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TECHNICAL NOTE: SV8100 SIP TRUNK SETUP FOR ORCON

Below is the method for setting up SIP trunks for carrier and ISP Orcon. www.orcon.net.nz These screen shots below were taken from PCPro.. Orcon will supply to the customer a fiber link that the SIP trunking is connected to. It is ***not*** recommended that the internet be used for SIP trunks .

MB 10.12. LAN and IPLA setup. Enter IPLA and gateway address.

10-12: CD-CP00 Network Setup

01 - IP Address	<input type="text" value="192.168.0.10"/>
02 - Subnet Mask	<input type="text" value="255.255.255.0"/>
03 - Default Gateway	<input type="text" value="10.0.0.254"/>
04 - Time Zone	<input type="text" value="(GMT +12:00) Auckland"/>
05 - NIC Setting	<input type="text" value="Automatic detection"/>
06 - NAPT Router	<input type="checkbox"/>
07 - NAPT Router IP Address	<input type="text" value="0.0.0.0"/>
08 - ICMP Redirect	<input type="checkbox"/>
09 - IPLA IP Address	<input type="text" value="10.0.1.213"/>
10 - IPLA Subnet Mask	<input type="text" value="255.255.0.0"/>
11 - IPLA NIC Setting	<input type="text" value="Automatic detection"/>

Use Program 10-12: CPUUI Network Setup to setup the IP Address, Subnet-Mask and Default Gateway addresses.

Caution: If any of the IP Address or NIC settings are changed, the system must be reset in order for the changes to take affect.

MB 10.20 The SIP trunks are setup as a SIP T ieline.

10-23: IP System Interconnection Setup

Sys No. (1~1000)

Sys No.	System Interconnection	IP Address	Call Control Port	Dial Number
0001	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="1"/>
0002	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="2"/>
0003	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="3"/>
0004	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="4"/>
0005	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="5"/>
0006	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="6"/>
0007	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="7"/>
0008	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="8"/>
0009	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="9"/>
0010	<input checked="" type="checkbox"/>	<input type="text" value="60.234.25.4"/>	<input type="text" value="1720"/>	<input type="text" value="0"/>

The IP address is that of the SIP carrier Orcon 60.234.25.4 . Each dial access level needs to be added. Without this call will not progress outgoing.

10-28: SIP System Information Setup

01 - Domain Name ← SIP carrier IP address

02 - Host Name

03 - Transport Protocol

04 - User ID ← User login

05 - Domain Assignment ← Leave as IP address

06 - IP Trunk Port Binding

This program sets basic system information used in SIP Trunk

10-29: SIP Server Information Setup

01 - Outbound Default Proxy

02 - Inbound Default Proxy

03 - Default Proxy IP Address

04 - Default Proxy Port

05 - Register Mode

06 - Registrar IP Address

07 - Registrar Port

08 - DNS Mode

09 - DNS IP Address

10 - DNS Port

11 - Registrar Domain Name

12 - Proxy Domain Name

13 - Proxy Host Name

14 - SIP Carrier Choice

15 - Registration Expiry Time

17 - DNS Source Port

This program sets the information of SIP Server this system uses

SIP carrier address

Leave at None

10-40: IP Trunk Availability

01 - IP Trunk Availability

02 - IP Trunk Port Count

Set 10.40.01 to ON and 10.40.02 to the number of IP trunk required. Without this no trunks will appear in MB 22.02

22.02 set IP trunks to DID or what ever mode is being used.

22-02: Incoming Call Trunk Setup

Trunk

Trunk	Night Mode	
	Mode 1	Mode 2
01	<input type="text" value="DID"/>	<input type="text" value="DID"/>
02	<input type="text" value="DID"/>	<input type="text" value="DID"/>
03	<input type="text" value="DID"/>	<input type="text" value="DID"/>
04	<input type="text" value="DID"/>	<input type="text" value="DID"/>
05	<input type="text" value="DID"/>	<input type="text" value="DID"/>
06	<input type="text" value="DID"/>	<input type="text" value="DID"/>
07	<input type="text" value="DID"/>	<input type="text" value="DID"/>
08	<input type="text" value="DID"/>	<input type="text" value="DID"/>

Use Program 22-02: Incoming Call Trunk Setup to assign the incoming trunk type for each trunk. There is one item for each Nigh

Setup MB 22.11 as per normal DID.

22-11: DID Translation Table

01 - Received Number	<input type="text" value="101"/>
02 - Target Number	<input type="text" value="101"/>
03 - Dial-in Name	<input type="text" value="A SEUSEU"/>
04 - Transfer Operation Mode	<input type="text" value="No Transfer"/>
05 - Transfer Target 1	<input type="text" value="0"/>
06 - Transfer Target 2	<input type="text" value="0"/>

ARS MB 22.02 and Froute MB 44.05

For Orcon use the standard ARS setup that is used for Telecom Primary Rate Lite.

INSTALLATION NOTES.

1. In MB 84.26. Set the first two entries if using a 32IPLA card to the same address range as for the IPLA card in MB 10.12.09 otherwise there will be no speech on SIP trunk calls..
2. Set out going Caller ID in MB 21.03 to reflect the true DID number otherwise CLID will come from MB 10.28.04 and will appear as gibberish to the called party..

Orcon will supply you with a cryptic amount of info like below. This will vary site by site.. Orcon use on originating IP address as the method of registration. They will supply this when the customer fiber link is installed.

DDI range is: 95500101 to 95500110

The customers points PBX towards the following address:

60.234.25.4

The SIP endpoint name is: SIPT-necb-auck1

If you have read thru the document above then you will see that there is a place for all of this info.

I noticed when I first setup the trunks that there were the following issues which were sorted by the Orcon tech support group.

3. Incoming calls cut off 4 seconds after answer.
4. Had to dial 0 +area code+ local number for local calls.

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5. Outgoing Caller ID. Due to interconnect agreements between Orcon and other carriers this may not be correct. Orcon tech support will help you with this. Outgoing CLID is located in MB 21.19

Other Things To Note

CLID incoming is area code+ local number. MB 10.02.03 does not on SIP trunks insert a zero in front of the area code as it does on ISDN and analog trunks. This may preclude the use of the feature CLID call back. You may find that after doing changes in MB 10.28 and 10.29 area that you may not be able to call in or have no speech. NEC documentation suggests that you either reset the CPU via WebPro or power cycle the system after changes in these areas..

If you wish to check on SIP call progress messages you will need a 5 port Hub (not a switch) and a copy of the a program called Wireshark that can be downloaded from <http://www.wireshark.org>

For more detail on SIP trunk setup have a look at the SIP trunk cheat sheet for IPK2.

END OF DRAFT