Avaya Solution & Interoperability Test Lab

Application Notes for Pridis Calacsy with Avaya Communication Manager – Issue 1.0

Abstract

These Application Notes describe the compliance testing done with Avaya Communication Manager and Pridis Calacsy. Calacsy collects Call Detail Records (CDRs) from Avaya Communication Manager and creates telephone usage reports.

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

1. Introduction

Pridis Calacsy is a PC-based application, which collects and evaluates Call Detail Records (CDRs) from Avaya Communication Manager running on Avaya Media Servers via an IP network. Pridis Calacsy can simultaneously collect records from multiple Avaya Communication Manager running on Avaya Media Servers. Pridis Calacsy can generate reports containing statistics on the usage resources, such as trunks and individual stations.

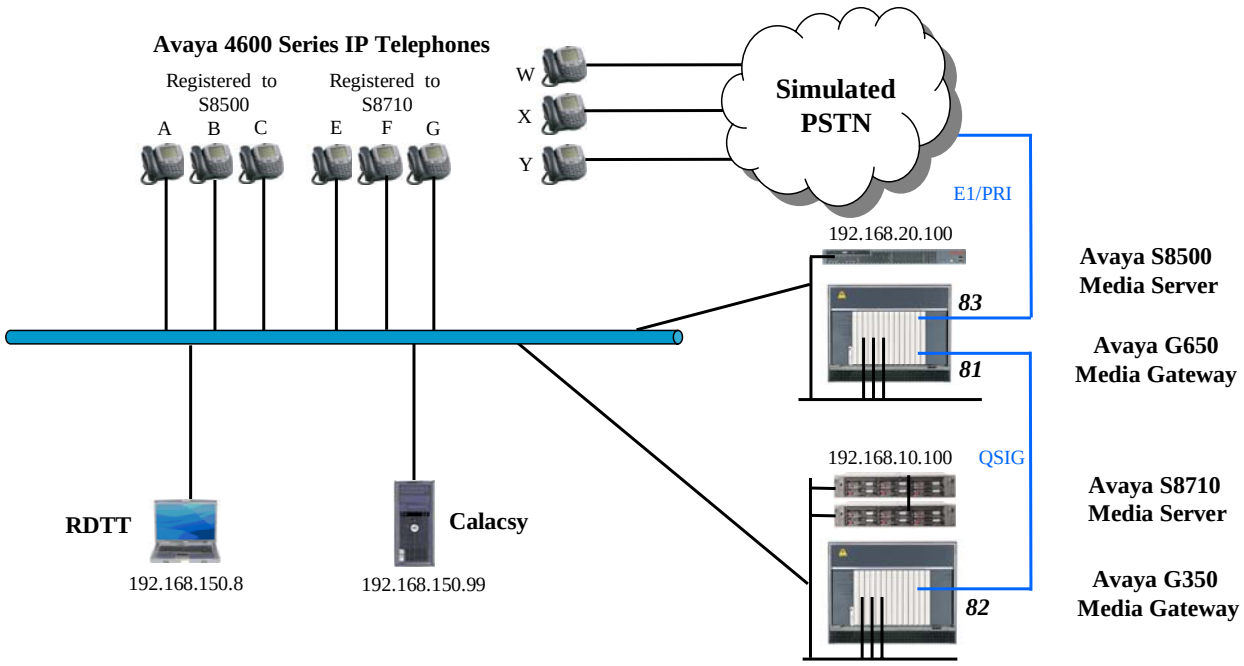


Figure 1: Pridis Calacsy Test Configuration

Figure 1 shows the test configuration used for compliance testing. The following is a brief description of the components:

- The Pridis Calacsy system in the above diagram collects CDRs from the Avaya S8500 and Avaya S8710 Media Servers.
- The Avaya Reliable Data Transport Tool (RDTT) running on the laptop also collects CDRs from the Avaya S8500 and Avaya S8710 Media Servers and serves as means of verifying the correct transmission of CDRs.
- The Avaya S8500 and S8710 Media Servers are connected via an E1 QSIG trunk.
- The Avaya S8500 Media Server is connected to the simulated PSTN via an E1 primary rate trunk.
- The two-digit numbers shown on trunk connections are the Trunk Access Code (TAC) values for those trunks, which appear in CDR records for traffic over those trunks.
- Avaya 4600 series IP telephones A-C are registered to the Avaya S8500 Media Server.

- Avaya 4600 series IP telephones E-G are registered to the Avaya S8710 Media Server.
- Telephones W-Y simulate external telephones connected to the PSTN.

2. Equipment and Software Validated

2.1. Avaya S8710/G650

Component	Version
Avaya S8710 Media Server / Avaya G650 Media Gateway	Avaya Communication Manager R3.1 R013x.01.0.628.6
Avaya TN2312BP IPSI interface	HW11/FW030
Avaya TN799DP C-LAN interface	HW01/FW017
Avaya TN2302AP IP Media Processor	HW20/FW110
Avaya S8500 Media Server / Avaya G650 Media Gateway	Avaya Communication Manager R3.1 R013x.01.0.628.6
Avaya TN2312BP IPSI interface	HW11/FW030
Avaya TN799DP C-LAN interface	HW01/FW017
Avaya TN2302AP IP Media Processor	HW20/FW110
Avaya 4620 IP Telephones	2.3
Avaya Reliable Data Transport Tool	2.1
Pridis Calacsy	5.1
Pridis Calacsy OS: Microsoft Windows XP	2003, SP2

3. Configuration and Administration

Configuration was done using the System Access Terminal (SAT).

3.1. Configuration of Avaya Communication Manager on Avaya S8500 Media Server

3.1.1. Configuration of Avaya Communication Manager on Avaya S8500 Media Server

3.1.2. IP Names/Addresses

Use the “change node-names ip” command to add the address of “calacsy” and the “laptop” on which runs the RDDT program to the list of IP name and address.

The IP address of the “clan” interface is required to configure Pridis Calacsy, as shown in the “LAN setup” window of the “Calacsy Pro Config” configuration program described in section 3.2 of this document. The “calacsy” parameter is the IP address of the Calacsy server. The “laptop” parameter is the IP address of the laptop PC that is used to run the Avaya RDDT program.

```
change node-names ip                                        Page   1 of   1
                                IP NODE NAMES
    Name              IP Address          Name              IP Address
clan                192.168.20 .6                            .   .   .
default             0  .0  .0  .0                           .   .   .
gateway             192.168.20 .254                          .   .   .
ipsi                192.168.20 .5                            .   .   .
medpro              192.168.20 .7                            .   .   .
procr               192.168.20 .100                          .   .   .
calacsy             192.168.150.99
laptop              192.168.150.8
```

3.1.2.1 CDR IP Services

Use the "change ip-services" command to define CDR services for both Pridis Calacsy and the Avaya RDDT test program.

Define a service type of "CDR1" for Calacsy, which corresponds to the "Primary Output Endpoint" defined in the "system-parameters cdr" screen described in section 3.1.1.3 of this document. Specify a "Local Node" name of "clan" so that CDR reports will be sent to via the CLAN interface. Specify a "Remote Node" of "calacsy" which corresponds to the name, which was assigned to Calacsy's IP address in section 3.1.1.1 of this document. Specify a "Remote Port" value of "9001", which corresponds to the "Port" value in the "Lan setup" screen described in section 3.2 of this document.

Define a service type of "CDR2" for Calacsy, which corresponds to the "Secondary Output Endpoint" defined in the "system-parameters cdr" screen described in section 3.1.1.3 of this document. Specify a "Local Node" name of "clan" so that CDR reports will be sent to Pridis Calacsy via the CLAN interface. Specify a "Remote Node" of "laptop" which corresponds to the name, which was assigned to IP address of the PC, which runs the RDDT program in section 3.1.1.1 of this document. Specify a "Remote Port" value of "9001", which corresponds to the "Port" value which is read by the RDDT tool.

```
change ip-services                                          Page   1 of   3

                                  IP SERVICES
 Service     Enabled     Local       Local       Remote      Remote
  Type                   Node        Port        Node        Port
CDR1                     clan        0           calacsy     9001
CDR2                     clan        0           laptop      9001
```

Configure the interface to Calacsy to not use the "Reliable Protocol" feature.
Configure the interface to the RDDT program to use the "Reliable Protocol" feature.

```
change ip-services                                          Page   3 of   4

                            SESSION LAYER TIMERS
  Service     Reliable  Packet Resp   Session Connect  SPDU  Connectivity
   Type       Protocol     Timer        Message Cntr    Cntr     Timer

 CDR1            n         30               3          3         60
 CDR2            y         30               3          3         60
```

3.1.2.2 CDR System Parameters

Use the "change system-parameters cdr" command to configure format and destinations for primary and secondary CDR output. Configure the output for both Calacsy (**cdr1**) and RDDT (**cdr2**) to use the "customized" format defined by page 2 of this command. Set the "Primary Output Endpoint" to go to Calacsy (cdr1). Configure the secondary CDR output to go to the RDDT program (cdr1).

```
change system-parameters cdr                                    Page   1 of   2
                           CDR SYSTEM PARAMETERS

 Node Number (Local PBX ID): 2                      CDR Date Format: day/month
      Primary Output Format: customized    Primary Output Endpoint: cdr1
    Secondary Output Format: customized  Secondary Output Endpoint: cdr2
           Use ISDN Layouts? n
       Use Enhanced Formats? n      Condition Code 'T' For Redirected Calls? n
Modified Circuit ID Display? n                  Remove # From Called Number? n
                 Record Outgoing Calls Only? n            Intra-switch CDR? n
  Suppress CDR for Ineffective Call Attempts? n     Outg Trk Call Splitting? y
      Disconnect Information in Place of FRL? n       Outg Attd Call Record? y
                                                    Interworking Feat-flag? n
 Force Entry of Acct Code for Calls Marked on Toll Analysis Form? n
                                   Calls to Hunt Group - Record: member-ext
Record Called Vector Directory Number Instead of Group or Member? n

     Inc Trk Call Splitting? y                 Inc Attd Call Record? n
  Record Non-Call-Assoc TSC? n           Call Record Handling Option: warning
      Record Call-Assoc TSC? n   Digits to Record for Outgoing Calls: dialed
   Privacy - Digits to Hide: 0               CDR Account Code Length: 15
```

Configure the "customized" format of the CDR records, which are to be written to both Pridis Calacsy and the Avaya RDDT program. This is the fixed format, which is required by Pridis Calacsy.

```
change system-parameters cdr                                    Page   2 of  2

                           CDR SYSTEM PARAMETERS

     Data Item - Length         Data Item - Length         Data Item - Length
 1: date             - 6   17:                  -     33:                  -
 2: time             - 4   18:                  -     34:                  -
 3: sec-dur          - 5   19:                  -     35:                  -
 4: cond-code        - 1   20:                  -     36:                  -
 5: dialed-num       - 18  21:                  -     37:                  -
 6: calling-num      - 15  22:                  -     38:                  -
 7: in-trk-code      - 4   23:                  -     39:                  -
 8: code-used        - 4   24:                  -     40:                  -
 9: duration         - 4   25:                  -     41:                  -
10: in-crt-id        - 3   26:                  -     42:                  -
11: vdn              - 7   27:                  -     43:                  -
12: return           - 1   28:                  -     44:                  -
13:                  -     29:                  -     45:                  -
14:                  -     30:                  -     46:                  -
15:                  -     31:                  -     47:                  -
16:                  -     32:                  -     48:                  -
                           Record length = 72
```

3.1.2.3 Intra-Switch CDR Members

Use the "change intra-switch-cdr" command to specify the list of locally attached stations for which CDR records are to be generated. These are stations E, F, and G with extension 700102, 700112 and 700121 respectively.

```
change intra-switch-cdr                                        Page   1 of   2
                          INTRA-SWITCH CDR

Assigned Members:   3    of 1000   administered
  1: 700102   19:          37:          55:          73:          91:
  2: 700112   20:          38:          56:          74:          92:
  3: 700121   21:          39:          57:          75:          93:
  4:          22:          40:          58:          76:          94:
  5:          23:          41:          59:          77:          95:
  6:          24:          42:          60:          78:          96:
  7:          25:          43:          61:          79:          97:
  8:          26:          44:          62:          80:          98:
  9:          27:          45:          63:          81:          99:
 10:          28:          46:          64:          82:         100:
 11:          29:          47:          65:          83:         101:
 12:          30:          48:          66:          84:         102:
 13:          31:          49:          67:          85:         103:
 14:          32:          50:          68:          86:         104:
 15:          33:          51:          69:          87:         105:
 16:          34:          52:          70:          88:         106:
 17:          35:          53:          71:          89:         107:
 18:          36:          54:          72:          90:         108:
```

3.1.2.4 Configure E1 interface to PSTN

Use the "add trunk-group" command to configure the E1/PRI interface, which is used to simulate the receipt of external calls. Specify a "CDR Reports" value of "r" so that CDR records include the ring time to answer or abandon for incoming calls that the trunk group originates. Use a unique "TAC" code for this trunk. This value is reported in CDR records generated for traffic on this trunk.

```
add trunk-group 2                                              Page   1 of  20
                                TRUNK GROUP

Group Number: 2                     Group Type: isdn          CDR Reports: r
  Group Name: S8300                       COR: 1        TN: 1        TAC:83
   Direction: two-way        Outgoing Display? y         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
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: a    Digit Handling (in/out): overlap/overlap
      Digit Treatment:                                        Digits:
           Trunk Hunt: cyclical                     QSIG Value-Added? n
                                                  Digital Loss Group: 13
Incoming Calling Number - Delete:     Insert:                 Format:
             Bit Rate: 1200         Synchronization: async    Duplex: full
 Disconnect Supervision - In? y  Out? n
```

Enter “add signaling group j” command, where “j” is an available signaling group number. Set the “Trunk Group for Channel Selection” to the group created in the previous step**.**

```
add signalling-group 2                                          Page   1 of  3
                                SIGNALLING GROUP

Group Number: 2                    Group Type: isdn-pri
Associated Signaling?: y               Max number of NCA TSC: 0
   Primary D-channel: 001v216           Max number of CA TSC: 0
                                     Trunk Group for NCA TSC:
Trunk Group for Channel Selection: 2             Xmobility/Wireless Type: NONE
Supplementary Service Protocol: a                Network Call Transfer? n
```

Allocate sufficient channels to handle the anticipated traffic to be encountered by the trunk.

```
add trunk-group 2                                          Page   4 of  20
                                TRUNK GROUP
                                     Administered Members (min/max):   1/30
GROUP MEMBER ASSIGNMENTS                 Total Administered Members:  29

       Port    Code Sfx Name        Night           Sig Grp
  1: 01A0601  TN2464 C                                2
  2: 01A0602  TN2464 C                                2
  3: 01A0603  TN2464 C                                2
  4: 01A0604  TN2464 C                                2
  5: 01A0605  TN2464 C                                2
  6: 01A0606  TN2464 C                                2
  7: 01A0607  TN2464 C                                2
  8: 01A0608  TN2464 C                                2
  9: 01A0609  TN2464 C                                2
 10: 01A0610  TN2464 C                                2
 11: 01A0611  TN2464 C                                2
 12: 01A0612  TN2464 C                                2
 13: 01A0613  TN2464 C                                2
 14: 01A0614  TN2464 C                                2
 15: 01A0615  TN2464 C                                2
```

3.1.2.5 Configure E1 Interface to S8710

Use the "add trunk-group" command to configure the E1/PRI interface, which is used to connect to the S8710 via QSIG trunk. Specify a "CDR Reports" value of "r" so that CDR records include the ring time to answer or abandon for incoming calls that the trunk group originates. Use a unique "TAC" code for this trunk. This value is reported in CDR records generated for traffic on this trunk.

```
add trunk-group 1                                              Page   1 of  21
                               TRUNK GROUP

Group Number: 1                    Group Type: isdn          CDR Reports: r
  Group Name: S8700                       COR: 1        TN: 1        TAC: 81
   Direction: two-way        Outgoing Display? y         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
```

Enter "add signaling group j" command, where "j" is an available signaling group number. Set the "Trunk Group for Channel Selection" to the group created in the previous step**.**

```
add signalling-group 1                                         Page   1 of  3
                                SIGNALLING GROUP

Group Number: 2                    Group Type: isdn-pri
Associated Signaling?: y               Max number of NCA TSC: 0
   Primary D-channel: 001v216           Max number of CA TSC: 0
                                     Trunk Group for NCA TSC:
Trunk Group for Channel Selection: 1             Xmobility/Wireless Type: NONE
Supplementary Service Protocol: a                Network Call Transfer? n
```

Allocate sufficient channels to handle the anticipated traffic to be encountered by the trunk.

```
add trunk-group 1                                              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: 01A0501  TN2464 C                                1
  2: 01A0502  TN2464 C                                1
  3: 01A0503  TN2464 C                                1
  4: 01A0504  TN2464 C                                1
  5: 01A0505  TN2464 C                                1
  6: 01A0506  TN2464 C                                1
  7: 01A0507  TN2464 C                                1
  8: 01A0508  TN2464 C                                1
  9: 01A0509  TN2464 C                                1
 10: 01A0510  TN2464 C                                1
 11: 01A0511  TN2464 C                                1
 12: 01A0512  TN2464 C                                1
 13: 01A0513  TN2464 C                                1
 14: 01A0514  TN2464 C                                1
 15: 01A0515  TN2464 C                                1
```

3.1.3. Configuration of Avaya Communication Manager on Avaya S8710 Media Server

3.1.3.1 IP Names/Addresses

Use the "change node-names ip" command to add the address of "calacsy" and the "laptop" on which the RDDT program is to be run to the list of IP name and address.

The IP address of the "clan" interface is required to configure Calacsy, as shown in the "LAN setup" window of the "Calacsy Pro Config" configuration program described in section 3.2 of this document.

```
change node-names ip                                        Page   1 of   1
                              IP NODE NAMES
    Name              IP Address          Name             IP Address
clan                192.168.10 .6                          .   .   .
default             0  .0  .0  .0                         .   .   .
gateway             192.168.10 .254                        .   .   .
ipsi                192.168.10 .5                          .   .   .
medpro              192.168.10 .7                          .   .   .
procr               192.168.10 .1                          .   .   .
server              192.168.10 .3                          .   .   .
ses                 192.168.200.100                        .   .   .
calacsy             192.168.150.99                         .   .   .
laptop              192.168.150.8                          .   .   .
```

3.1.3.2 CDR IP Services

Use the "change ip-services" command to define CDR services for both Pridis Calacsy and the Avaya RDDT test program.

Define a service type of "CDR1" for Calacsy, which corresponds to the "Primary Output Endpoint" defined in the "system-parameters cdr" screen described in section 3.1.2.3 of this document. Specify a "Local Node" name of "clan" so that CDR reports will be sent to Calacsy via the CLAN interface. Specify a "Remote Node" of "calacsy" which corresponds to the name which was assigned to Calacsy's IP address in section 3.1.2.1 of this document. Specify a "Remote Port" value of "9001", which corresponds to the "Port" value in the "Lan setup" screen described in section 3.2 of this document.

Define a service type of "CDR2" for Calacsy, which corresponds to the "Secondary Output Endpoint" defined in the "system-parameters cdr" screen described in section 3.1.2.3 of this document. Specify a "Local Node" name of "clan" so that CDR reports will be sent to via the Clan interface. Specify a "Remote Node" of "laptop" which corresponds to the name which was assigned to IP address of the PC which runs the RDDT program in section 3.1.2.1 of this document. Specify a "Remote Port" value of "9001", which corresponds to the "Port" value which is read by the RDDT tool.

```
change ip-services                                              Page   1 of   4

                                  IP SERVICES
 Service     Enabled     Local        Local       Remote      Remote
  Type                   Node         Port        Node        Port
AESVCS        y      clan             8765
CDR1                 clan             0           calacsy     9001
CDR2                 clan             0           laptop      9001
```

Configure the interface to Pridis Calacsy to not use the "Reliable Protocol" feature.
Configure the interface to the RDDT program to use the "Reliable Protocol" feature.

```
change ip-services                                              Page   3 of   4

                             SESSION LAYER TIMERS
  Service     Reliable  Packet Resp   Session Connect  SPDU  Connectivity
   Type       Protocol     Timer       Message Cntr    Cntr     Timer

 CDR1            n         30               3          3         60
 CDR2            y         30               3          3         60
```

3.1.3.3 CDR System Parameters

Use the "change system-parameters cdr" command to configure format and destinations for primary and secondary CDR output. Configure the output for both Calacsy (**cdr1**) and RDDT (**cdr2**) to use the "customized" format defined by page 2 of this command. Set the "Primary Output Endpoint" to go to Calacsy (cdr1). Configure the secondary CDR output to go to the RDDT program (cdr2).

```
change system-parameters cdr                                    Page   1 of   2
                           CDR SYSTEM PARAMETERS

 Node Number (Local PBX ID): 1                      CDR Date Format: day/month
      Primary Output Format: customized    Primary Output Endpoint: cdr1
    Secondary Output Format: customized  Secondary Output Endpoint: cdr2
           Use ISDN Layouts? n
       Use Enhanced Formats? n      Condition Code 'T' For Redirected Calls? n
Modified Circuit ID Display? n                  Remove # From Called Number? n
                 Record Outgoing Calls Only? n            Intra-switch CDR? n
  Suppress CDR for Ineffective Call Attempts? n     Outg Trk Call Splitting? y
      Disconnect Information in Place of FRL? n       Outg Attd Call Record? y
                                                    Interworking Feat-flag? n
 Force Entry of Acct Code for Calls Marked on Toll Analysis Form? n
                                   Calls to Hunt Group - Record: member-ext
Record Called Vector Directory Number Instead of Group or Member? n

     Inc Trk Call Splitting? y                 Inc Attd Call Record? n
  Record Non-Call-Assoc TSC? n           Call Record Handling Option: warning
      Record Call-Assoc TSC? n   Digits to Record for Outgoing Calls: dialed
   Privacy - Digits to Hide: 0              CDR Account Code Length: 15
```

Configure the "customized" format of the CDR records, which are to be written to both Calacsy and the Avaya RDDT program. This is the fixed format, which is required by Calacsy.

```
change system-parameters cdr                                    Page   2 of  2

                           CDR SYSTEM PARAMETERS

     Data Item - Length         Data Item - Length         Data Item - Length
 1: date             - 6   17:                  -     33:                  -
 2: time             - 4   18:                  -     34:                  -
 3: sec-dur          - 5   19:                  -     35:                  -
 4: cond-code        - 1   20:                  -     36:                  -
 5: dialed-num       - 18  21:                  -     37:                  -
 6: calling-num      - 15  22:                  -     38:                  -
 7: in-trk-code      - 4   23:                  -     39:                  -
 8: code-used        - 4   24:                  -     40:                  -
 9: duration         - 4   25:                  -     41:                  -
10: in-crt-id        - 3   26:                  -     42:                  -
11: vdn              - 7   27:                  -     43:                  -
12: return           - 1   28:                  -     44:                  -
13:                  -     29:                  -     45:                  -
14:                  -     30:                  -     46:                  -
15:                  -     31:                  -     47:                  -
16:                  -     32:                  -     48:                  -

                              Record length = 72
```

3.1.3.4 Intra-Switch CDR Members

Use the "change intra-switch-cdr" command to specify the list of locally attached stations for which CDR records are to be generated. These are stations A, B, and C with extensions 600103, 300132 and 600151.

```
Change intra-switch-cdr                                      Page   1 of   2
                          INTRA-SWITCH CDR

Assigned Members:   3    of 1000   administered
  1: 600103   19:          37:          55:          73:          91:
  2: 600132   20:          38:          56:          74:          92:
  3: 600151   21:          39:          57:          75:          93:
  4:          22:          40:          58:          76:          94:
  5:          23:          41:          59:          77:          95:
  6:          24:          42:          60:          78:          96:
  7:          25:          43:          61:          79:          97:
  8:          26:          44:          62:          80:          98:
  9:          27:          45:          63:          81:          99:
 10:          28:          46:          64:          82:         100:
 11:          29:          47:          65:          83:         101:
 12:          30:          48:          66:          84:         102:
 13:          31:          49:          67:          85:         103:
 14:          32:          50:          68:          86:         104:
 15:          33:          51:          69:          87:         105:
 16:          34:          52:          70:          88:         106:
 17:          35:          53:          71:          89:         107:
 18:          36:          54:          72:          90:         108:
```

3.1.3.5 Configure E1 interface to S8500

Use the "add trunk-group" command to configure the E1/PRI interface, which is to provide a QSIG trunk to the S8500. Specify a "CDR Reports" value of "r" so that CDR records include the ring time to answer or abandon for incoming calls that the trunk group originates. Use a unique "TAC" code for this trunk. This value is reported in CDR records generated for traffic on this trunk.

```
add trunk-group 1                                            Page   1 of  21
                                TRUNK GROUP

Group Number: 1                     Group Type: isdn          CDR Reports: r
  Group Name: S8500                       COR: 1        TN: 1        TAC: 82
   Direction: two-way        Outgoing Display? y         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
swer Supervision Timeout: 0
```

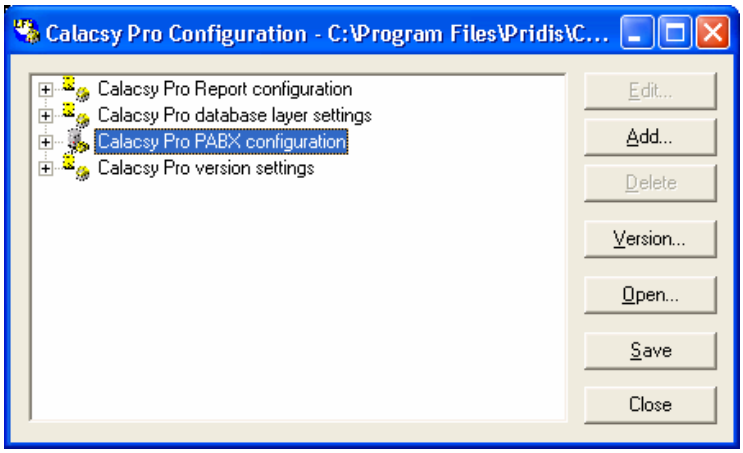
Allocate sufficient channels to handle the anticipated traffic to be encountered by the trunk.

```
add trunk-group 1                                              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: 01A0601  TN2464 C  port-01                       1
  2: 01A0602  TN2464 C  port-02                       1
  3: 01A0603  TN2464 C  port-03                       1
  4: 01A0604  TN2464 C  port-04                       1
  5: 01A0605  TN2464 C  port-05                       1
  6: 01A0606  TN2464 C  port-06                       1
  7: 01A0607  TN2464 C  port-07                       1
  8: 01A0608  TN2464 C  port-08                       1
  9: 01A0609  TN2464 C  port-09                       1
 10: 01A0610  TN2464 C  port-10                       1
 11: 01A0611  TN2464 C  port-11                       1
 12: 01A0612  TN2464 C  port-12                       1
 13: 01A0613  TN2464 C  port-13                       1
 14: 01A0614  TN2464 C  port-14                       1
 15: 01A0615  TN2464 C  port-15                       1
```

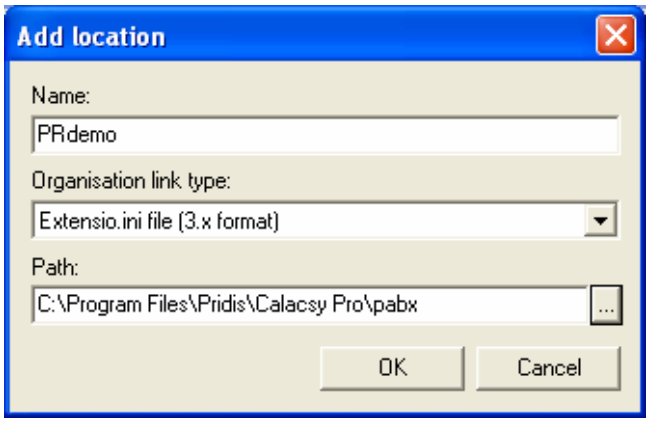
3.2. Configure Calacsy

Install the Calacsy software from the distribution media and accept all default parameters. Start Calacsy Pro Config by selecting **Start->Programs->Calacsy-> Calacsy Pro PABX**.

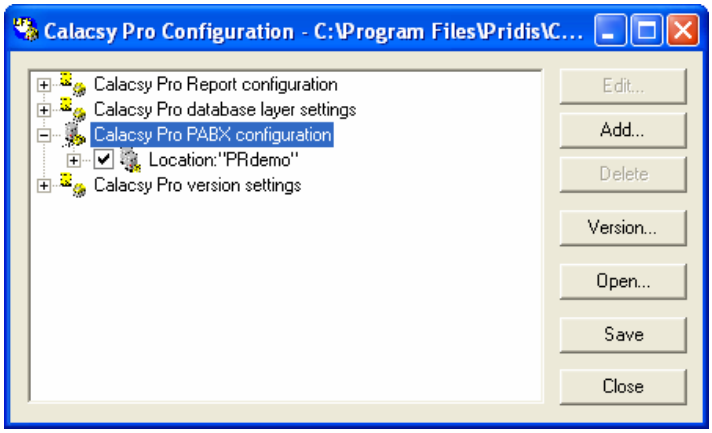


Click the “Add” button to add a new location.

- Enter a location name of “PRdemo” to be used for testing.
- Select “Extansio.ini file (3.x format) from the “Organization link type” drop-down list.
- Specify a “Path” of the default “pabx” directory, which was created by the installation program.
- Click “OK”.



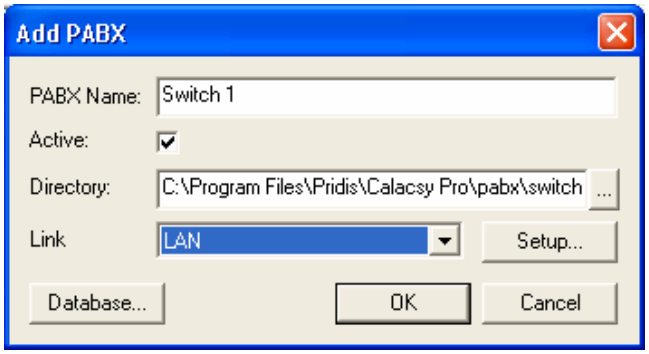
The “Calacsy Pro PABX configuration” entry can now be “expanded” to show the new location.



Select the new location and click “Add” to add a PABX to the location.

A directory is required for each switch to be included in the configuration. These can be created by manually making a copy of the "switch 1" directory which is contained within the "pabx" location directory which was created by default by the installation program. After the directory has been created, if required, perform the following steps:

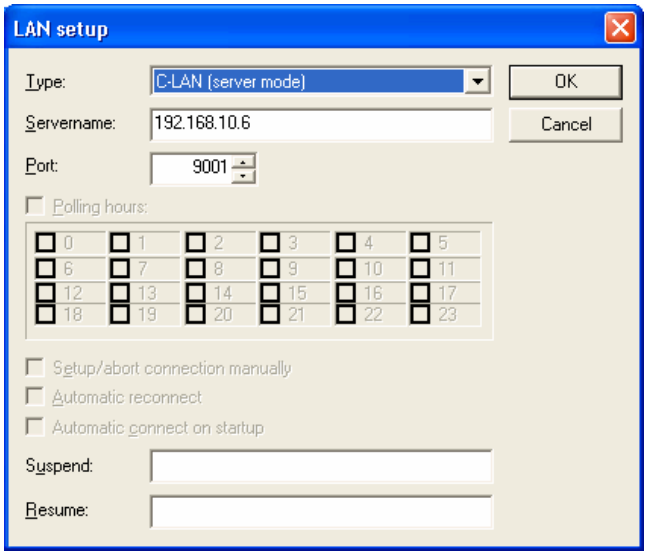
- Enter "Switch 1" for PABX name to add the S8710.
- Check the "Active" check box.
- Select the "switch 1" directory from the "Directory" field
- Select "LAN" from the "Link" drop-down box.



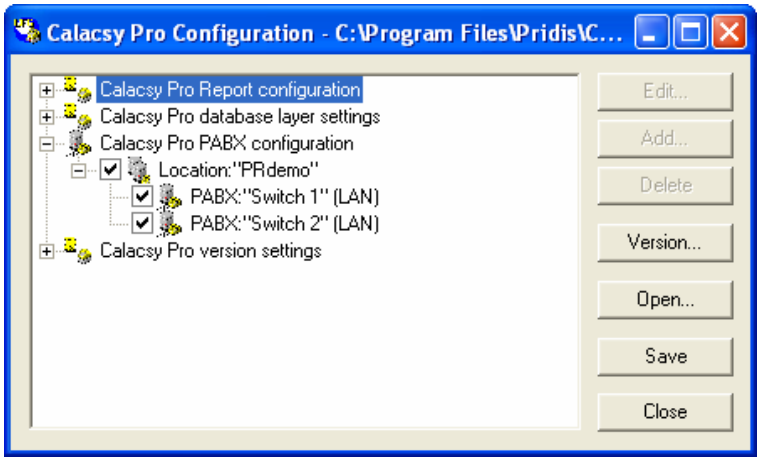
Setup the LAN connection by clicking "Setup".

Perform the following steps to setup the LAN:

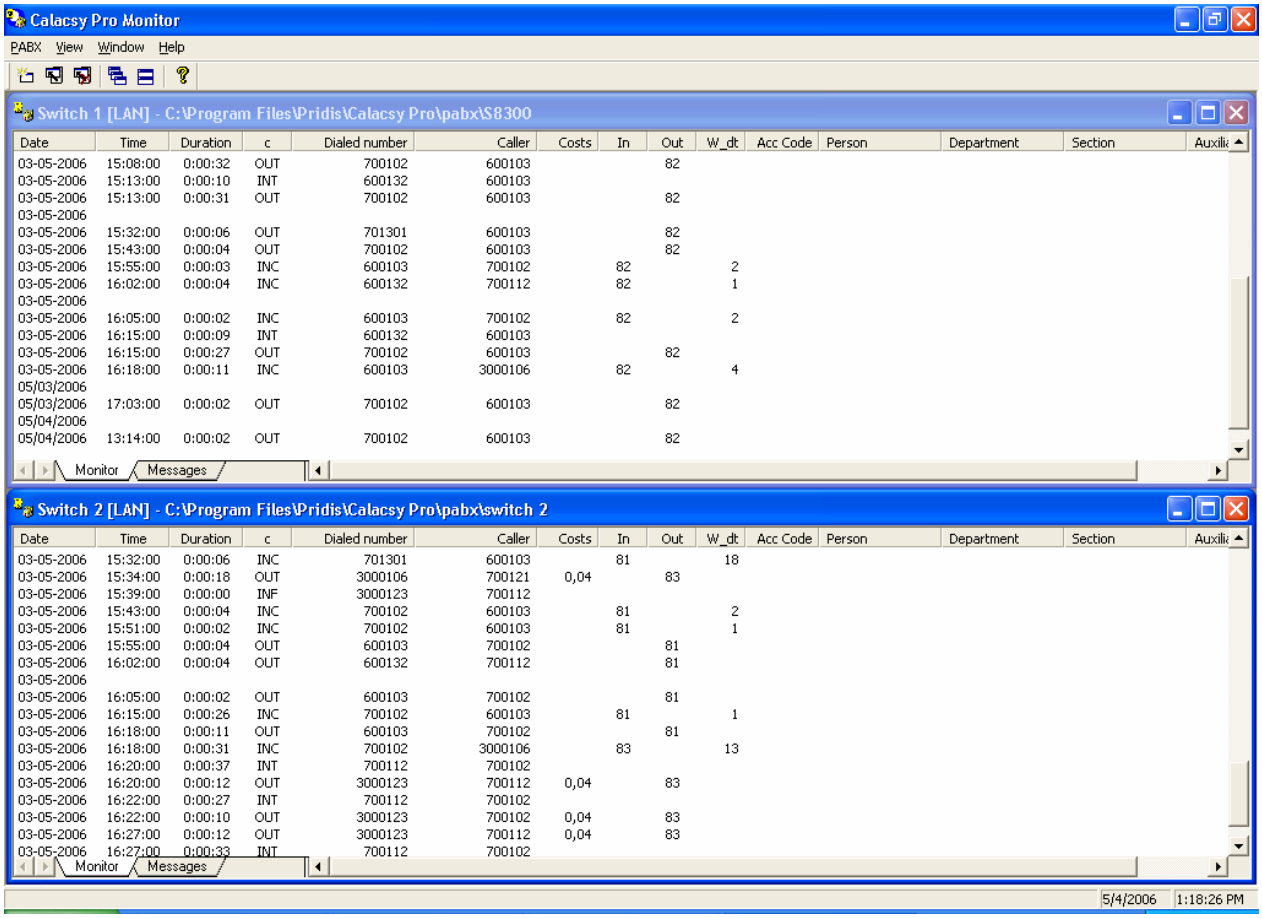
- Select “C-LAN (server mode)” from the “Type” drop-down box.
- Enter the IP address of the Media Server’s CLAN interface for the “Servername” value. This is the same value which is specified for “calacsy” in the Communication Manager “node-names ip” configuration screens shown in Sections 3.1.2.1.
- Enter the “Port” address specified for “Calacsy” in the Communication Manager “ip-services” screen show in Sections 3.1.2.1.
- Click “OK” when this is complete.



Repeat these steps to add “Switch 2” for the S8500. The “PRdemo” entry can now be “expanded” to show both of the newly added switches.



Once both switches have been configured, the Calacsy Pro Monitor can be started from the Windows Start/Programs/Calacsy Pro 5.1 menu. The PABX/New Window menu can then be used to start a monitor window for each of the switches. Each window contains an auto-scrolling report showing all calls.



3.3. Avaya RDTT

The Avaya RDTT application was pre-configured for this test.

4. Interoperability Compliance Testing

The objective of the compliance testing done on the Pridis Calacsy product was to verify interoperability with Avaya Communication Manager. This includes verifying that the essential Calacsy features function properly when used with Avaya Communication Manager, and that Avaya Communication Manager features are not hindered by the interaction with Calacsy. Furthermore, the robustness of Calacsy was verified.

4.1. General Test Approach

The test method employed can be described as follows:

- The simulated PSTN interface was attached to Avaya Communication Manager and equipped with telephones used to simulate external callers.
- The Calacsy Pro Monitor was started and a report window opened for both the S8500 and S8710 switches.
- The Avaya RDDT monitor program was also started on the laptop.
- The major Calacsy features and functions were verified using local and external telephones, including making, receiving, and transferring local and external calls, and initiating conferences.
- The results reported by Calacsy were compared with the results reported by the Avaya RDDT program.
- The robustness of Calacsy was tested by verifying its ability to recover from interruptions to its external connections.

All testing was performed manually. The tests were all functional in nature, and no performance testing was done.

4.2. Test Results

All test passed successfully, with one exception. Calacsy looses CDR records, which are generated when it is disconnected from the local area network. CDR record collection continues normally once Calacsy is reconnected to the network.

5. Verification Steps

There are various verification steps which can be performed to verify the correct operation of the system:

- Verify that Avaya Communication Manager and Calacsy can ping each other.
- Verify that the various telephones can call each other.
- Start the Avaya RDDT monitor and verify that it can receive CDR records from all of the Avaya Communication Servers, which have been configured to generate CDR records.
- Start the Calacsy Pro Monitor program and make a basic call from one local phone to another. Verify that the call is reported on the Calacsy Pro Monitor program.
- Start the Calacsy Pro Monitor program and make a basic call from one local phone to an external party. Verify that the call is reported on the Calacsy Pro Monitor program.

6. Support

Support for Calacsy is available at:

Pridis B.V.
Computer Telephony Products
Ambachtsstraat 13 D
3861 RH Nijkerk
The Netherlands
Phone: +31 (0)33 4697086
e-mail: info@pridis.com
info: www.pridis.com

7. Conclusion

The following conclusions can be drawn from the compliance testing done on the Pridis Calacsy application:

- The major Calacsy functions interoperate with Avaya Communication Manager.
- Avaya Communication Manager operation is not hindered by interactions with Calacsy.
- Calacsy functions as expected, except that it does not report CDR records, which are generated when it is disconnected from the local area network.

8. Additional References

1. "IP-CALACSY V4.0 and CALACSY PLUS Technical Manual", Version 4.0/Plus UK, June 2005
2. “Feature Description and Implementation for Avaya Communication Manager”, 555-245-205, Issue 3, June 2005

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 Developer*Connection* Program at devconnect@avaya.com.