



Sage CRM 7.3 SP1

CTI Guide

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Chapter 1: About This Guide

The main body of this guide is for Sage CRM implementers. The final chapter "Working with CRM CTI" is for users.

Please note that while the document refers to Sage CRM, CRM, or the CRM system throughout, regional products may use different brand names.

We assume that implementers have:

- A good understanding of Computer Telephony Integration (CTI) technologies, including ActiveX software.
- Familiarity with TAPI (Telephony Application Programming Interface), TSAPI (Telephony Server Application Programming Interface), or CSTA (Computer-supported Telecommunications Applications).
- A basic understanding of how CTI networks are set up and configured.
- Experience of implementing and troubleshooting CRM installations.

We assume that users are:

- Familiar with the use of a Web browser.

Chapter Summary

The table below gives a summary of each chapter.

Chapter	Summary
Getting Started (page 2-1)	An introduction to prerequisites and compatibility requirements for CRM/CTI integration.
Installing CRM CTI (page 3-1)	Details of how to install CRM CTI.
Enabling Users for CTI (page 4-1)	How to enable CRM users to use CTI.
CTI Screen Customization (page 5-1)	Guidance on how to configure fields to be telephone numbers.
Working with CRM CTI (page 6-1)	How to make, take, and handle online calls with CRM CTI.

Chapter 2: Getting Started

In this chapter you will learn how to:

- Understand what CRM CTI is.
- Get an overview of CTI Network Architecture.
- Get an overview of CRM/CTI Network Integration.
- Understand the prerequisites for setting up CRM CTI.
- Gain an insight into the role of the Telephony Administrator.

What is CRM CTI?

CRM CTI provides CTI-enabled users with telephony functionality from their desktops, via the Sage CRM interface. Users can select any hyperlinked telephone number in the system to call that number, and any incoming calls are matched with contacts in the CRM system so that users can quickly view contact details while they talk, or even before they take the call.

CRM requires a TAPI driver on the client machine in order to communicate with the Telephony Server. If you have a CSTA or TSAPI solution you will require a 3rd party TAPI client in order to integrate with CRM.

CTI Network Architecture

The following section provides an overview of a typical CTI network environment's technical infrastructure. It also provides details of what hardware needs to be in place before the implementer goes on site.

The following are the main elements of a typical CTI network:

- A private PABX switch.
- A Telephony Server.
- A Telephony Network.
- A local area network (LAN) server.
- A LAN.

The PABX switch controls the events and messaging over the Telephony Network, and the LAN server handles the day-to-day user-based network activities. The Telephony Server is a PC-based server that has an interface to the PABX switch and an interface to the LAN. This is the bridge that integrates telephony functionality with software on a LAN.

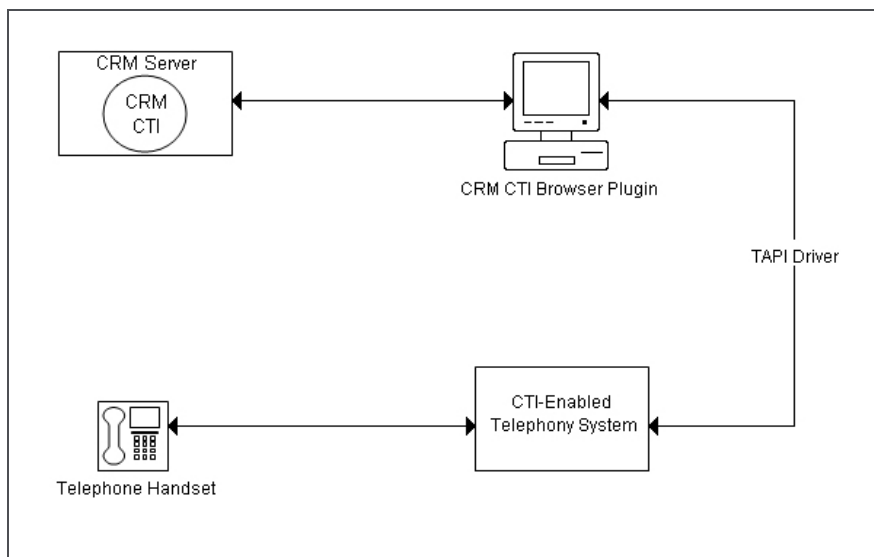
CRM/CTI Network Integration

The following are additional elements in a CRM/CTI network:

- The CRM CTI component installed on a server.
- The CRM CTI browser plug-in (this gets installed automatically).
- For TSAPI and CSTA CTI solutions, TAPI client software needs to be installed on all user machines who will work with CRM CTI because CRM is compatible only with TSAPI and CSTA systems that provide a TAPI driver. A TAPI driver must be present on the client machine in order for integration with TSAPI and CSTA systems to work.

The CRM Server interacts with the CRM CTI browser plug-in, which in turn interacts with the Telephony Server. When CRM CTI is enabled, every CTI enabled user of CRM has access to the CRM CTI browser plug-in. All inbound and outbound telephony activities are received or created by this plug-in. In addition, the CRM CTI browser plug-in calls the CRM server for the screen pop-ups, which present the caller ID and CRM contact information to the user.

The diagram below illustrates how CRM integrates with a typical CTI network.



CRM / CTI Integration

CRM CTI Prerequisites

Before an implementer goes on site, the following must be available to integrate CRM with a CTI network:

- A Private Automatic Branch Exchange (PABX) switch. All TAPI-compliant PABX switches are compatible with CRM.
- A Telephony Server that has been configured for all users who will use CRM CTI. All the following telephony servers are compatible with CRM:
 - TAPI
 - TSAPI
 - CSTA

Note: For TSAPI and CSTA CTI solutions, TAPI client software needs to be installed on all user machines who will work with CRM CTI because CRM is compatible only with TSAPI

and CSTA systems that provide a TAPI driver. A TAPI driver must be present on the client machine in order for integration with TSAPI and CSTA systems to work.

- Telephony Server Provider (TSP) software installed on the telephony server. Specific software depends on the type of server.
- An operational CTI network that has been fully tested.
- Workstations configured for inclusion in the telephony network. For more details, please refer to [Enabling Users for CTI \(page 4-1\)](#).
- A list that specifies the TN number (analogous to the IP associated with the user) and DN number (user's extension number) for each CRM user so that they can be enabled for CTI on the CRM server. Please refer to [Role of the Telephony Administrator \(page 2-3\)](#).

Other requirements for CRM CTI include:

- A CRM CTI license.

Role of the Telephony Administrator

The Telephony Administrator is the person who administers a company's Telephony Server and Switch. He will also be responsible for ensuring that the CTI network is operational and has been fully tested before the implementer begins installing CRM CTI.

One important role of the telephony administrator is to set up telephony devices on the Telephony Server. This involves configuring the Telephony Server to associate each user in the local network domain with a particular telephone or telephony device. Each telephony device needs to be uniquely associated with a local telephony IP address. Each user needs to be associated with this address and assigned a TN number. A user list that specifies TN and DN numbers for each user needs to be compiled and made available to the CRM implementer.

Note: If you have difficulty in identifying telephony device names for the users you want to enable for CTI, consider using a tool such as ExceleTel (a trial version can be downloaded from <http://www.exceleтел.com>) to help you do this.

Chapter 3: Installing CRM CTI

In this chapter you will learn how to:

- Run the Setup program for CRM CTI.
- Edit the System Behavior CTI settings.
- Check that system telephone settings correspond to CRM settings.

Running the Setup Program

The installation process for CRM CTI is almost identical to the installation process for a typical Sage CRM installation. For instructions on installing Sage CRM, please refer to the *Installation and Upgrade Guide*. All of the screens and dialog boxes that display during the CTI installation are the same as the ones that display during the CRM installation, except the following one:

An additional screen is displayed after the Default Currency dialog box that prompts you for information on the telephony network setup.

For example, let's say you are based in the US in Washington, DC. In addition, you typically dial "9" from your work telephone to get an outside line.

To complete the CTI information fields:

1. Select the country that you are located in from the **What Country / Region Are You In Now** list, for example, **United States of America**.
2. Type in your area or city code in the **What Area Code (Or City Code) Are You In Now** field, for example, **202**.
3. In the **If You Dial A Number To Access An Outside Line What Is It** field, type the number that users typically dial to get an outside line, for example, **9**.
4. Continue with the installation.
5. Once CRM is installed, log on and click **<My Profile> | Administration | System | System Behavior**. The details you specified during the installation are displayed in the CTI fields, and default values are automatically entered in the other CTI fields. You can change the values of the fields at any point if you need to.

System Behavior CTI Fields

The table below describes all of the CTI fields on the **Administration | System | System Behavior** page.

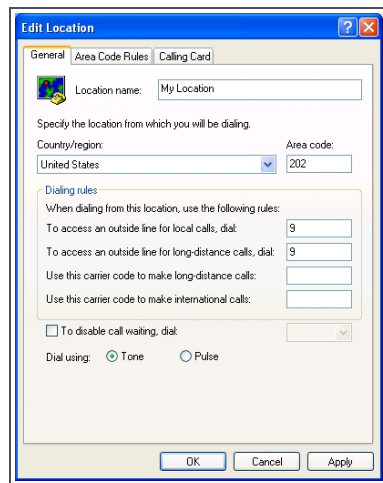
Field	Description
CTI Plug-in Class ID	Contains the GUID for the CTI plug-in. This GUID is always the same for the CRM plug-in. If a user has developed their own plug-in, they must change this field to the GUID of their plug-in.
CTI.cab Version	Contains the version of the CTI plug-in used by CRM. If a user has developed their own plug-in, they must change this field to the cab name and version number of their plug-in.
External Dial Prefix	The digit used in your organization to make a telephone call outside the company (external call), for example, 9 or 0. The number will already have been set up on the telephony server.
Default Country Code	The international country code for the country you are located in.
Default Area Code	The area or city code for the area or city you are located in.
Internal Number Length	The number of digits in your organization's extension numbers. This is set to 4 by default. This field enables CRM to determine whether an incoming or outbound call is an internal or external number.

Checking System Telephone Settings

Once CRM CTI is installed, you need to make sure that the server machine telephone settings correspond with the information you specified during the CTI install.

To check the telephone settings on the server machine:

1. Select **Start | Control Panel**, and navigate to the **Phone and Modem Options** option.
2. Highlight **My Location** and select the **Edit** button. The settings displayed on the Edit Location dialog box should correspond with the settings you specified during the CRM install. If they do not, you can change them.



Edit Location dialog box

3. Depending on your location, you may need to specify (or verify) area code rules. To do this, select the **Area Code Rules** tab on the Edit Location dialog box, and select the New or Edit button, depending on whether you are specifying new rules or checking previously set up rules.
4. Select **OK** to close the Area Code dialog box and then **OK** to close the Edit Location dialog box.

Chapter 4: Enabling Users for CTI

In this chapter you will learn how to:

- Configure users for CTI.
- Access the telephony server for CTI users.
- Check user telephony settings.

Configuring Users for CTI

Once you have configured the CRM server, the next step is to configure users for CTI. This involves specifying a telephony device (or TN number) on the CRM server for each user who requires CTI.

1. Click **<My Profile> | Administration | Users | Users**.
2. Find the user you want to enable CTI for, and open the User Details page for that user.
3. Click **Change**.
4. Select **CTI Enabled**. When you do this, two fields become visible—CTI Device Name and CTI Call Screen.
5. In **CTI Device Name**, enter the device name for that user as defined on the Telephony Server. On certain systems, Swyx PBX for example, you will need to enter the phone's IP address as the device name.
6. From the **CTI Call Screen** field, specify which screen the user will be presented with by default when they click on an inbound call hyperlink. For example, some customer service users may need to see the New Case screen as their job is to log customer service issues, while telesales operatives may need quick access to the New Lead screen to record new leads.

The screenshot shows the 'User Details' form in a CRM system. The form is divided into two main sections: 'User' and 'More User Details'. The 'User' section includes fields for First Name (Susan), Last Name (Maye), E-mail (mayes@panolytech.com), User Name (MayeS), Password (masked), Primary Team (Direct Sales), Resource (True), and Home Territory (US & Canada). The 'More User Details' section includes fields for Department (US Sales), Display Team (Telesales), Phone (212 954 1902), Home Phone, Mobile (212 340 1298), Pager (212 506 1093), Ext. (1902), Fax (212 954 1900), Language (US English), User SMS notification (True), Forecasting - Currency (\$), Title (US and Canada Sales Manager), Location (New York), CTI Device Name (Device), Desk Location (5/2122), and CTI Call Screen (Company Summary). A checkbox for 'CTI Enabled' is checked. On the right side of the form, there are buttons for Save, Delete, Cancel, and Help.

CTI fields on the User Details page

7. Ensure that the user's telephone number and extension are entered correctly in **Phone** and **Ext.**
8. Click **Save**. The user is enabled for CTI.

Making the Telephony Server Accessible to Users

Once a user has been enabled for CTI, you need to ensure that the following command is run on the user's desktop or laptop so that the telephony server is accessible:

```
TcmSetup /c <TelephonyServerName>
```

To run the command on the user's desktop or laptop:

1. Select **Start | Run**, and type **cmd**.
2. Type the command in the command prompt. If the server name is "TelephoneServer" for example, type the following command:

```
TcmSetup /c TelephoneServer
```
3. Press **Enter**. The command is run, and a dialog box is displayed to inform you that the client was successfully set up.
4. Select **OK** on the dialog box.
5. You need to repeat the above steps on each CTI-enabled user's machine.

Checking User Telephone Settings

You need to make sure that the telephone settings on the user's computer correspond with the server telephone settings. Please refer to the [Checking System Telephone Settings \(page 3-3\)](#) for more information.

Chapter 5: CTI Screen Customization

In this chapter you will learn how to:

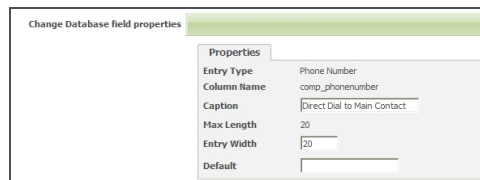
- Configure fields to be telephone numbers.

Configuring Phone Number Fields

When a user has been enabled for CRM CTI, all phone number values in CRM are displayed as hyperlinks for the user. However, you can also create new phone number fields or configure any text field in CRM to be a telephone number. Once a field is converted to this type of entry, it will automatically be displayed as a hyperlinked value on the screens in which it is used. This allows CTI-enabled users to make outbound calls by clicking the value of the field, which is set as a telephone number. As with any text field, you can edit phone number fields.

To convert a text field to a phone number field:

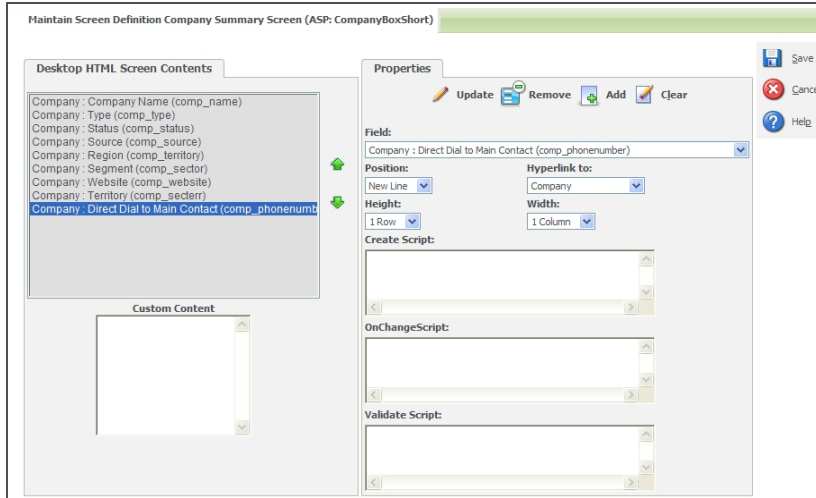
1. Click on the **Administration | Customization | <Entity> | Fields**.
2. Click the hyperlink of the field you want to convert.
3. Change the Entry Type to **Phone Number** and enter the new caption and column names, for example, Direct Dial to Main Contact.
4. Click the **Save** button.



Change Database field properties	
Properties	
Entry Type	Phone Number
Column Name	comp_phonenumber
Caption	Direct Dial to Main Contact
Max Length	20
Entry Width	20
Default	

Change Database Field Properties page

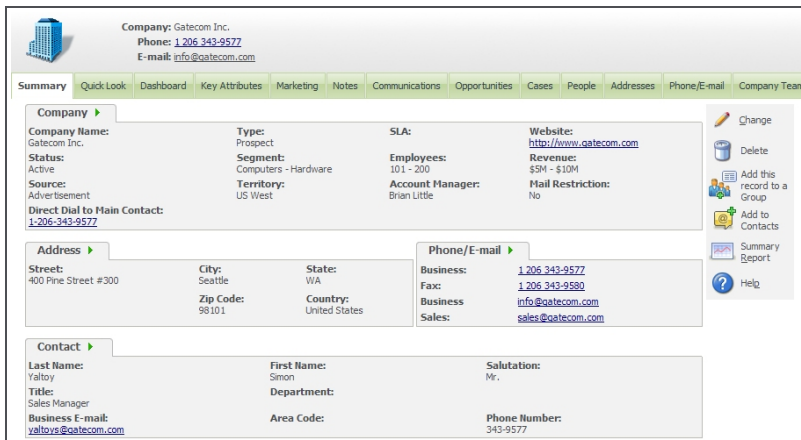
5. Select the **Screens** tab.
6. Click the hyperlink of the Screen you want the converted field to appear on, for example, the Company Summary Screen.
7. Select the converted field from the Field drop-down and click the **Add** action button.



Maintain Screen Definition Company Summary Screen

8. Click the **Update** action button and then click **Save**. A new Phone Number field called Direct Dial to Main Contact is added to the Company Entry screen.

Once a phone number is entered in the field, it immediately becomes activated as a CTI field. Users can enter phone numbers in Phone Number fields in any format. CTI ignores all non-numerical characters and spaces when the hyperlinked number is selected by the user and dialed from CRM.



Company Summary page with new CTI field

Chapter 6: Working with CRM CTI

In this chapter you will learn how to:

- Understand what you can do with CRM CTI.
- Downloading the CTI plug-in.
- Make an outbound call.
- Take an inbound call.
- Handle connected calls.
- Work with the Active Calls list.

Overview

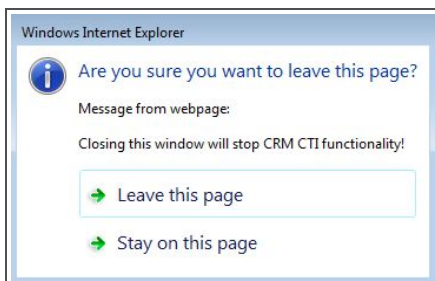
CRM CTI allows users to view information about incoming calls and perform various telephony functions. The features of CRM CTI include:

- Auto caller identification (caller ID).
- The ability to view the most relevant CRM screen to them when they click on the inbound call hyperlink.
- The option to go directly to the relevant Company or Person screen while the call is active.
- Auto dial-out via hyperlinked phone numbers.
- The option to transfer and put calls on hold.

Downloading the CTI Plug-in

When you log onto CRM for the first time having been CTI-enabled, you are prompted to download the CTI plug-in. To download the CTI plug-in, follow the instructions provided on-screen. You only need to do this once. If you receive an upgrade, or change machines, you are prompted to download the plug-in again.

Once the plug-in has been downloaded and installed, you can start working with CTI using the CTI Call Screen pop-up window. You can **minimize** the pop-up and CTI remains active. If you **close** the pop-up window, CTI is no longer active and you cannot make or received calls using CTI.



CTI pop-up closure warning message

To activate or reactivate the CTI Call Screen pop-up:

- Select the **CTI** option (telephone icon) from the Main Menu.

Making an Outbound Call

Once you have been enabled as a CTI user:

- All phone numbers in CRM display as hyperlinks.
- Even phone numbers in the context area of the screen are displayed as hyperlinks.

To make an outbound call:

- Click on the hyperlinked phone number you want to call. For example, click on the Phone hyperlink in the context area.

The Call screen is then displayed with the number you clicked on in the Active Calls field.

The Active Call field shows:

- The full telephone number you selected, including Country Code and Area Code.
- Once you have clicked on the Dial button, the word "Dialing" is displayed in the Enter Number field to indicate that the number is being dialed.

You can stop dialing at this point if you wish by clicking on the Hangup button. The Call is ended. If you do not have it set to be displayed at all times, the Call screen is hidden.

Making a Call to a Number that is not in CRM

Note: Although numbers in Phone Number fields can include symbols and spaces, this is not the case when you enter a number on the CTI Call screen. When entering a phone number on the CTI screen, either:

- Type the "simple" number—you can include spaces but not symbols. For example **44 161 5527789**.

Or

- Type the number in canonical format—that is, <plus sign> <country code> <area code in brackets> <number>. For example, **+ 44 (161) 5527789**.

To make a call to a number that is not in the CRM system:

1. Select the **Telephone** menu button to display the Call screen.
2. Type the number you want to call in the **Enter Number** field. For example, include an international code, a country code, and an area code if you are dialing an international number. If you are dialing a different area code within the same country, type the code followed by the number. However, if you are dialing a local number, just type the phone number. Similarly, dialing an extension number simply requires you to input the extension.
3. If you want to stop dialing, select **Hangup**.

Taking an Inbound Call

When an inbound call is directed to your extension number:

- The CTI call screen is displayed in a pop-up window in CRM.
- The phone number is displayed in the **Active Calls** list followed by the word "Ringing" to indicate that the call is coming in.
- If the incoming call number matches a company or person in the system, the contact is listed underneath the Active Calls field.
- If the incoming call matches more than one contact in the system, all the contacts are listed.
Note: A matching number is any number in the contact database that has the same number as the caller Id or is a prefixed match against the caller Id.
- If the incoming call is from a user in CRM (that is, a colleague) as opposed to a contact, the word **Internal** is displayed on the list.

To answer the inbound call:

- Click on the **Answer** button or pick up the receiver.
When you do this, the incoming call number is displayed on the Active Calls list followed by the word **Connected**, and additional buttons become available, which you use to handle the call.
- When you click on the hyperlink of an active call, the CTI Call Screen set up for you by your System Administrator is displayed. If you are a sales person and your CTI Call Screen is the New Opportunity screen, for example, clicking on the active call hyperlink displays the New Opportunity screen. The screen gathers context information so that you can quickly log a case for the CRM customer who just called.

Handling Connected Calls

When you answer a call, or if a call you make is connected, you can do the following from the connected call screen:

Hangup. Speak to the caller, and when you have completed the call, select Hangup to end the call.

Hold. Put the caller on hold while you deal with a query by selecting the Hold button. When you do this, the Unhold button is displayed. The Hold button is not visible if the number dialed is busy or invalid.

Unhold. Resume a call that is on hold. When you select the Unhold button, the Hold button becomes available again.

Transfer. Transfer the call directly to another extension number. When you do this, the call goes straight through to the extension number you specify, and you are hung up. The transfer functionality is available for TAPI implementation only. To transfer a call directly to a colleague:

- Type the extension number you want to transfer the call to in the **Number** field, and select the **Transfer** button. The call is transferred directly to your colleague.

Consult. Consult with a colleague before you transfer a call to them. To do this:

- Type your colleague's extension number in the **Number** field, and select the **Consult** button.
- When you do this, your colleague's number is dialed and if they pick it up, you are presented with two buttons, Complete Transfer and Hangup. Talk to your colleague, for example, ask them are they free to take the call.
 - If they can take the call, select the **Complete Transfer** button to transfer it to them.
 - If they are not available to take the call, select the **Hangup** button to return to the call.
- You then need to select the Unhold button to speak to the caller. Once you do this, you are returned to the connection call screen where all of the call options become available again.

Working With the Active Calls List

The Active Calls list displays information about the current status of the call.

For example:

- The list is empty if you have no active calls.
- It shows the number you are dialing, followed by the word **Dialing** if you are making an outbound call.
- It displays the incoming call number followed by the word **Ringling** when a call is coming in.
- When you answer an incoming call or are connected to a number you dialed, it shows the number followed by the word **Connected**.
- If you select the **Transfer** or **Consult** button when a call is connected, the list displays the status of the external call, for example, **Holding, Pending, Transfer**, as well as the status of the number you are transferring to or consulting with, for example **Connected, Consulting**.

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