



breakfree  
*with a software based PBX for Windows*



# Manual

**3CX Phone System integration with  
Microsoft Outlook and Salesforce  
Version 1.0**

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## Installing 3CX Assistant CRM Integration

### What is the 3CX Assistant CRM Integration?

3CX Assistant CRM Integration is a Windows application residing in the system tray that allows you to integrate with Microsoft Outlook or Salesforce.

When a call arrives to your extension, you will be notified about it with a screen pop-up containing the information of the contact that is calling you. In order to do this, the application searches in your Microsoft Outlook Contact's folder and / or Salesforce Contact and Lead tables. If the callerid matches one of your contact's phones, the contact's information will be shown in the screen pop-up.

Also, when the call finishes the application may automatically add the call record to the Microsoft Outlook Contact's Journal or the Salesforce Contact's activity history.

From the application you can also view missed calls, and monitor the connectivity with each enabled Plug-in (Microsoft Outlook and Salesforce).

### System requirements

3CX Assistant CRM Integration requires the following:

- Windows XP Pro or Vista
- .NET Framework version 2.0 or higher
- 512 Megabyte Memory or higher, Pentium 4 processor or up
- Port 5534 to be free (if integration with Salesforce is desired)
- Microsoft Outlook 2003 or 2007 (if integration with Microsoft Outlook is desired)

### Installation

3CX Assistant CRM Integration is installed as a part of 3CX Assistant. When installing it, choose to also install the "Outlook and Salesforce CRM Integration" module.

When installing on a machine with multiple profiles, a separate installation must be re-run on each profile. The 3CX Assistant CRM Integration configuration wizard needs to be re-run again for the plug-ins to register with success. Therefore perform a fresh installation of the Call assistant on each profile you need.

### Run the 3CX Assistant CRM Integration configuration wizard

1. The 3CX Assistant CRM Integration configuration wizard walks you through a number of essential tasks that you need to do in order to get your integration up and running. After it starts up, it will ask if you want to enable the integration with Microsoft Outlook. Also you can specify if you want to store call activity in the Contact's Journal.



**Screenshot 1 - The 3CX Assistant CRM Integration Configuration Wizard**

2. The wizard will then ask you if you want to enable the integration with Salesforce. Also you can specify if you want to store call activity in the Contact's activity history. Then you will be requested to enter the login information (User Name, Password and Security Token).
3. If you have enabled the integration with both Microsoft Outlook and Salesforce, you need to define the query order. If the callerid is matched with Contacts in Microsoft Outlook and Salesforce, this setting will determine which of them will be used. Set-up will prompt you for the Plug-in with highest priority.
4. Set-up will ask you for the desired screen pop-up behavior.
5. The wizard will then ask you for a prefix to use when launching outbound calls.
6. Set-up will ask you to click 'Next' to save your settings.
7. Press Finish to end the installation process.

After the Wizard has completed, you can open 3CX Assistant CRM Integration from 3CX Assistant. There you may change the configuration, and perform other tasks like view missed calls or monitor the system status.

Also, if you prefer to change the configuration with the Wizard, you may re-launch it at any time from the program folder at the Start menu.

## Uninstallation

When you uninstall the Call Assistant with CRM on a machine with multiple profiles, you might have fast switching enabled on the machine. This will result in 2 instances of the “3CX Assistant” running on different profiles and another 2 instances of the “3CX Assistant CRM Integration” also running on separate profiles. For successful uninstallation to occur, all the processes must be terminated from task manager. The uninstall only detects the instances of that current profile. To do this you have two possible ways:

- a) You can log on to the other profile and close the “Call Assistant” and the “3CX Assistant CRM Integration”.
- b) Open task manager; end every instance of processes “3CX Assistant CRM Integration.exe” and “tcx.assistant.client.exe”.

Then proceed with uninstallation after this. Failure to do so will leave traces of the application on the machine.

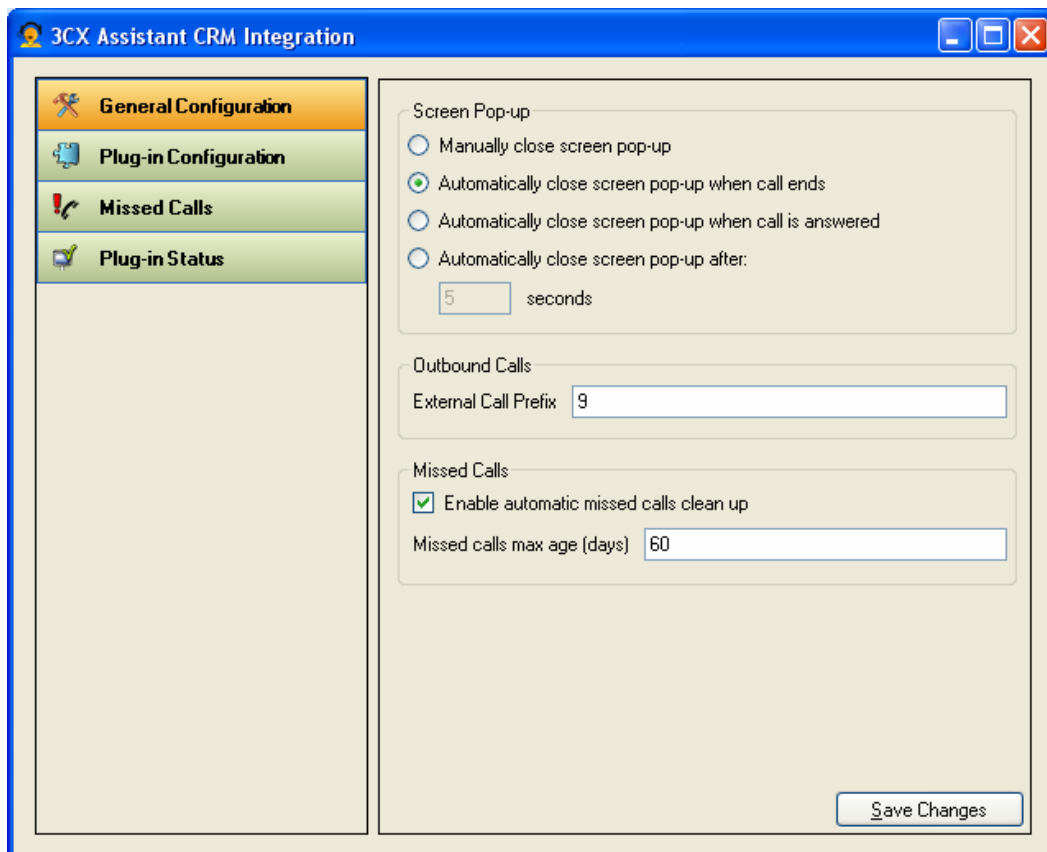




# Configuring 3CX Assistant CRM Integration

## Introduction

This chapter explains how to use 3CX Assistant CRM Integration to change the configuration, view missed calls or monitor the system status. It also shows how inbound calls are notified.



**Screenshot 2 - The main Window**

The main Window can be shown by selecting an option under the “CRM” menu in 3CX Assistant. That menu will let you go directly to the desired screen.

## General Configuration

This section allows you to change general settings:

- Screen Pop-up. The screen pop-up is automatically shown when an inbound call arrives to your extension, displaying the contact information. Here you can set the way it is closed, choosing between:
  - Manually closing it: you must click the ‘Close’ button otherwise it will remain opened
  - Automatically closing it when the call ends

- Automatically closing it when the call is answered
- Automatically closing it after N seconds
- Outbound Calls. When launching outbound calls directly from Microsoft Outlook or Salesforce, you may add a prefix in order to select a route in 3CX Assistant. This avoids the need of editing contacts in Microsoft Outlook or Salesforce to include the external line prefix.
- Missed Calls. The system automatically registers missed calls, so you can view them with a few clicks when you're back at your desk. Those records can be automatically deleted after some time. You may enable or disable this automatic clean-up, and set the number of days to keep those records.

In order to apply changes you need to click on "Save Changes".

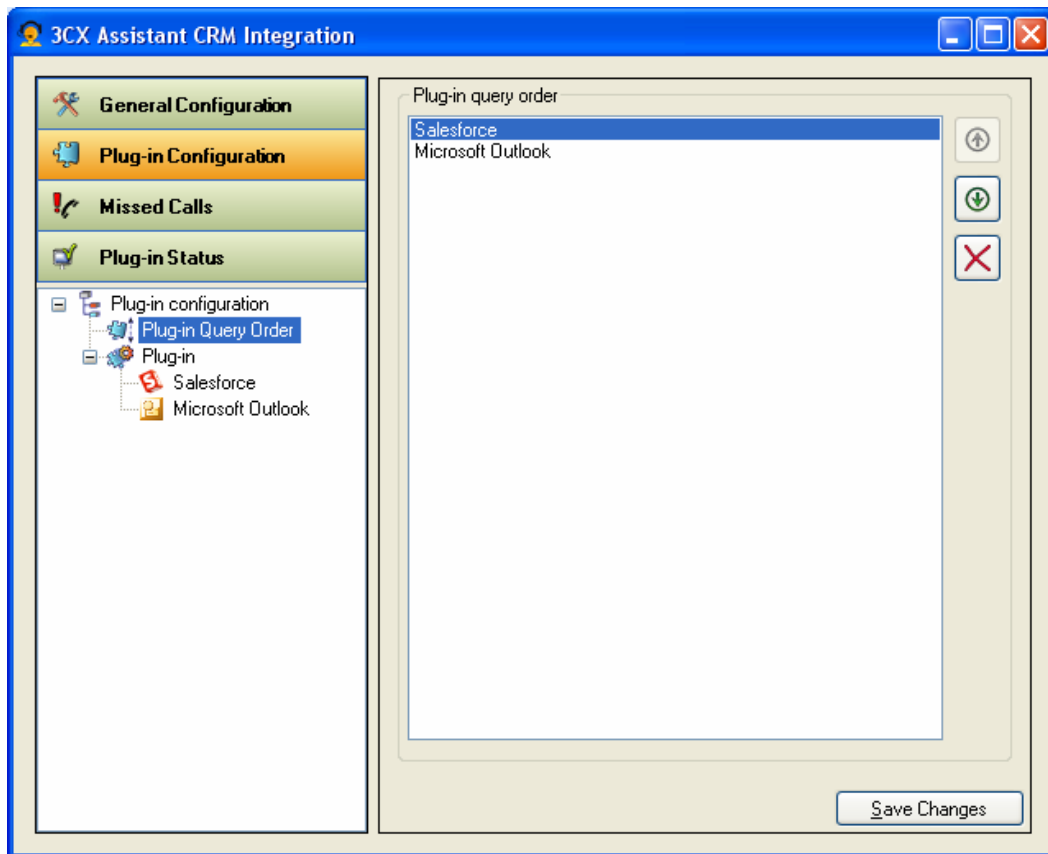
### Plug-in Configuration

The 3CX Assistant CRM Integration works with the use of plug-ins, allowing multiple CRM applications to be supported. Currently Microsoft Outlook and Salesforce plug-ins are available, but in the future more plug-ins will be available with other CRM systems.

This section allows you to change Plug-in settings. When selected, the left pane shows a tree, which enables you to change the query order and the configuration of each Plug-in.

After performing the desired changes, you need to press the button "Save Changes" in order to apply them.

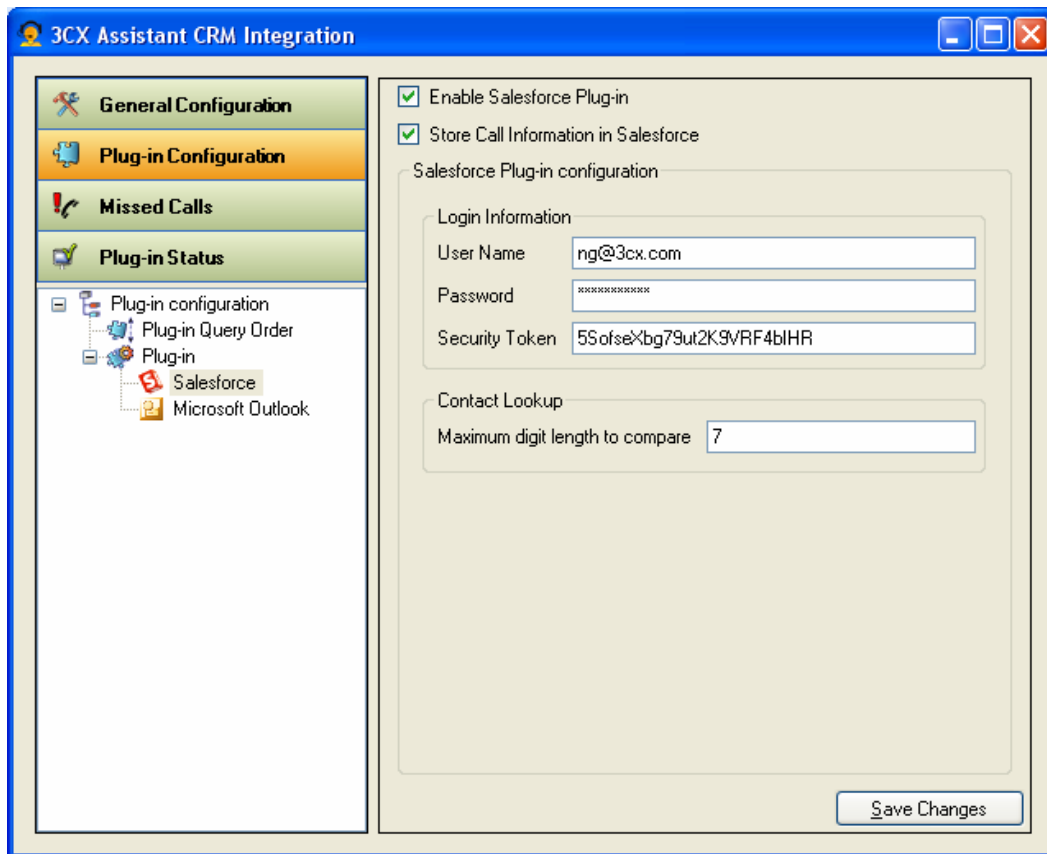
## Plug-in Query Order



**Screenshot 3 – Plug-in Configuration – Query Order**

If you have enabled the integration with more than one Plug-in, you need to define the query order. If the caller ID is matched with Contacts in more than one Plug-in, this setting will determine which of them will be used. You can move Plug-ins up and down, or press the delete button to disable it.

## Salesforce Plug-in configuration



**Screenshot 4 – Plug-in Configuration – Salesforce**

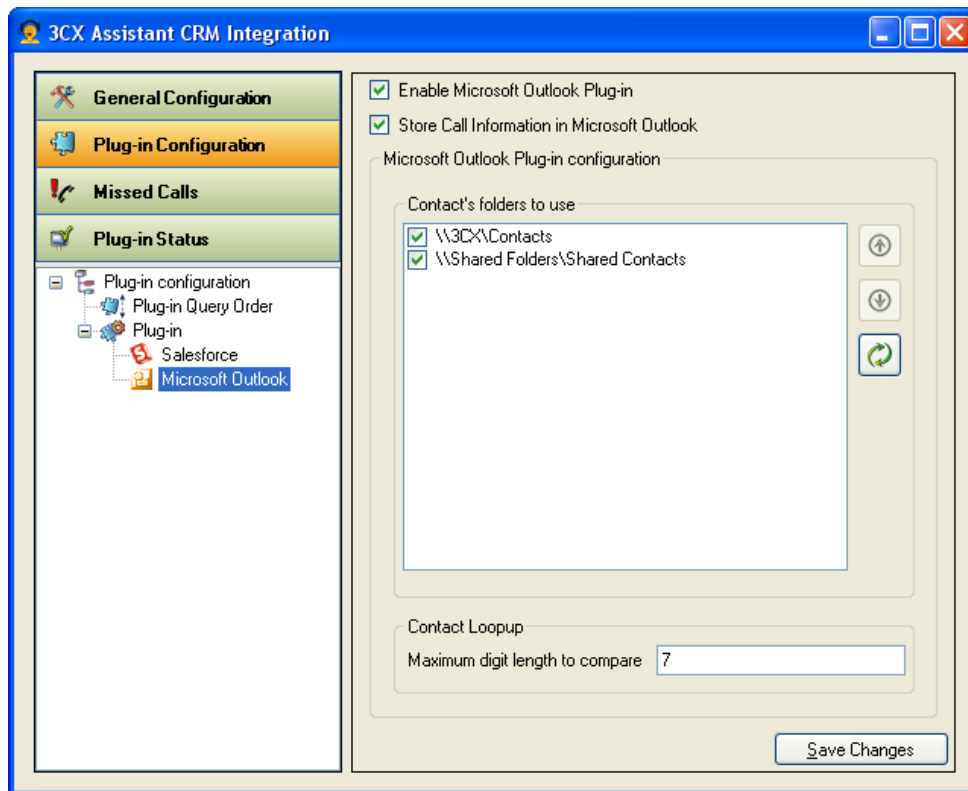
You can enable Salesforce integration checking the “Enable Salesforce Plug-in” option. If you also want to automatically register call information in the Contact’s activity history, you must check the “Store Call Information in Salesforce” option.

You must fill the Login Information section with your Salesforce user account information. If you don’t have a Security Token yet, login to Salesforce using the web interface and go to Setup → My Personal Information → Reset My Security Token.

You can change the maximum digit length to compare to in the Contact Lookup section. When an inbound call arrives to your extension, the caller ID may have different formats depending on your PSTN or VoIP Provider. It could have international format (including the country code), national format (including the region or city code), or local format (including only the local number).

Also, you may have created your Contact’s phones in Salesforce with prefixes that are not present in the caller ID, such as mobile phone prefixes. In order to match the caller ID with the contact’s phone in these cases, you need to specify this parameter. The system will compare the last N digits of the caller ID with the last N digits of your contact’s phone, where N is the specified maximum digit length to compare. Usually this parameter should be the length of your local number. With a higher number you get more accuracy, but you may possibly not match the caller ID with some contact. With a lower number you get less accuracy (with possible false positives), minimizing the possibility of a no match.

## Microsoft Outlook Plug-in configuration



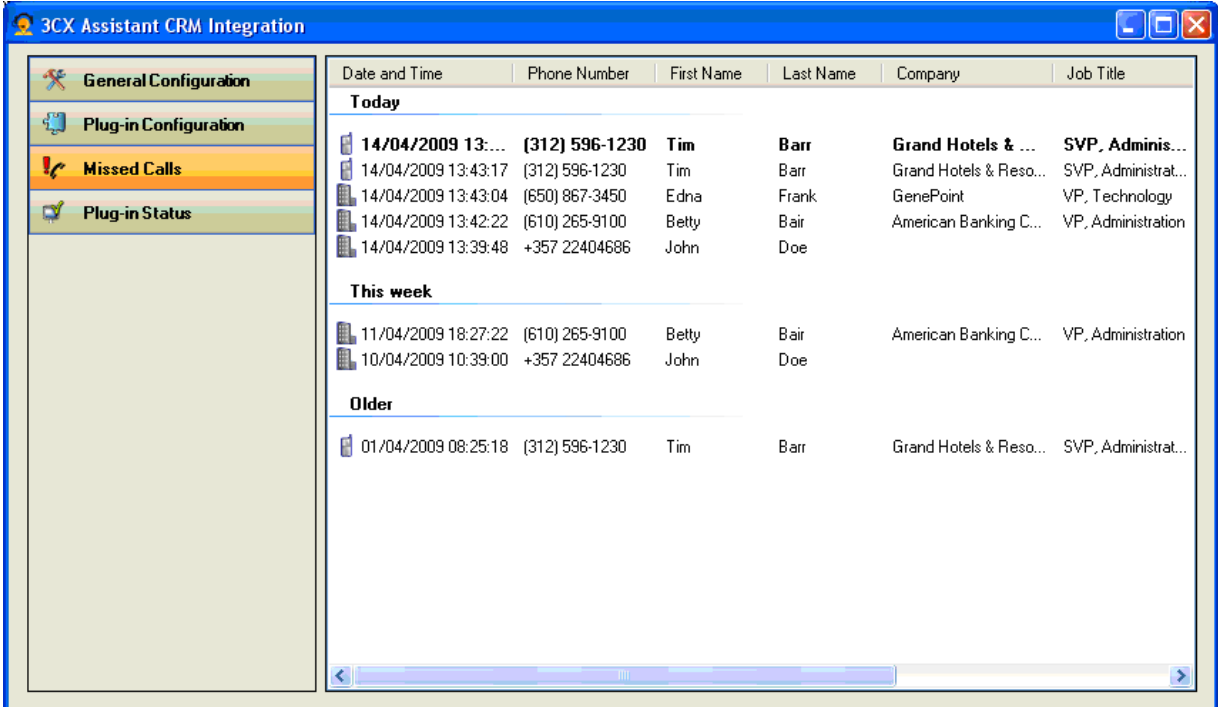
**Screenshot 5 – Plug-in Configuration – Microsoft Outlook**

You can enable Microsoft Outlook integration checking the “Enable Microsoft Outlook Plug-in” option. If you also want to automatically register call information in the Contact’s Journal, you must check the “Store Call Information in Microsoft Outlook” option.

When this Plug-in is enabled, it will automatically retrieve the list of available Contact’s folders. You need to check the ones where the application should look for contacts when an inbound call arrives. Also, you may specify the query order in your Microsoft Outlook folders pressing the arrow button and moving the selected folder up or down.

You can change the maximum digit length to compare to in the Contact Lookup section. When an inbound call arrives to your extension, the caller ID may have different formats depending on your PSTN or VoIP Provider. It could have international format (including the country code), national format (including the region or city code), or local format (including only the local number). Also, you may have created your Contact’s phone numbers in Microsoft Outlook with prefixes that are not present in the caller ID, such as mobile phone prefixes. In order to match the caller ID with the contact’s phone in these cases, you need to specify this parameter. The system will compare the last N digits of the caller ID with the last N digits of your contact’s phone, where N is the specified maximum digit length to compare. Usually this parameter should be the length of your local number. With a higher number you get more accuracy, but you may possibly not match the caller ID with some contact. With a lower number you get less accuracy (with possible false positives), minimizing the possibility of a no match.

## Missed Calls



Date and Time	Phone Number	First Name	Last Name	Company	Job Title
<b>Today</b>					
<b>14/04/2009 13:...</b>	<b>(312) 596-1230</b>	<b>Tim</b>	<b>Barr</b>	<b>Grand Hotels &amp; ...</b>	<b>SVP, Adminis...</b>
14/04/2009 13:43:17	(312) 596-1230	Tim	Barr	Grand Hotels & Reso...	SVP, Administrat...
14/04/2009 13:43:04	(650) 867-3450	Edna	Frank	GenePoint	VP, Technology
14/04/2009 13:42:22	(610) 265-9100	Betty	Bair	American Banking C...	VP, Administration
14/04/2009 13:39:48	+357 22404686	John	Doe		
<b>This week</b>					
11/04/2009 18:27:22	(610) 265-9100	Betty	Bair	American Banking C...	VP, Administration
10/04/2009 10:39:00	+357 22404686	John	Doe		
<b>Older</b>					
01/04/2009 08:25:18	(312) 596-1230	Tim	Barr	Grand Hotels & Reso...	SVP, Administrat...

Screenshot 6 – Missed Calls

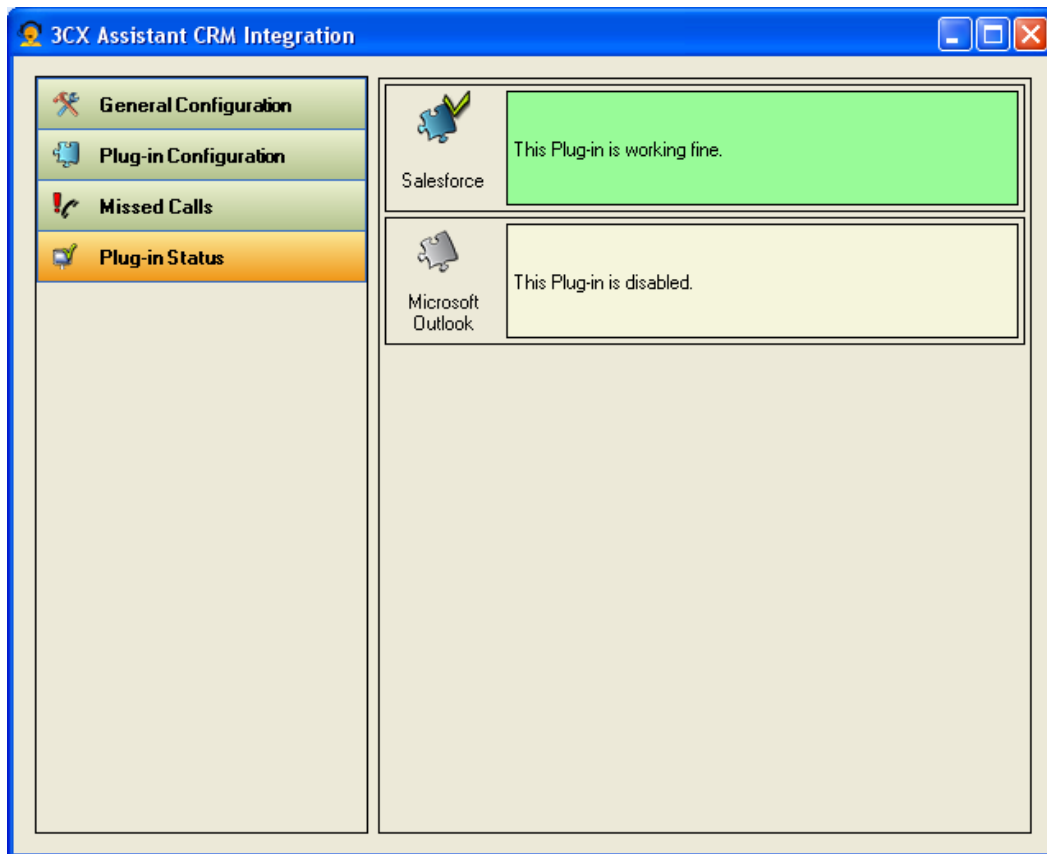
When a call arrives to your extension and you don't pick it up, it is automatically added to the missed call list, and shown in this section. New missed calls are highlighted in bold font. Also, the icon in the system tray changes to alert you about the missed call.

Missed calls are ordered by date and time by default. You may change the ordering by clicking the desired column. Also, records are grouped in categories like "Today", "This week" and "Older".

You can view call details double clicking or pressing ENTER on a missed call record, or using the contextual menu. There you will see the screen pop-up showed when the call originally arrived.

If a missed call record is irrelevant to you, you may delete it pressing DEL on the desired record, or using the contextual menu.

## Plug-in Status



**Screenshot 7 – Plug-in Status**

You can monitor the status of each Plug-in through this section. You will see a row for each detected Plug-in (Microsoft Outlook and Salesforce), and information about how it's working:

- Disabled. When the Plug-in is disabled, you will see it with beige background, and the according icon and description.
- Working. When the Plug-in is enabled and working, you will see it with green background, and the according icon and description.
- In Error. When the Plug-in is enabled but not working properly, you will see it with red background, and the according icon and error description.

### The screen pop-up

When an inbound call arrives to your extension, a screen pop-up is automatically shown, containing the related contact information retrieved from Microsoft Outlook or Salesforce.



The screenshot shows a window titled "Inbound call from Nick Galea (357 22 444032)". The window contains a form with the following fields:

Caller Number	35722444032
First Name	Nick
Last Name	Galea
Company	3CX Ltd
Job Title	CEO
E-Mail	ng@3cx.com
Address	Block B, Office 303 Engomi Business Center 1, 28th October Street

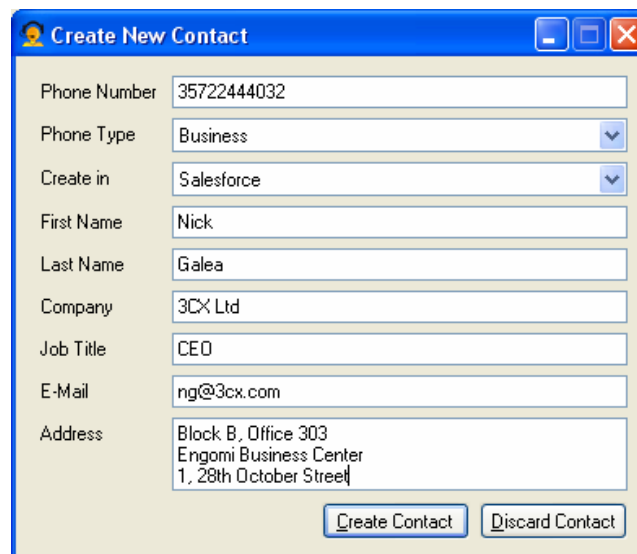
There are two images on the right side of the form: a portrait of Nick Galea and a building icon. At the bottom left, there is a link that says "Click to open the contact record". At the bottom right, there is a "Close" button.

**Screenshot 8 – Screen pop-up**

The screen pop-up can be manually closed at any time, or you can leave it to be automatically closed by the application if you configured it that way.

You may automatically open the contact record in Microsoft Outlook or Salesforce by clicking the "Click to open the contact record" link.

When a contact is not found in Microsoft Outlook or Salesforce, you can automatically create it from this application. To do this, click the "Click to create a new contact record" link. The following form will be displayed, and you will be able to fill the contact information.



The screenshot shows a dialog box titled "Create New Contact". The dialog contains a form with the following fields:

Phone Number	35722444032
Phone Type	Business
Create in	Salesforce
First Name	Nick
Last Name	Galea
Company	3CX Ltd
Job Title	CEO
E-Mail	ng@3cx.com
Address	Block B, Office 303 Engomi Business Center 1, 28th October Street

At the bottom of the dialog, there are two buttons: "Create Contact" and "Discard Contact".

**Screenshot 9 – Create New Contact dialog**

You may choose to create the contact in Microsoft Outlook or Salesforce. Pressing the "Create Contact" button the application will try to create the contact and will notify you about the result.

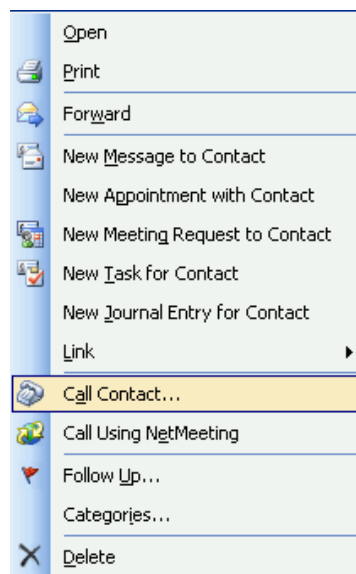


## Launching calls from Microsoft Outlook

### Introduction

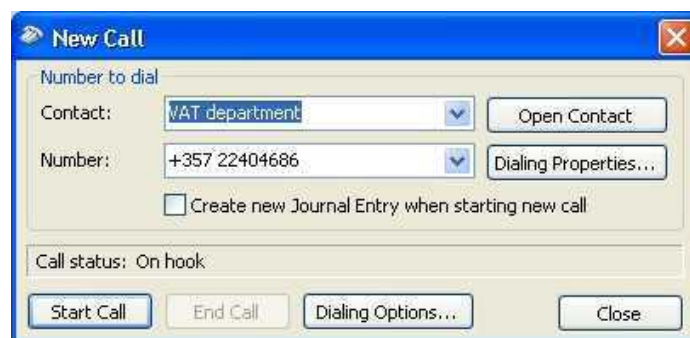
If you use Microsoft Outlook or any TAPI compliant application, and store all your phone numbers in Outlook contacts, you can easily launch calls directly from Outlook. To do this:

1. Right click on the contact in Microsoft Outlook, and select 'Call contact'



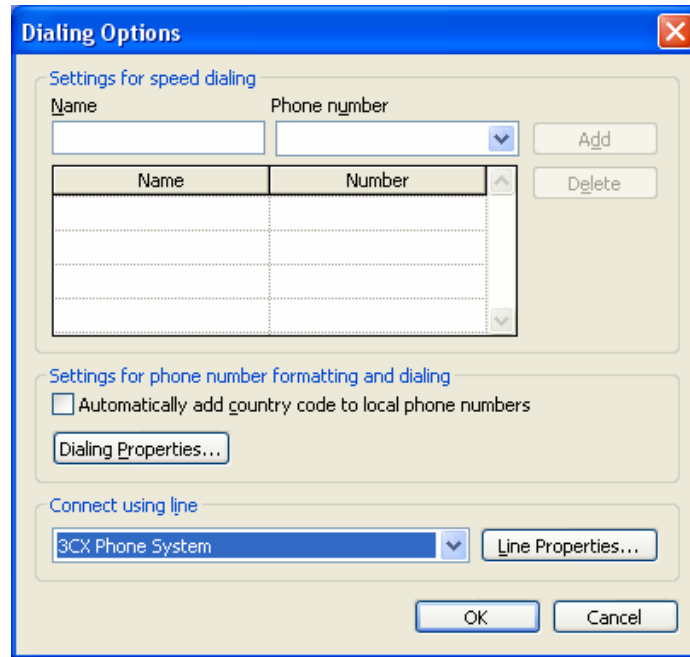
**Screenshot 10 – Right click on a contact**

2. The Microsoft Outlook New Call dialog will appear. The first time you use the Microsoft Outlook integration, click on 'Dialing Options'



**Screenshot 11 – Microsoft Outlook New Call dialog**

3. In the section 'Connect using line', select the entry 3CX Phone System. Click OK to exit the dialog.



**Screenshot 12 – The Dialing Options dialog**

4. Now you can click the start call button. The call will be launched using the 3CX Assistant CRM Integration application.

## Launching calls from Salesforce

### Introduction

3CX Assistant CRM Integration allows Salesforce.com users to automatically dial contacts simply by clicking 'Call this contact'. The call will be triggered and setup to the users desktop phone WITHOUT having to actually dial the number on the phone. This saves users a great deal of time.

### Configuring outbound calls via Salesforce

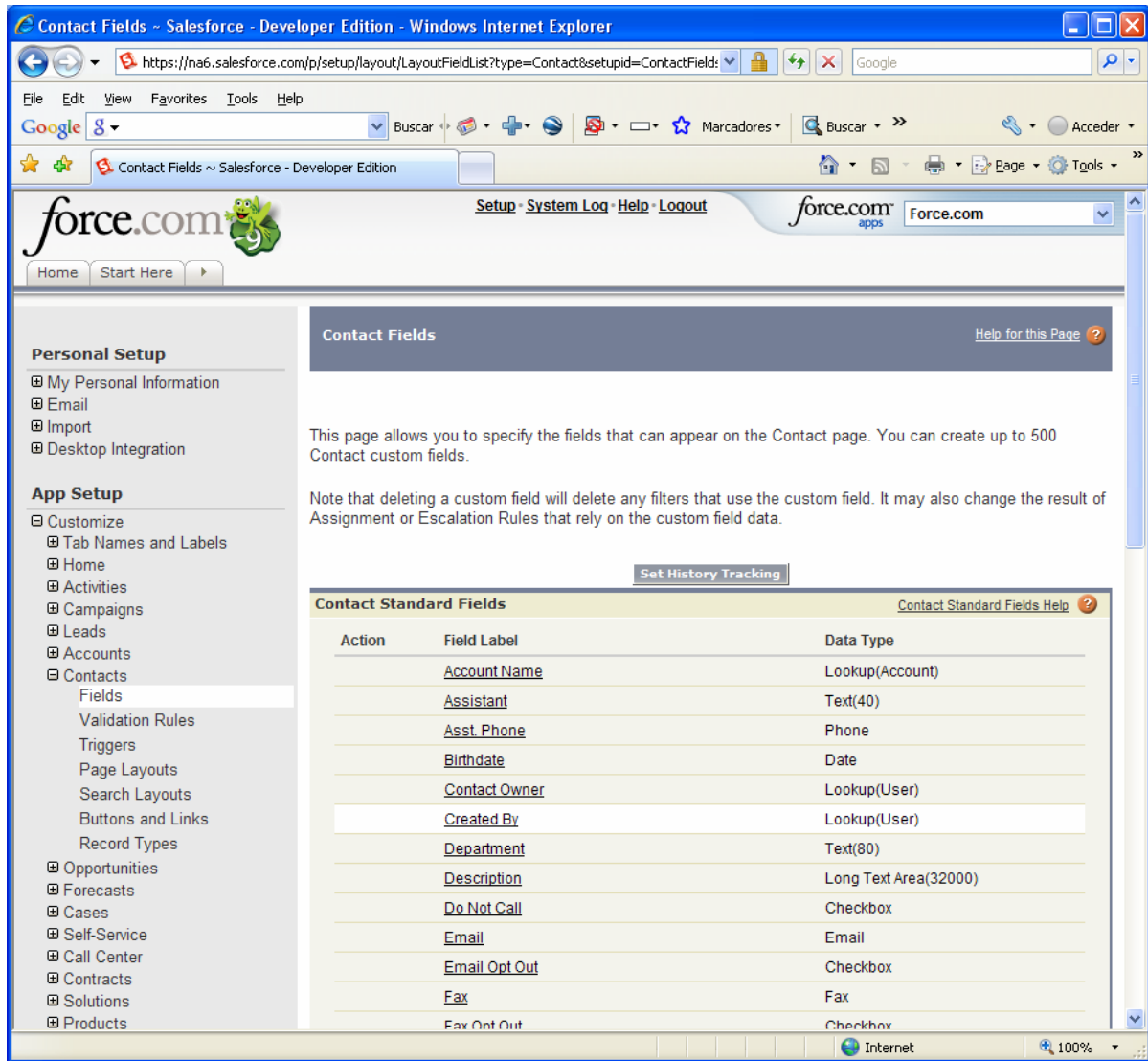
3CX Assistant CRM Integration automatically creates custom fields in your Salesforce.com database when a user with administration privileges is configured to use the application.

Each created field allows you to easily dial to a different number of a contact or lead. The list of fields automatically created follows:

- In the Contact table
  - Call assistant phone via 3CX
  - Call fax via 3CX
  - Call home phone via 3CX
  - Call mobile phone via 3CX
  - Call other phone via 3CX
  - Call phone via 3CX
- In the Lead table
  - Call fax via 3CX
  - Call mobile phone via 3CX
  - Call phone via 3CX

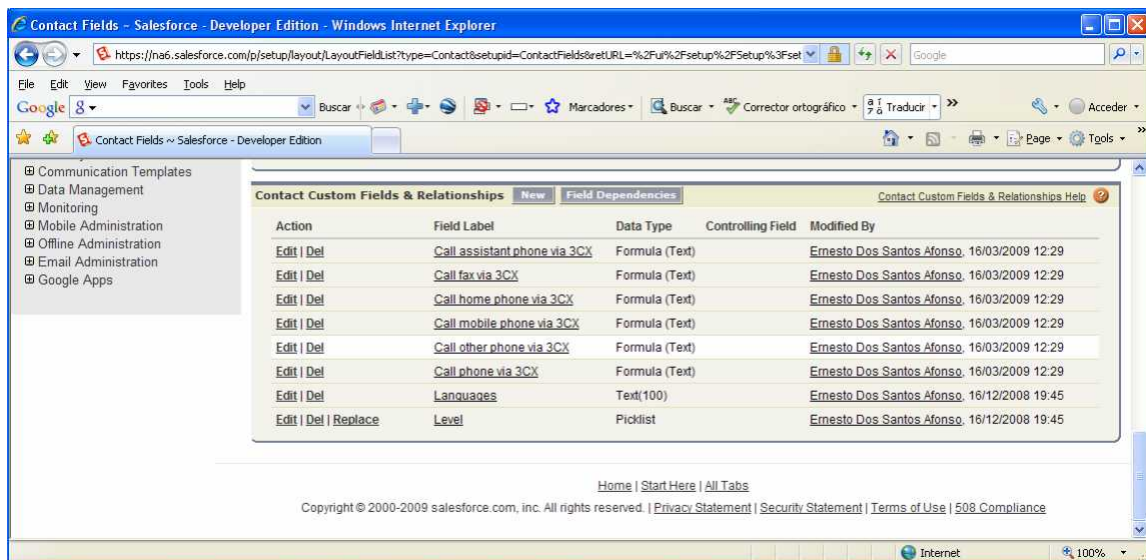
These fields are hidden by default. In order to view them in the Contacts or Leads page, you need to logon to Salesforce.com and change the field accessibility. To do this:

1. Go to Setup → App Setup → Customize → Contacts → Fields



Screenshot 13 – Salesforce Contact Fields

2. At the bottom of that page you will find the custom fields created.



Screenshot 14 – Salesforce Contact Custom Fields

3. Click on the custom field that you want to make visible, for example “Call mobile phone via 3CX”:
4. Press the “View Field Accessibility” button on the upper right side of the screen.
5. Click on the “Hidden” label on the right of “Standard User”.

The screenshot shows the Salesforce Developer Edition interface for configuring field-level security. The main content area is titled "Access Settings for Contact Field: Call mobile phone via 3CX". It indicates that the field is currently hidden for the Standard User profile. The "Field-Level Security" section shows a table with columns for Profile, Field, Visible, and Read-Only. The "Standard User" profile has the "Call mobile phone via 3CX" field set to "Visible" (checked) and "Read-Only" (checked). The "Page Layout" section shows the field is added to the "Contact Information" section of the "Contact Layout" page layout. A table below shows the field is visible for all profiles listed.

Page Layout	Section	Field	Visible	Read-Only	Required
Contact Layout	Contact Information	Call mobile phone via 3CX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Profiles	Contact Layout
Contract Manager	<input checked="" type="checkbox"/>
Customer Portal Manager	<input checked="" type="checkbox"/>
Marketing User	<input checked="" type="checkbox"/>
Partner User	<input checked="" type="checkbox"/>
Read Only	<input checked="" type="checkbox"/>
Solution Manager	<input checked="" type="checkbox"/>
Standard Platform User	<input checked="" type="checkbox"/>
Standard User	<input checked="" type="checkbox"/>
System Administrator	<input checked="" type="checkbox"/>

**Screenshot 15 – Salesforce Contact Field Visibility**

6. Check the “Visible” option in the “Contact Layout” row, and press the “Save” button to finish.
7. Repeat the same procedure for every field that you want to view in the Contact page.
8. Repeat the same procedure for Leads, going to Setup → App Setup → Customize → Leads → Fields

## Launching calls

Once you changed the visibility attributes of the created custom fields, you are able to launch calls directly from the Salesforce.com web interface. The Contacts page should look like the following:

The screenshot displays the Salesforce interface for a contact named Ms. Edna Frank. The page is viewed in Internet Explorer. The contact details section includes fields for Name, Account Name (GenePoint), Title (VP, Technology), Department (Technology), Birthdate (18/09/1930), Reports To (View Org Chart), Lead Source (Partner), Mailing Address (345 Shoreline Park, Mountain View, CA 94043, USA), Languages (English), and Level (Primary). There are also links for 'Call phone via 3CX' and 'Call mobile phone via 3CX'. Below the contact details, there are sections for Opportunities, Cases, and Open Activities. The Cases section contains a table with two entries:

Action	Case	Subject	Priority	Date/Time Opened	Status	Owner
<a href="#">Edit</a>   <a href="#">Cls</a>	00001006	Generator assembly instructions unclear	Low	16/12/2008 19:45	Closed	<a href="#">Ernesto Dos Santos Afonso</a>
<a href="#">Edit</a>   <a href="#">Cls</a>	00001016	Maintenance guidelines for generator unclear	Low	16/12/2008 19:45	New	<a href="#">Ernesto Dos Santos Afonso</a>

Screenshot 16 – Salesforce Contact page

Now, for example, clicking on the link “Click here to call this contact with 3CX (Phone)” will launch a call to the contact’s phone using 3CX Phone System and connect it to your extension.

## Troubleshooting

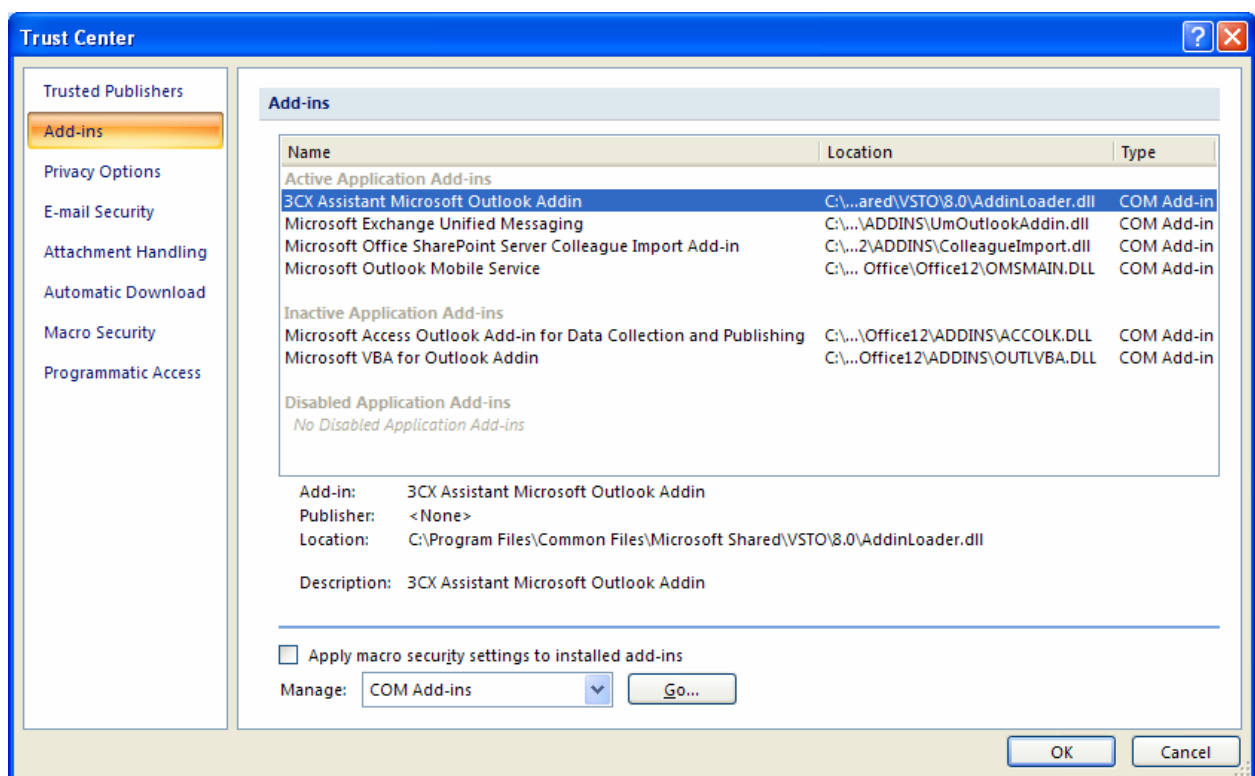
### Microsoft Outlook Integration

This application allows integrating 3CX Phone System with Microsoft Outlook 2003 and 2007. To do this, a Microsoft Outlook Add-in is installed and automatically configured. But your current configuration may cause that the Add-in is not actually loaded by Microsoft Outlook.

### Verifying Add-in state

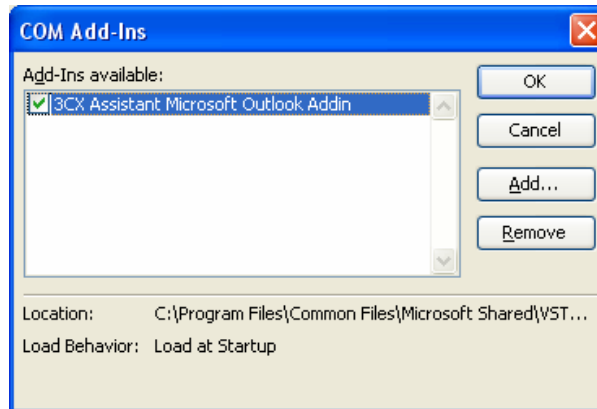
In order to verify if the Microsoft Outlook Add-in is loaded in Microsoft Outlook 2007, you need to go to Tools → Trust Center → Add-ins. There you should see the “3CX Assistant Microsoft Outlook Addin” in the “Active Application Add-ins” group. If the Add-in is in the “Inactive Application Add-ins” group, it’s having a problem.

Note that the option “Apply macro security settings to installed add-ins” must be cleared in order to allow “3CX Assistant Microsoft Outlook Addin” to run.



**Screenshot 17 – Microsoft Outlook 2007 Trust Center**

If the Add-in is inactive, select “COM Add-ins” in the drop-down list at the bottom of the configuration dialog and click “Go”. Check the option at the left of “3CX Assistant Microsoft Outlook Addin”. Verify that the “Load Behavior” is “Load at Startup”. If the add-in is having any problem, you should see here a description of the error.



**Screenshot 18 – Microsoft Outlook 2003 & 2007 COM Add-Ins**

If you are running Microsoft Outlook 2003, go to Tools → Options, select Other tab → Advanced Options → COM Add-Ins. You will see the COM Add-Ins dialog.

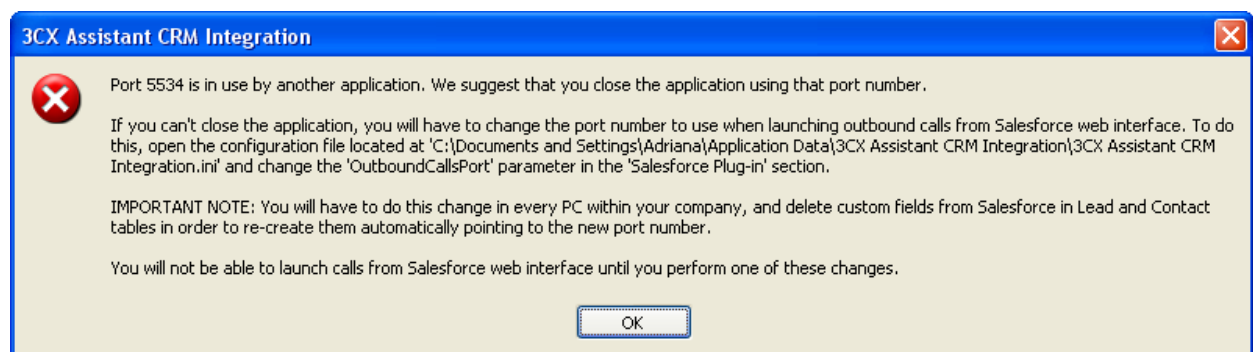
## Salesforce Integration

This application allows integrating 3CX Phone System with Salesforce.com CRM. With this integration you will be able to display the information related to a calling contact, and automatically dial outbound calls from the Salesforce web interface.

## Changing the outbound call receiver port

In order to allow automatic dialling of outbound calls from the Salesforce web interface, custom fields are automatically created in Salesforce, as mentioned in the “Launching calls from Salesforce” chapter. Those fields contain a hyperlink to the outbound call receiver included in this application. The outbound call receiver listens by default in port 5534.

If another application in your computer is using that port number, you will see the following message when the Salesforce Plug-in starts.



**Screenshot 19 – Port already in use message**

We recommend that you reconfigure the conflicting application to use another port number. If you can't do it you will need to change the configuration of this application in every computer running 3CX Assistant CRM Integration in your company. This is because the port number is stored in the custom fields created in Salesforce, and those



custom fields are shared between all Salesforce accounts in your company, and thus are used by every computer running 3CX Assistant CRM Integration in your company.

In order to change the port number, do the following:

1. Ensure that every computer in your company is not running 3CX Assistant CRM Integration
2. Login to Salesforce using the web interface
3. Go to Setup → App Setup → Customize → Contacts → Fields
4. At the bottom of that page you will find the custom fields created (Call *PhoneType* via 3CX). Delete every one of these custom fields.
5. Go to Setup → App Setup → Customize → Leads → Fields
6. At the bottom of that page you will find the custom fields created (Call *PhoneType* via 3CX). Delete every one of these custom fields.
7. Open the configuration file located in “C:\Documents and Settings\UserName\ \Application Data\3CX Assistant CRM Integration\ 3CX Assistant CRM Integration.ini” and change the parameter “OutboundCallsPort” in section “Salesforce Plug-in”. Ensure that the new port number is not being used in every computer that needs to run 3CX Assistant CRM Integration in your company.
8. Repeat the previous step in every computer that needs to run 3CX Assistant CRM Integration in your company.
9. Start 3CX Assistant CRM Integration in every computer. Custom fields will be automatically created again, now pointing to the new port number. You will have to follow the steps described in the “Launching calls from Salesforce” chapter in order to make custom fields visible in the Salesforce web interface.