Alcatel TAPI Server

for SME Communication Server

Installation Guide & Administration Guide

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1. Overview

Telephony administrators need two tools to manage the service provider.
One called **Tapi 2.1 Administration tool** (tcmapp). It's a Microsoft tool described in Microsoft documentation. With tcmapp, for any given user account, you may grant access to as many lines as needed. But you have first to create lines with the Alcatel TAPI server administration tool.

Note 1: this tool will be obsolete in Tapi 3.0: the telephony client management will be integrated in the new Active Directory components (Microsoft announcements).
Note 2: the telephony users must have an account in a Windows NT domain.

The other tool is the telephony administration tool for **Alcatel TAPI Server** (TSP) described in this document. The TSP administration tool enables to **manage the data** needed by the TSP to connect itself to the PBX and to **add and remove the lines** that the TSP server must monitor and control.

In addition, there is a third tool, which allows activating both tools described above, **Alcatel Tapi Client/Server Manager**. Moreover, this tool can be used to set up a Microsoft NT Server machine as a **telephony server** or Windows NT (or 98) machines as **telephony client**. This tool is described in the first part of this document.

2. Related documents

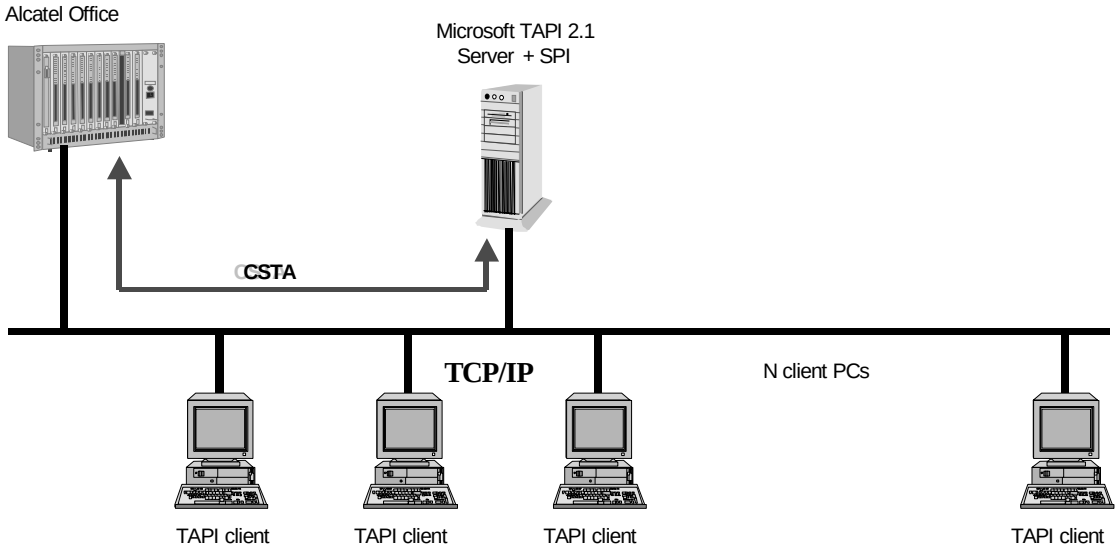
Following documents may help you to understand telephony services tools, in particular, the following:

[1] Microsoft **Tapi 2.1 Client Management** documentation
[2] Microsoft **Tapi 2.1 Administration Tool** documentation
[3] "TAPI Server Install" documentation (on the CD-ROM).

Documents [1] and [2]

3. Architecture

3.1 General Architecture



3.2 Client Server architecture

The TSP uses the CSTA protocol for the Call Control connecting to SME Communication Server switch. Server, clients and PBX are connected using TCP/IP.

Client: There is no Alcatel software installed on the client PC. Just declare this PC as a TAPI client. (See chapter 4 NT4 Client installation for more details)

Server: Install the Alcatel software and configure the TSP via the control panel (telephony) and the Microsoft management tool (tcmapp).

4. NT4 Client installation

4.1 Requirements

- TAPI 2.1 only support communication using TCP/IP protocol
- Telephony client must be running Windows NT 4.0 (Service pack 4 or later) or Windows 98.

NOTE: a PC running on Windows 2000, with TAPI 3.0 installed can also be client from a server TAPI 2.1.

▼ **For Windows 98:**

Before installation, check all the following points:

In the control panel network, in the right tab called ***"user access"***

Check the **User** Level (i.e. not shared level) option

In the control panel/ network, the following network components must be installed:

Client for Microsoft Network: Primary Network Logon must be set to "Client for Microsoft Network". And in the "Client for Microsoft Network Properties", logon to NT domain must be activated.

File & Printer sharing for Microsoft Network : File and Print options must be selected.

TCP/IP.

4.2 Installation

▼ Log in as a correct user (with local administrator privilege - see "server installation" chapter-).

▼ Launch the Microsoft command "tcmsetup" in client mode (see Microsoft Tapi Client Management for arguments of the tcmsetup command)

Figure 1 How to enable the client mode by using the "tcmSetup"

Or :

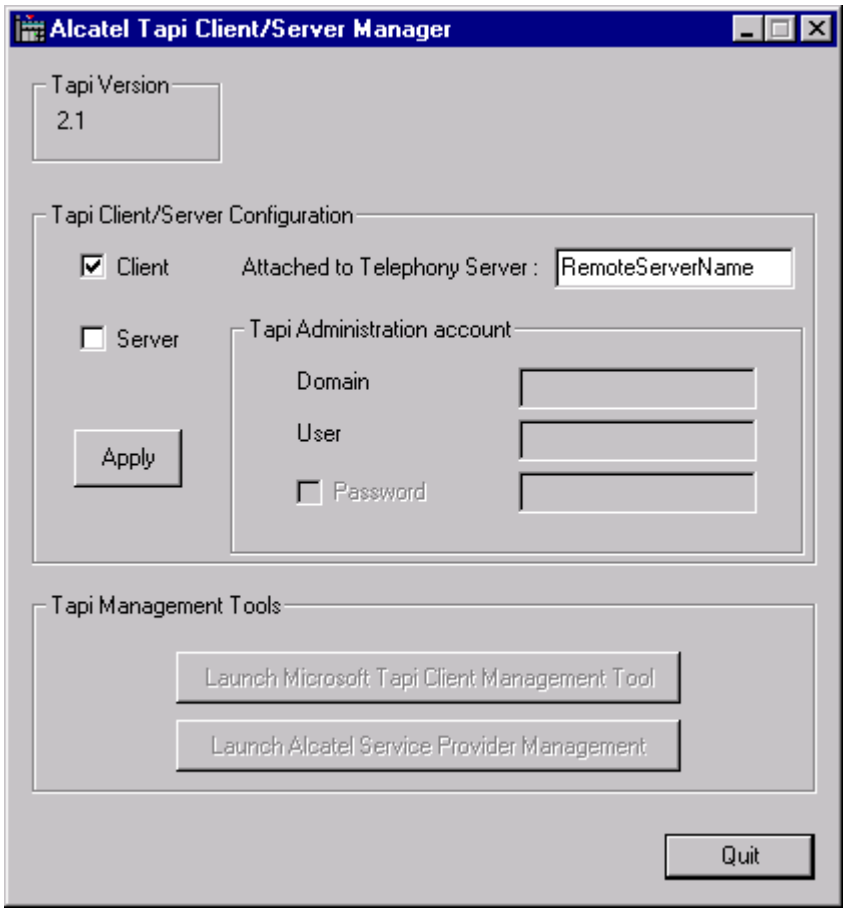
▼ Another way to install a TAPI client is to launch the Alcatel Tapi client/server management tool - **tapiconfig.exe**[1] - (this tool is on the CD-ROM)

Check the client box

Enter the telephony server name in the edit box

You don't have to restart the PC. The client is installed.

[1] Note: It's possible to execute this tool **via the network** (or to record it on a disk, execute it on the local PC). This tool allows the **diagnostic and the setup of a Tapi client** (see windows below).



5. Alcatel Tapi Client/Server Manager

With this tool, you can:

- Launch the Microsoft Administration tool.
- Launch the Alcatel TAPI Service Provider Configuration tool
- Set up your computer as Tapi server or as client of a Tapi server computer.

Information:

- At the top of the window, the **TAPI version**, which is currently installed on your machine, is displayed. (here, TAPI 2.1)

Client setup:

- Check the client box
- Put the telephony server name in the corresponded field
- Click the "Apply" button

Disable client:

- Uncheck the client box
- Click the “Apply” button

Server setup:

- Check the server box
- In the domain field, put the domain of an administrative network account (not a local machine account)
- The user name must have administrator rights. But don’t use the administrator account! (for more details about this user account, see document)
- If a password is associated to this user, check the password box, and enter the password.
- Click the “Apply” button.

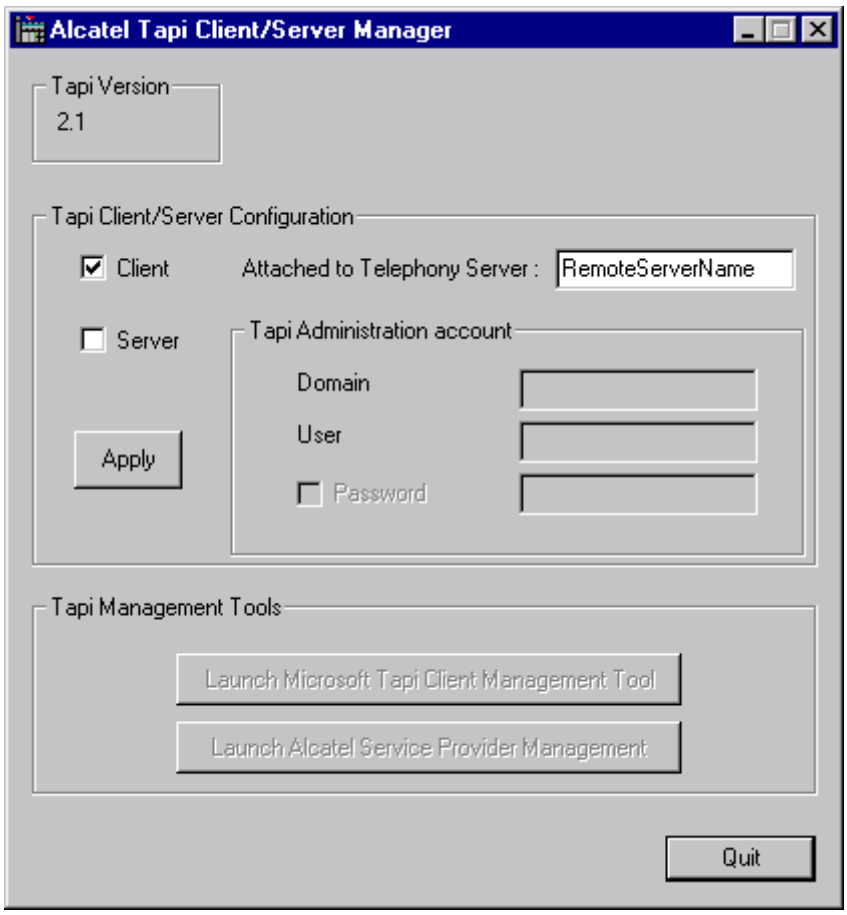
Disable Server:

- Uncheck the server box
- Click the “Apply” button.

Tapi management tools

In the "Tapi management tools" section, you can launch

- The Microsoft Administration tool (see document [2])
  - This button is only available on a Tapi server machine.
- The Alcatel TAPI Service Provider Configuration tool (see section 5.1).

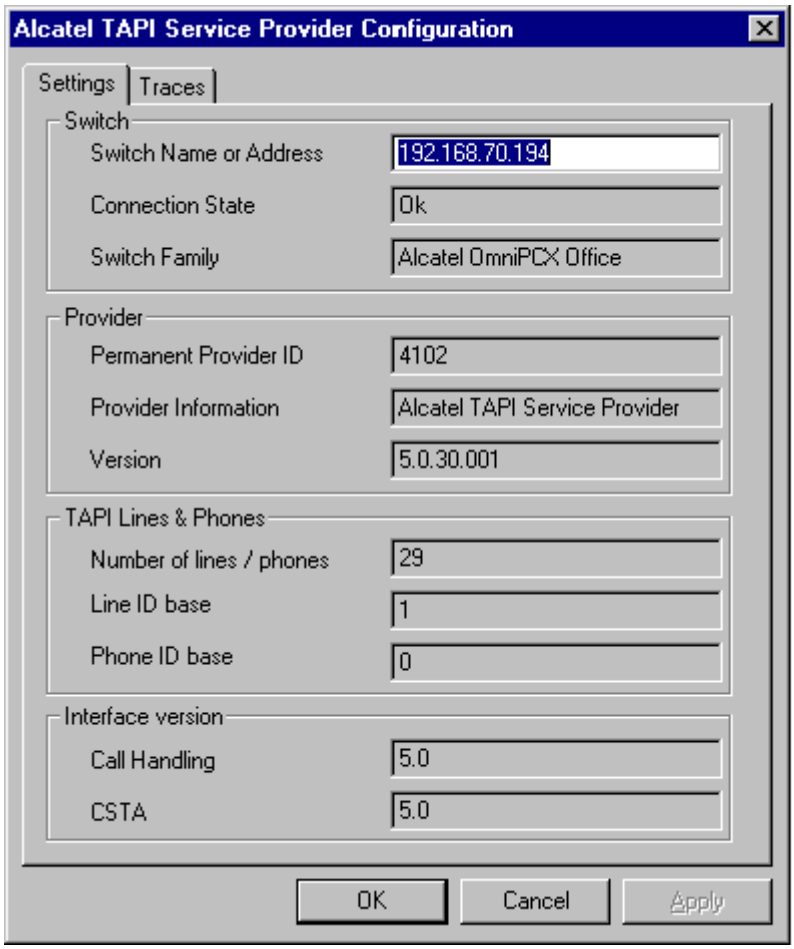

Alcatel Tapi Client/Server Manager
Tapi Version
2.1
Tapi Client/Server Configuration
Client
Attached to Telephony Server :
RemoteServerName
Server
Tapi Administration account
Domain
User
Password
Apply
Tapi Management Tools
Launch Microsoft Tapi Client Management Tool
Launch Alcatel Service Provider Management
Quit

5.1 Using Alcatel TSP administration tool

You must first install the Alcatel TAPI Server product (TAPI Server Install document [3]). Then, click on the Telephony (Windows NT Server) in the control panel.

The Telephony Drivers or Advanced tab shows you all telephony drivers installed on the computer. The "Alcatel TAPI Service Provider" is ordinarily already installed. It means that it appears in the service provider's list. Click the configure button to access to the provider configuration window.

5.2 Alcatel TAPI Service Provider Configuration



The SPI Information tab shows different generals' information about the PBX, the provider, lines, phones and versions.

Switch information:

Switch Name: Enter here the PBX name or address.

Provider information:

Permanent Provider ID: Permanent number associated to this service provider.

Lines & phones information:

Line ID Base:	Identifier of the first line device for this service provider
Number of lines:	Number of lines monitored by this service provider

Interface version:

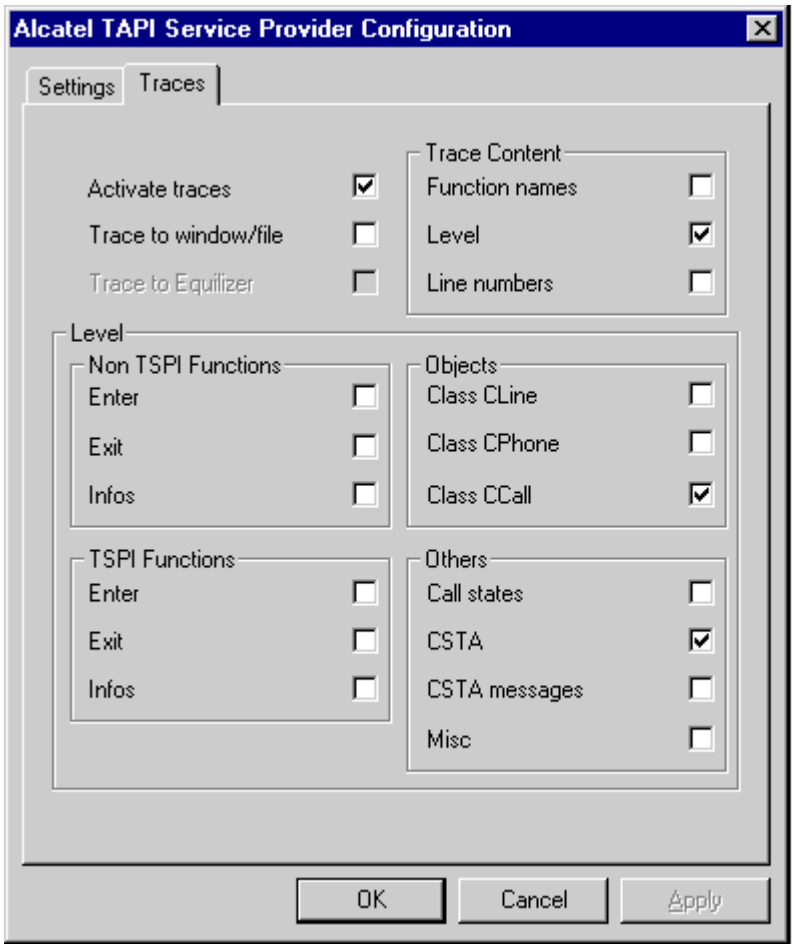
Call Handling:	Alcatel SME switch Call Handling version
CSTA:	CSTA version for the switch

Important remark:

Due to a Microsoft bug, the TAPI configuration does not work properly on Windows NT 4 Server -French version. The following actions must be done manually:

- Create the key "Server" in "HKLM\Software\Microsoft\Windows\CurrentVersion\Telephony"
- In this key, create two values
  - DWORD value : "DisableSharing" 0x00000000
  - String value : "MapperDll" "TSEC.DLL"
- In the propriety of “Telephony Service”
- Stop the service “Telephony Service”
- Select “Automatic Start”
- Associate an administrator account (locally for this machine
- Restart the service

5.3 Debug traces



The second tab allows the traces activation. Check all the options you want then click the "ok" button.

Activate traces: traces are activated when this box is checked.

▾ Traces contents

Function Name: Each trace contains the function name.
Level: Each trace contains the debug level
Line number: Each trace contains the line number in the source code.

▾ Non TSPI-Functions

Enter non-TSPI functions: Traces each entry in a non-TSPI function.
Exit non-TSPI functions: Traces each exit from a non-TSPI function.
Non-TSPI functions infos: Traces all information detailed in the non-TSPI functions.

▾ TSPI-Functions

Enter TSPI-Functions: Traces each entry in a TSPI function.
Exit TSPI functions: Traces each exit from a TSPI function.
TSPI functions infos: Traces all information detailed in the TSPI functions.

▾ Objects

Class CLine: Information about all the CLine objects, which represent the lines (in Tapi representation).
Class CPhone: Information about all the CPhone objects, which represent the phones (in Tapi representation).
Class CCall: Information about all the CCall objects, which represent the calls (in Tapi representation).

▾ Others

Call states: Traces call states.
CSTA: Information about CSTA communication
CSTA messages: CSTA message information
Misc.: miscellaneous information

Note: Please activate as few traces as possible, because traces generation is CPU-time consuming. The TSP will run faster when traces are not activated at all.

END OF DOCUMENT