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UNIVERGE[®] SV8500

SIP Trunking Service Configuration Guide for Xcast Labs

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TABLE OF CONTENTS

Chapter 1 Configuring NEC SV8500 with Xcast Labs SIP Trunking Service

Section 1	NEC SV8500 and Xcast Labs Setup Guide.....	1-1
1.1	This Guide and Related Documents	1-1
1.2	Xcast Labs Account	1-1
Section 2	Network Configuration.....	1-2
Section 3	PBX Programming.....	1-3
3.1	MG-SIP Programming	1-4

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LIST OF FIGURES AND TABLES

Figure 1-1	Xcast Labs SIP InterOp Testing NEC Lab Setup	1-2
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Configuring NEC SV8500 with Xcast Labs SIP Trunking Service

SECTION 1 NEC SV8500 AND XCAST LABS SETUP GUIDE

1.1 This Guide and Related Documents

This guide was created to assist knowledgeable vendors with configuring the NEC SV8500 Communication Server with Xcast Labs's SIP Trunking service. It provides sample entries for the required fields. The actual data is provided by Xcast Labs when service is activated.

For questions about software and hardware installation or other PBX configuration issues, refer to the Media Gateway - Session Initiated Protocol (MG-SIP) Configuration Guide.

These manuals can be downloaded from NEC's National Technical Assistance Center (NTAC) web site. You must have a valid dealer ID to access the documents.

1.2 Xcast Labs Account

Contact your Xcast Labs representative.

SECTION 2 NETWORK CONFIGURATION

Xcast Labs, Inc.

Network Configuration

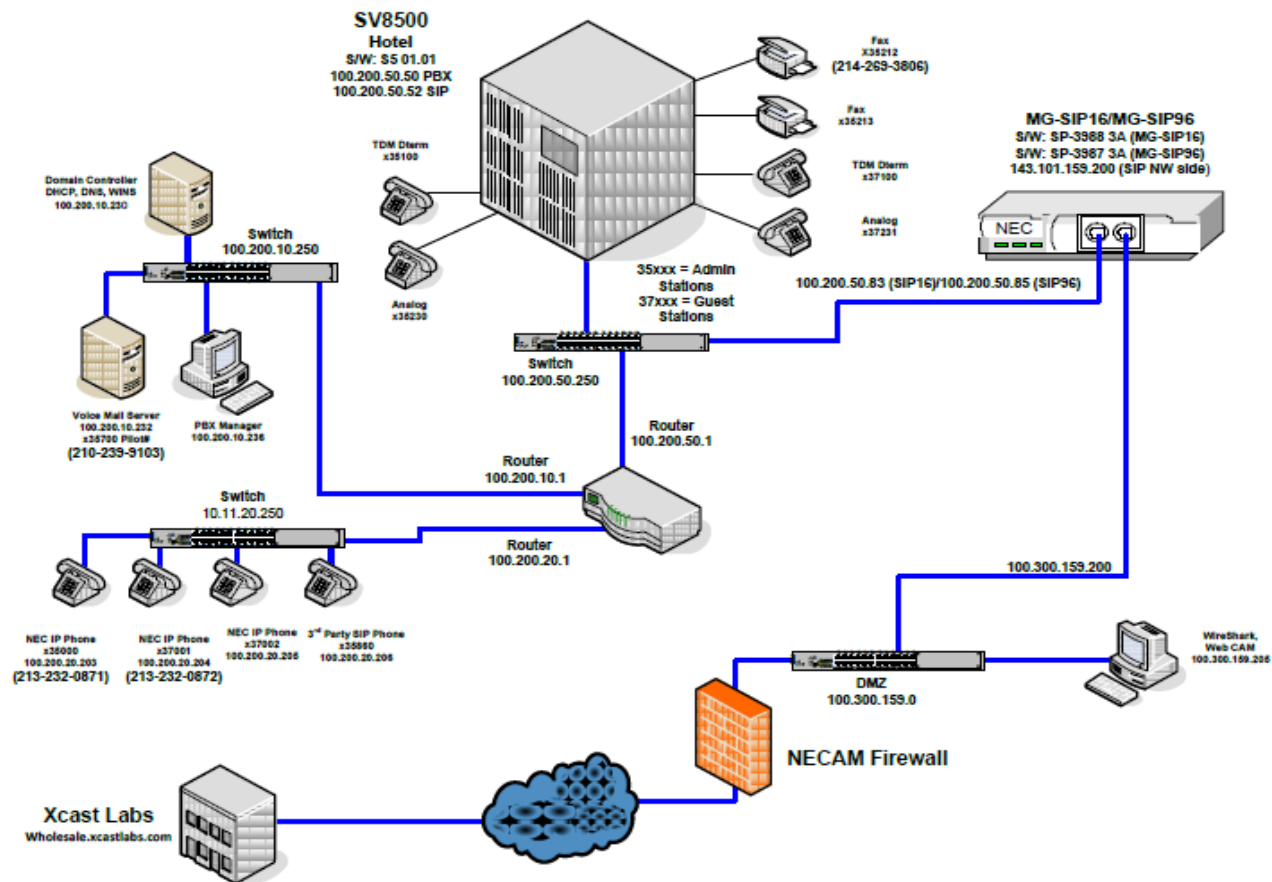


Figure 1-1 Xcast Labs SIP InterOp Testing NEC Lab Setup

SECTION 3 PBX PROGRAMMING

This does not include the basic programming that is the same regardless of SIP Provider (i.e., ARTD, ARTI, ADPC, ACSC, ACIC1, etc.). You can refer to Appendix A for the information that was used during the tests. This only includes the commands that were uniquely programmed for this configuration.

AMGIL

```
MG-ID: xx-xx-xx-xx-xx-xx (MG-SIP16/96 LAN1 MAC Address)
KIND = SIP-MG
LINE = 0
CH = 0
LENS: 022000
Retry = 0
Service Type: Off
CH: 16 max for MG-SIP16/96 max for MG-SIP96 (only assign the actual numbers of trunks
in ATRK)
Service of Authentication exists: No
MG Group =
MG Number =
```

ACDD

```
DAY/NIGHT: Day/Night Mode
RT: 200
DC: 32320871 / 32320872/ 02396103/ 42693806
CDC: 35000/ 37001/ 35700/ 35212
AD: Out of Service
XFR: In ServiceACND
CNP: 1
SKIP: 0
ADD: 6
DC: 214272
```

ACDDL (NOTE: The PBX is using the "L" Commands or else I only needed ACDD)

```
DAY/NIGHT: Day/Night Mode
LGRT: 200
DC: 32320871 / 32320872/ 02396103/ 42693806
CDC: 35000/ 37001/ 35700/ 35212
AD: Out of Service
XFR: In Service
```

ACNP

```
OG/IC: OG
ROUTE: 200
CNP: 1
```

ACND

```
CNP: 1
SKIP: 0
ADD: 2
DC: 21
```

3.1 MG-SIP Programming

Note that the assignments shown are those set for the majority of the test cases ran during the inter-operability testing. Some parameters were changed for specific tests. For example, Privacy test cases would have had the "set privacy_pattern" changed from "0: Displayname" to a "2: RFC 3323/3325 (P-Preferred-ID / Privacy)" and the selection of whether the P-Preferred-ID Header is included or not. The same type of changes were made to the "set cpn_pattern" when testing the normal "userinfo" setting as well as the "anonymous" and "P-Asserted ID" settings. The listing shows the basic data to get the equipment up and communicating. Then, if necessary, you can fine-tune various parameters for the customer's specific requirements.

DRS Data

```
DRS[0] IP Address : 100.200.50.52 : PortNo[3456]
DRS[1] IP Address : 0.0.0.0 : PortNo[3456]
DRS[2] IP Address : 0.0.0.0 : PortNo[3456]
DRS[3] IP Address : 0.0.0.0 : PortNo[3456]
```

Common Config Data

```
set signaling_port_no :
  Signal port number      : 61012
```

```
-----
set registration_port_no :
  Registration port number : 3456
```

```
-----
set pre_negotiation_port_no :
  Voice path port number   : 61014
```

```
-----
set ipx_rtp_port_no :
  IPX side RTP port number : 51000
```

```
-----
set sip_rtp_port_no :
  SIP side RTP port number : 50000
```

```
-----
set h245_base_port_no :
  H245 base port number   : 40000
```

```
-----
set drs_qos :
  DRS QOS          : 0xa0
  PRECEDENCE       : 5
  DELAY            : 0
  THROUGHPUT       : 0
  RELIABILITY      : 0
  COST             : 0
-----
```

```

set rtp_qos :
  RTP QOS                : 0xa0
  PRECEDENCE              : 5
  DELAY                   : 0
  THROUGHPUT              : 0
  RELIABILITY             : 0
  COST                    : 0

-----

set sip_qos :
  SIP QOS                : 0xa0
  PRECEDENCE              : 5
  DELAY                   : 0
  THROUGHPUT              : 0
  RELIABILITY             : 0
  COST                    : 0

-----

set domain :
  Domain Name : 0

-----

set dnsaddress :
  DNS IP Address : 100.100.10.20

-----

set hc_alarm :
  H/C Alarm type : IPX and SIP Side enable

-----

set hc_timer :
  H/C timer value : 240sec

-----

set musictype :
  Music Type : Type1

-----

set call_hold :
  Call Hold function : enable
  RTP detect timer value : 3sec
  Response code to reject : 488

-----

set name_display :
  Name Display : enable

-----

set ip_version :
  IP Version : IPv4 (IPv6 only available in MG-SIP96)

-----

```

Port Config Data

Use all port

```

Ether[1]
  IP Address : 100.200.50.83 (MG-SIP16 / MG-SIP96 was 100.200.50.85)
  Subnet : 255.255.255.0
  Interface : Speed/Duplex = Auto/Auto
  Port type : IPX Side Port

Ether[2]
  IP Address : 100.300.159.200
  Subnet : 255.255.255.0
  Interface : Speed/Duplex = Auto/Auto
  Port type : SIP Side Port

```

SIP Config Data

```
set sip_server :
  SIP server type : FQDN
  SIP server FQDN : wholesale.xcastlabs.com
  SIP server Port Number : 5060
  SIP server Router type : Strict
  rport(RFC3581) function : enable
  Domain Name : 0
-----
set sip_register :
  SIP register type : IP Address
  SIP register IP Address : 0.0.0.0
  SIP register Port Number : 5060
  SIP register Expires time : 3600sec
-----
set keynumber :
  Keynumber : 32320871
-----
set auth :
  User ID : 0
  Password : 0
-----
set privacy_pattern :
  Privacy pattern : DisplayName
-----
set session_timer :
  Session-timer : enable
  Session-expires : 1800sec
  Refresher : UAC
  Invite Refresher : enable
  Forced mode : disable
-----
set prack :
  Supported 100rel : enable
  Stop cyclical-send of 18x : disable
-----
set cdn_pattern :
  Prior Called Party Number pattern : Request-URI[userinfo]
-----
set sip_port_no :
  SIP Port Number : 5060
-----
set 184toprivacy :
  184 to Privacy pattern : disable
-----
set slipresp :
  SIP server slip response code : 503
-----
set self_sip_domain :
  Self SIP Domain mode : enable
  Self SIP Domain string : 100.300.159.200
-----
set dtmf_mode :
  DTMF Mode : Negotiation(SIP/SDP)
  DTMF Duration : 120ms
  DTMF Pause : 100ms
  Payload type : 101
-----
set 183rbt :
  RBT Addition (183w/oSDP) : enable
-----
```

```
set rtp_pathon :
  Path-on 183 after 180 : disable
-----
set another_keynumber :
  Another Keynumber 1 : 0
  Another Keynumber 2 : 0
  Another Keynumber 3 : 0
-----
set multi_regist :
  Multi-registration mode : disable
-----
set sip_tel_service :
  SIP telephony service function : enable
  Replaces function : enable
  Hold[a=inactive] function : enable
  Hold[put off hold] function : enable
  REFER/NOTIFY function : enable
  3PCC function : enable
  3PCC function(codec) : AUTO
-----
set reg_interval :
  REGISTER interval timer : 5min
-----
set update :
  UPDATE method support function : enable
-----
set auth_header :
  Auth-Header Cache function : enable
-----
set cause_table :
  Cause table : Route Advance
-----
set response_table :
  Response table : normal
-----
set cpn_pattern :
  Prior Calling Party Number pattern : P-Asserted-ID
-----
set cc_convert :
  Country Code convert : disable
-----
set check_number :
  telephone-number check function : disable
-----
set out_of_area_code :
  Response code when out of area : 408
-----
set sdp_style :
  SDP style setting : RFC4566
  G729 annexb=no : enable
-----
set call_id_relay :
  Call-ID relay mode : disable
-----
set sip_accfilter :
  SIP Access Filter : disable
-----
set sip_transport :
  SIP transport protocol : UDP
-----
set dns_option :
  DNS type : Locating SIP servers function(RFC3263)
  DNS cache : enable
```

```
-----
set codec_change :
  Codec Change function : enable
  G711 Fax renegotiation : enable
-----
set no_media_code :
  Response code(unsupported codec) : 415
-----
set ppi_to_pai :
  PAID transmission function : enable
-----
```

Route Config Data

```
Ether[1]
  Route type : Static
  No | Gateway Address | Destination network/Prefix
-----+-----+-----
  1 | 100.200. 50. 1 | 100.200. 0. 0 /16
Ether[2]
  Route type : Static
  No | Gateway Address | Destination network/Prefix
-----+-----+-----
  1 | 100.300.159. 1 | 0. 0. 0. 0
```