Legrand CRM TAPI Interface

DEFINITION OF TAPI:

Short for *Telephony Application Programming Interface,* an API for connecting a PC running Windows to telephone services. TAPI was introduced in 1993 as the result of joint development by Microsoft and Intel. The TAPI standard supports connections by individual computers as well as LAN connections serving many computers. Within each connection type, TAPI defines standards for simple call control and for manipulating call content.

TAPI typically falls into two distinct categories: 1st party TAPI and 3rd party TAPI.

Legrand CRM utilises the 1st party TAPI capabilities of the Microsoft Windows platform. It is not the scope of this document to detail 3rd party TAPI applications, however the difference in architecture between 1st and 3rd party TAPI is illustrated below.

3RD PARTY TAPI

In a 3rd Party TAPI application your computer controls your telephone *indirectly* with the assistance of a 3rd party server acting as a go-between (hence 3rd party).

COMPUTER WORKSTATION (TYPICALLY A WINDOWS PC)

LOCAL AREA NETWORK   (TYPICALLY ETHERNET 10/100)

TELEPHONE SYSTEM
(PABX OR KEY SYSTEM)   SERVER
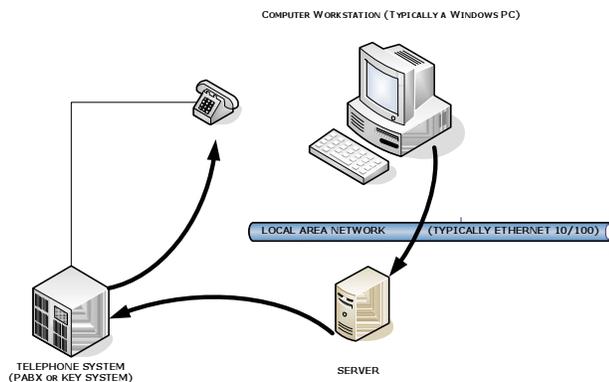
3rd Party TAPI (not supported by Legrand CRM)

1ST PARTY TAPI

In a 1st party TAPI application your computer controls your telephone directly without the involvement of a 3rd party server acting as a go-between (hence 1st party). Most businesses today have installed a telephone system (such as a PABX or a smaller 'Key System'). Phone systems vary greatly from manufacturer to manufacturer, however the following examples illustrate the two most common mechanisms for 1st party TAPI employed by phone system manufacturers today.

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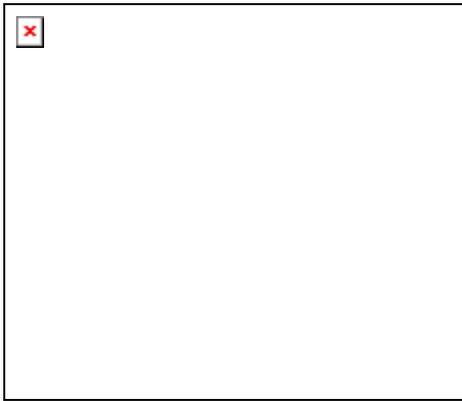
1ST PARTY TAPI EXAMPLE 1

'Your Phone System Manufacturer' uses a USB connection between your computer and your phone. In this example the manufacturer has provided 3 elements to help you create a 1st party TAPI CTI interface with your computer.

1. A physical USB connection on the phone (or handset) which can be connected to your computer using a standard USB cable –check with the dealer that installed your telephone system to see if your system's handsets have USB capability.

2. A set of basic USB drivers that tell the PC about the USB connection to the phone. This is not the TAPI driver.

3. A 1st party TAPI driver compatible with Microsoft TAPI 2.0 or higher that utilises the USB connection to your handset.
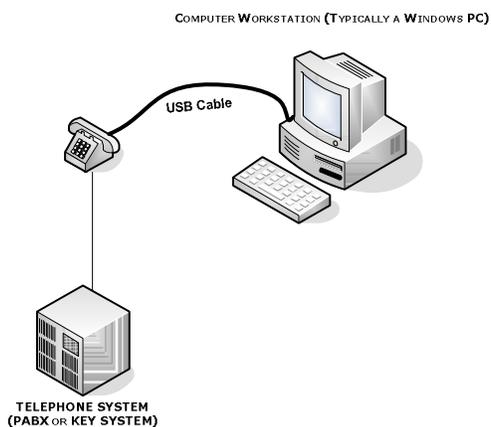
Here are the steps commonly taken to create this TAPI connection via USB. You should carefully read your manufacturer's instructions on 1st party TAPI drivers and/or USB connections before attempting to make the connection.

1. Ensure you have the correct handset type, USB drivers for your Windows operating system and the 1st party TAPI driver from the manufacturer of your telephone system.

2. Physically install the USB adapter into the phone, or if integrated, then connect the USB cable to your PC. Supply the USB drivers in the normal manner of loading a Windows PC with drivers.

3. Install the 1st party CTI driver software, indicating your telephone extension number if requested during or after the installation. Restart your PC.

4. After restart check the advanced section of the Phone and Modem Options (in Windows XP in this example) and see that your telephone system manufacturer's TAPI driver (or simply your extension) is listed, and that it has the correct extension configured when you select it and click Configure.

5. Now configure your application (such as Legrand CRM) to use this TAPI device and test.

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1ST PARTY TAPI EXAMPLE 2

'Phone System Manufacturer' uses a LAN connection between your computer and your phone system which in turn controls only your phone. In this example the manufacturer has provided only 2 necessary elements to help you create a 1st party TAPI CTI interface with your computer.

1. A piece of software usually referred to as a LAN CTI driver for installing the TAPI driver and providing the mechanism to communicate with your phone system over the local area network.

2. A programming mechanism to allow the phone system to control which computers or users are allowed to control which phones by 1st party CTI. This is usually a collection of setting in the manufacturer-supplied management console for the telephone system.
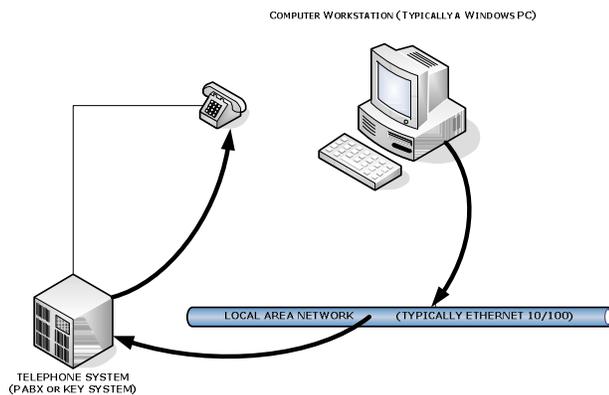
Here are the steps commonly taken to create this TAPI connection via the LAN. You should carefully read your manufacturer's instructions on 1st party TAPI drivers and/or LAN connections before attempting to make the connection.

1. Ensure you have the correct handset type and the LAN CTI software for your Windows operating system.

2. Have the dealer (or staff member) that maintains your phone system to create an association between your computer and your telephone extension. Many manufacturers do this by allocating an extension to an IP address.

3. Install the 1st party LAN CTI software. You are usually not required to configure your telephone extension number because this configuration has been achieved already

4. After restart check the advanced section of the Phone and Modem Options (in Windows XP in this example) and see that your telephone system manufacturer's TAPI driver (or simply your extension) is listed, and that it has the correct extension configured when you select it and click Configure.

5. Now configure your application (such as Legrand CRM) to use this TAPI device and test.

Always refer to your manufacturer's instructions with regard to installing software and making changes to a telephone system's programming. A telephone system is usually a very complex piece of equipment and changes should be performed by trained personnel only.

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