# NEAX 2000IPS Sip Trunking

The following is an example for programming 8 SIP Trunks connected to an external SIP Trunk Provider. The example also includes Inbound and Outbound Calling Party Number assignments as well as inbound DID assignment.

### Sip Trunk Assignment

#### Sense Wheel, Trunk Route, and Trunk numbers are examples only.

- 1. CM050>08>46 Assign AP sense wheel (08) to a setting of 46 (Sip Trunk Card).
- CM058>08>0099 Assign AP sense wheel (08) to be accommodated in the main site where 00 = FP 00 and 99 = AP card. SIP trunks are only supported in main the site of a remote PIM network.
- 3. CM0607 >0>08 Assign SIP Channel Number (0) to the AP sense wheel (08).
- 4. **CM0701> 0800~0807>D100~D107** For sense wheel **08** assign channels **00~07** Trunks **100~107**. A minimum of 8 trunks should be assigned. Up to 32 trunks can be assigned per card.
- 5. **CM0A00>00>080** Assign the LAN Interface Number (**00**) to the AP sense wheel (**08**). Up to 32 LAN Interfaces can be assigned to the IPS. 8 of these can be the 8IPTA for SIP Trk.
- 6. **CM0A01>00>192168100100** Assign an IP address to LAN interface number (00). This must be a static address usually provide by the LAN administrator.
- 7. CM0A02>00>255255255000 Assign a Subnet Mask to LAN Interface Number (00).
- 8. CM0A03>00>192168100155 Assign the Default Gateway to LAN Interface Number (00).
- 9. CM14>03127>D254 Assign Control Trunk to an unassigned phantom LEN. Do not assign trunk D255. If Peer to Peer CCIS is already utilized in the system assign trunk D253.
- 10. CM3000>100~107>20 Assign Trunks (100~107) to a Trunk Route (20). Assign VOICE channels ONLY. Unused trunks should be assigned to a dummy trunk route. E.g. 63.
- 11. CM3500>20>04 or 00 Assign SIP voice route as a Tie Trunk (04) or (00) SIP Trunk.
- 12. CM3504>20>2 Assign the SIP voice route to Answer signal arrives (2).
- 13. CM3509>20>03 Assign the SIP voice route to Wink incoming signaling (03).
- 14. CM3520>20>00 Assign the SIP voice route to Wink outgoing signaling (00).
- 15. CM3590>20>0 Assign the SIP voice route for SIP Trunk facilities.
- 16. CM3591>20>0 Assign the SIP voice route (20) to SIP Channel assigned in step 3 (0).
- 17. **CM3035>100~107>001~008** Assign CIC codes for each SIP voice trunk (**100~107**) (CIC **001~127** available)
- 18. **CMA700>0>254** Assign the SIP Channel (0) to utilize the phantom trunk, assigned in step 9 (254) for communication
- 19. CMA701>0>00001 Assign an Originating Point Code to the SIP Channel (0). If Peer to Peer CCIS is already utilized in the system the same OPC can be used.
- 20. **CMA702>0>00002** Assign a Destination Point Code to the SIP Channel (0). *The DPC must be unique from all other DPC's assigned in CMA702 or CM A8.*
- 21. CMA770>0>00 Assign the SIP Channel (0) to the LAN Interface Number (00).
- 22. **CMA771>0>00** Assign the SIP Channel (0) to a Profile Number (00) A Profile Number is utilized by the BM commands to assign SIP features and functionalities.
- 23. CMA8>00002>0 Assign the Destination Point Code (00002) to the SIP Channel (0).
- 24. **CMBA30>00>192168100200** To the Profile Number (**00**) assign the IP Address of the SIP Server/SIP carrier. *The NEAX 2000 IPS can only be assigned a SIP IP Address. A URL destination is not supported.*
- 25. CMBA31>00>05060 To the SIP Profile Number (00) assign the SIP Server Port (05060).

## **Outgoing CALLER ID Programming**

- 1. CM08>379>0 Assign maximum number of 24 dialed digits sent to the SIP Trunk
- 2. **CM1212>Station Number>XXXX** Assign the last **4 digits** of the Caller ID to be sent to the Network. **NOTE:** Assignment for CPN over SIP requires either steps 2 and 3 **OR** steps 4 and 5. Step 9, (LCR), will then utilize only one of these pair of steps for the outbound CPN on the number dialed.
- 3. **CM1213>Station Number>00** To the station assign a Local Office Table number (00). *Table numbers 00~14 are available and maybe shared with existing ISDN CPN programming.*
- 4. **CM1246>Station Number>XXXX** Assign the last **4 digits** of the Caller ID to be sent to the Network. See **NOTE**: at step 2.
- CM1247>Station Number>00 To the station assign a Local Office Table number (00). Table numbers 00~14 are available and maybe shared with existing ISDN CPN programming. CM5005>00>XXXXXXX To the Table Number (00) assigned in step 3 or step 5 Assign the ISDN/SIP Local Office Code. This number will precede the four digit number (assigned in either step 2 or step 4) in the CPN on the outgoing call.
- 6. **CMA726>0>0** Provide Name Display to the SIP Channel (0).
- 7. **CMA728>0>0** To the SIP Channel (0) provide Calling Party Information transferring service.
- CM8A5XXX>176>01/02 To the LCR Pattern (XXX) send ISDN/SIP subscriber assigned by CM1212, CM1213 (01 see steps 2,3) or by data assigned in CM1246, CM1247 (02 see steps 4,5)
- 9. **CMBA32>00>2145551212** To the Profile Number assign a Calling Party Number for the SIP Trunks. *It is recommended the customers main billing number be assigned.*
- 10. CMBA44>00>01 To the Profile Number (00) provide a Calling Party Number (from step 9) when there is not one assigned to the station initiating the call. If a station does not have steps 2~5 above assigned, the call will use the CPN assigned in step 9.

### **Incoming CALLER ID Programming**

**CMBA126>00>0** Assign the Profile Number (**00**) to display the CPN in the "From" field of the incoming SIP INVITE message. **Note:** *Only Calling Party Number is supported. Calling Party Name is not available.* 

#### **Incoming DID Programming**

#### Example:

Converting DID 9725015905 to station 2000

- 1. CM3518>20>0 Assign digit conversion for the SIP Trunk route (20).
- 2. CM35170>20>0 Assign the SIP Trunk Route (20) to utilize DID Development Table 1.
- 3. **CM35171>20>15** Assign the number of digits received on the SIP Trunk Route (20). *A* setting of 15 = 4 digits.
- 4. CM3001>100~107>02 Assign SIP Trunks (100~107) to and unused Tenant (02).
- CM29>02>711 Assign the Tenant in step 4 (02) to utilize an unused Numbering Plan (711). 4 numbering plans are available 710~713.
- CM201>9>804 Assign the leading digit of DID number (9) as a 4 digit station number (804) for the numbering plan assigned in step 5.
- 7. **CM7690>5905>000** Assign the last **4 digits** of the DID number to a conversion block (000~999 available).
- CM7601>000>2000 Assign Day Mode terminating destination for conversion block 000 to station 2000.
- 9. **CM7602>000>2000** Assign Night Mode terminating destination for conversion block **000** to station **2000**.
- 10. **CM7603>000>2000** Assign Mode A terminating destination for conversion block **000** to station 2000.
- 11. **CM7604>000>2000** Assign Mode B terminating destination for conversion block **000** to station **2000**.

## **Conditions/Requirements**

- 1 CCIS Link license and 1 IP Trunk license is required per 8IPTA card
- A maximum of 64 SIP trunks can be assigned or 8 IPTA cards.
- 8IPTA card uses AP Timeslots (8~32 timeslots per card), Upper Highway is NOT available for this card.
- 8IPTA card does NOT support Link Reconnect.