

This feature "DISA" works, but not released by Development.
Therefore, there is NO SUPPORT obligation

HiPath 4000

Configuration for DISA - All Versions

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Changes:
January, 30 2010 = 1.0 edition
November 2, 2012: Updated

DISA (Direct Inward System Access)

Customer's employees when outside the company can reach a HiPath4000 Analog Station; from this station, users access all the features (e.g. VoIP, international and long distance calls) as they're virtually at the customer location, reducing costs on calls expense reports and getting better control thru CDR.

Remote Support can troubleshoot (dialton, audio, routing, etc.) and check the system without dispatching Technician to the customers for test calls. This turns to be very interesting this days for VoIP where we had lot of problems with Speech path as one way, static, echo, chopping, etc..

With this implementation, we can sell more analog trunks, expand the Features portfolio; Service will have more MAC to do, bringing cash to the company. Cost reduction is aimed with less dispatch and diagnose time saved.

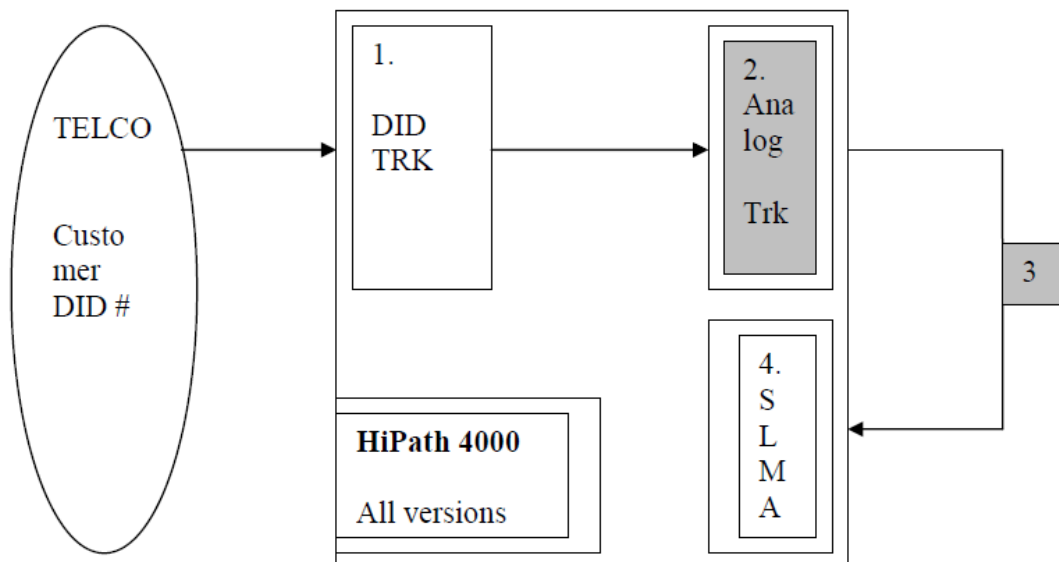
Previous Situation:

There is no DISA feature on HiPath4000, according to the Document entitled:
HiPath 4000 V5, Feature Description, Issue 1 up
P31003H3150F100017618
Capital 3.5.6.6

The following functions are not supported:

- Networking
- DISA (Direct Inward System Access)

Realization:



HW Requirements:

1. DID number from Telco, connected to TMDNH or DIU2U or DIUT2 or TMDID. Can be also an analog Telco trunk ground start line with DIT function.
2. Analog Loop Start Trunk card: TMC16 or TMANI.
3. Connect DISA analog loop start trunk port (2) to the analog dtmf station (4).
4. Analog Station (SLMA24 / SLMAC / SLMAE)

If DID is not available on requir.1; use a Telco Ground Start analog trunk line with cop:ditw, tacsu:dgtp=tie access code.

Follow the numbers on the figure:

Incoming DID external call → 1.TRk → TIE → 2.Analog Trk →3→ 4.DISA Analog Stn (DID# (1) connects to Analog Trunk(2), connected to Analog Stn(3))

- 1 External customer DID number configured as TIE access code (e.g: 8127). DID # = TIE = LDPLN = LDAT with LODR=end
- 2 Analog Trunk with COP parameter
FDGT (Fuc. no DiGiT sent) = direct connect without digit be sent
- 3. Analog Trunk port is connected to an analog station (4.slma port). Wire (jumper) physically the 02 ports.

INSTRUCTIONS:

1. External user dials the DISA DID Number (e.g: 972.714-8127).
2. User will hear HiPath4000 analog station Dial Ton, he is connected to the DISA analog station and can dial as is in the one of office phones.
3. For security reasons, the analog DISA station should be protected with PIN code.

CONFIGURATION EXAMPLE:

DIS-WABE:GEN,8127;

```

DIGIT INTERPRETATION                                VALID FOR ALL DIAL PLANS
CODE          | CALL PROGRESS STATE |NODE/DIGIT| RESERVED/CONVERT
              | 1 11111 11112 22| ANALYSIS | DNI/ADD-INFO
              |0 12345 67890 12345 67890 12| RESULT | *=OWN NODE
    
```

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-----
-----
8127          | . .**** ***** **... .. .*| TIE
-----
-----
    
```

DIS-LDPLN:CD,8127;

```

+ ----+
| CD   8127          --->          |
+ ----+-----+
| LDPNO | LDP          | DIPINUM |
+ ----+-----+
| 28   | 8127          | 0      |
    
```

DIS-LDPLN:LDP,0,28;

```
+-----+
|
| DIPLNUM: 0 |
| LDPNO : 28 | LDP : 8127 | | |
|           | SPC : 22 |
|           | FDSFIELD : 0 | SDSFIELD : 0 | PINDP : N |
+-----+
| DPLN | LROUTE | LAUTH |
+-----+
| 0 | 127 | 1 |
| 1 | 127 | 1 |
|
| 14 | 127 | 1 |
| 15 | 127 | 1 |
+-----+
```

DIS-LDAT:LCR,127;

```
+-----+
| LROUTE = 127 LDPLN          NAME = TMANI DISA          SERVICE = ALL |
| TYPE = LCR                  DNNO OF ROUTE =          127 |
| SERVICE INFO =
+-----+
|
| SCHEDULE | CARRIER | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LRTEL | LVAL | TGRP | ODR | LAUTH | ABCDEFGH | ZONE | LATTR | LDSRT | COTIDX |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 127 | 127 | 1 | ***** | 1 | EMPTY | WCHREG | 120 |
|
| DNNO =          127
+-----+
```

DIS-LODR:127;

```
+-----+
| ODR      POSITION CMD      PARAMETER |
+-----+-----+-----+
| 127 | 1 END |
+-----+
| INFO:DISA |
+-----+
```

DIS-RICHT:LRTE,127;

```
+-----+
| LRTE = 127 NAME = TMANI DISA (NEUTRAL) LSVC = ALL |
| DNNO = 127 PDNNO = 127 DESTNO =127 |
| ROUTOPT = NO REROUT = YES PLB = NO FWDBL = NO |
| DTMFCNV = FIX DTMFDSP = WITHOUT DTMFTEXT = |
| DTMFPULS = PP300 BUGS = LIN ROUTATT = NO MAINGRP = 8 |
| EMCYRTT = NO CONFONE = NO RERINGRP = NO RTENO = 8 |
+-----+
| TGRP = 127 LDAT TMANI DISA (NEUTRAL) SUBGROUP = 15 |
+-----+
```

DIS-BUEND:127;

```
+-----+
| TGRP NUMBER : 127 TGRP NAME : TMANI DISA MAXIMUM NO. : 4 |
| CHARCON : NEUTRAL |
| SUBGROUP NO.: 15 DEVICE TYPE : LPSTR TRACENO : 0 |
| SEARCH MODE : CIRCULAR ACD THRESHOLD : * |
| NUMBER OF ASSOCIATED ROUTES : 1 PRIORITY : 1 |
| TDDRFLAG : ON TDDRTHRESHOLD: 0 SOURCEGROUPIDX : 1 |
| GDTRRULE : 0 ACDEPMGRP : 0 |
| THE FOLLOWING TRUNKS (LTG-LTU-SLOT-CCT) HAVE BEEN ALLOCATED: |
+-----+
| 1- 3- 12-7 | | | |
```

DIS-BCSU:TBL,1,3,12;

LTG 1 LTU 3 SRCGRP 1 ALARMNO-LTU 0

PEN	MODULE	TYPE	ID	C	Y	NO	MODULE	STATE	INFO	STATUS
12	Q2327-X100	TMANI	A	0			Q2327-X100	1	-05	READY

DIS-PTIME;

INIBLOCK: 111 DEVICE: TMCOT8 **TBLK: 20**

LONGTIME:

L1 = 600, L2 = 600, L3 = 6000, L4 = 150,

~~L5 = 1000, L6 = 0, L7 = 60000,~~

SHORTTIME:

S1 = 200, S2 = 0, S3 = 0, S4 = 0,

S5 = 0, S6 = 0, S7 = 0, S8 = 0,

S9 = 0, S10 = 0, S11 = 0, S12 = 0,

S13 = 0, S14 = 0,

SHORT-PARA:

P1 = 1, P2 = 0, P3 = 0, P4 = 0,

P5 = 12, P6 = 64, P7 = 0, P8 = 2,

P9 = 0, P10 = 15, P11 = 7, P12 = 0,

P13 = 0, P14 = 0.

DIS-TACSU:1-3-12-7;

ANALOG TRUNKS (FORMAT=L)

PEN		1-3-12-7
DEVTYPE		TC
DEV		LPSTR
COPNO		120
COPNO		127
DPLN		0
ITR		0
TGRP		127
COFIDX		0
CCT		STN.21301
DESTNO		0
INS		Y
COS		12
LCOSV		1
LCOSD		1
INIGHT		
NNO		120
ALARMNO		2
CARRIER		1
ZONE		EMPTY
LIN		0
CIDDGTS		NONE
CBMATTR		NONE
SRCGRP		0
CLASSMRK	EC	G729AOPT
TCCID	TMANI LS DISA	
DITIDX		0
TRTBL		GDTR
RULEIDX		0
ATNTYP		CO
MFCVAR		0
DGTPR		
SUPPRESS		0
DGTCNT		0
TESTNO		1
CIRCIDX		20
CRDINT		1
CCTINFO		0
DIALTYPE		MOSIG-DTMF
DIALVAR		0-0
COEX		0
SVCDOM		

DIS-COP:127;

COP: 127 INFO: TMANI DISA

PARAMETER:

DUALTONE MULTIPLEFREQUENCY	DTMF
LINE WITH ANSWERING	ANS
FLASH LINE, NO DIGITS SEND	FDGT
NORTH AMERICAN ANALOG TRUNK	NAAT
START-DIALING-SIGNAL TIMER 1 (AMO DTIM2: PARAMETER STADIAL1)	TIM1
LINE WITH NO START-DIAL-SIGNAL	NSDL
MAKE/BREAK RATIO FOR DTMF 1 (PULSE=80MS,PAUSE=80MS)	DTM1

DIS-COT:120;

COT: 120 INFO: TMANI LOOP START

DEVICE: INDEP SOURCE: DB

PARAMETER:

RECALL IF USER HANGS UP IN CONSULTATION CALL	RCL
TRUNK CALL TRANSFER	XFER
TRUNK SIGNALING ANSWER	ANS
CHANGEOVER FROM HOLD TO RING TONE	CHRT
CALL EXTEND FOR BUSY, RING OR CALL STATE	CEBC
REGISTRATION OF IMPLAUSIBLE EVENTS	IEVT
SEND NO NODE NUMBER TO PARTNER	LWNC
ANSWER BEFORE POSTDIAL OR ANNOUNCEMENT	ABPD
USE DEFAULT NODE NUMBER OF LINE	DFNN
NORTH AMERICAN ANALOG TRUNK	NAAT
AUTOM.DTMF CONVERSION ON INCOM.CALL WHILE IN TALK STATE	AMFC
NO TONE	NTON

<dis-cossu:cos,12;

+	+	+	+	+
COS	VOICE	FAX	DIE	
+	+	+	+	+
12	>TMANI ANAL.TRK	SLOT 12		
	TA	NOCO	NOCO	
	TNOTCR	NOTIE	NOTIE	
	TTT			
+	+	+	+	+

AMO'S SETTINGS SEQUENCE:

ADD-BCSU:MTYPE=PER,LTG=1,LTU=3,SLOT=12,PARTNO="Q2327-X100",FCTID=0,LWVAR="0",
HWYBDL=A,ALARMNO=0; /* for TMANI

ADD-BCSU:MTYPE=PER,LTG=1,LTU=3,SLOT=12,PARTNO="Q2485-X",FCTID=0,LWVAR="0",
/* when TMC16 is used, only this line will be different.

ADD-BUEND:TGRP=127,NAME="TMANI DISA ",NO=4,TRACENO=0,ACDTHRH=*,PRIONO=1,
TDDRFLAG=ON,GDTRRULE=0,ACDPMGRP=0,CHARCON=NEUTRAL;

COPY-PTIME:INIBLOCK=111,TBLK=20;

CHANGE-PTIME:TYPE=REST,TBLK=20,BTYPE=PARA,P5=12,P6=64,P8=2,P10=15,P11=7;

ADD-COP:COPNO=127,PAR=DTMF&ANS&FDGT&NAAT&TIM1&NSDL&DTM1; CHANGE-
COP:COPNO=127,COPTYPE=COPADD,DEV=INDEP,INFO="TMANI DISA";

ADD-COT:COTNO=120,PAR=RCL&XFER&ANS&CHRT&CEBC&IEVT&LWNC&ABPD&DFNN&NAAT&AMFC& NTON;
CHANGE-COT:COTNO=120,COTTYPE=COTADD,DEV=INDEP,INFO="TMANI LOOP START";

ADD-COSSU:NEWCOS=12,INFO="TMANI ANAL.TRK SLOT 12"; CHANGE-
COSSU:TYPE=COS,COS=12,AVCE=TA&TNOTCR&TTT;

ADD-TACSU:PEN=1-3-12-7,COTNO=120,COPNO=127,DPLN=0,ITR=0,COS=12,LCOSV=1,LCOSD=1,
TGRP=127,COFIDX=0,CCT="STN.21301 ",DESTNO=0,NNO=120,ALARMNO=2,CARRIER=1,
ZONE=EMPTY,LIN=0,CIDDGTS=NONE,CBMATTR=NONE,SRGGRP=0,CLASSMRK=EC&G729AOPT,
TCCID="TMANI LS DISA ",DITIDX=0,TRTBL=GDTR,RULEIDX=0,ATNTYP=CO,
INS=Y,DEVTYPE=TC,DEV=LPSTR,MFCVAR=0,SUPPRESS=0,DGTCNT=0,TESTNO=1,CIRCIDX=20,
CDRINT=1,CCTINFO=0,DIALTYPE=MOSIG-DTMF,DIALVAR=0-0,COEX=0;

ADD-WABE:CD=8127,DAR=TIE,CHECK=N;

ADD-RICHT:MODE=LRTENNEW,LRTE=127,LSVC=ALL,NAME="TMANI DISA ",TGRP=127,
DNNO=127,DTMFCNV=FIX,DTMFPU=PP300,PLB=NO,DESTNO=127,ROUTATT=NO,EMCYRTT=NO,
PDNNO=127,CHARCON=NEUTRAL,CONFONE=NO,RERINGRP=NO,NOPRCFWD=NO,NITO=NO,
CLNAMEDL=NO,FWDSWCH=NO,LINFEMER=NO,NOINTRTE=NO;

ADD-LODR:ODR=127,CMD=END; ADD-
LODR:ODR=127,INFO="DISA";

ADD-LDAT:LROUTE=127,LSVC=ALL,LVAL=1,TGRP=127,ODR=127,LAUTH=1,CARRIER=1,
ZONE=EMPTY,LATTR=WCHREG,DNNO=127,VCCYC=4,COTIDX=120;

ADD-LDPLN:LCRCONF=LCRPATT,DIPLNUM=0,LDP="8127",LROUTE=127,LAUTH=1,PINDP=N;

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