



ip.buffer App Note

AN010 : Connecting to Alcatel PBXs



<i>Date</i>	<i>Author</i>	<i>Release</i>
2000-09-09	MP	Initial draft

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1. Introduction

The ip.buffer can collect CDR data from the Alcatel range of PBXs across the network.

Scannex buffers have been used for some years to collect from Alcatels. However, the ip.buffer now includes a protocol that makes setup for the Alcatel extremely easy¹.

¹ Firmware version 2.41 has the protocol built in. Firmware prior to 2.41 require a small protocol script to be uploaded. Scripts are available from <http://www.scannex.com/scripts>

2. Setting up the ip.buffer

Set the ip.buffer Source in the following way:

- Source = TCP
- Connect = “ipbuffer to Device (active/client)”
- Address = IP address of the Alcatel
- Port = 2533
- Match & Send = **all blank**
- Heartbeat String = **blank**

Then, choose the Alcatel protocol:

- Protocol = “Alcatel TCP/IP port 2533”²

Save the changes and the ip.buffer should connect to the Alcatel and begin collecting data.

- It is absolutely vital that only one client is connected to the Alcatel PBX at any one time. The Alcatel, unfortunately, does not include checks to prevent additional clients from connecting. If more than one client does connect then the CDR records are output to random clients - one client may get most of the records (but not necessarily all), while other clients will get almost none. To discover how many clients are connected, see the instructions in Section 3.3

² The protocol will appear in the drop down list for v2.41+. If the protocol script has been manually loaded, then the protocol will appear at the top of the list, prefixed by an asterisk “*”.

3. Useful diagnostic tools

There are some useful diagnostic tools available on the Alcatel. To access these, Telnet into the PBX. Use the telnet tool from a PC command line, e.g.

Client (PC command line)	Alcatel PBX
<code>telnet 10.30.30.5³</code>	Welcome to xa000001 Alcatel OmniPCX Enterprise login:
<code>mtcl</code>	Password:
<code>password</code>	Last login... (loads of text)... (1)xa00001>

Once logged into the Alcatel you can run the diagnostic tools⁴.

3.1. Showing the CDR fields

The Alcatel “eaccclt” tool can output the meaning of all CDR fields. Having Telnet'd into the Alcatel type:

```
eaccclt -e accounting
```

The CDR format is very long - longer than 500 characters. The above command shows the name and character positions for all 47 fields that are output from the Alcatel.

3.2. Generating test CDR records

The Alcatel can generate a call record - to test the ip.buffer connection. Having Telnet'd into the Alcatel type:

```
account justif
```

The tool will then ask a number of questions. The first line is the telephone number. Just enter a value for this and hit [ENTER] at each of the others. You will need to press “Y” [ENTER] when asked to confirm at the end.

Once confirmed, the Alcatel will generate a single CDR ticket.

³ Obviously, use the real IP address of the Alcatel!

⁴ The Alcatel is actually a Linux/Unix based PC. The telnet access into the Alcatel gives administration access to this Linux/Unix machine.

3.3. Finding out how many clients are connected

It's possible to work out how many clients are currently connected to the Alcatel with a couple of command line instructions into the Alcatel. Having Telnet'd into the Alcatel type:

```
ps -e | grep netaccessd
```

Count the number of times that “#netaccessd” appears in the list.

This value is the total number of clients using CDR services (both port 2533 and the other Alcatel method of “eaccclt” via Telnet).

3.4. Finding out how many “eaccclt” processes are running

Having Telnet'd into the Alcatel type:

```
ps -e | grep eaccclt
```

Count the number of “#eaccclt” entries in the list.

The number of clients using TCP/IP port 2533 is the difference between the eaccclt count and the netaccessd count mentioned in section 3.3.

3.5. Terminating any running “eaccclt” processes

Having Telnet'd into the Alcatel type:

```
pkill eaccclt
```

Any clients that were logged in using eaccclt will be terminated.

4. Alternate method for CDR collection

The Alcatel includes at least one other method for obtaining CDR data. Having Telnet'd into the Alcatel there is a commandline tool called "eaccclt" that can provide ASCII CDR output in one of two formats.

However, since logging in via Telnet requires sending the PBX administration username and password it is generally better to use the port 2533 protocol.

On the ip.buffer you can choose to use the "eaccclt" method in the following manner:

- Source = TCP
- Connect = "ipbuffer to Device (active/client)"
- Address = IP address of the Alcatel
- Port = 23 (this is the Telnet port)
- Match & Send as follows:

Match1	/~ogin:	Send1	mtcl#
Match2	word:	⁵ Send2	password#
Match3	>	Send3	pkill eaccclt#
Match4	>	⁶ ⁷ Send4	eaccclt -cpu 10.30.30.5 -ascii#

- Heartbeat String = blank
- Protocol = ASCII Lines

⁵ Obviously, use the actual password for the PBX.

⁶ Use the actual IP address of the PBX.

⁷ To get a very verbose, multi-line CDR output remove the "-ascii" part.