL addresses. 15 Transfer to a RINGING EXTENSION. 17 May send NETWORK messages IMMEDIATELY.

19 May request a RETURN RECEIPT message.

43 May RE-RECORD message after a busy or unanswered call.



61

This mailbox may send FUTURE DELIVERY messages.

| 64 | This user may ERASE a message during ADDRES | SSING OPTIONS. | | |
|-------|--|----------------|--|--|
| 69 | SPEAK DIGITS entered to CONFIRM message address. | | | |
| 76 | Use NEW and SAVED/ARCHIVED MESSAGE queues. | | | |
| 77 | ALLOW user to record PERSONAL NAME. | | | |
| 78 | FORCE recording of PERSONAL NAME. | | | |
| 79 | ALLOW address entry before record. | | | |
| 93 | Allow USER to send an URGENT MESSAGE. | | | |
| 114 | Enable extended absence greeting. | | | |
| 126 | DO NOT speak "Greeting is on" prompt after LO | GIN. | | |
| 132 | FORCED LOGON to Busy Mailbox. | | | |
| | | | | |
| COS 2 | 0 (MAILBOX COS) 74 | | | |
| 1 PDI | _/GRP LST INDEX VALUE | NONE | | |
| 3 PUI | RGE SAVED(ARCHIVED) msgs older than (days) | 0 | | |
| 4 PUI | RGE NEW msgs older than (days) | 0 | | |
| 5 SEC | CURITY CODE change interval (days) | NONE | | |
| 6 CAI | LL FORWARD PROMPT LANGUAGES: | NONE | | |
| 8 NET | ΓWORK PREFIX | NONE | | |
| 9 ACI | I: Caller Prompting LEVEL | FULL | | |
| | | | | |
| SCHEI | DULE TABLES: | | | |
| SCHEI | DULE FOR COS 20 (MAILBOX COS) 74 | | | |
| | | | | |
| PERIO | D DAYS START STOP INFO TABLE# | | | |
| DEFAU | ULT 20 | | | |
| | | | | |
| INFOR | MATION TABLES: | | | |
| | | | | |



TABLE 20 (MAILBOX INFO)

- 1. INTERCEPT MAILBOX 8000
- 4. MAX DIGIT FOR MENU NONE
- 5. PREFIX DIGS FOR MENU NONE
- 6. PRE EXTENSION DIGITS NONE
- 7. RINGS BEFORE NO ANS 4
- 8. MSG WAITING RINGS 4
- 9. TIMES TO RETRY ON BUSY NONE
- 10. USE ALT TRANSFER CODES NO
- 11. DIVERT MSGS TO MAILBOX NONE
- 12. MSG WAITING NOTIF YES
- 13. AUTO GREETING ACTIV NO
- 14. OFFSITE ATTEMPT TIMES NONE
- 15. OFFSITE SPEAK TIMES 3
- 16. OFFSITE SPEAK DELAY 5
- 17. OFFSITE PREFIX DIGITS NONE
- 18. NEXT MAILBOX NONE
- 19. OFFSITE DIAL SYSP DIGS NO
- 20. OFFSITE END SYSP DIGS NO
- 22. MAXIMUM MSG LENGTH 6
- 23. MAX NUMBER OF MSGS 32
- 24. PERSONAL ASSISTANCE NO
- 25. QUICK GREETING ACTIV NO
- 26. AUTOTRANSFER TO ASSIST NO
- 27. MSG WITH AUTO TRANSFER NO
- 28. ANNOUNCE CALLS TO INT NO
- 29. LANGUAGE NONE
- 30. GROUP FAX NUMBER NONE
- 31. OFFSITE ONLY IF URGENT NO



| 32. MAX FAX DELIV ATTEMPTS SYSP 209 | | | | | |
|--|------|--|--|--|--|
| 35. OVERRIDE TRUNK GRP. # NONE | | | | | |
| 36. DEFAULT GREETING MBOX NONE | | | | | |
| | | | | | |
| .l profile | | | | | |
| COS:254 | | | | | |
| | | | | | |
| COS 254 (PORT/TRUNK COS) | | | | | |
| 1 PDL/GRP LST INDEX VALUE | NONE | | | | |
| 3 PURGE SAVED(ARCHIVED) msgs older than (days) | 0 | | | | |
| 4 PURGE NEW msgs older than (days) | 0 | | | | |
| 5 SECURITY CODE change interval (days) | NONE | | | | |
| 6 CALL FORWARD PROMPT LANGUAGES: | NONE | | | | |
| 8 NETWORK PREFIX | NONE | | | | |
| 9 ACI: Caller Prompting LEVEL | FULL | | | | |
| | | | | | |
| SCHEDULE TABLES: | | | | | |
| SCHEDULE FOR COS 254 (PORT/TRUNK COS) | | | | | |
| | | | | | |
| PERIOD DAYS START STOP INFO TABLE# | | | | | |
| DEFAULT | | | | | |
| | | | | | |
| INFORMATION TABLES: | | | | | |
| | | | | | |
| TABLE 254 (PORT/TRUNK INFO) | | | | | |
| 1. INTERCEPT MAILBOX 8000 | | | | | |
| 2. COMPANY GREETING MBX 8001 | | | | | |
| 4. MAX DIGIT FOR MENU NONE | | | | | |
| 5. PREFIX DIGS FOR MENU NONE | | | | | |



- 6. PRE EXTENSION DIGITS NONE
- *7. RINGS BEFORE NO ANS 4
- *9. TIMES TO RETRY ON BUSY NONE
- *10. USE ALT TRANSFER CODES NO
- 18. NEXT MAILBOX NONE
- 26. AUTOTRANSFER TO ASSIST NO
- 27. MSG WITH AUTO TRANSFER NO
- 29. LANGUAGE NONE
- 34. LOGIN FAILURE XFER MBX NONE

Octel 200 User mailbox

USERS TABLE:

MAILBOX EXTENSION COS SECURITY NAME

2005 2005 20 N N 2006 2006 20 N N 2151 2151 20 N N

^{*} Used ONLY when MAILBOX is UNDEFINED

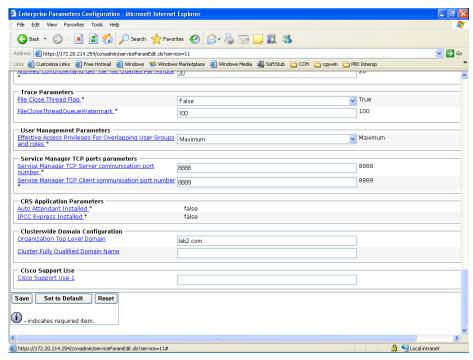


Cisco Unified CallManager Configuration

Cisco Unified CallManager Software Version

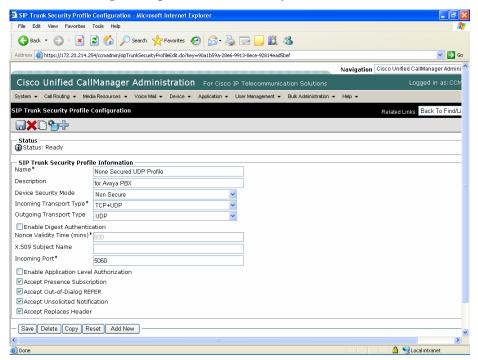


Cisco Unified CallManager Enterprise Parameters (Organization Top Level Domain)

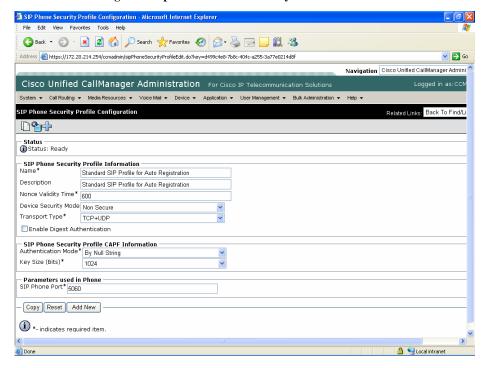




Cisco Unified CallManager Enterprise SIP Trunk Security Profile

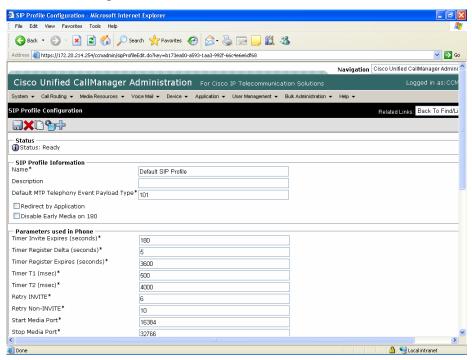


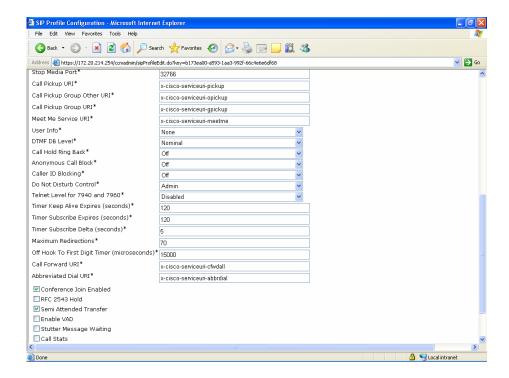
Cisco Unified CallManager Enterprise SIP Phone Security Profile





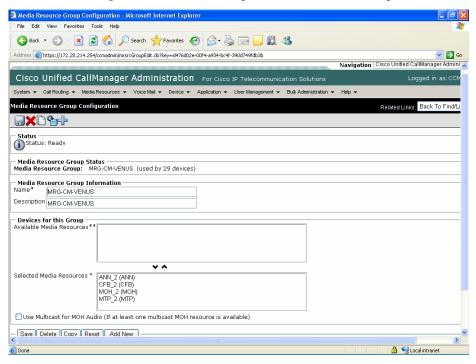
Cisco Unified CallManager Device SIP Profile

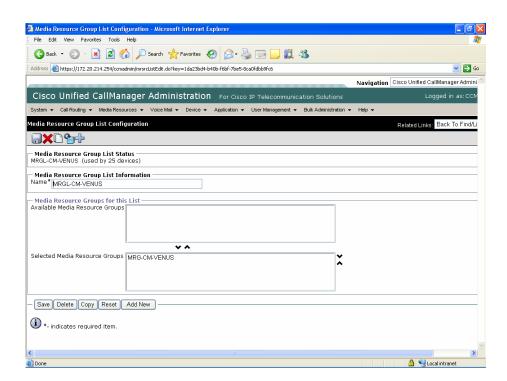






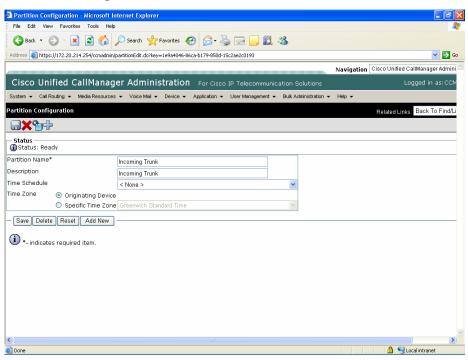
Cisco Unified CallManager Media Resource Group and Media Resource Group List

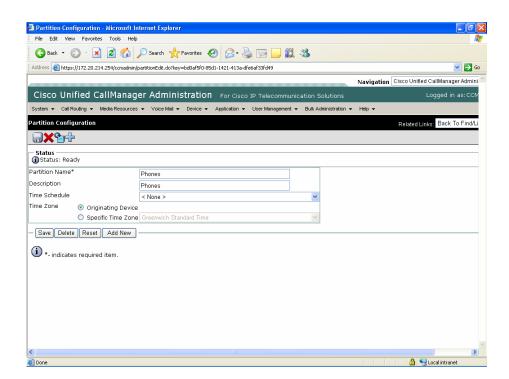






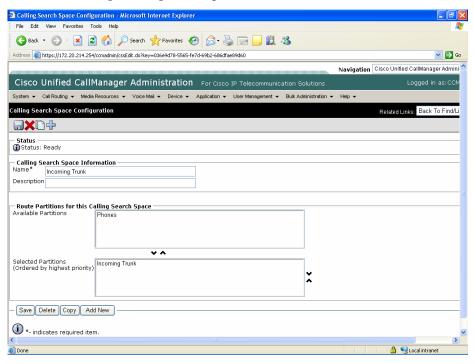
Cisco Unified CallManager Partitions

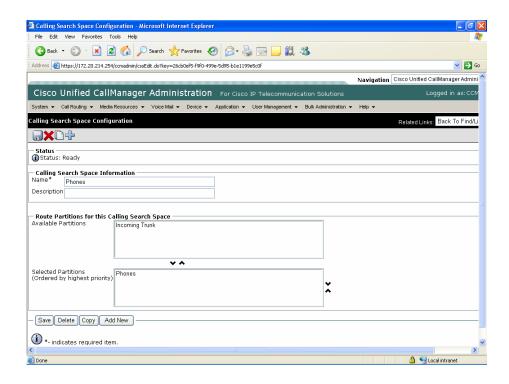






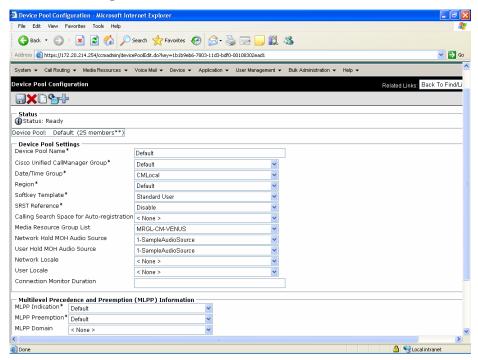
Cisco Unified CallManager Calling Search Space



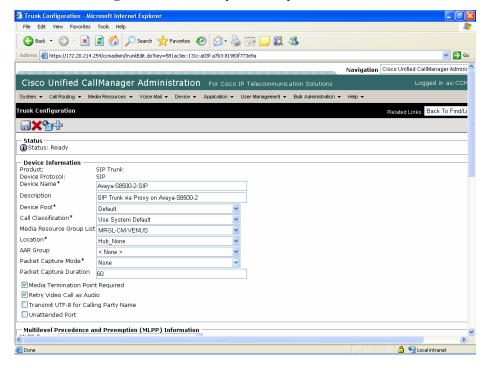




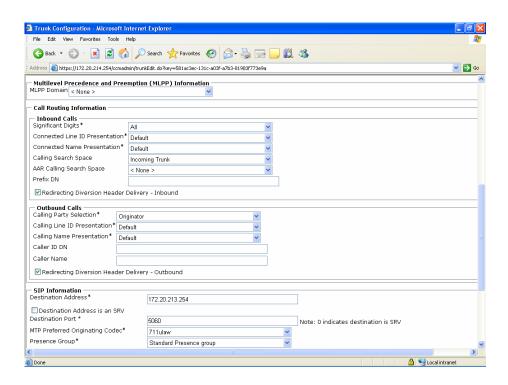
Cisco Unified CallManager Device Pool

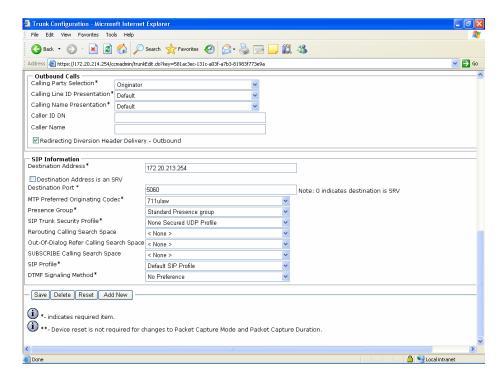


Cisco Unified CallManager SIP Trunk to Avaya SIP Proxy



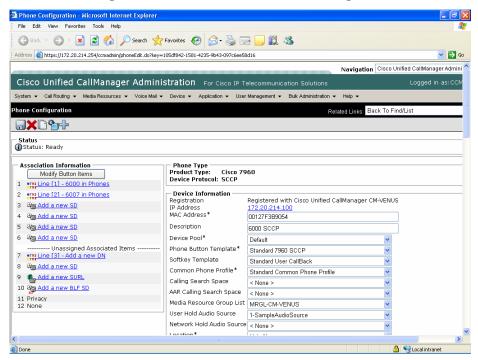


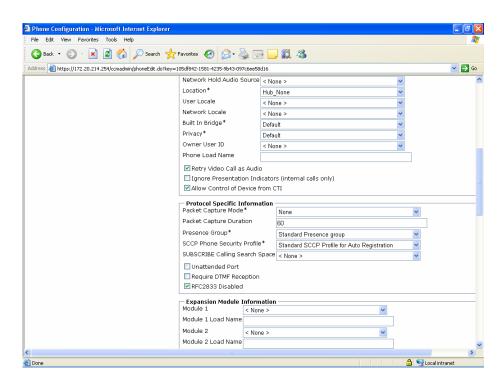




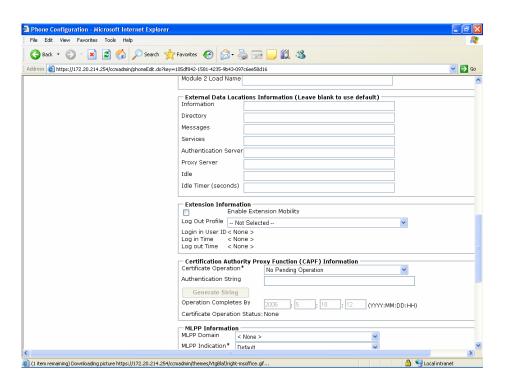


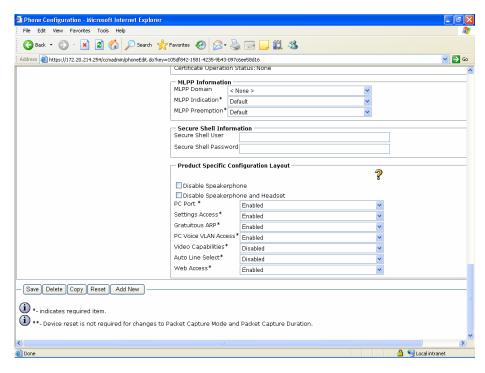
Cisco Unified CallManager SCCP Phone Ext. 6000 Device Level Configuration





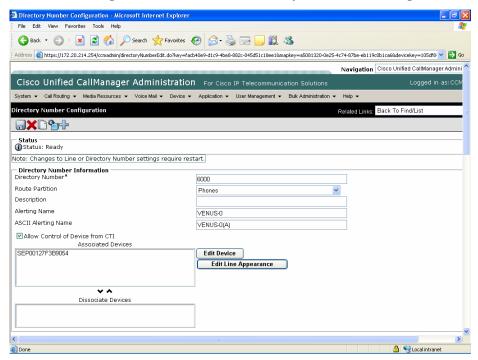


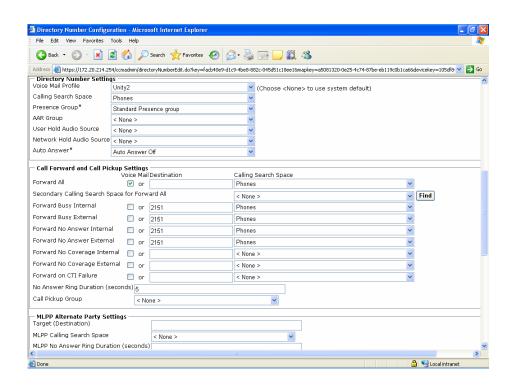




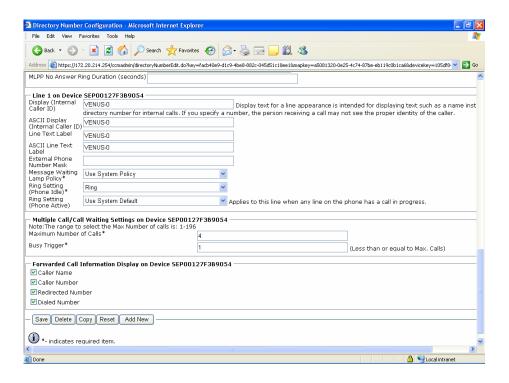


Cisco Unified CallManager SCCP Phone Ext. 6000 Directory Number Level Configuration

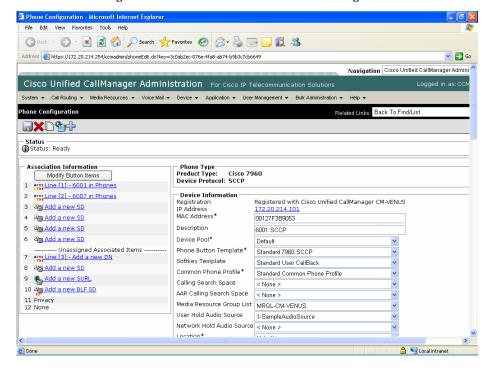




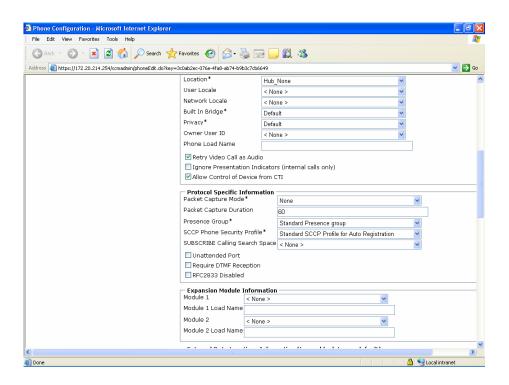


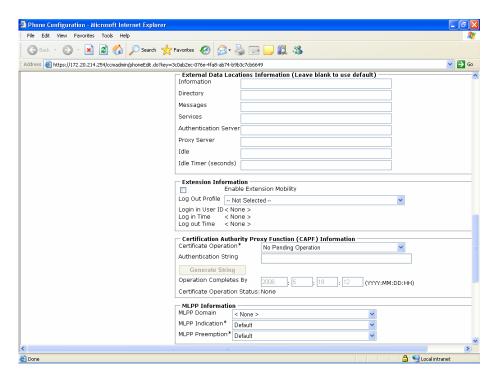


Cisco Unified CallManager SCCP Phone Ext. 6001 Device Level Configuration

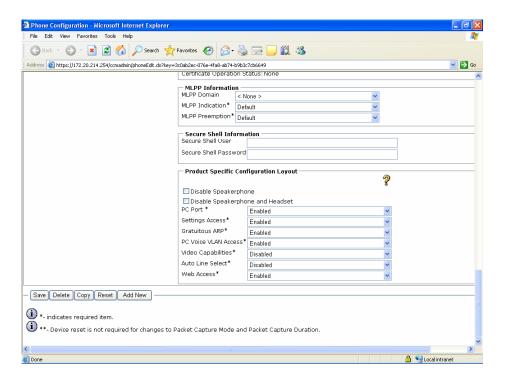




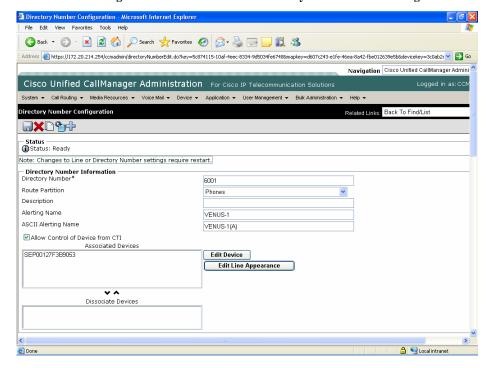




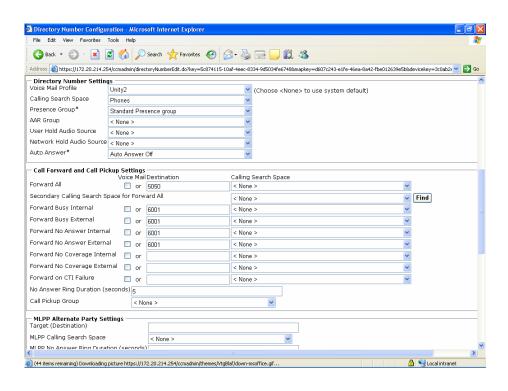


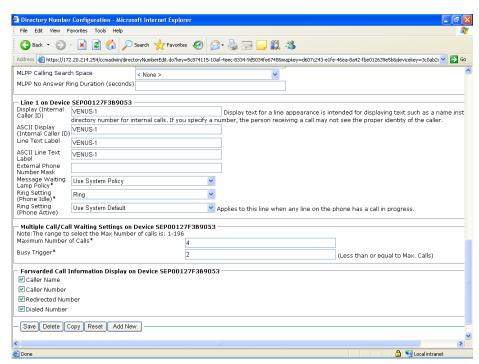


Cisco Unified CallManager SCCP Phone Ext. 6001 Directory Number Level Configuration



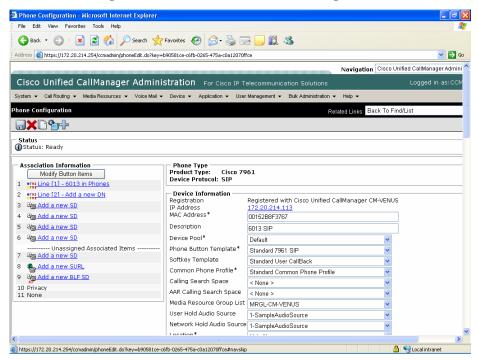


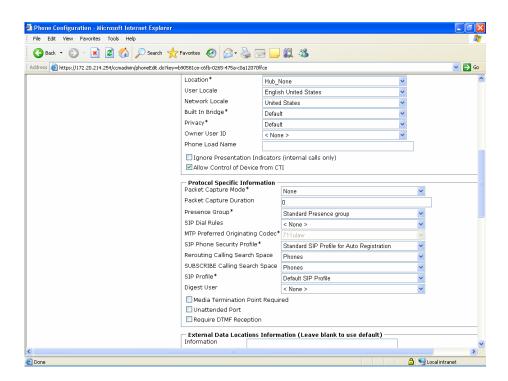




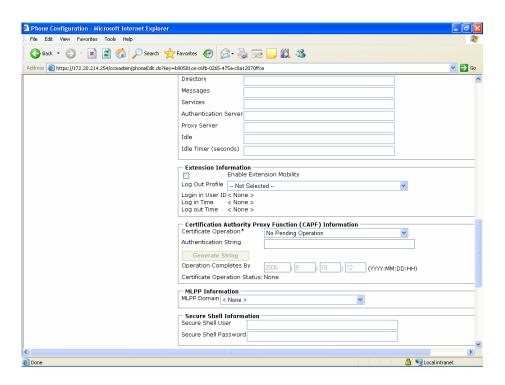


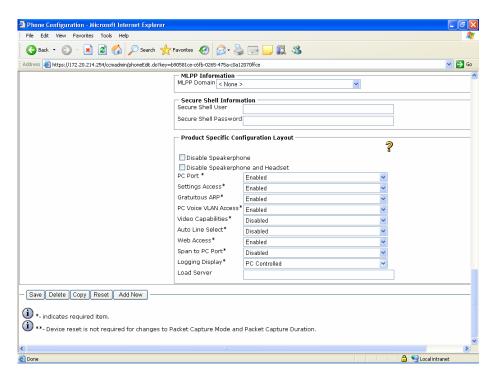
Cisco Unified CallManager SIP Phone Ext. 6013 Device Level Configuration





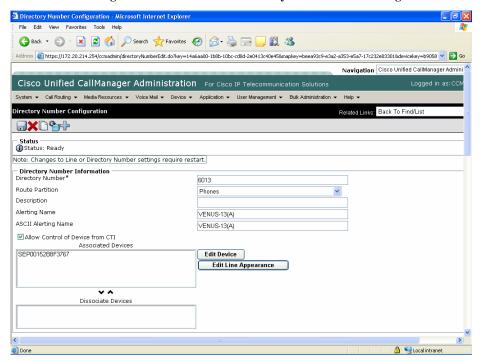


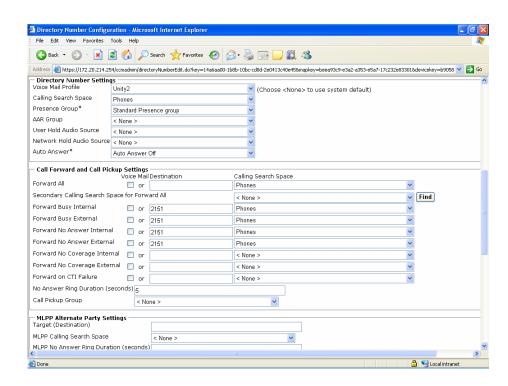




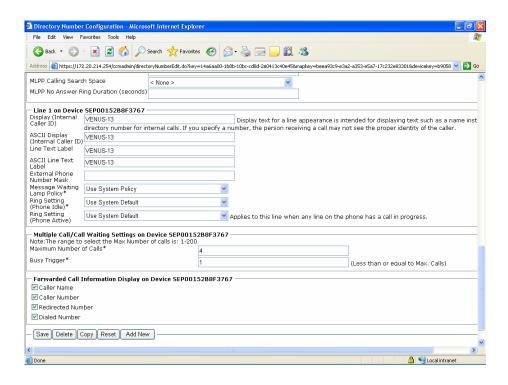


Cisco Unified CallManager SIP Phone Ext. 6013 Directory Number Level Configuration

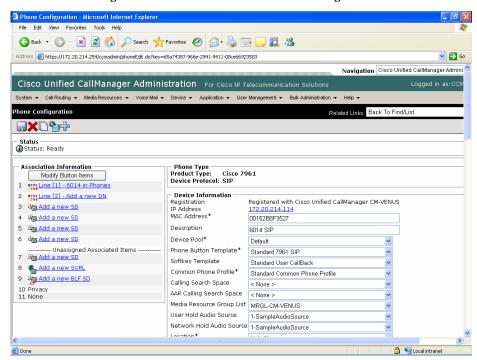




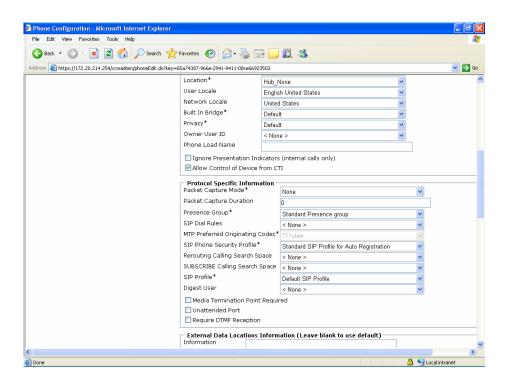


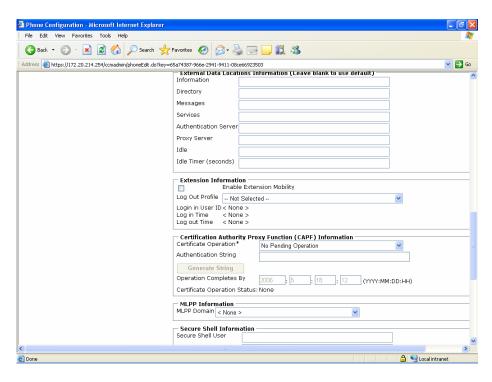


Cisco Unified CallManager SIP Phone Ext. 6014 Device Level Configuration

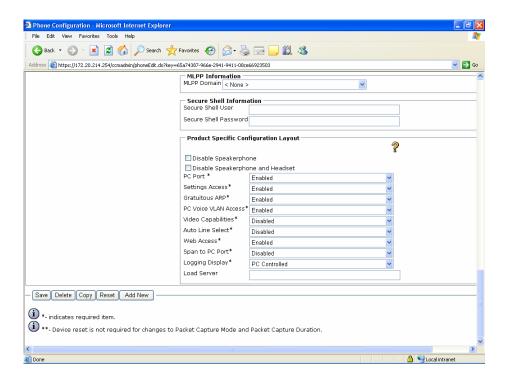




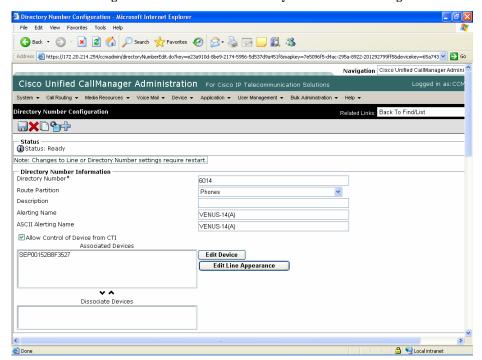




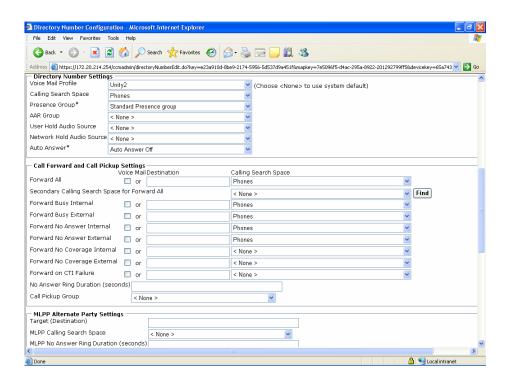


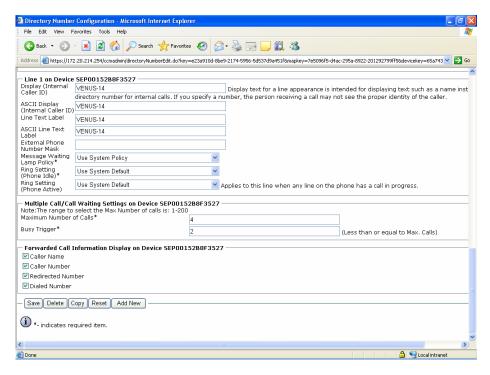


Cisco Unified CallManager SIP Phone Ext. 6014 Directory Number Level Configuration



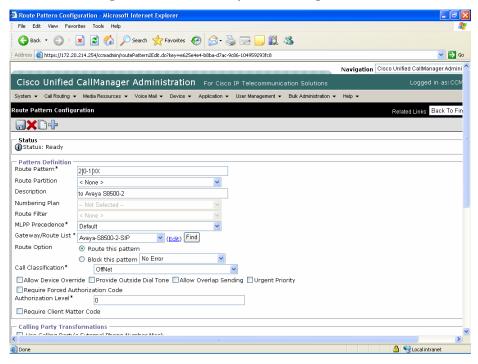


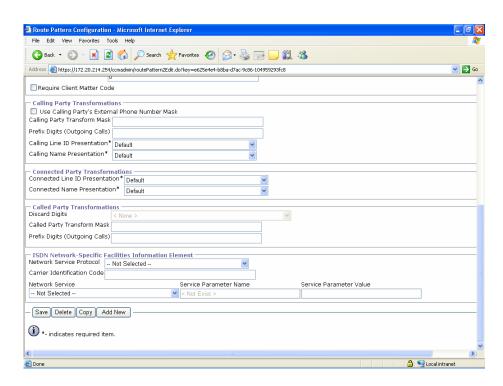






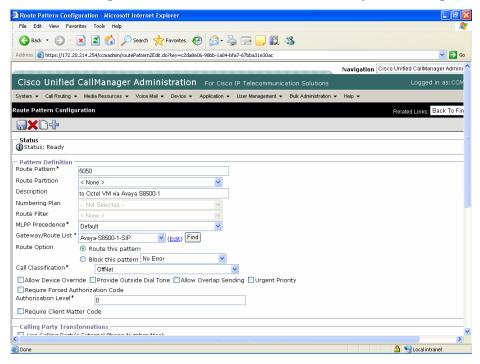
Cisco Unified CallManager Route Pattern to Avaya S8500 Configuration

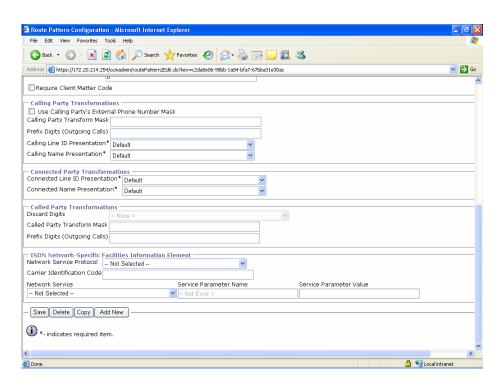






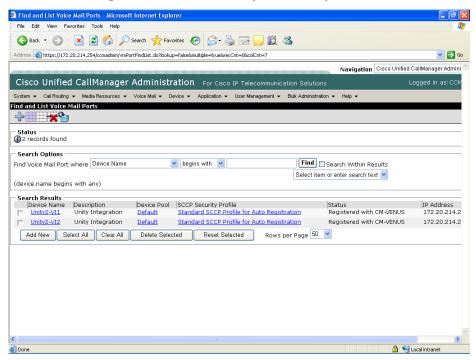
Cisco Unified CallManager Route Pattern to Octel Voice Mail via the Avaya S8500 Configuration

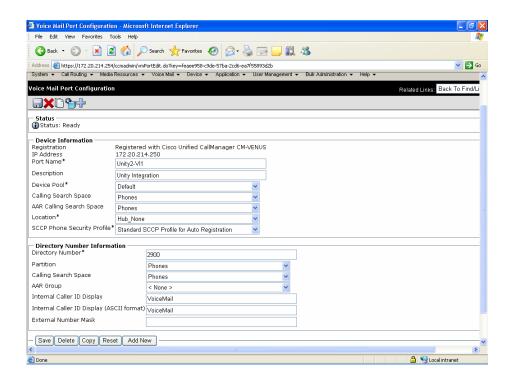




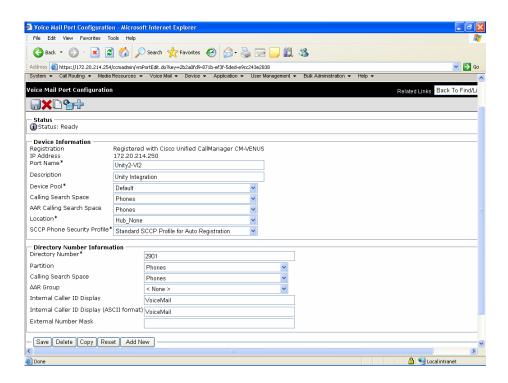


Cisco Unified CallManager Voice Mail Ports to Unity Voice Mail system

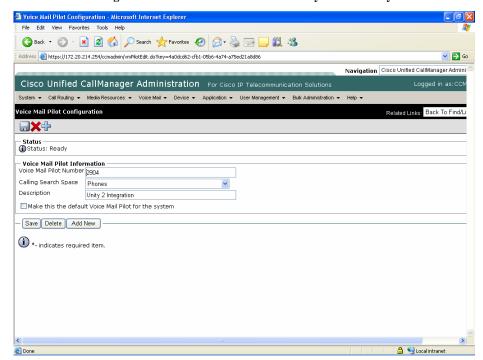




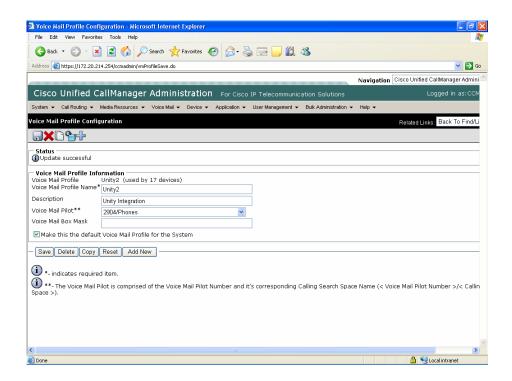




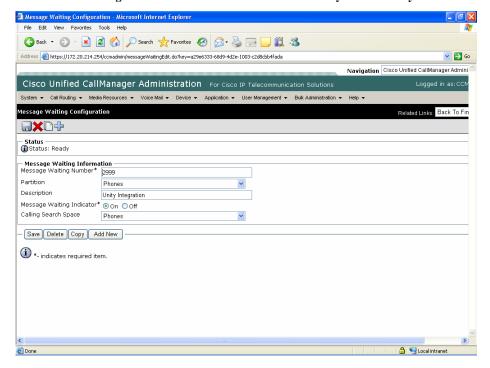
Cisco Unified CallManager Voice Mail Pilot and Profile to Unity Voice Mail system



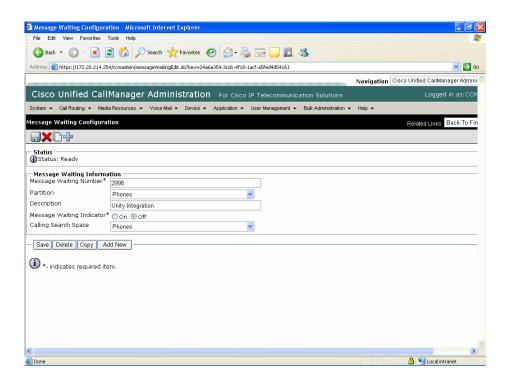




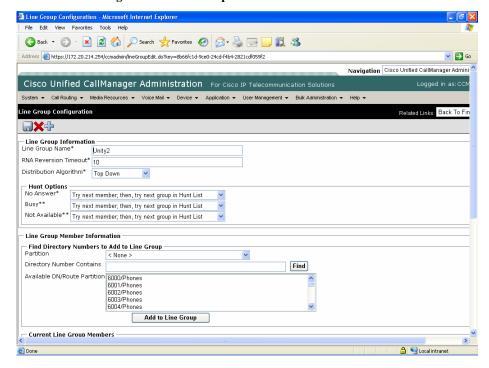
Cisco Unified CallManager Voice Mail MWI ON and OFF for Unity Voice Mail system



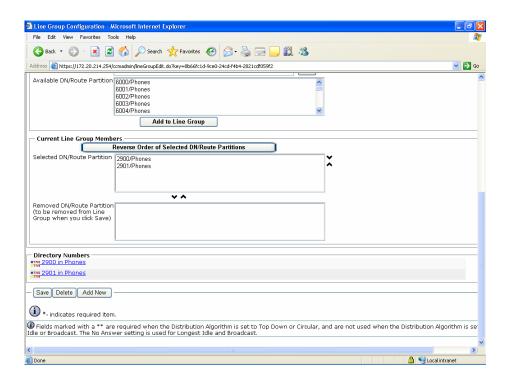




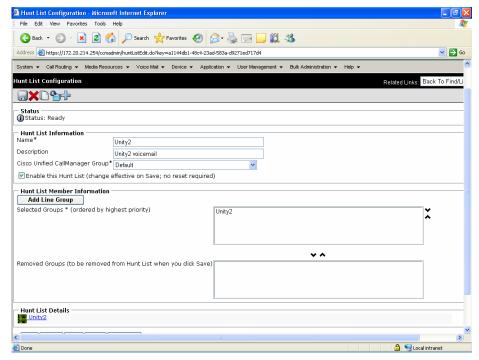
Cisco Unified CallManager Voice Line Group



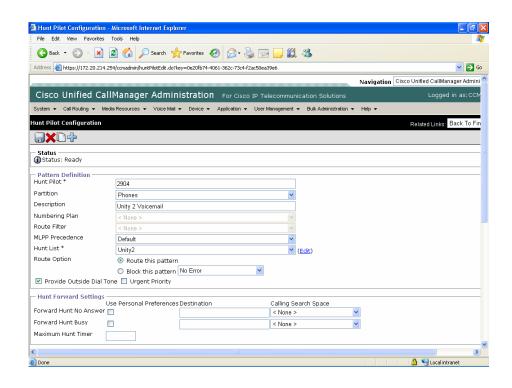


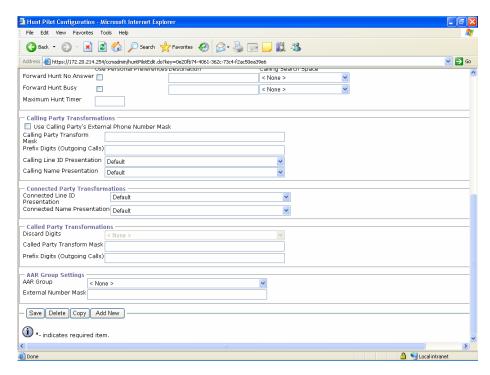


Cisco Unified CallManager Voice Mail Hunt List and Hunt Pilot





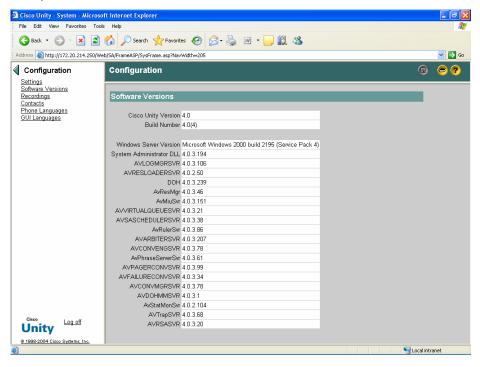




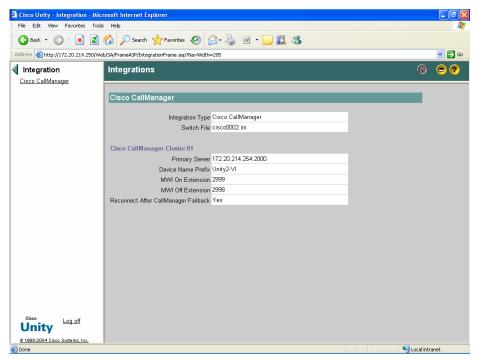


Cisco Unity Configuration

Cisco Unity Software Version

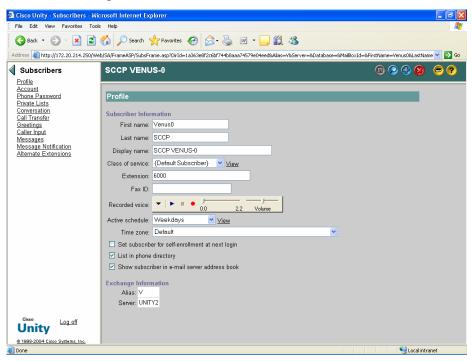


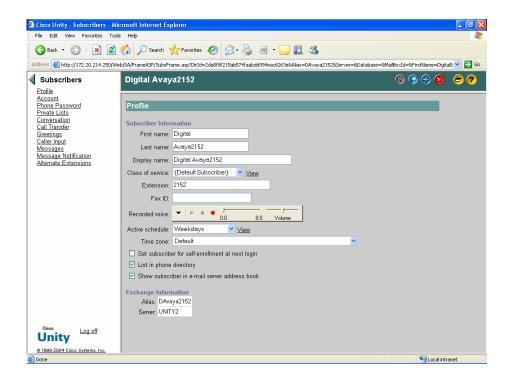
Cisco Unity Integration





Cisco Subscribers Configuration







Acronyms

| Acronym | Definitions |
|---------|---|
| CCBS | Call Completion to Busy Subscriber |
| CCNR | Call Completion on No Reply |
| CFB | Call Forwarding on Busy |
| CFNR | Call Forwarding No Reply |
| CFU | Call Forwarding Unconditional |
| CLIP | Calling Line (Number) Identification Presentation |
| CLIR | Calling Line (Number) Identification Restriction |
| CNIP | Calling Name Identification Presentation |
| CNIR | Calling Name Identification Restriction |
| COLP | Connected Line (Number) Identification Presentation |
| COLR | Connected Line (Number) Identification Restriction |
| CONP | Connected Name Identification Presentation |
| CONR | Connected Name Identification Restriction |
| СТ | Call Transfer |
| CUCM | Cisco Unified CallManager |
| DNS | Domain Name Server |
| FQDN | Fully Qualified Domain Name |
| MWI | Message Waiting Indicator |
| PSTN | Public Switched Telephone Network |
| SIP | Session Initiated Protocol |



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Corporate **Headquarters**

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 LISA

www.cisco.com Tel: 408 526-4000

800 553-NETS (6387) Fax: 408 526-4100

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European **Headquarters**

Cisco Systems International BV

Haarlerbergpark Haarlerbergweg 13-19 1101 CH Amsterdam The Netherlands www-europe.cisco.com

Tel: 31 0 20 357 1000 Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 LISA

www.cisco.com Tel: 408 526-7660

Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc. Capital Tower 168 Robinson Road #22-01 to #29-01 Singapore 068912 www.cisco.com Tel: +65 317 7777

Fax: +65 317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on the Cisco Web site at www.cisco.com/go/offices.

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