



Avaya Solution & Interoperability Test Lab

Application Notes for Etrali Etradeal and Avaya Communication Manager – Issue 1.0

Abstract

These Application Notes describe the compliance testing of trading turret system Etrali Etradeal with Avaya Communication. Etrali Etradeal consists of a control unit and terminals which are designed for use by traders in the financial sector. These Application Notes contain a description of the configurations for Etradeal and Avaya Communication Manager which were used for testing. The testing which was performed tested the major functions of the Etradeal product.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

Table of Contents

1. Introduction.....	3
1.1. Interoperability Compliance Testing	3
1.2. Support.....	3
2. Reference Configuration.....	4
3. Equipment and Software Validated.....	5
4. Configuration.....	5
4.1. Configure and Verify Avaya Communication Manager	5
4.1.1. Verify Customer Options	6
4.1.2. Configure Features.....	8
4.1.3. Configure E1/QSIG Interface to Etradeal	9
4.2. Configure Etradeal	15
5. General Test Approach and Test Results.....	23
6. Verification Steps.....	23
7. Conclusion	23
8. Additional References.....	24

1. Introduction

These Application Notes describe the configuration steps required for Etrali Etradeal to successfully interoperate with Avaya Communication Manager. The Etrali Etradeal system consists of a central control unit and one or more Etradeal Mach 3D telephone terminals, which were developed for the financial trading industry.

1.1. Interoperability Compliance Testing

The compliance testing included the following test scenarios

- Basic incoming call, with both enbloc and overlap sending
- Basic outgoing call with both enbloc and overlap sending
- Calling number and name identification for incoming and outgoing call
- Unconditional call forwarding
- Supervised transfer
- Blind transfer
- Call Completion Busy Subscriber (CCBS)
- Recovery from network interruptions and system restart

Where applicable, tests were performed with local and external (PSTN) telephones. Calling scenarios were performed with various combinations of local and external (PSTN) telephones.

1.2. Support

Support from Avaya is available at <http://support.avaya.com/>.

Presales support from Etrali is available at:

Andres Kaps
Trading Solutions Consultant
tel. + 49 (0) 69 50 60 74 603
fax + 49 (0) 69 21 93 93 34
mobil + 49 (0) 172 7223055
andreas.kaps@orange-ftgroup.com
Etrali GmbH
Vilbeler Strasse 29
60313 Frankfurt am Main
Germany

2. Reference Configuration

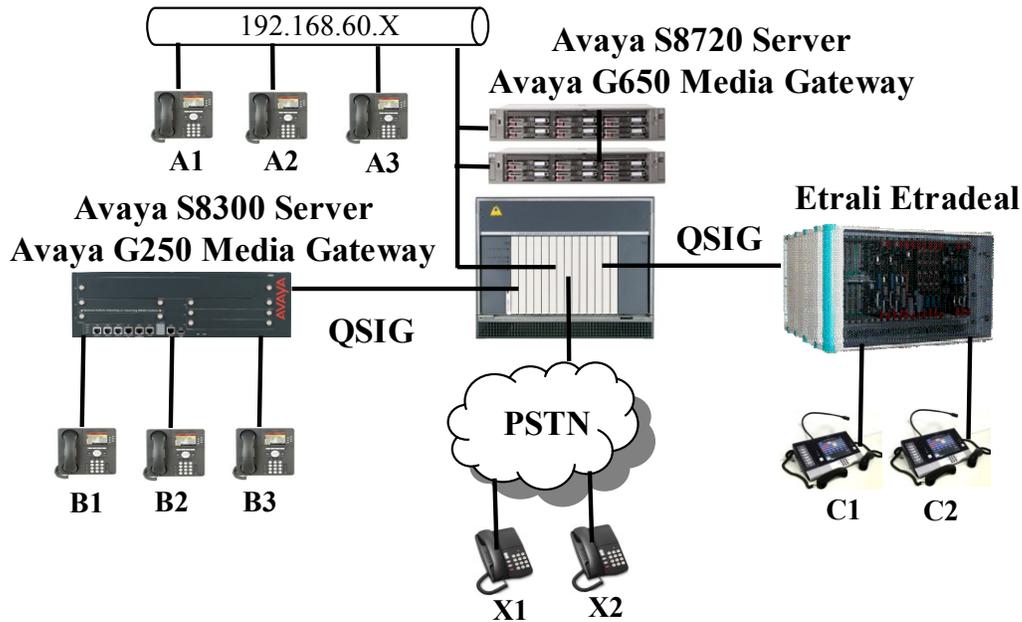


Figure 1: System Configuration

The Etrali Etradeal control unit in the above diagram is attached to an Avaya G650 Media Gateway via an E1/QSIG interface using an “un-crossed” E1 cable. The Etrali Etradeal E1 interface supports the following QSIG features:

- QSIG Calling and Connected Line Identification
- QSIG Call Transfer
- QSIG Call Diversion

The following table contains additional information about how each of the telephones contained in the above diagram are configured in Avaya Communication Manager. The “xxxx” and “yyyy” sequences have been substituted for actual number sequence for security reasons.

Endpoint	Ext	PSTN Number	Endpoint
A1	60094	+49 69 90739887 60094	Avaya 9640
A2	60091	+49 69 90739887 60091	Avaya 9640
A3	60182	+49 69 90739887 60182	Avaya 9630
B1	7211	+49 69 90739887 7211	Avaya 9640
B2	7212	+49 69 90739887 7212	Avaya 9630
B3	7213	+49 69 90739887 7213	Avaya 9640
C1	8500	+49 69 90739887 8500	Etradeal Mach 3D
C2	8501	+49 69 90739887 8501	Etradeal Mach 3D
X1		+49 69 7505 6174	ISDN
X2		+49 69 7505 6630	ISDN

Table 1: Extensions Used for Testing

3. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Software Component	Version
Avaya Communication Manager	R015x.01.2.416.4 (5.1.2) Update:01.2.416.4-16770
Avaya E1 Interface TN2464CP	HW01 FW022
Etradeal	37 R2
Etradeal Central Control Unit SIM 1030	37.07
Etradeal QSIG interface SIM 444	36.11-919
Etradeal Mach 3D SIM 960/965	1.65 / 5.02

Table 2: Equipment and Version Validated

4. Configuration

4.1. Configure and Verify Avaya Communication Manager

The configuration and verification operations illustrated in this section were all performed using the Avaya Communication Manager System Administration Terminal (SAT).

The information provided in this section describes the configuration of Avaya Communication Manager for this solution. For all other provisioning information such as installation and configuration, please refer to the product documentation in references [1] and [2].

4.1.1. Verify Customer Options

Use the **display system-parameters customer options** command to verify that Avaya Communication Manager is configured to meet the minimum requirements to run Etrali Etradeal. Those items shown in **bold** indicate required values or minimum capacity requirements. If these are not met in the configuration, please contact an Avaya representative for further assistance.

Parameter	Usage
Maximum Concurrently Registered IP Stations (page2)	This must be sufficient to support the total number of IP stations. This is only required if IP stations are included in the configuration. Other station types can also be used.
IP Stations? (page4)	This parameter must be set to “y” for the tested configuration, but is not required if IP stations are not included in the configuration.
ISDN-PRI? (page 4)	This parameter must be set to “y”.
Private Networking? (page 5)	This parameter must be set to “y”.
Basic Call Setup (page 8)	This parameter must be set to “y”.
Basic Supplementary Services (page 8)	This parameter must be set to “y”.

Table 3: System-Parameters Customer-Options Parameters

```

display system-parameters customer-options                               Page 2 of 11
                                OPTIONAL FEATURES

IP PORT CAPACITIES                                                    USED
      Maximum Administered H.323 Trunks: 10                          0
      Maximum Concurrently Registered IP Stations: 12                4
      Maximum Administered Remote Office Trunks: 0                   0
Maximum Concurrently Registered Remote Office Stations: 0            0
      Maximum Concurrently Registered IP eCons: 0                     0
      Max Concur Registered Unauthenticated H.323 Stations: 0         0
      Maximum Video Capable Stations: 0                               0
      Maximum Video Capable IP Softphones: 10                        0
      Maximum Administered SIP Trunks: 10                             10
Maximum Administered Ad-hoc Video Conferencing Ports: 0              0
      Maximum Number of DS1 Boards with Echo Cancellation: 0         0
      Maximum TN2501 VAL Boards: 10                                  0
      Maximum Media Gateway VAL Sources: 10                           0
      Maximum TN2602 Boards with 80 VoIP Channels: 0                 0
      Maximum TN2602 Boards with 320 VoIP Channels: 0               0
      Maximum Number of Expanded Meet-me Conference Ports: 0         0
  
```

Figure 2: System-Parameters Customer-Options Screen, page 2

```

change system-parameters customer-options                               Page 4 of 11
                                OPTIONAL FEATURES

Emergency Access to Attendant? y                                     IP Stations? y
  Enable 'dadmin' Login? y
  Enhanced Conferencing? y                                           ISDN Feature Plus? n
  Enhanced EC500? y                                                 ISDN/SIP Network Call Redirection? y
Enterprise Survivable Server? n                                       ISDN-BRI Trunks? y
  Enterprise Wide Licensing? n                                       ISDN-PRI? y
  ESS Administration? n                                             Local Survivable Processor? n
  Extended Cvg/Fwd Admin? y                                         Malicious Call Trace? n
  External Device Alarm Admin? n                                     Media Encryption Over IP? n
Five Port Networks Max Per MCC? n                                     Mode Code for Centralized Voice Mail? n
  Flexible Billing? n
  Forced Entry of Account Codes? n                                     Multifrequency Signaling? y
  Global Call Classification? n                                       Multimedia Call Handling (Basic)? y
  Hospitality (Basic)? y                                             Multimedia Call Handling (Enhanced)? y
  Hospitality (G3V3 Enhancements)? n                                   Multimedia IP SIP Trunking? y
  IP Trunks? y

IP Attendant Consoles? y

```

Figure 3: System-Parameters Customer-Options Screen, page 4

```

change system-parameters customer-options                               Page 5 of 11
                                OPTIONAL FEATURES

Multinational Locations? n                                           Station and Trunk MSP? n
Multiple Level Precedence & Preemption? n                             Station as Virtual Extension? n
  Multiple Locations? n
Personal Station Access (PSA)? n                                       System Management Data Transfer? n
  PNC Duplication? n                                                 Tenant Partitioning? n
  Port Network Support? y                                           Terminal Trans. Init. (TTI)? n
  Posted Messages? n                                               Time of Day Routing? n
  TN2501 VAL Maximum Capacity? y
  Private Networking? y                                           Uniform Dialing Plan? y
  Processor and System MSP? n                                         Usage Allocation Enhancements? y
  Processor Ethernet? y                                             Wideband Switching? n
  Remote Office? n                                                  Wireless? n
Restrict Call Forward Off Net? y
  Secondary Data Module? y

```

Figure 4: System-Parameters Customer-Options Screen, page 5

```

change system-parameters customer-options                               Page 8 of 11
                               QSIG OPTIONAL FEATURES
                               Basic Call Setup? y
                               Basic Supplementary Services? y
                               Centralized Attendant? n
                               Interworking with DCS? n
                               Supplementary Services with Rerouting? y
                               Transfer into QSIG Voice Mail? y
                               Value-Added (VALU)? y

```

Figure 5: System-Parameters Customer-Options Screen, page 8

4.1.2. Configure Features

Use the **display system-parameters features** command to set system features as shown in the following table.

Parameter	Usage
Trunk-to-Trunk Transfer?	Set this parameter to “all”.

Table 4: System-Parameters Features

```

change system-parameters features                                     Page 1 of 17
                               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): 10
                               Off-Premises Tone Detect Timeout Interval (seconds): 20
                               AAR/ARS Dial Tone Required? y
                               Music/Tone on Hold: music Type: ext 61121
                               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? n

```

Figure 6: System-Parameters Features, page 1

4.1.3. Configure E1/QSIG Interface to Etradeal

Use the **add ds1 <media module hardware address>** command to configure the DS1 interface card to serve as a Primary Rate ISDN interface. Assign those values for this command as shown in the following table.

Parameter	Usage
Bit Rate	Assign the bit rate to "2.048", as required to connect to the Etradeal E1 interface card.
Line Coding	Assign the line coding to "hdb3", as required to connect to the Etradeal E1 interface card.
Name	Assign a name to be used to identify the card.
Signaling Mode	Assign the signaling mode to "isdn-pri".
Connect	Specify the connection is to a "pbx"
Interface	Specify that Avaya Communication Manager is to serve as the "peer-slave".
Peer Protocol	Specify the Q-SIG protocol is to be used.
Side	Specify "b".
Interface Companding	Specify "alaw".
CRC?	Specify a "y".
Idle Code	Specify that an idle sequence of "01010100" is to be sent on the interface when no data is being transmitted.
Channel Numbering	Specify that "sequential" channel numbering is to be used.

Table 5: DS1 Parameters for PRI Interface to Etradeal

```

add ds1 01a09                                     Page 1 of 1
                                         DS1 CIRCUIT PACK

      Location: 01A09                               Name: ETRADEAL
      Bit Rate: 2.048                               Line Coding: hdb3

      Signaling Mode: isdn-pri
      Connect: pbx                                  Interface: peer-slave
      TN-C7 Long Timers? n                          Peer Protocol: Q-SIG
      Interworking Message: PROgress                 Side: b
      Interface Companding: alaw                     CRC? y
      Idle Code: 01010100                           Channel Numbering: sequential
                                         DCP/Analog Bearer Capability: 3.1kHz

                                         T303 Timer(sec): 4
                                         Disable Restarts? n

      Slip Detection? n                             Near-end CSU Type: other

      Echo Cancellation? n
  
```

Figure 7: DS1 Screen for PRI Interface to Etradeal

Use the **add signaling-group** command to allocate a signaling group to this trunk.

Parameter	Usage
Group Type	Specify "isdn-pri" for ISDN primary rate.
D-Channel	Assign port 16 of the DS1 interface as the D channel.
Max number of NCA TSC	Specify a number sufficient to handle the maximum number of simultaneous CCBS operations.
Trunk Group for NCA TSC	Specify the number of the trunk group configured in Figure 9 .
Trunk Group for Channel Selection	Specify the number of the trunk group configured in Figure 9 as the Trunk Group to be used for channel selection.
TSC Supplementary Service Protocol	Specify "b" to designate use of the QSIG protocol.

Table 6: Signaling-Group Parameters for Etradeal PRI Interface

```

add signaling-group 85                                     Page 1 of 1
                SIGNALING GROUP
Group Number: 85          Group Type: isdn-pri
Associated Signaling? y   Max number of NCA TSC: 8
Primary D-Channel: 01A0916   Max number of CA TSC: 0
Trunk Group for NCA TSC: 85
Trunk Group for Channel Selection: 85
TSC Supplementary Service Protocol: b   Network Call Transfer? n
    
```

Figure 8: Signaling Group for Interface to Etradeal

Use the **add trunk-group** command to configure the Trunk Group to the Etradeal Server. Assign values for this command as shown in the following table.

Parameter	Usage
Group Type (p.1)	Specify the Group Type as “isdn”
Group Name (p.1)	Select an appropriate name to identify the device.
TAC (p.1)	Specify a trunk access code that can be used to provide dial access to the trunk.
Carrier Medium (p.1)	Specify a Carrier Medium of “PRI/BRI”, as PRI will be used for this trunk.
Dial Access (p.1)	Allow dial access to the trunk by dialing the trunk access code.
Service Type (p.1)	Designate the trunk as a “tie” line to a peer system.
Supplementary Service Protocol (p.2)	Specify a Supplementary Service Protocol of “b” for QSIG.
Digit Handling (p.2)	Specify “enbloc/enbloc” to use block sending of dialed digits.
Trunk Hunt (p.2)	Specify “ascend”.
NCA-TSC Trunk Member (p.3)	Enter a trunk group member number to use for routing of tandem QSIG call-independent signaling connections.
Send Name (p.3)	Specify “y” so that the name of the caller is sent for outgoing calls.
Send Calling Number (p.3)	Specify “y” so that the number of the caller is sent for outgoing calls.
Format (p.3)	Specify “unk-pvt” to use unknown/private dialing plan.
Send Connected Number (p.3)	Specify “y” so that the number of the connected party is sent to the caller.
TSC Method for Auto Callback (p.4)	Specify “always-retain” to use the Avaya Auto Callback feature.
Group Member Assignments (p.5,6)	Assign the interface ports on the E1 interface to the trunk group members. Note that port 16 is used for the D channel, which must be assigned to the signaling group associated with this trunk.

Table 7: Trunk-Group Parameters for Etradeal PRI Interface

```

change trunk-group 85                                     Page 1 of 21
                                     TRUNK GROUP
Group Number: 85                Group Type: isdn                CDR Reports: y
  Group Name: ETRADEAL          COR: 1                TN: 1                TAC: *85
  Direction: two-way           Outgoing Display? n        Carrier Medium: PRI/BRI
  Dial Access? y               Busy Threshold: 255       Night Service:
Queue Length: 0
Service Type: tie                Auth Code? n                TestCall ITC: rest
Far End Test Line No:
TestCall BCC: 4

```

Figure 9: Trunk Group for Interface to Etradeal, Page 1

```

change trunk-group 85                                     Page 2 of 21
  Group Type: isdn

TRUNK PARAMETERS
  Codeset to Send Display: 6      Codeset to Send National IEs: 6
  Max Message Size to Send: 260  Charge Advice: none
  Supplementary Service Protocol: b  Digit Handling (in/out): enbloc/enbloc

  Trunk Hunt: ascend

  Digital Loss Group: 13
Incoming Calling Number - Delete:      Insert:      Format:
  Bit Rate: 1200                      Synchronization: async  Duplex: full
Disconnect Supervision - In? y  Out? n
Answer Supervision Timeout: 0
Administer Timers? n              CONNECT Reliable When Call Leaves ISDN? n

```

Figure 10: Trunk Group for Interface to Etradeal, Page 2

```

change trunk-group 85                                     Page 3 of 21
TRUNK FEATURES
  ACA Assignment? n      Measured: none      Wideband Support? n
                        Internal Alert? n      Maintenance Tests? y
                        Data Restriction? n      NCA-TSC Trunk Member: 30
                        Send Name: y      Send Calling Number: y
  Used for DCS? n      Hop Dgt? y      Send EMU Visitor CPN? n
  Suppress # Outpulsing? y  Format: unk-pvt
Outgoing Channel ID Encoding: preferred  UUI IE Treatment: service-provider

  Replace Restricted Numbers? n
  Replace Unavailable Numbers? n
  Send Connected Number: y
  Hold/Unhold Notifications? y
  Modify Tandem Calling Number? n
  Send UUI IE? y
  Send UCID? n
  Send Codeset 6/7 LAI IE? y      Ds1 Echo Cancellation? n

  Apply Local Ringback? n
  Show ANSWERED BY on Display? y
  Network (Japan) Needs Connect Before Disconnect? n

```

Figure 11: Trunk Group for Interface to Etradeal, Page 3

```

change trunk-group 85                                     Page 4 of 21
  QSIG TRUNK GROUP OPTIONS

  TSC Method for Auto Callback: always-retain
  Diversion by Reroute? y
  Path Replacement? y
  Path Replacement with Retention? n
  Path Replacement Method: better-route
  SBS? n
  Display Forwarding Party Name? y
  Character Set for QSIG Name: eurofont
  QSIG Value-Added? n

```

Figure 12: Trunk Group for Interface to Etradeal, Page 4

```

change trunk-group 85                                     Page 5 of 21
                                     TRUNK GROUP
                                     Administered Members (min/max): 1/30
GROUP MEMBER ASSIGNMENTS                               Total Administered Members: 29

   Port   Code Sfx Name      Night      Sig Grp
1: 01A0901 TN2464 C              85
2: 01A0902 TN2464 C              85
3: 01A0903 TN2464 C              85
4: 01A0904 TN2464 C              85
5: 01A0905 TN2464 C              85
6: 01A0906 TN2464 C              85
7: 01A0907 TN2464 C              85
8: 01A0908 TN2464 C              85
9: 01A0909 TN2464 C              85
10: 01A0910 TN2464 C             85
11: 01A0911 TN2464 C             85
12: 01A0912 TN2464 C             85
13: 01A0913 TN2464 C             85
14: 01A0914 TN2464 C             85
15: 01A0915 TN2464 C             85

```

Figure 13: Trunk Group for Interface to Etradeal, Page 5

```

change trunk-group 85                                     Page 6 of 21
                                     TRUNK GROUP
                                     Administered Members (min/max): 1/30
GROUP MEMBER ASSIGNMENTS                               Total Administered Members: 29

   Port   Code Sfx Name      Night      Sig Grp
16:
17: 01A0917 TN2464 C              85
18: 01A0918 TN2464 C              85
19: 01A0919 TN2464 C              85
20: 01A0920 TN2464 C              85
21: 01A0921 TN2464 C              85
22: 01A0922 TN2464 C              85
23: 01A0923 TN2464 C              85
24: 01A0924 TN2464 C              85
25: 01A0925 TN2464 C              85
26: 01A0926 TN2464 C              85
27: 01A0927 TN2464 C              85
28: 01A0928 TN2464 C              85
29: 01A0929 TN2464 C              85
30: 01A0930 TN2464 C              85

```

Figure 14: Trunk Group for Interface to Etradeal, Page 6

Use the **change private-numbering** command to specify that the calling party number is to be sent for calls which are made via the E1 trunk to the Etradeal trunk.

Parameter	Usage
Ext Len	Specify "5" as the length of local extensions.
Ext Code	Specify "6" as the leading digit of local extensions.
Trk Grp	Specify "85" as the trunk which connects to Etradeal.
Total Len	Specify "5" as the length of local extensions.

Table 8: Private-Numbering Parameters for Etradeal PRI Interface

```

change private-numbering 0
                                Page 1 of 2
                                NUMBERING - PRIVATE FORMAT
Ext Ext      Trk      Private      Total
Len Code    Grp(s)   Prefix      Len
5 6         2          5          5
5 6         82         5          5
5 6         85         5          5
Total Administered: 6
Maximum Entries: 540

```

Figure 15: Private Numbering Screen

Parameter	Usage
Pattern Name	Specify an appropriate name to identify the routing pattern.
Grp No	Specify "85".
Numbering Format	The format "unk-unk" was used for the testing which was done. The format to be used for a specific configuration depends on the configuration of the telephone network.

Table 9: Route-Pattern 19 Parameters

```

change route-pattern 85
                                Page 1 of 3
                                Pattern Number: 85  Pattern Name: ETRADEAL
                                SCCAN? n      Secure SIP? n
Grp FRL NPA Pfx Hop Toll No.  Inserted      DCS/ IXC
No   Mrk Lmt List Del  Digits      QSIG
                                Dgts      Intw
1: 85  0
2:
3:
4:
5:
6:
                                n  user
                                n  user
                                n  user
                                n  user
                                n  user
                                n  user

BCC VALUE TSC CA-TSC ITC BCIE Service/Feature PARM No. Numbering LAR
0 1 2 M 4 W Request      Dgts Format
Subaddress
1: y y y y y n n      rest      unk-unk  none
2: y y y y y n n      rest      none
3: y y y y y n n      rest      none
4: y y y y y n n      rest      none
5: y y y y y n n      rest      none
6: y y y y y n n      rest      none

```

Figure 16: Route Pattern for Etradeal Screen

4.2. Configure Etradeal

Start the “Jade Management” application from the Etradeal console and login with the appropriate credentials.

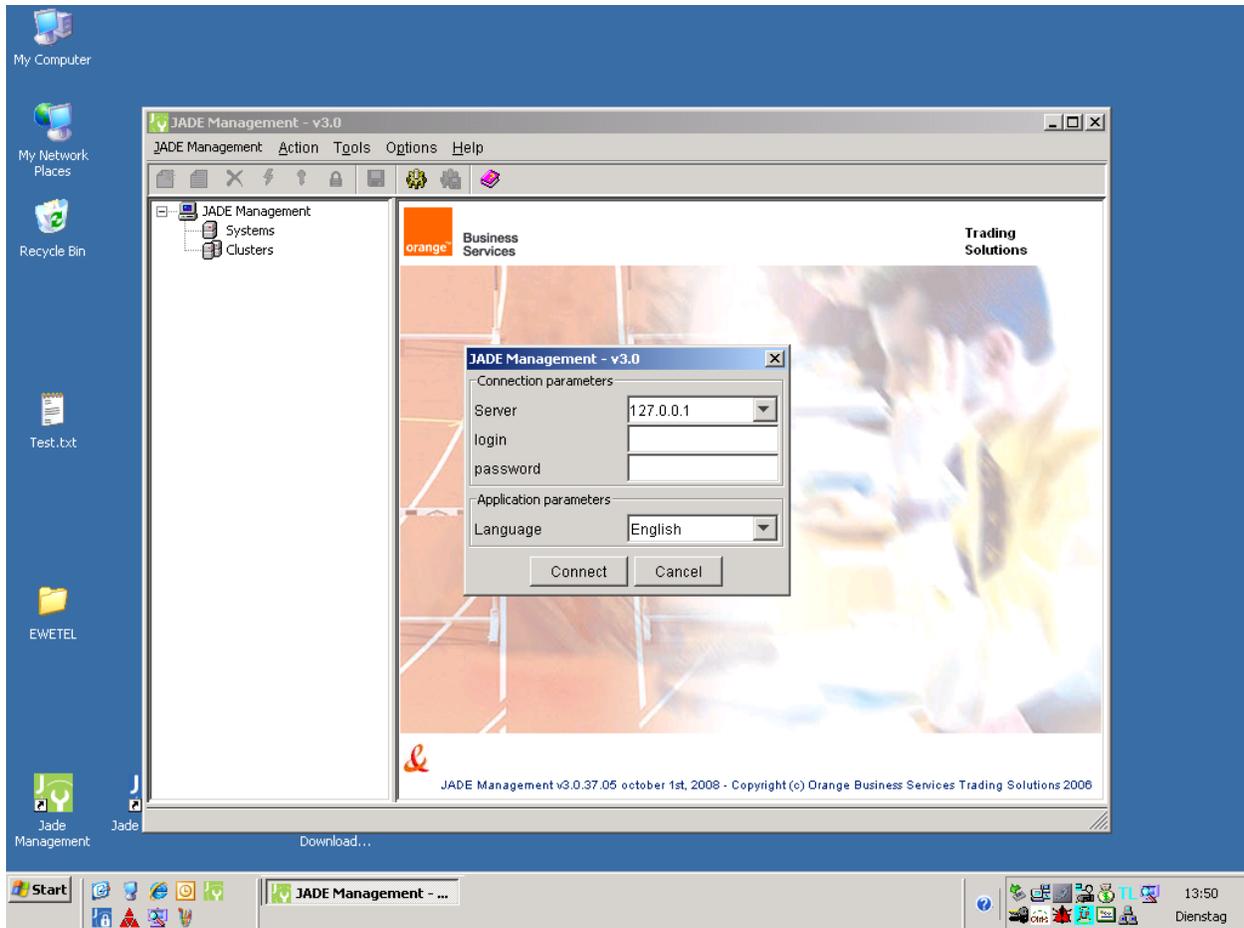


Figure 17: Etradeal Configuration Login Screen

Select “E1/T1 prefixes” from the icon hierarchy.

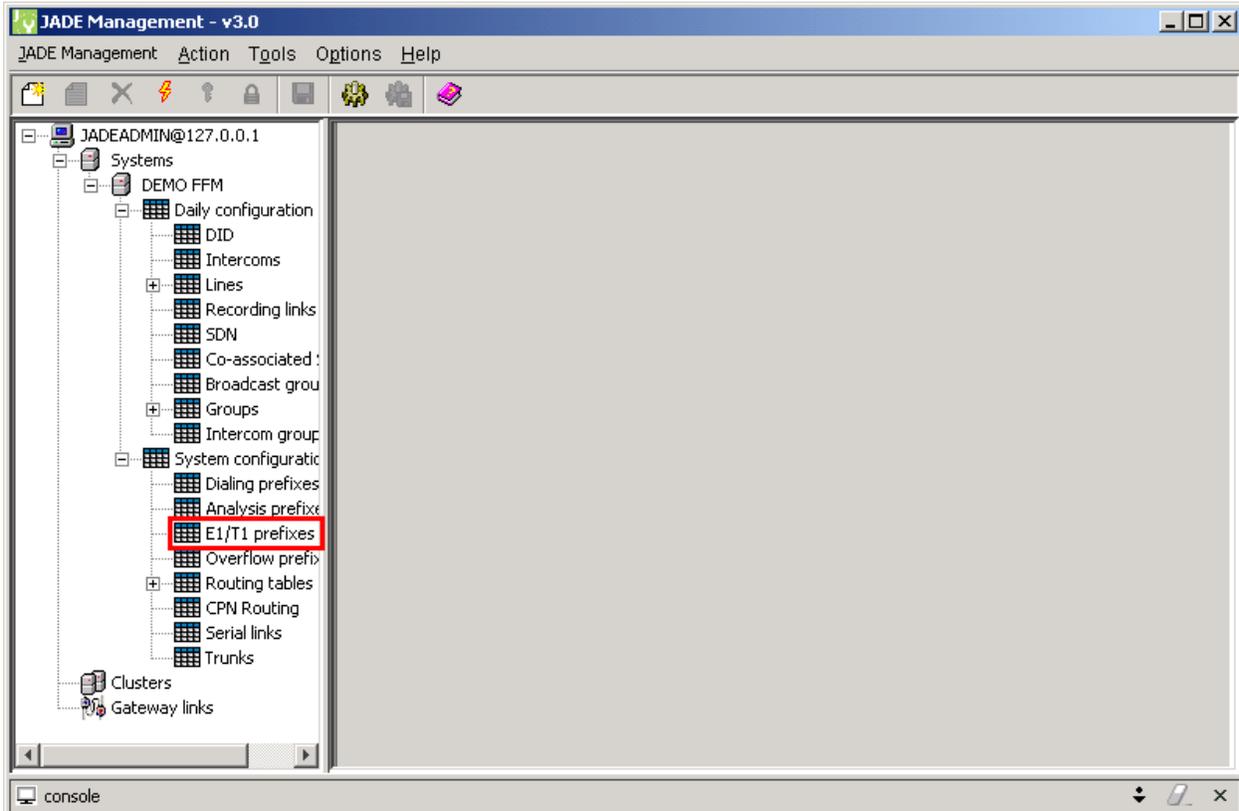


Figure 18: Etradeal Configuration Icon Hierarchy Screen

Enter the parameters shown in the following table.

Parameter	Usage
Network	Select “E1 QSIG Terminal” from the drop-down menu.
Link with CRC	Check this box. This parameter corresponds to “CRC?” parameter configured in Figure 7 .
Identifying code	Select “Unknown Unknown” dial plan from the drop-down menu. The parameter value to be used for a specific configuration depends on the configuration of the telephone network. This value corresponds to that configured in Figure 16 .
ECMA	Select “ECMA3 (‘INTEGER’)” from the drop-down menu.
Transmit. name	Check this box to transmit the terminal user name on trunk interface.
Auto recall	Check this box to enable Call Completion Busy Subscriber (CCBS) which allows calls to busy parties to be repeated automatically.

Table 10: Etradeal E1 Channel Configuration Parameters

Modification: E1/T1 channels

E1/T1 prefix

System: DEMO FFM Prefix: 8

Physical parameters (Level 1 and 2)

Network: E1 QSIG Terminal Cable length: 0-180m Link with CRC:

Dialog parameters (level 3)

Outgoing call parameters

Block dialing:
 Inter-digit delay: 8s
 Tone: Local
 Release Time-out: 4s
 Prefix + CPN:
 Identifying code: Unknown Unknown

Incoming call parameters

DID length: 4
 Transmit. DID: 3

Additional parameters

QSIG parameters

Channel used: Last
 ECMA: ECMA3 ('INTEGER')
 Transmit. name
 Auto recall
 Join. transfer
 Rerout. transfer
 Voice mail transfer

Name(s) filtering

ETSI parameters

No malicious call:

Associated Lines

0	64	Auto MF	PBX	<input checked="" type="checkbox"/>
1	65	Auto MF	PBX	<input checked="" type="checkbox"/>
2	66	Auto MF	PBX	<input checked="" type="checkbox"/>
3	67	Auto MF	PBX	<input checked="" type="checkbox"/>
4	68	Auto MF	PBX	<input checked="" type="checkbox"/>
5	69	Auto MF	PBX	<input checked="" type="checkbox"/>
6	70	Auto MF	PBX	<input checked="" type="checkbox"/>
7	71	Auto MF	PBX	<input checked="" type="checkbox"/>
8	72	Auto MF	PBX	<input checked="" type="checkbox"/>
9	73	Auto MF	PBX	<input checked="" type="checkbox"/>
10	74	Auto MF	PBX	<input checked="" type="checkbox"/>
11	75	Auto MF	PBX	<input checked="" type="checkbox"/>
12	76	Auto MF	PBX	<input checked="" type="checkbox"/>
13	77	Auto MF	PBX	<input checked="" type="checkbox"/>
14	78	Auto MF	PBX	<input checked="" type="checkbox"/>
15				<input type="checkbox"/>
16	80	Auto MF	PBX	<input checked="" type="checkbox"/>
17	81	Auto MF	PBX	<input checked="" type="checkbox"/>
18	82	Auto MF	PBX	<input checked="" type="checkbox"/>
19	83	Auto MF	PBX	<input checked="" type="checkbox"/>
20	84	Auto MF	PBX	<input checked="" type="checkbox"/>
21	85	Auto MF	PBX	<input checked="" type="checkbox"/>
22	86	Auto MF	PBX	<input checked="" type="checkbox"/>
23	87	Auto MF	PBX	<input checked="" type="checkbox"/>
24	88	Auto MF	PBX	<input checked="" type="checkbox"/>
25	89	Auto MF	PBX	<input checked="" type="checkbox"/>
26	90	Auto MF	PBX	<input checked="" type="checkbox"/>
27	91	Auto MF	PBX	<input checked="" type="checkbox"/>
28	92	Auto MF	PBX	<input checked="" type="checkbox"/>
29	93	Auto MF	PBX	<input checked="" type="checkbox"/>
30	94	Auto MF	PBX	<input checked="" type="checkbox"/>
31				<input type="checkbox"/>

Figure 19: Etradeal Configuration Login Screen

Select “Trunk” from the icon hierarchy and assign trunk type of “PBX” to the trunk which is connected to the Avaya G650 Gateway.

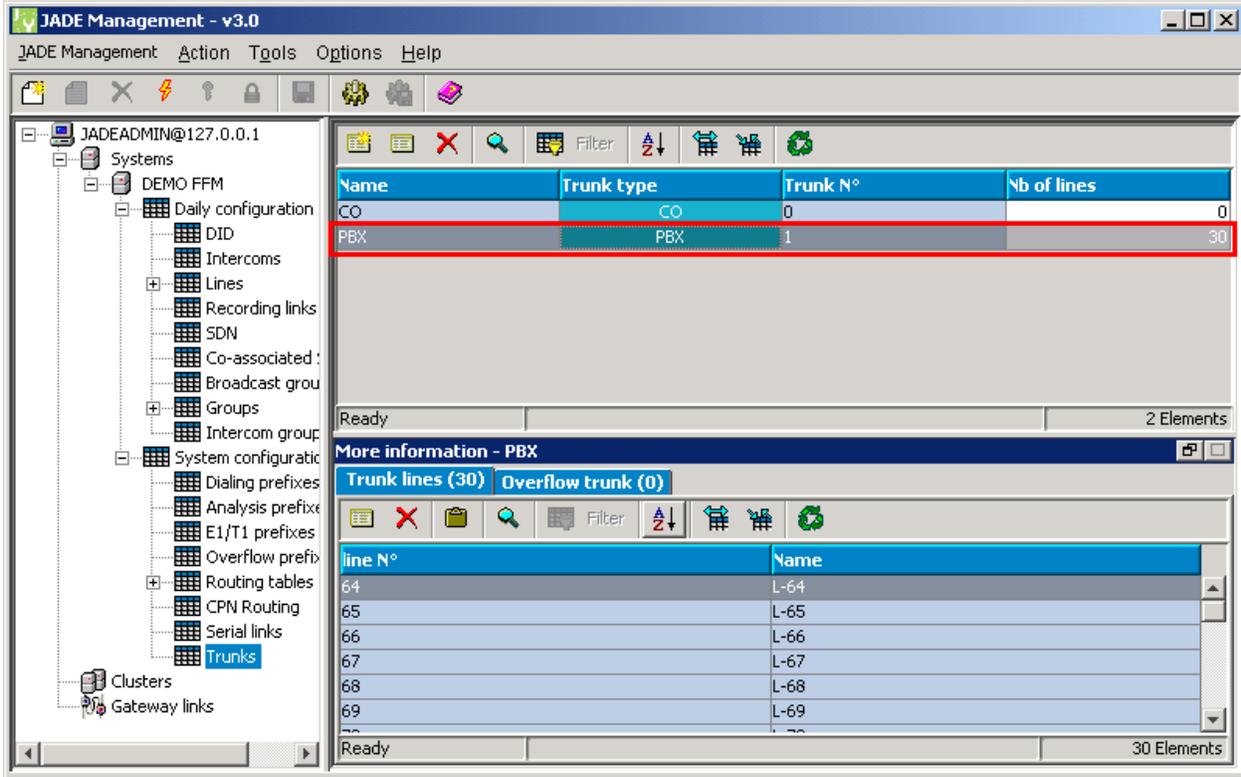


Figure 20: Etradeal Trunk Configuration Screen

Select “Users” from the icon hierarchy and click the “New” icon.

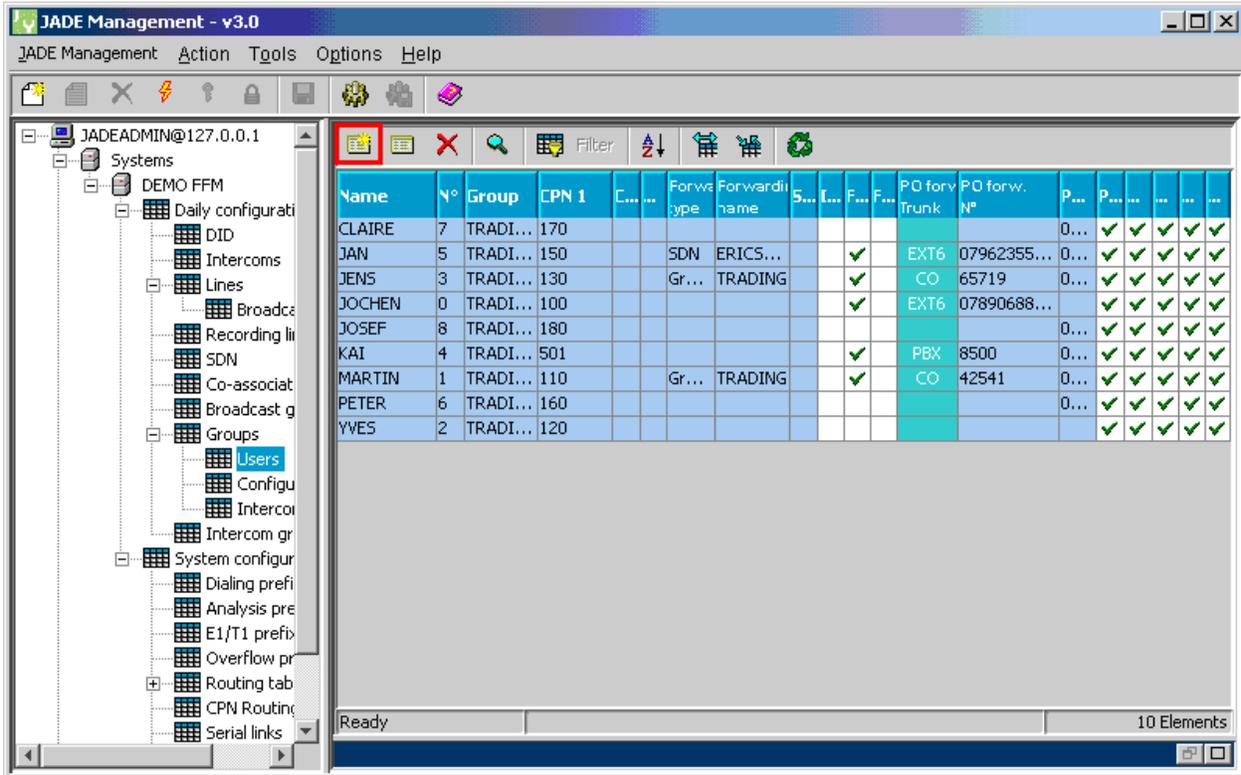


Figure 21: Etradeal User Configuration Screen

Assign a user name and calling party number for that user and click OK. Repeat this for each of the terminals to be attached to the Etradeal.

The screenshot shows a dialog box titled "Modification : Users modified". The "User Name" field is set to "ANDREAS". Under "Shared systems", "DEMO FFM (1)" is selected. The "Group" is set to "TRADING". The "CPN 1" field is set to "8500". The "Forwarding" section shows "Forwarding type" as "<NONE>" and a "No forwarding" button. The "Service name" field is empty. The "Password" field contains "0000" and a "Reset" button. The "Options" section has three checked checkboxes: "Playback", "APIPC", and "ACF". The "Presence" section has two unchecked checkboxes: "View Presence" and "Display Presence". At the bottom are "Ok", "Restore", and "Cancel" buttons. Red boxes highlight the "User Name" and "CPN 1" fields.

Figure 22: Etradeal New User Screen

Select “DID” (Direct Inward Dialing) from the icon hierarchy and click the “New” icon.

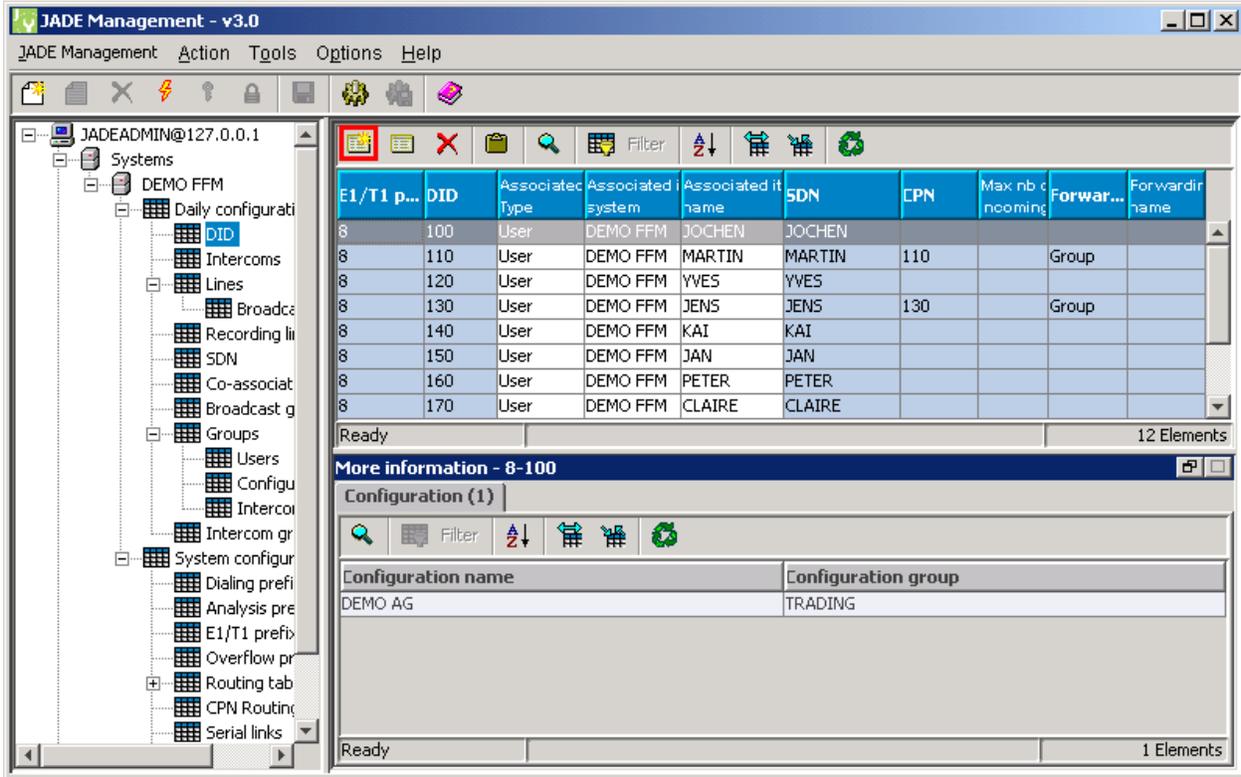


Figure 23: Etradeal DID Screen

Enter the DID to be assigned to the user, and click on the “user” button and select a user for that DID, and click “OK”

Modification : DID

System

DEMO FFM

E1/T1 prefix :

DID 8500

Associated item

Type : User

User ANDREAS

SDN : ANDREAS

CPN

Max nb of incoming call(s) : <NONE>

Forwarding

Forwarding type : <NONE>

No forwarding

Ok Restore Cancel

Figure 24: Etradeal New DID Screen

5. General Test Approach and Test Results

The compliance testing done between Etrali Etradeal and Avaya Communication Manager was performed manually. The tests were all functional in nature, and no performance testing was done. **Section 1.1** contains a list of tests which were performed. All tests for the QSIG features supported by Etradeal were completed correctly. The operation of certain QSIG features for Etradeal is different from that of Avaya Communication Manager:

- For calls made by Etradeal terminals via the QSIG trunk, Etradeal can be configured to send either the number or the name of the calling party but not both.
- Calls diverted to Etradeal terminals via the QSIG trunk show the extension of the diverting-party as caller without an indication that the call is being diverted.
- If an Etradeal extension transfers a call with an Avaya extension to another Avaya extension via the QSIG trunk, the transferred-to endpoint shows the Etradeal extension as the connected number.

6. Verification Steps

The correct installation and configuration of Etradeal QSIG link can be verified by performing the steps shown below.

1. After attachment of the connecting cable between the Avaya G650 E1 interface and the Etradeal E1 interface, the synchronization LEDs on the interface cards of both systems should go on.
2. The Avaya SAT command “status trunk xx” (where xx is the number of the trunk connected to Etradeal) should show “in-service/idle” for all of the trunk members.

7. Conclusion

These Application Notes contain instructions for configuring Avaya Communication Manager to connect to the Etradeal. A list of instructions is provided to enable the user to verify that the various components have been correctly configured.

8. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at <http://support.avaya.com>.

- [1] *Administrator Guide for Avaya Communication Manager*, January 2008, Issue 4.0, Document Number 03-300509.
- [2] *Feature Description and Implementation for Avaya Communication Manager*, January 2008, Issue 6, Document Number 555-245-205.
- [3] *Avaya one-X™ Deskphone Edition for 9600 Series IP Telephones Installation and Maintenance Guide*, May 2008, Issue 5, Release 2.0, Document Number 16-300694
- [4] *Etradeal Installation Guide*, Version 37
- [5] *Etrali User Guide*, Version 37

©2009 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.