ESI API

Makes ESI an even better fit for connected businesses

Introduction

Your prospects and customers can rarely count on off-the-shelf software to fit their business needs perfectly. Whether the situation requires a custom patient-tracking system, an order-processing database, or a telemarketing autodialer, there will come a point where nearly every business must decide between customizing tools or changing work flows to match the tools available. This is particularly true of customer relationship management (CRM) software. How a business tracks its customers and their needs is a fundamental component of how it presents itself to the world; but it can be tough to bring all of the business's activities in line with the CRM software.

ESI has responded to this challenge by developing the **ESI API** — the application programming interface (API) for ESI's **IP Server 900** business communications system. The ESI API allows custom software to control an ESI phone to integrate critical telephony functionality — such as call processing, screen pops, and dialing — into ESI-using businesses' CRM systems.

ESI understands that, while its software solutions provide a wide range of functionality, there are times when businesses want to replicate some of those functions in their existing systems. The IP Server 900 was built to allow such integration through the use of the ESI API, a **Microsoft**® **TAPI 2.0**-compatible driver for 32-bit and 64-bit of Microsoft *Windows*® that allows users to control their phones through their own custom software or TAPI-compatible business applications.

TAPI — short for *telephony application programming interface* — was developed by Microsoft and allows *Windows* applications to communicate in a standard way with phone systems such as the IP Server 900. The advantage of TAPI is that it's available on all versions of *Windows* and is easily accessed through every major programming language, which simplifies finding capable software developers and greatly shortens development periods.

> **Note:** This document is **not** intended to serve as a programming guide; for that, ESI Resellers should refer to the *IP Server 900 ESI API Programming Manual* (ESI # 0450-1359).

Requirements

- **ESI system** — An IP Server 900.
- **PC** — Each PC running the ESI API must fulfill the following minimum requirements:
    - **Operating system** — *Windows 7*, *Windows Server 2008*, *Windows Vista*, *Windows XP Professional Edition*, or *Windows Server 2003*. As applicable to each, both 32- and 64-bit versions are supported.
    - **Processor** — Pentium® 4, 1.6 GHz or higher (32- or 64-bit).
    - **Memory** — 1 GB or more of RAM.
    - **Hard drive** — 20 GB or larger.
- **Networking** — The IP Server 900 and any PCs running the ESI API must be connected to the same data network.

> **Note:** *VIP 7* and the ESI API cannot co-exist. This means that the ESI API **cannot** be installed on a PC where *VIP 7* is already installed, and any PC running the ESI API **cannot** have *VIP 7* installed on it. If the functionality of both is desired, the *VIP 7* application can be installed standalone; for this reason, a **specialized** version of the ESI API is installed with *VIP 7* and can be accessed identically to the ESI API.

So how does TAPI work?

As its name implies, TAPI is a software interface used to create telephony applications. Among those applications are dialers, operator consoles, ACD agent interfaces, and screen-pop databases, to name just a few. This is accomplished by installing a **TAPI service provider (TSP)**. A TSP acts much like a printer or sound card driver, allowing *Windows* to communicate with the phone system. ESI's TSP is the ESI API. The basic flow of events, as illustrated below, is:

- The software application sends a command to TAPI.

- TAPI sends the command to the ESI API.

- The ESI API sends the command to the IP Server 900.

- The IP Server 900 sends the command to the phone.
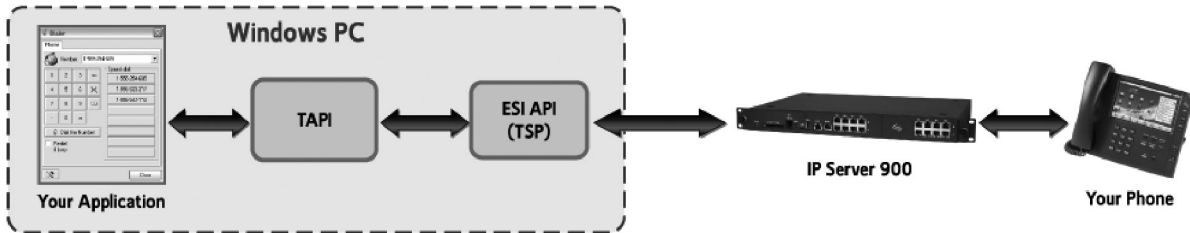
What can the customer do with It?

The ESI API can be used to create applications such as the ***ESI Salesforce.com Connector*** (for more information, see the *IP Server 900 ESI Salesforce.com Connector Overview*, ESI # 0450-1361), which allows *Salesforce*® users to make calls from *Salesforce* and receive screen pops for incoming calls directly from Salesforce customer records.

The ESI API currently allows users to perform the following actions on ESI phones from within applications:

- Answer a call

- Make a call

- Blind-transfer a call to another person

- Place a call on hold

- Pick up a call from hold

- Hang up a call

How do I get it?

The ESI API can be downloaded from the password-protected ESI Resellers' site as a *Windows*-executable application. After installation of the ESI API, a Certified ESI Reseller must configure an installed IP Server 900 and extension information to allow interfacing of the ESI API to the customer's phones. For more details about installation, consult the *IP Server 900 ESI API Programming Manual* (ESI # 0450-1359).