

**mscrm-addons.com**  
**TelephoneIntegration**  
**for MS CRM 2013**

# TelephoneIntegration Client for MS CRM 2013

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Version 6.16 – October 2014

## **Client Installation and User Guide**

(How to install and work with TelephoneIntegration Client for MS CRM 2013)

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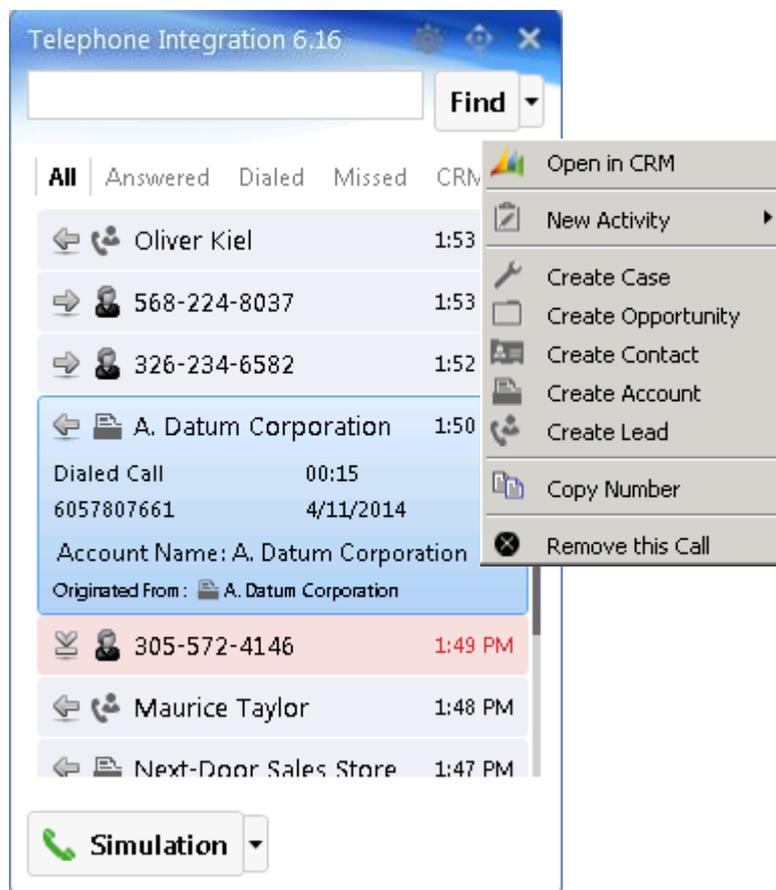
## 1 User Guide

This guide gives detailed explanations of all functionalities provided by **TelephoneIntegration for MS CRM 2013**.

If you need to reach us, see the Contact page.

## 2 Introduction

TelephoneIntegration for Microsoft CRM 2013 (**TI**) is a CRM Add On which enables you to connect your Telephone System (CTI) to Microsoft CRM 2013.



This Guide contains important information about:

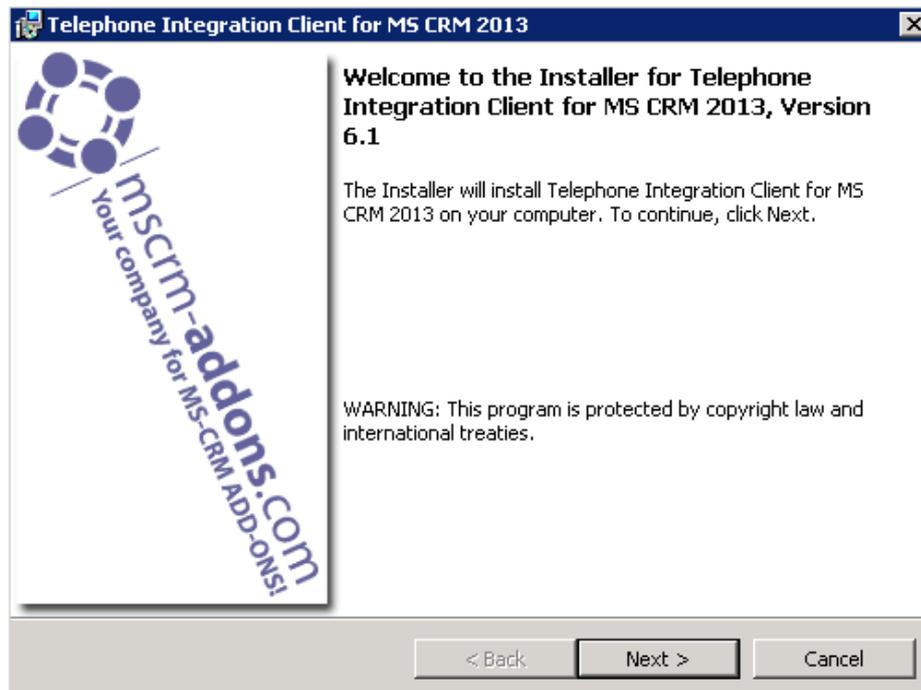
- Installing the Client
- The capabilities of the Balloon
- Configuring the Client

## 3 Installing the TI-Client for MS CRM 2013

### 3.1 Prerequisites

### 3.2 Introduction

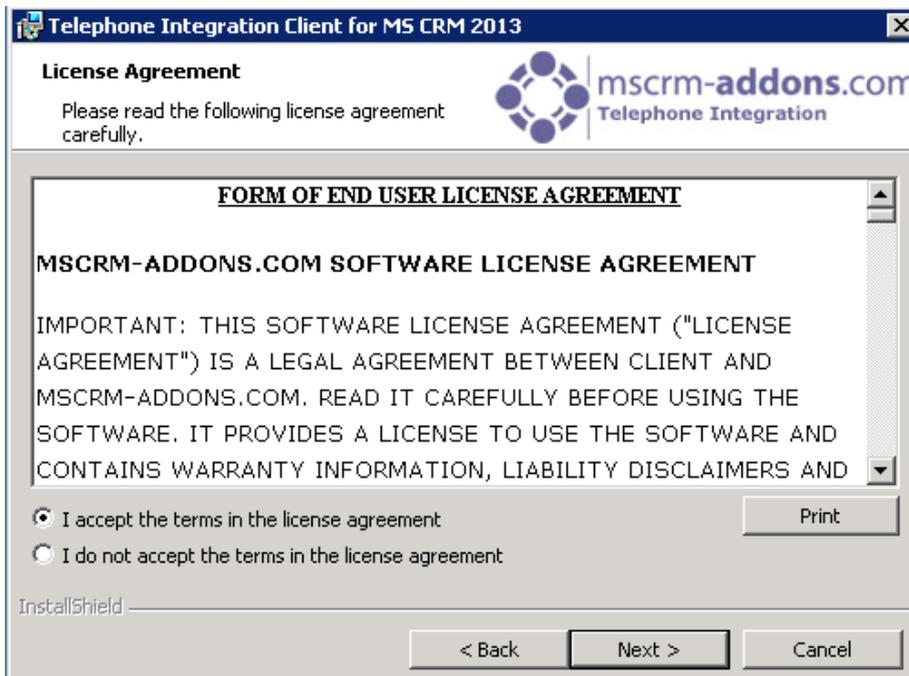
Run the TelephoneIntegration Client for MS CRM 2013 Setup file. The following window will appear:



Click [Next] to proceed.

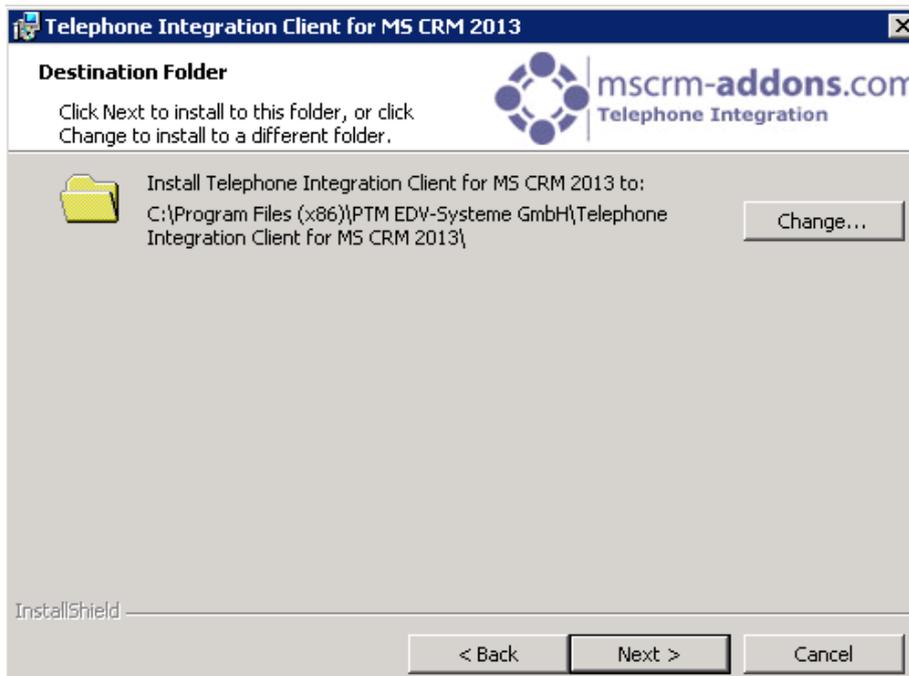
INFORMATION: If an upgrade is detected, a message will be shown and the setup will go to [chapter 3.6](#) directly after accepting the EULA.

### 3.3 EULA (End User License Agreement)



Click [Next] to proceed.

### 3.4 Folder Selection

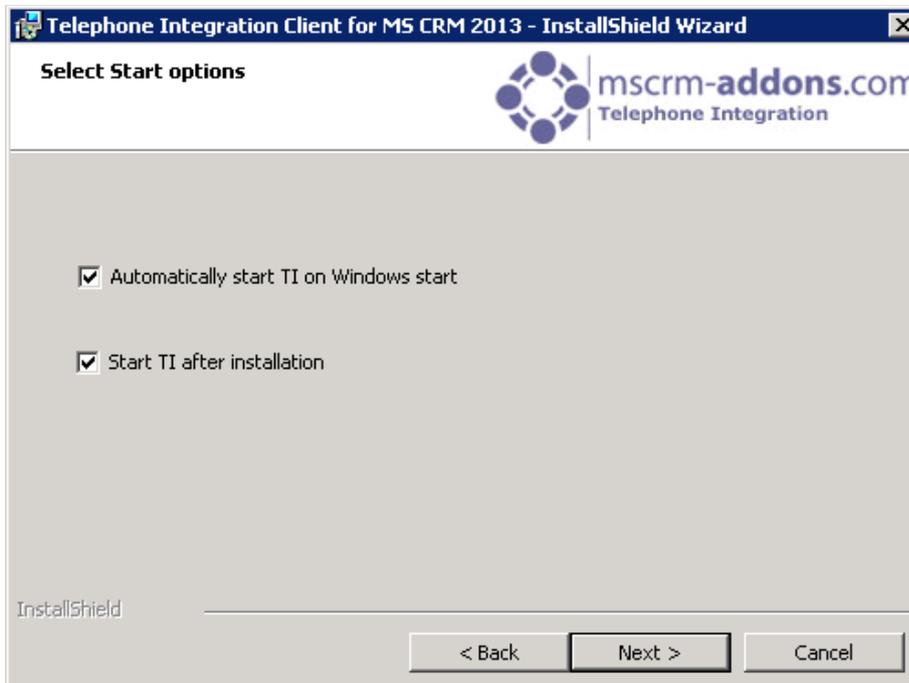


Click [Change] to specify a different installation path

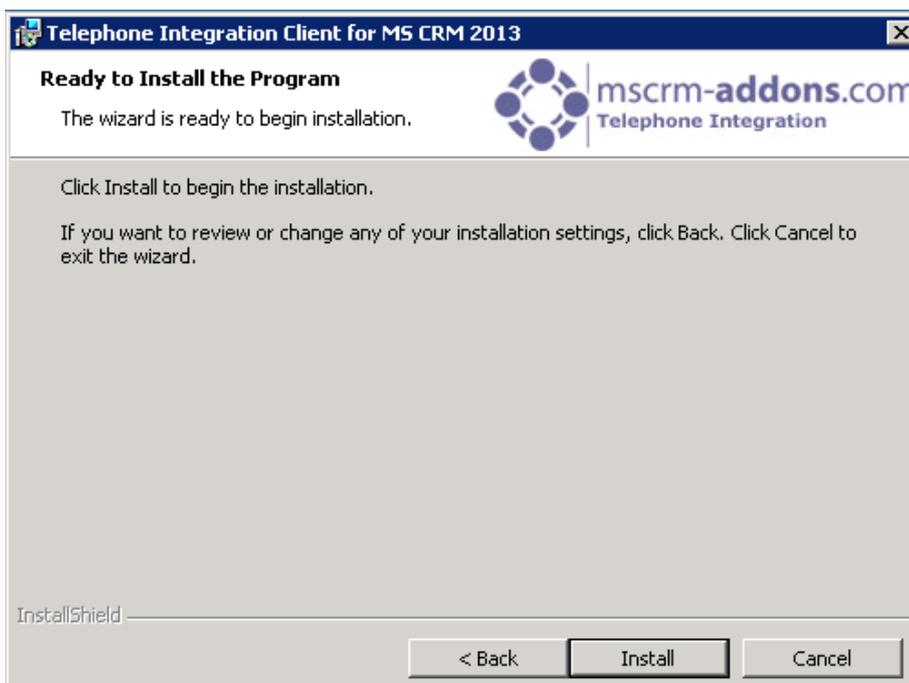
Click [Next] to proceed

### 3.5 Start Options

Configure the start options and proceed with a click on [Next]



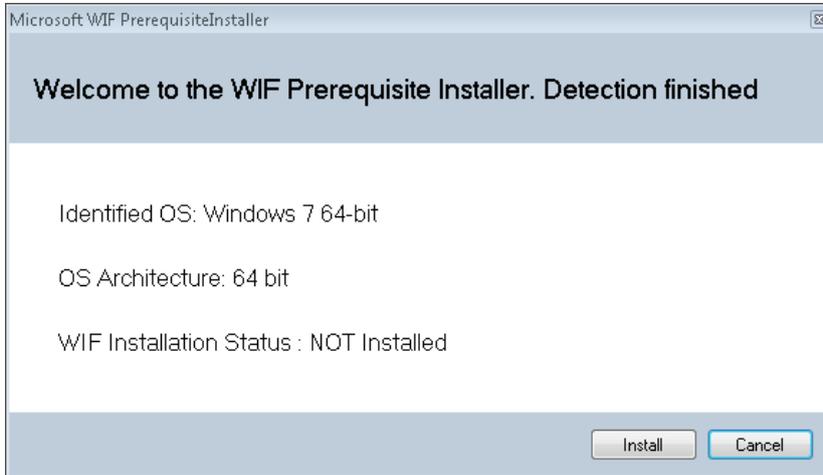
### 3.6 Confirm Installation



To start the installation, click on [Install].  
To change the settings, click on [Back].

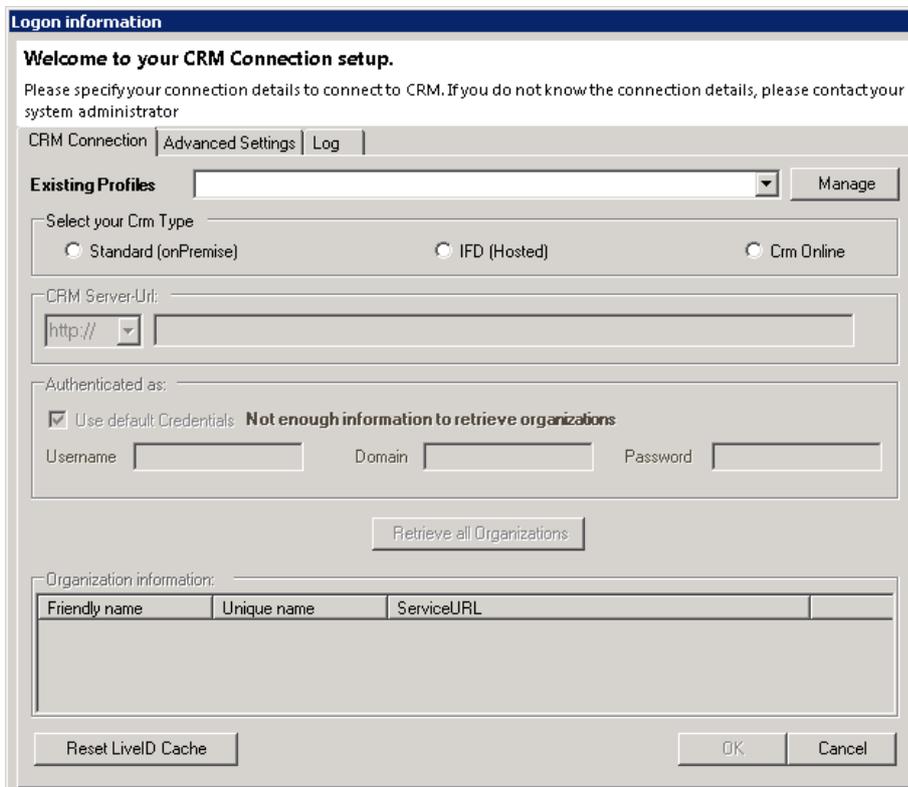
### 3.7 Install Windows Identity Foundation

In order to use TI-Client for MS CRM 2013 you first have to install Windows Identity Foundation.



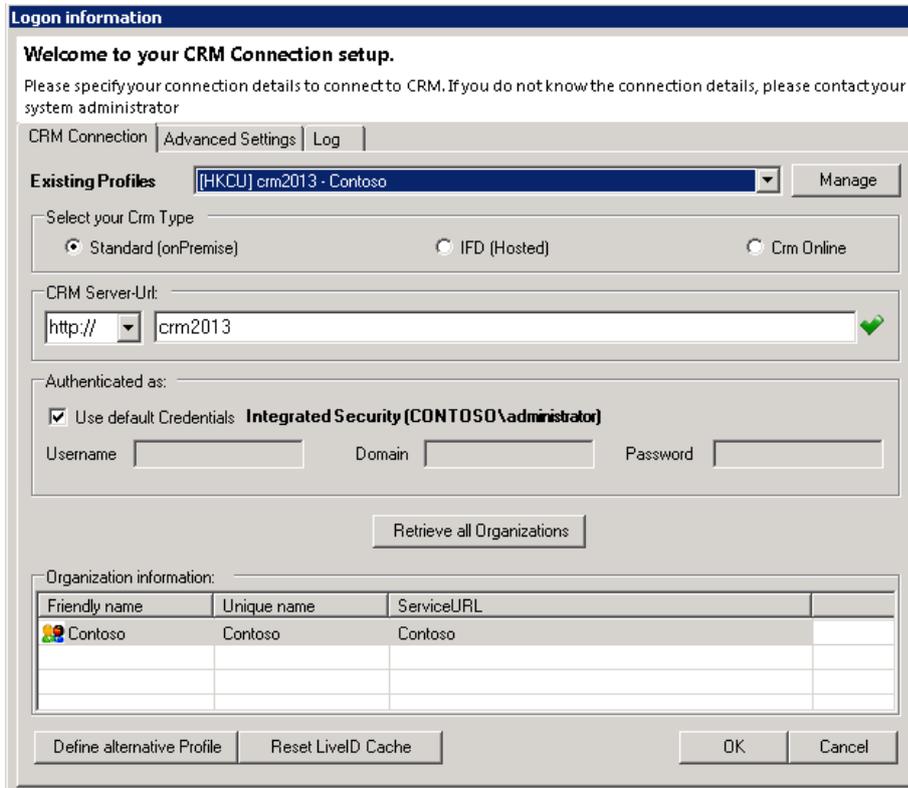
### 3.8 Configure CRM-Connection

To configure your CRM Server, select your Profile or create a new profile and select your CRM Server type:



Choose the server path and add your login credentials by filling in the field's username, password and domain or choose the default credentials.

As soon as the organizations are retrieved, press the "OK"-button.



**Logon information**

**Welcome to your CRM Connection setup.**  
Please specify your connection details to connect to CRM. If you do not know the connection details, please contact your system administrator

CRM Connection | Advanced Settings | Log

**Existing Profiles** [HKCU] crm2013 - Contoso [Manage]

Select your Crm Type  
 Standard (onPremise)   
  IFD (Hosted)   
  Crm Online

CRM Server-Url:  
 http:// [crm2013] ✓

Authenticated as:  
 Use default Credentials **Integrated Security (CONTOSO\administrator)**  
 Username [ ] Domain [ ] Password [ ]

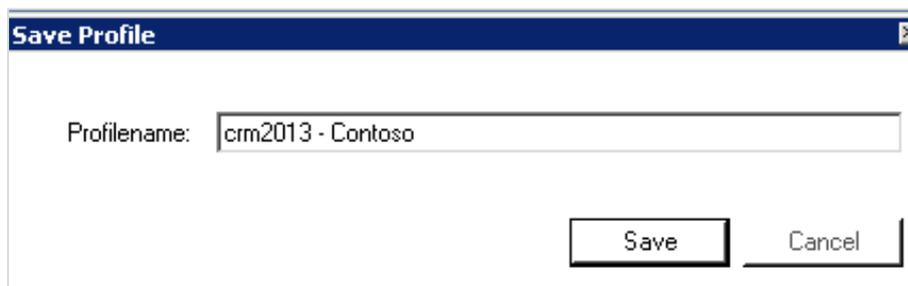
[Retrieve all Organizations]

Organization information:

Friendly name	Unique name	ServiceURL
Contoso	Contoso	Contoso

[Define alternative Profile] [Reset LiveID Cache] [OK] [Cancel]

If you save a new profile following window appears:



**Save Profile**

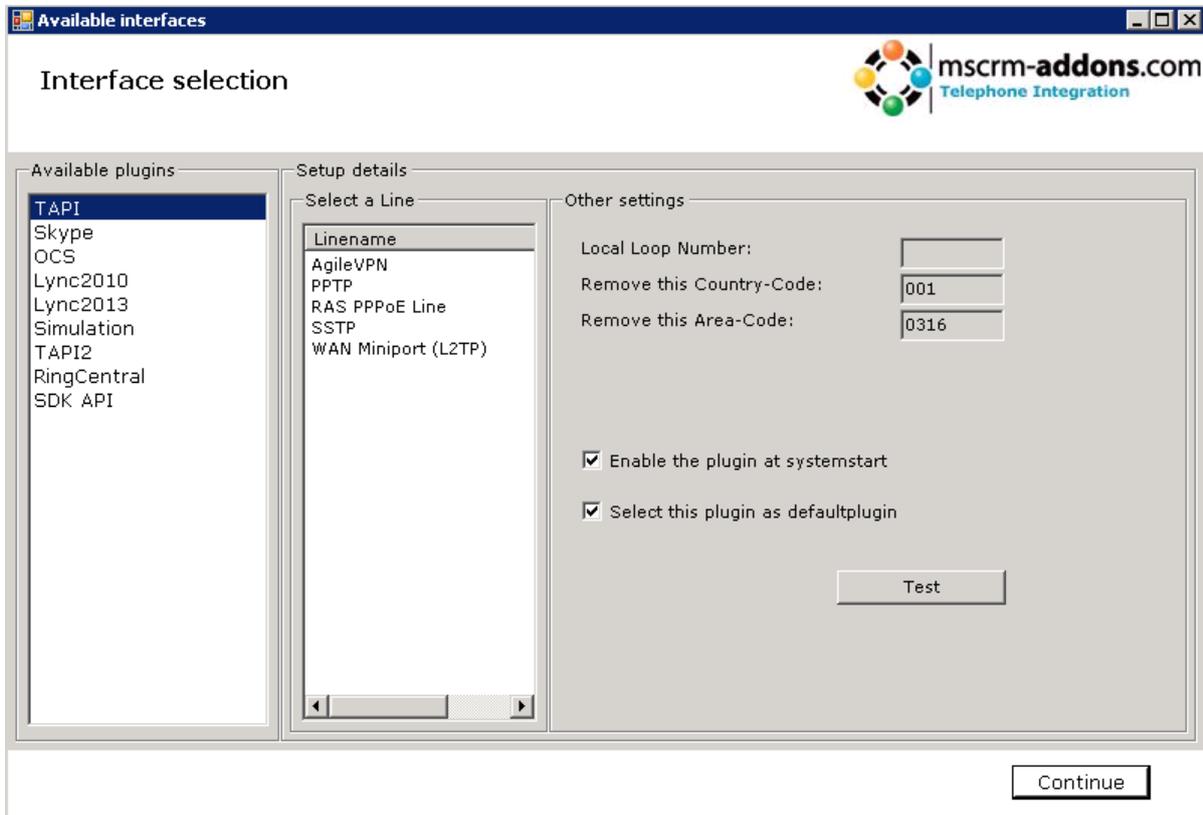
Profile name: [crm2013 - Contoso]

[Save] [Cancel]

Click on [Save] to save your profile.  
 Click on Cancel if you don't want to save the profile.

### 3.9 Configure Integrations

There are seven possible interfaces that can be used with the TelephoneIntegration-Client:

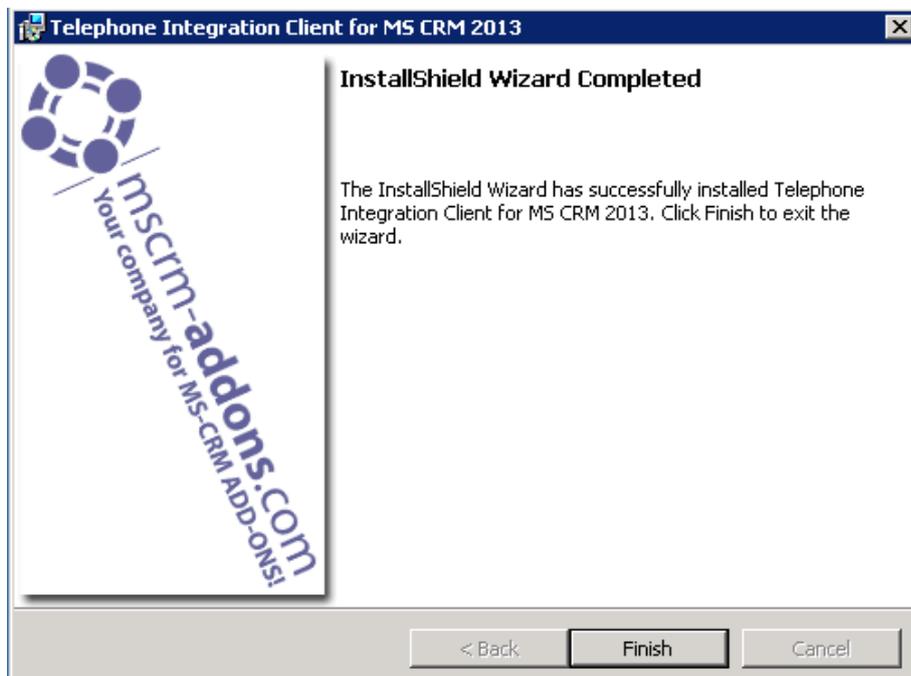


- 3.9.1 **TAPI:** direct connection via your telephone system. If an adequate driver is installed, your phone-line will appear in the "Select Line"-list. For configuration details see [chapter 9.3](#)
- 3.9.2 **Skype:** allows using your Skype-account to handle calls. For configuration details, see [chapter 9.1.1](#)
- 3.9.3 **OCS:** allows using the OCS Wrapper to handle calls. For configuration details see [chapter 9.4](#)
- 3.9.4 **Lync2010:** allows using the Lync2010 Wrapper to handle calls. For configuration details see [chapter 9.5](#)
- 3.9.5 **Lync2013:** allows using the Lync2013 Wrapper to handle calls. For configuration details see [chapter 9.6](#)
- 3.9.6 **Simulation:** allows simulating an incoming and outgoing call. For configuration details see [chapter 9.7](#)
- 3.9.7 **RingCentral:** the RingCentral Wrapper provides a way for 3<sup>rd</sup> Party tools to control TI client behavior by incoming calls. For details see [chapter 9.8](#)

- 3.9.8 **SDK API Plugin:** enables the connection between TelephoneIntegration Client and a .NET application that can communicate with a specific phone device based on its specific SDK with basic phone commands. (dialing/answering/ending the call). For details see [chapter 9.9](#).
- 3.9.9 **InIn Wrapper:** enables the connection between TelephoneIntegration Client and the [Interactive Intelligence](#) phone system. This plugin supports outgoing call. Incoming calls are not yet supported. For details see [chapter 9.10](#).

### 3.10 Finish Installation

Depending on the options defined in [chapter 3.5](#) the Client will start automatically or can be started as described in [chapter 4](#).



Click on [Finish] to complete the installation.

## 4 Getting Started

### 4.1 Starting the TelephoneIntegration Client

The application can be started via the windows-menu → All Programs → www.MSCRM-ADDONS.com → TelephoneIntegration Client for MS CRM 2013 or from the Installation Directory.

It is possible to configure the TelephoneIntegration-client to automatically start on windows-startup.



Once started, an icon appears in the taskbar:



This gray icon with the  sign means that the application is loading/connecting to CRM. Please wait until the icon is colored:



The client is ready to use. Click on the icon to open the TI Balloon. [See chapter 5.2](#)

## 5 The User Interface

### 5.1 How to enable or disable the DFR (dialing from relationship) from TI

In general, TelephoneIntegration (TI) allows users to dial from related CRM-records. This means, that they have the possibility, to choose from a list of records related to the initially opened one when dialing out from CRM (e.g. from related leads, contacts, etc.). In regards to this you have now the possibility to disable this feature.

#### **There are two options, to enable or disable this feature on CRM:**

##### **Server-side or Client-side:**

- Server-side means, that the whole TelephoneIntegrationServer-users could be set enable or disable. If server-side is set disabled, no server-user could set his TI client enable.
- Client-side means, that just the TelephoneIntegration user could set his own TI client enable or disable.

##### **How to enable/disable DFR by Server-side:**

- If you set this setting on "false", then the whole TelephoneIntegration server-users would be set disabled from DFR.
- If you set this setting on "true", then all users of TelephoneIntegration are able to use DFR.

Server-side settings are overruling the client-side settings.

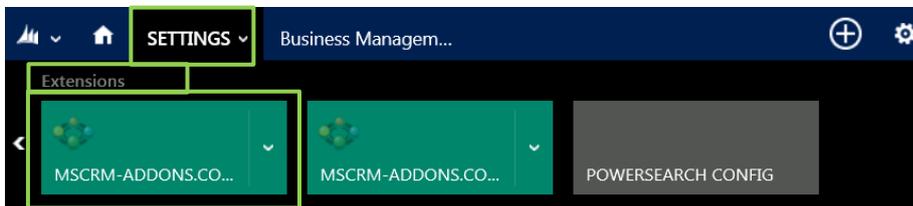
Client or Server setting are using the same key name: UseDFR

**Follow the steps below to to enable/disable DFR by Server-side:**

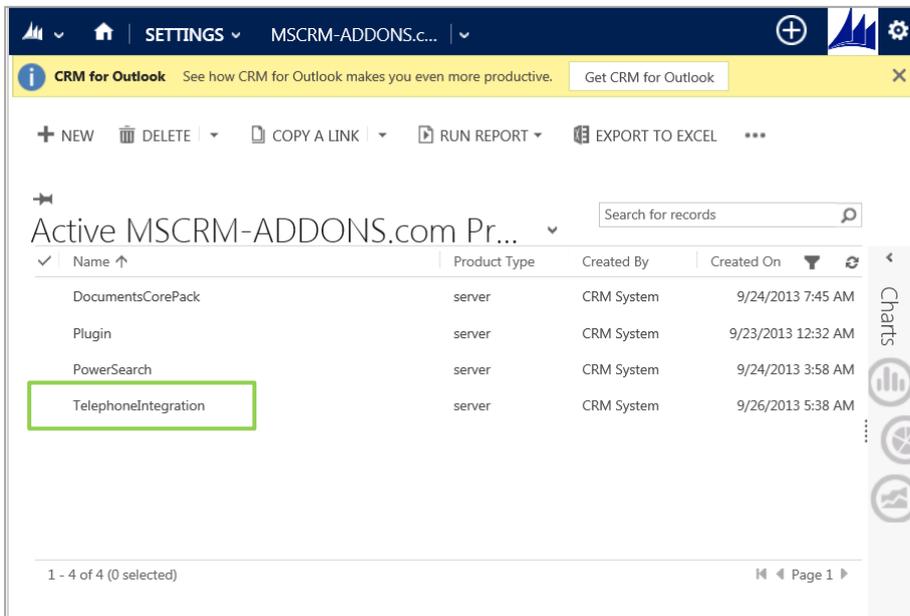
Open CRM – go to “Microsoft Dynamics CRM” Logo on the left corner – click on settings



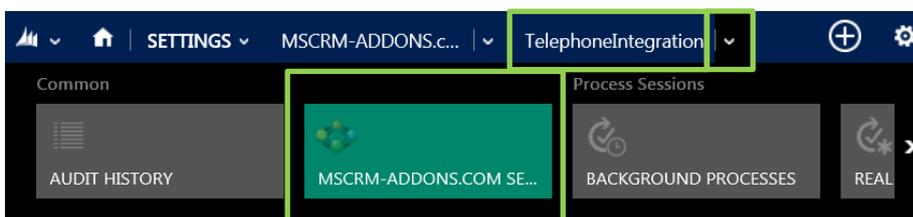
Click again on “SETTINGS” - go to the “Extensions Area” and click on “MSCRM-ADDONS.com Products”.

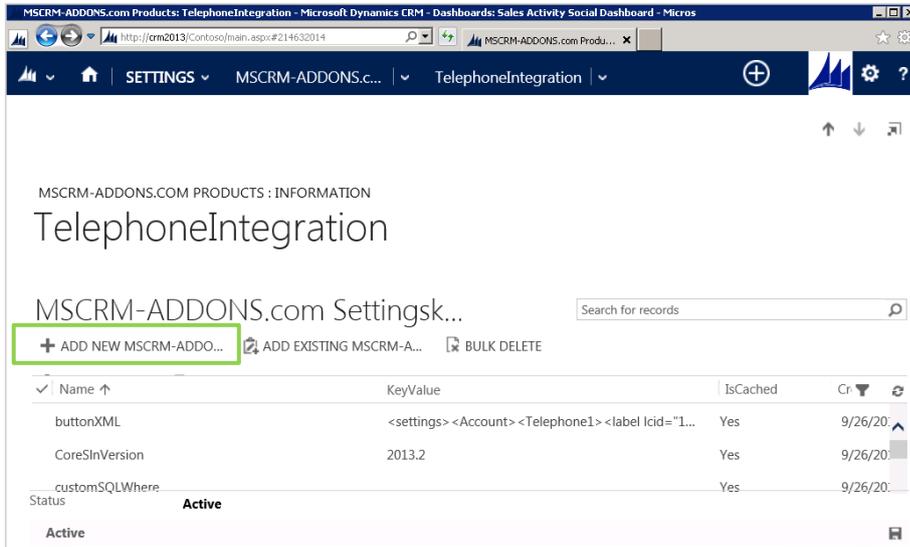


This action will open following window:

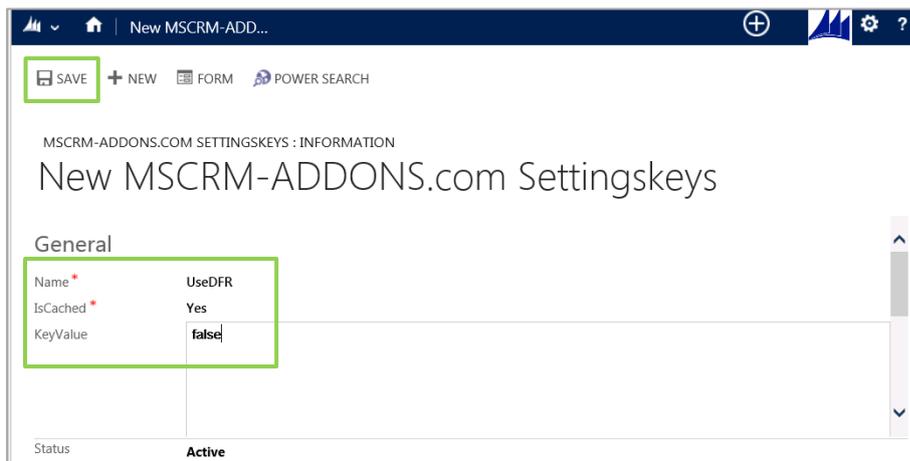


Choose TelephoneIntegration and click on the dropdown button next to “TelephoneIntegration” in the ribbon and open “MSCRM-ADDONS.COM SETTINGSKEYS”. See next screenshots:





Click on "+ ADD NEW MSCRM-ADDONS.com Settingskeys". See screenshot above.



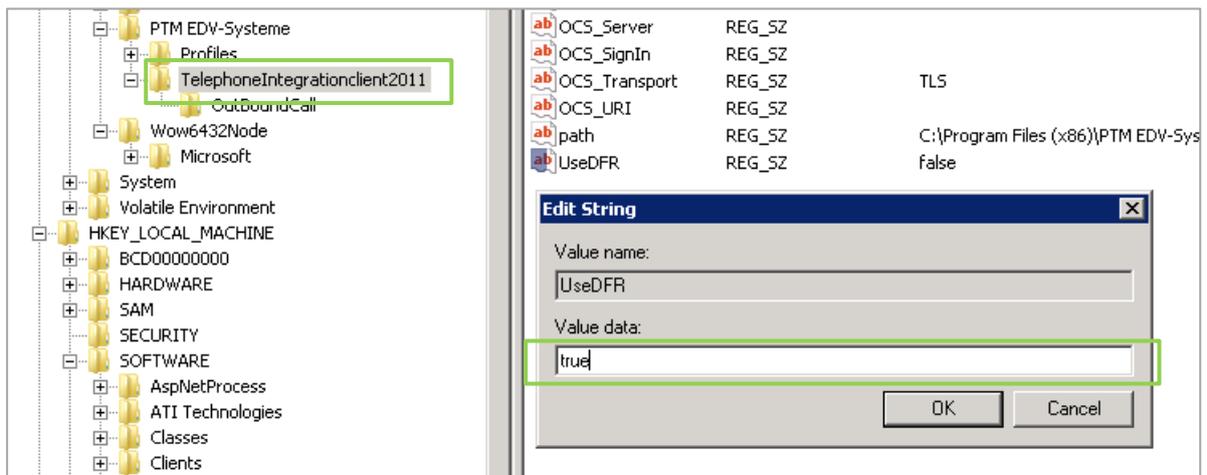
- **Name:** Type in "UseDFR" to enable or disable DFR.
- **KeyValue:** If you set this setting on "false" the whole server-users, would be set disable. If you set this setting on "true", then all users are able to use this feature.

Click on [SAVE]

**How to enable/disable DFR by Client-side:**

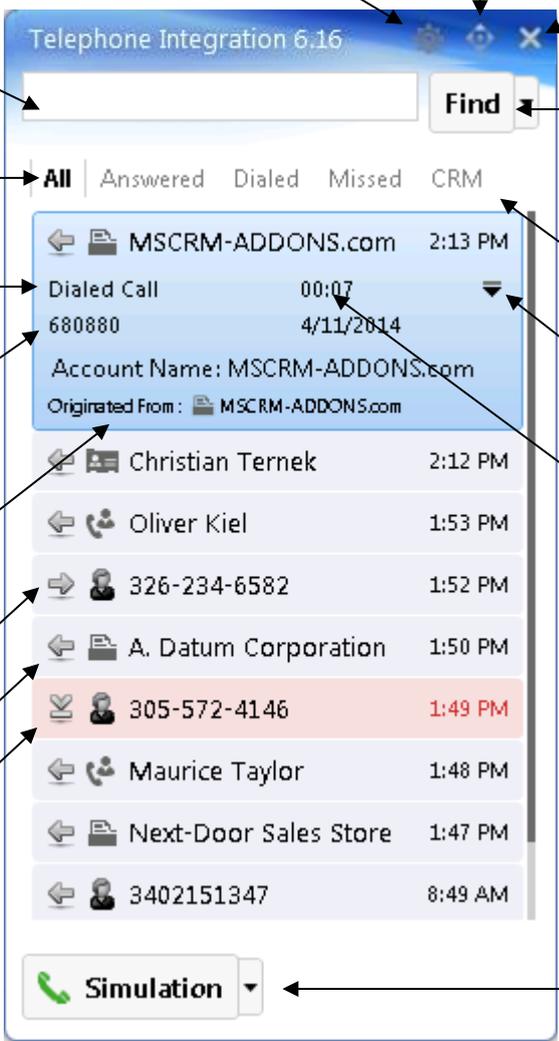
Open your TI client. Now you can create a new string. Name the new string "UseDFR", then click twice on your new string, after this, you have the change to set DFR enable or disable by "true" or "false".

- If you set this setting on "false", then you will not be able to use DFR.
- If you set this setting on "true", then you will be able to use DFR.



## 5.2 The TI Balloon

The "balloon" provides the main user-interface. It contains all client-side functionalities.



The screenshot shows the 'Telephone Integration 6.16' window. At the top, there are three buttons: 'Open TI Setup', 'Drag & Drop', and 'Close the Balloon'. Below these is a search bar with a '[number\_textfield]' and a 'Find' button. The main area displays a list of call records with columns for status, phone number, and duration. A 'Simulation' dropdown is at the bottom.

**Annotations:**

- [number\_textfield]**: Points to the search input field.
- Shows All/Answered/Dialed/Missed calls ...**: Points to the filter tabs.
- Call status information**: Points to the 'Dialled Call' status in the first record.
- Phone number**: Points to the number '680880'.
- CRM data records details**: Points to the 'Account Name' and 'Originated From' fields.
- Called out from CRM site**: Points to the 'Originated From' field.
- Shows call status, incoming, outgoing, missed calls**: Points to the call status icons.
- Open TI Setup**: Points to the top-left button.
- Drag & Drop**: Points to the top-middle button.
- Close the Balloon**: Points to the top-right button.
- Find Entities in CRM or Call the inserted number [Ctrl] + [Enter]**: Points to the 'Find' button.
- CRM find results from the search above.**: Points to the search results list.
- Open the Context Menu**: Points to the right-click icon on a record.
- Duration of the call**: Points to the '00:07' duration field.
- The Call-button, selects your desired call-plugin like OCS, TAPI, Skype or Lync and press the Button to call.**: Points to the 'Simulation' dropdown.

### How to initiate an outgoing call?

- A call can be started by simply selecting the item (contact, account...) in the list and double click on it. The "CRM" tab shows the search-results from CRM.
- Additionally, you can just type the number you want to call into the [number\_textfield] and press **Ctrl+Enter** or click on the Call button.

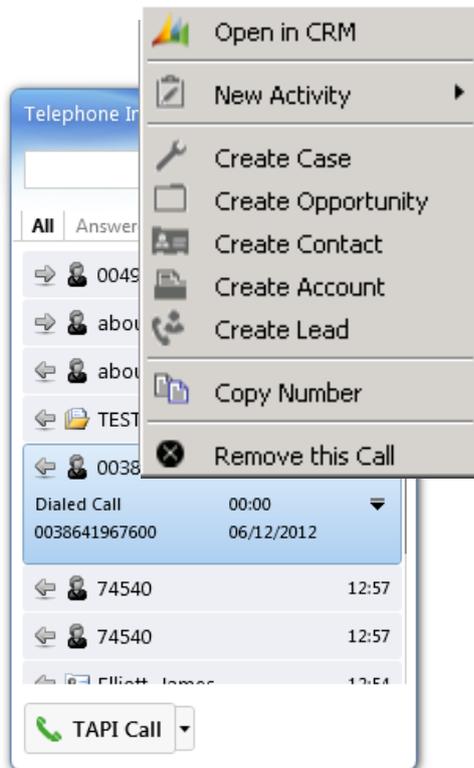
### 5.3 Integrated Search

By using the Find button, it is possible to search for CRM-records from within the balloon. Therefore there is no need to open CRM in order to call a contact, account, lead etc. You can search it by name or by phone numbers.



## 5.4 The Context Menu

Several CRM-functionalities are available in the context menu of a phone call:

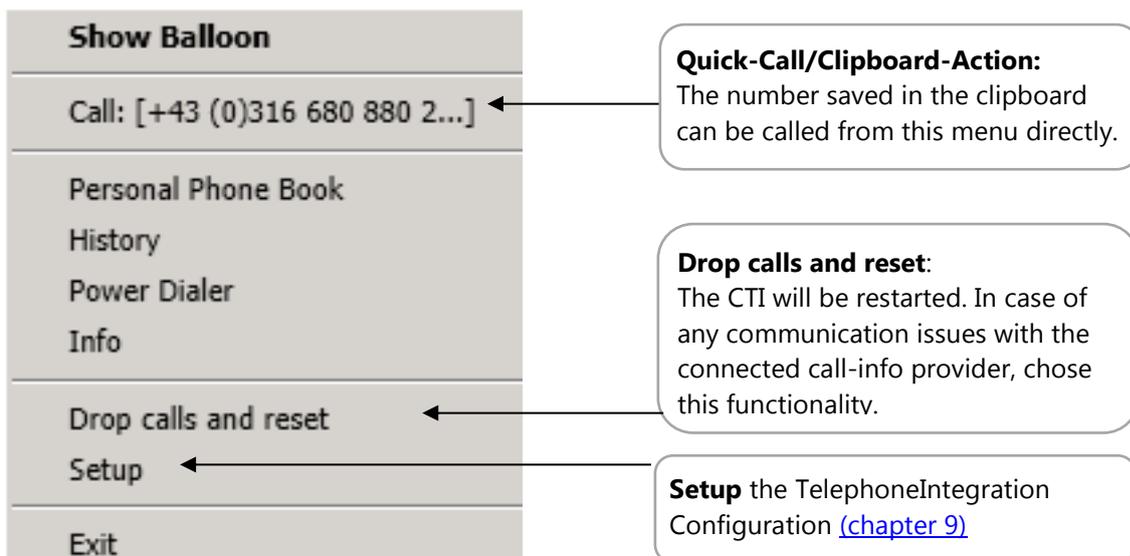


If the user has no sufficient CRM-rights to create those records, these functionalities are automatically disabled.

## 5.5 The Application Menu

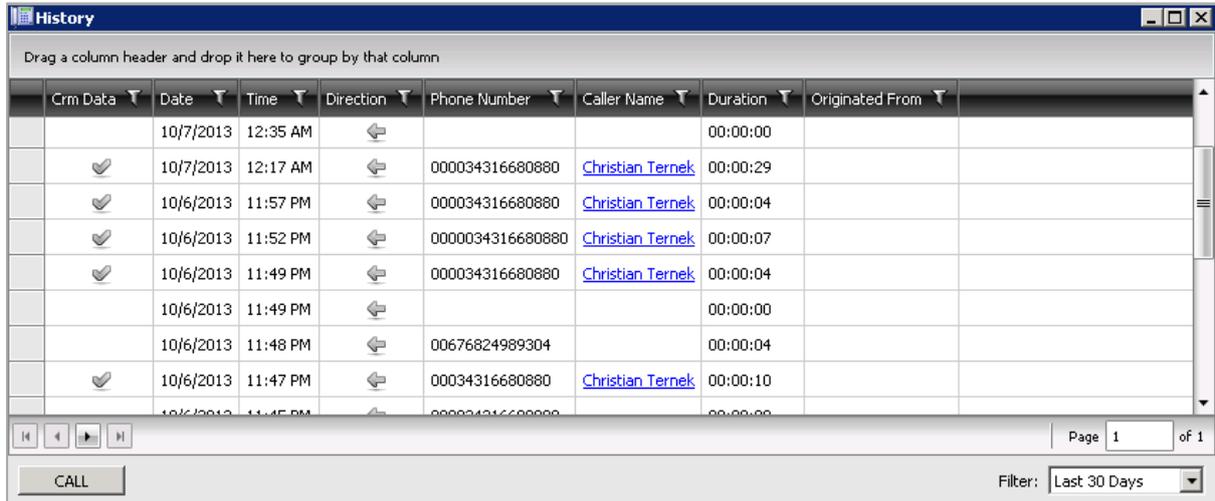
Right-click on the TI toolbar icon to open the Application-Menu. It provides the possibility to:

- Open the balloon
- Call the number that is saved in the clipboard (see screenshot)
- Open Call-History ([see chapter 5.6](#))
- Open Personal Phone Book ([see chapter 5.7](#))
- Open Power Dialer ([see chapter 11](#))
- Show info (license state)
- Drop call and reset (see screenshot)
- Open Setup
- Exit (shutdown the CTI client)



## 5.6 History Window

The History provides an overview of all of your calls. It is accessible via the application menu ([see chapter 5.5](#)). Those records are stored on the CRM server and cannot be deleted by the user.



History window showing a table of call records. The table has columns: Crm Data, Date, Time, Direction, Phone Number, Caller Name, Duration, and Originated From. The records are sorted by date and time.

Crm Data	Date	Time	Direction	Phone Number	Caller Name	Duration	Originated From
	10/7/2013	12:35 AM	←			00:00:00	
✓	10/7/2013	12:17 AM	←	000034316680880	<a href="#">Christian Ternek</a>	00:00:29	
✓	10/6/2013	11:57 PM	←	000034316680880	<a href="#">Christian Ternek</a>	00:00:04	
✓	10/6/2013	11:52 PM	←	0000034316680880	<a href="#">Christian Ternek</a>	00:00:07	
✓	10/6/2013	11:49 PM	←	000034316680880	<a href="#">Christian Ternek</a>	00:00:04	
	10/6/2013	11:49 PM	←			00:00:00	
	10/6/2013	11:48 PM	←	00676824989304		00:00:04	
✓	10/6/2013	11:47 PM	←	00034316680880	<a href="#">Christian Ternek</a>	00:00:10	
	10/6/2013	11:45 PM	←	000034316680880		00:00:00	

Page 1 of 1  
Filter: Last 30 Days

You can also use redialing in History window by selecting the phone call record and pressing the [Call] button.

## 5.7 Personal Phone Book Window

The Personal Phone Book is not part of the CRM. It helps you store information of any person that is not in the CRM system, but you want to be resolved.



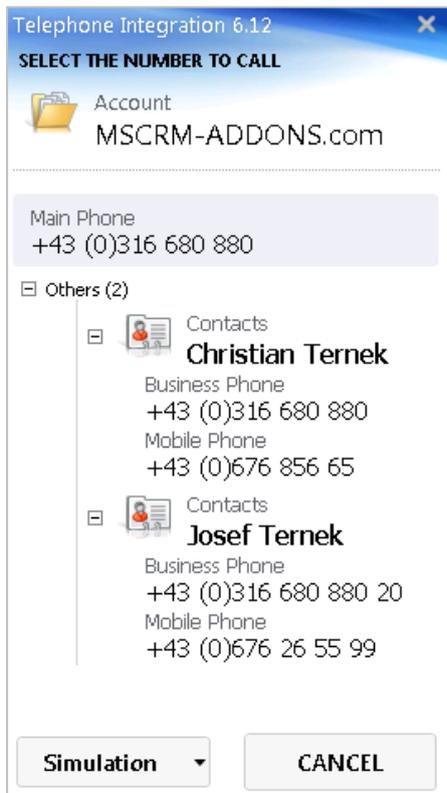
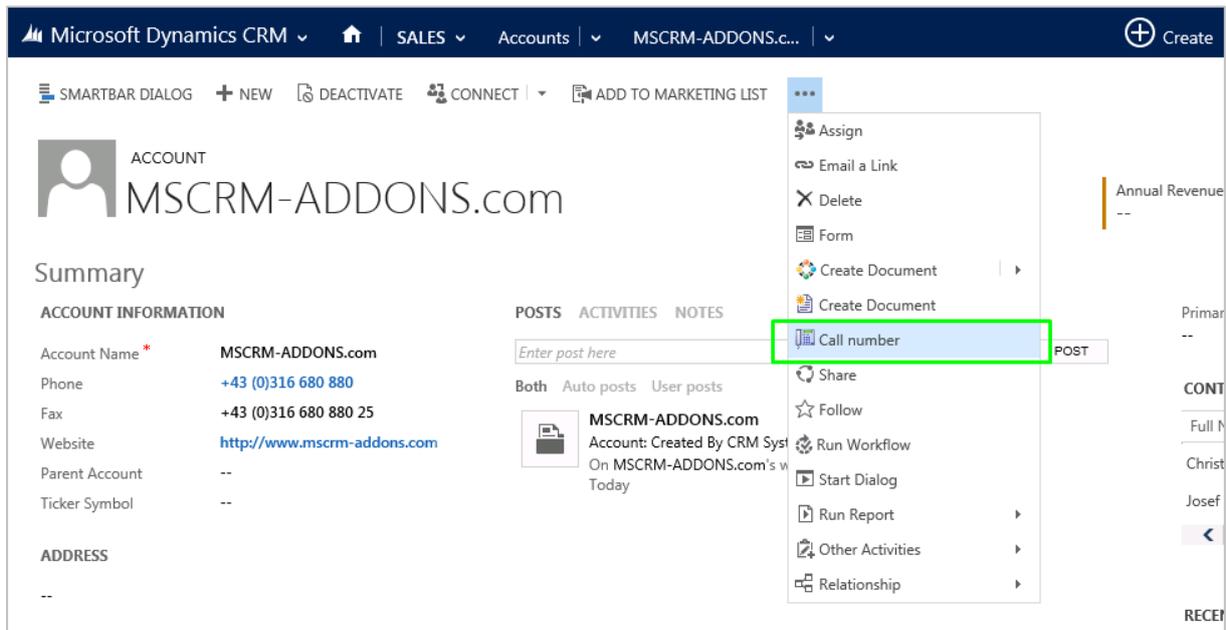
Personal Phone Book window showing a form to add a new contact and a table of existing contacts. The form has fields for Phone Number, First Name, and Last Name, and an Add Info button. The table has columns for Phone Number, First Name, and Last Name.

Phone Number	First Name	Last Name
+43316845698	Maria	Berghold
+43316862016	Josef	Kompacher
+43316693064	Katharina	Maier

## 6 MS CRM 2013 Integration

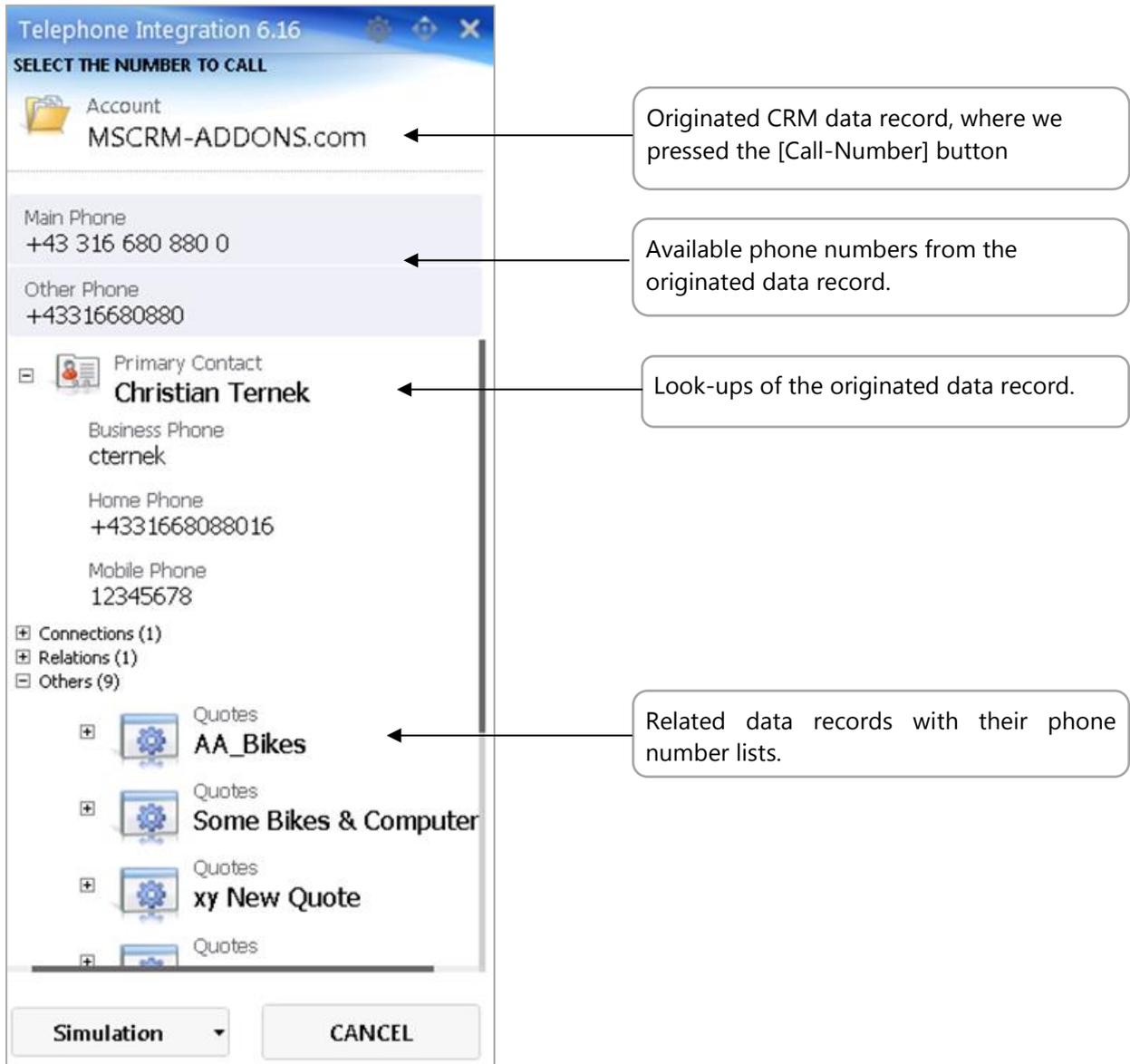
### 6.1 Start an outgoing Call from MS CRM 2013

By pressing on the [Call Number] button, the TI Clients balloon pops up with the available phone numbers of the originated CRM data record, as well as with phone numbers of all related data records.



If no related CRM-records are found and the originated CRM record has only one phone number, this number will be immediately called.

Per default TI Client always search for related CRM-records if you do not set it otherwise. You can disable searching for related CRM-records at server-side or on client-side layer.



The screenshot shows the 'Telephone Integration 6.16' application window. The title bar reads 'Telephone Integration 6.16'. Below the title bar, the text 'SELECT THE NUMBER TO CALL' is displayed. The interface is divided into several sections:

- Account:** MSCRAM-ADDONS.com
- Main Phone:** +43 316 680 880 0
- Other Phone:** +43316680880
- Primary Contact:** Christian Ternek
- Business Phone:** cternek
- Home Phone:** +4331668088016
- Mobile Phone:** 12345678
- Connections (1):** AA\_Bikes
- Relations (1):** Some Bikes & Computer
- Others (9):** xy New Quote

At the bottom of the window, there is a 'Simulation' dropdown menu and a 'CANCEL' button. Four callout boxes with arrows point to specific elements in the interface:

- Callout 1: 'Originated CRM data record, where we pressed the [Call-Number] button' points to the Account section.
- Callout 2: 'Available phone numbers from the originated data record.' points to the Main Phone and Other Phone sections.
- Callout 3: 'Look-ups of the originated data record.' points to the Primary Contact section.
- Callout 4: 'Related data records with their phone number lists.' points to the Connections, Relations, and Others sections.

---

Search for related CRM-records is per default always enabled for all users.

However there are possibilities to completely enable or disable this feature on [CRM server side](#) or locally on the client side.

**Server-side "UseDFR" setting:**

- If you set this setting on "false", then none of TI users will be able to use this.
- If you set this setting on "true", then all of TI users will use this feature.

If you did not set this setting on server-side layer, then per default every TI user will use it, except those who will disable it locally. Server-side setting are overruling the client-side settings.

**Client-side "UseDFR" setting** in the local registry:

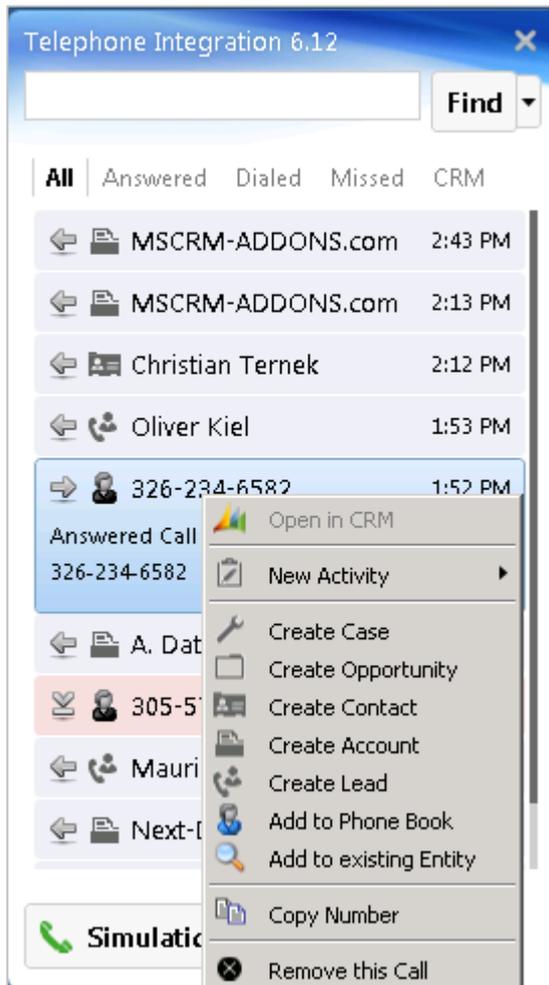
HKEY\_CURRENT\_USER\Software\PTM EDV-Systeme\TelephoneIntegrationclient2013

- If you set this setting on "false", then the local TI user will not be able to use this feature.
- If you set this setting on "true", then the local TI user will be able to use this feature.  
*Not setting this feature at all, is same as you would set it with "true".*

If TI User is using DFR feature, then he can set additional restrictions for it server-side. (For more information, please read our [blog article](#))

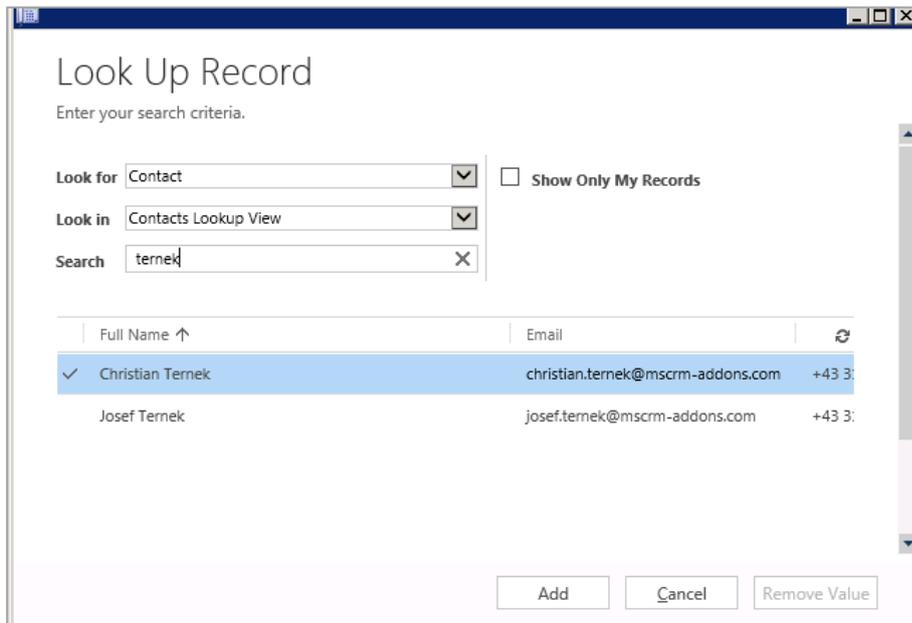
## 6.2 How to assign unresolved numbers to existing CRM records

TelephoneIntegration provides the possibility to assign unresolved numbers to already existing CRM records (accounts, contacts and leads). To do so, you just have to right-click on the number to open the context-menu. Then, chose "Add to Existing Entity" (see screenshot below).



A search window will open in which you could search for and select the required CRM record (see screenshot below). Afterwards, close the window and the number will be automatically added to one of the CRM record's phone fields.

**IMPORTANT:** These phone fields have to be configured as "search fields" in the TI Server configuration tool.



Full Name ↑	Email	
✓ Christian Ternek	christian.ternek@mscrm-addons.com	+43 3:
Josef Ternek	josef.ternek@mscrm-addons.com	+43 3:

Furthermore, you also have the possibility to create a new CRM record with the unresolved number assigned to (see first screenshot).

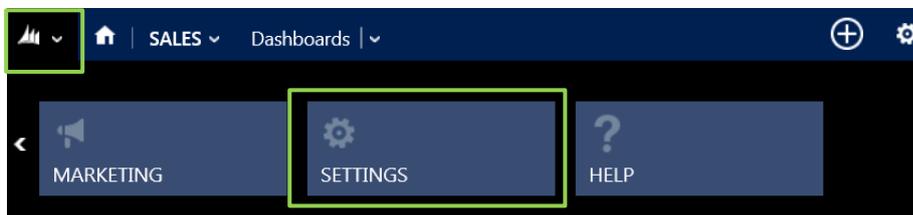
### 6.3 How to set restrictions for dialing from a related CRM-record

This means that they have the possibility to choose from a list of records related to the initially opened one when dialing out from CRM (e.g. from related leads, contacts, etc.).

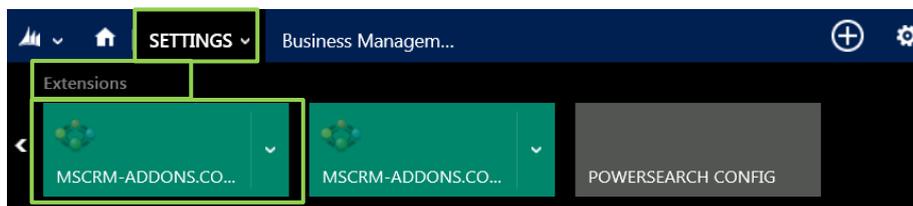
In regards to this, you have the possibility to set restrictions for the related records to be displayed in the TelephoneIntegration balloon (e.g. In case of dialing out starting from an opportunity, you want accounts and to be displayed, but not the related contacts and leads). In order to do so, you have to create a new settings key.

Follow the steps below:

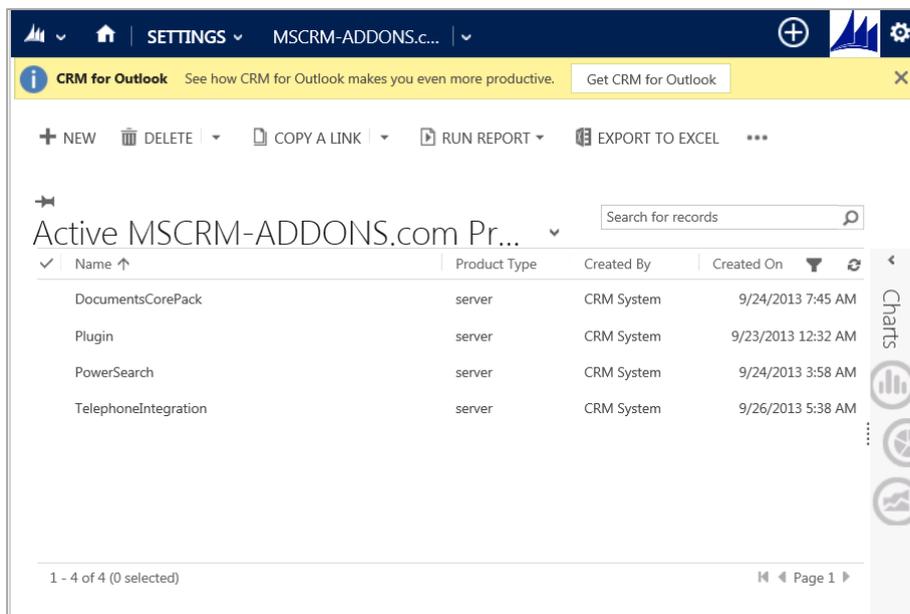
1. Open CRM – go to “Microsoft Dynamics CRM” Logo on the left corner – click on settings



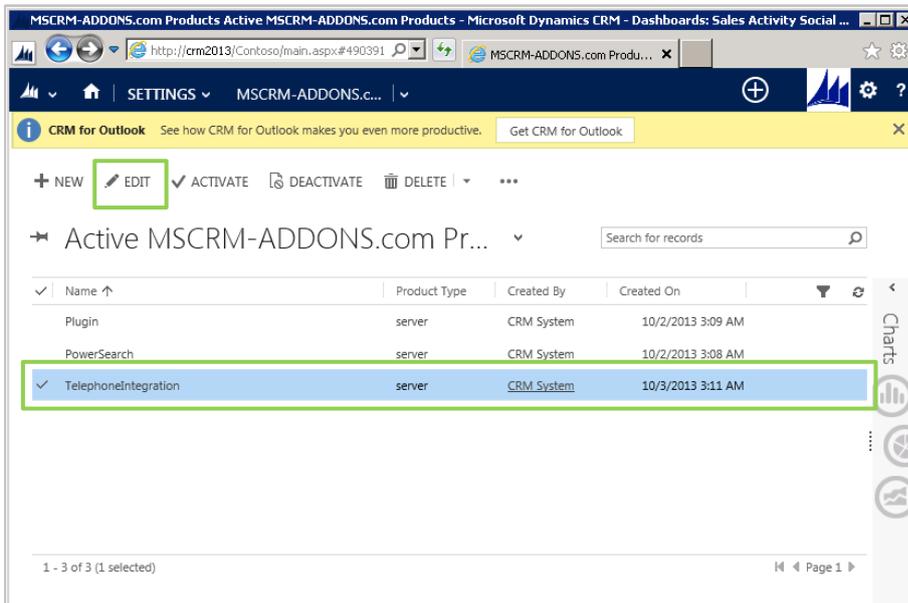
2. Click again on “SETTINGS” - go to the “Extensions Area” and click on “MSCRM-ADDONS.com Products”.



This action will open following window:

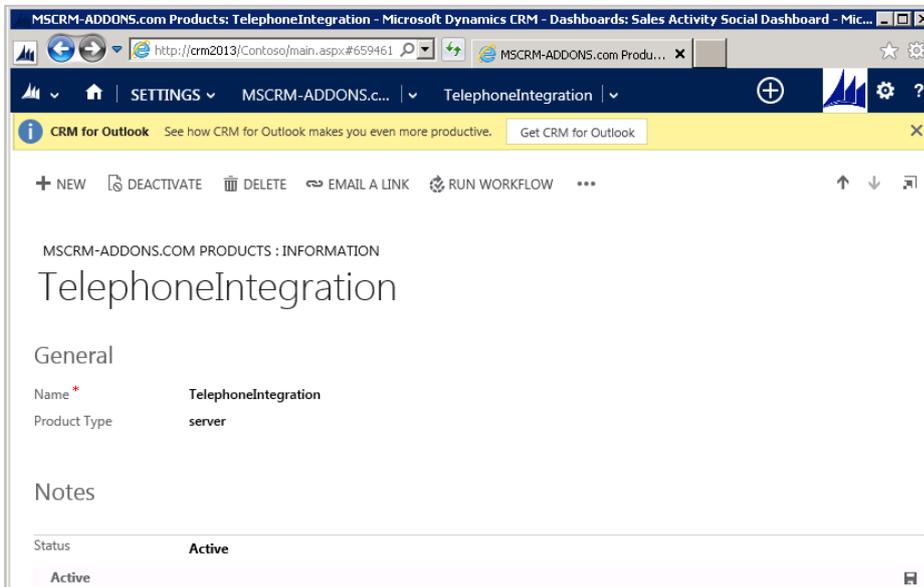


3. (1) Click the checkbox in front of 'TelephoneIntegration' and then (2) click on 'Edit'.



Screenshot: Edit TelephoneIntegration in the CRM Settings

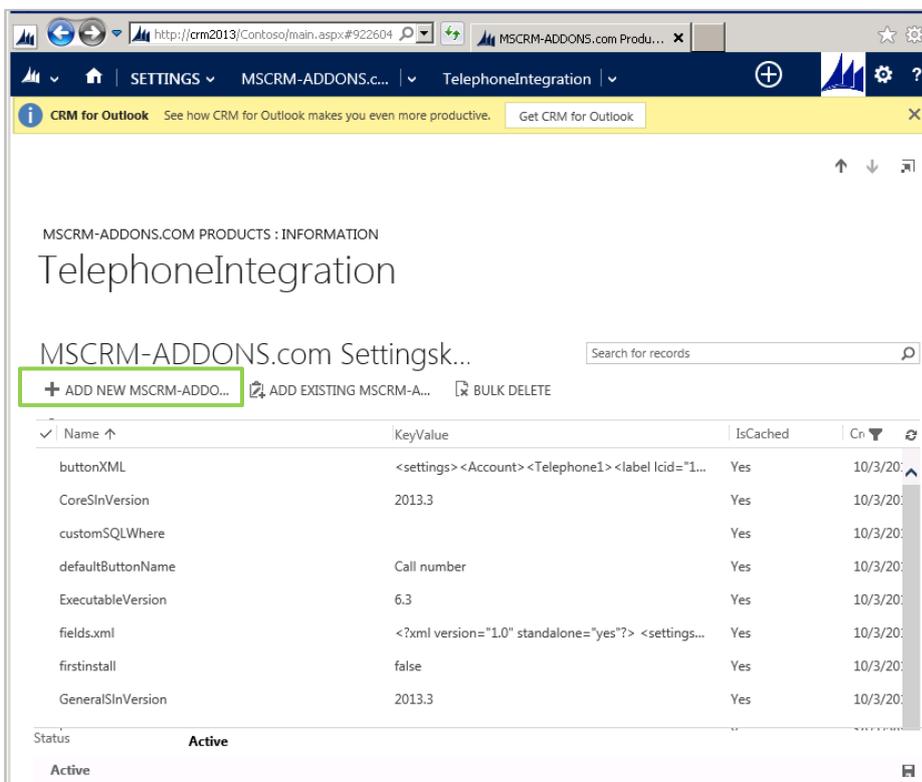
4. A new CRM window will open:



Within this window, (1) click on the dropdown-button next to TelephoneIntegration on the Top of the window and navigate to 'MSCRM-ADDONS.com Settingskeys' on the top and (2) click on 'Add New MSCRM-ADDONS.com Settingskeys'.



This action will open following window:



Within this window click on "+ADD NEW MSCRM-ADDONS.com Settingskey".

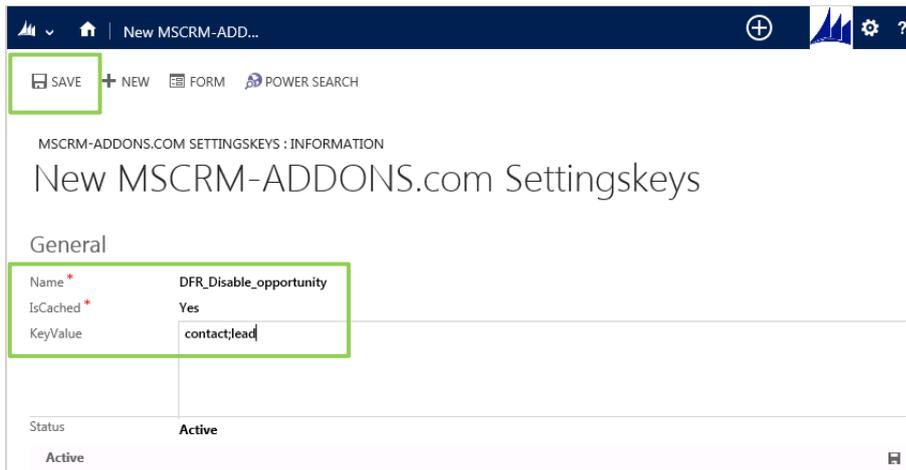
5. A new window will open. Within this window, put a name and a KeyValue with the following structure:

name: DFR\_Disable\_{entity name}  
cached value: entity name1;entity name2; entity name3

Furthermore, set 'IsCached' as 'yes'.

In our example (dialing out starting from an opportunity, accounts should be displayed, but not the related contacts and leads), we have to type in the following (see screenshot below):

```
< "DFR_Disable_opportunity", "contact;lead" >
```



MSCRM-ADDONS.COM SETTINGSKEYS : INFORMATION	
New MSCRM-ADDONS.com Settingskeys	
General	
Name *	DFR_Disable_opportunity
IsCached *	Yes
KeyValue	contact;lead
Status	Active
Active	

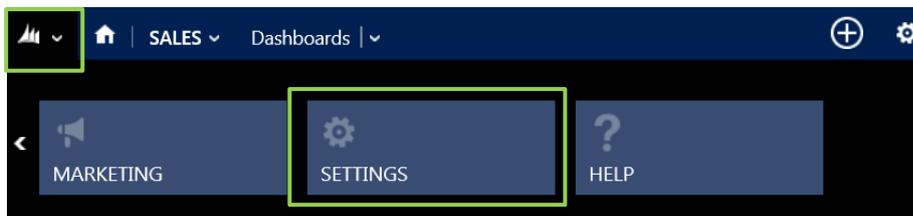
If you want to disable all subrelated data records (meaning that you do not want any related record to be displayed), you have to set "\*" within the 'KeyValue'-field and 'DFR\_Disable\_opportunity' within the 'Name'-field.

## 7 Use TelephoneIntegration with MS Outlook

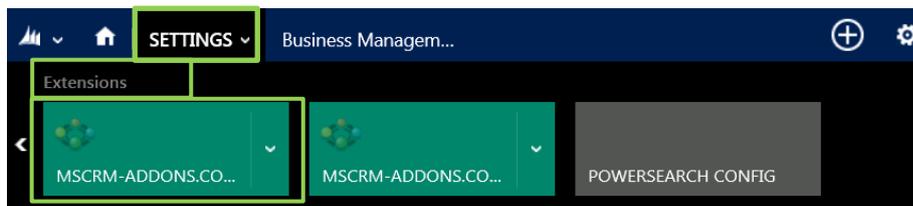
Users have the possibility to use TelephoneIntegration without a browser, but with Outlook only, meaning that TelephoneIntegration will open all windows (e.g. the CRM-call-activity, etc.) in Outlook and not in an internet browser window. For being able to use TelephoneIntegration with Outlook only, you have to install TelephoneIntegration Client v.5.54 or higher and create a new settingskey.

Please follow the steps below to do so:

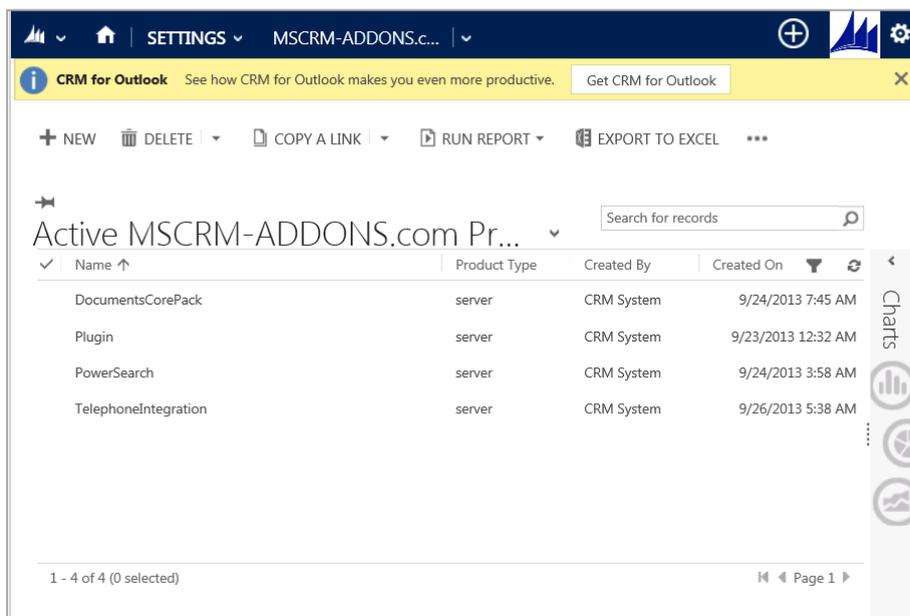
1. Open CRM – go to “Microsoft Dynamics CRM” Logo on the left corner – click on settings



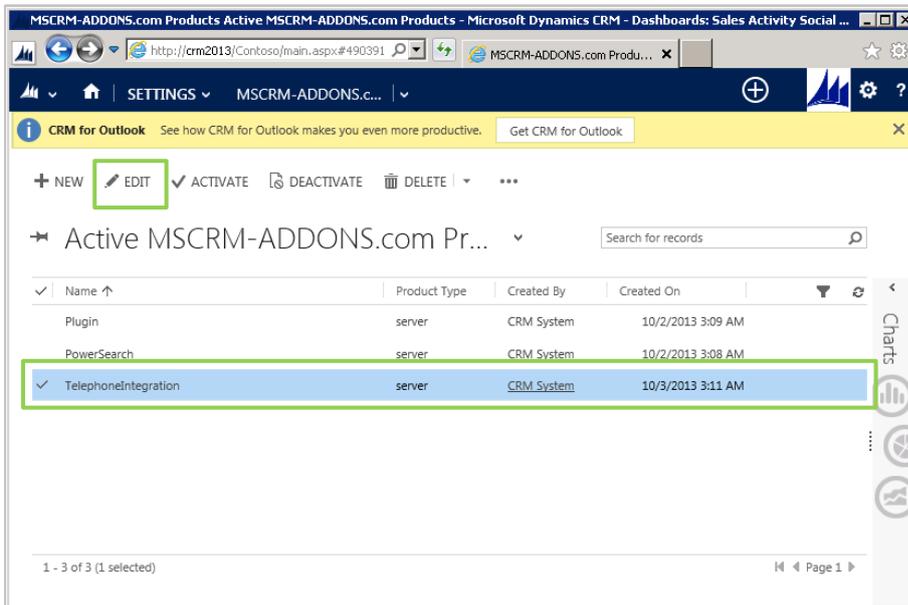
2. Click again on “SETTINGS” - go to the “Extensions Area” and click on “MSCRM-ADDONS.com Products”.



This action will open following window:

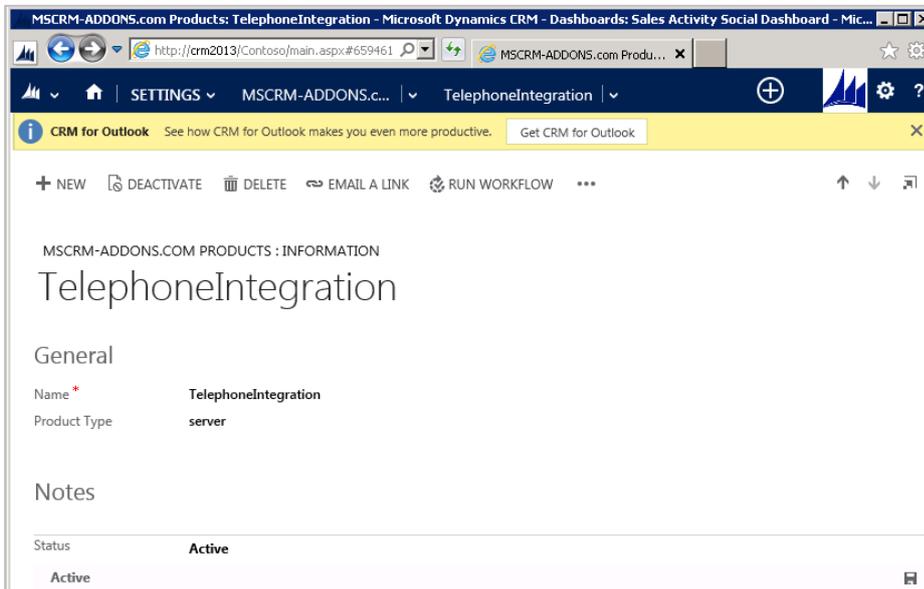


3. (1) Click the checkbox in front of 'TelephoneIntegration' and then (2) click on 'Edit'.

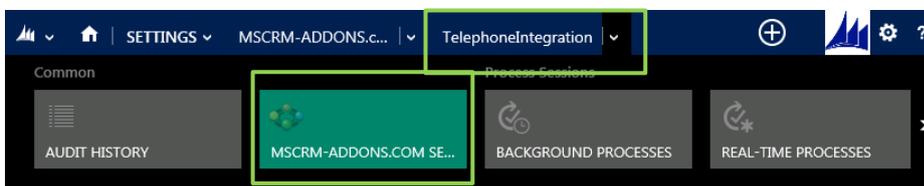


Screenshot: Edit TelephoneIntegration in the CRM Settings

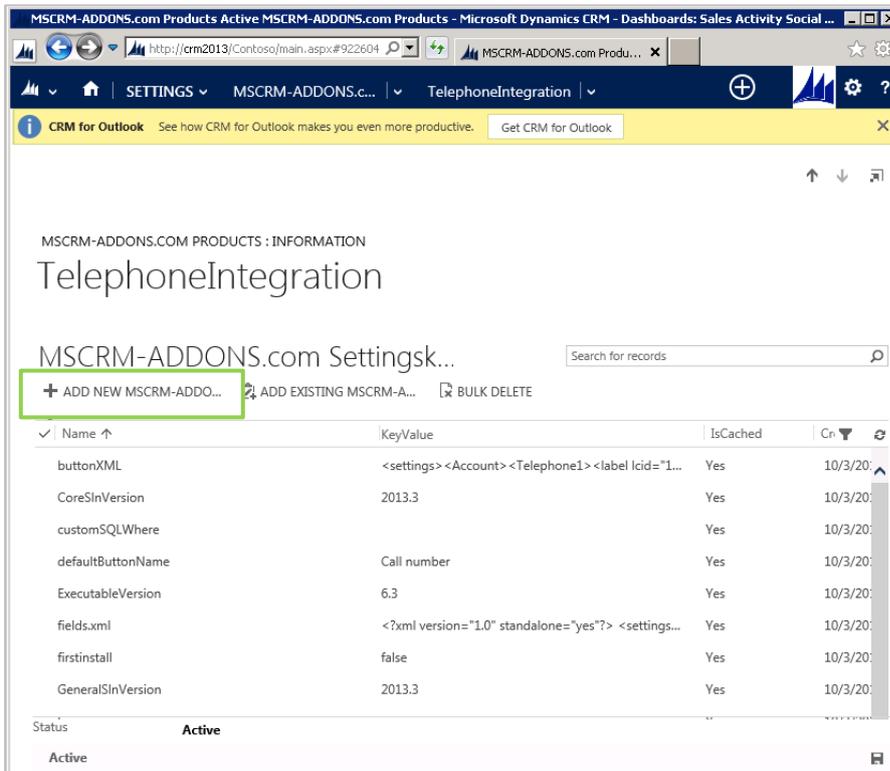
4. A new CRM window will open:



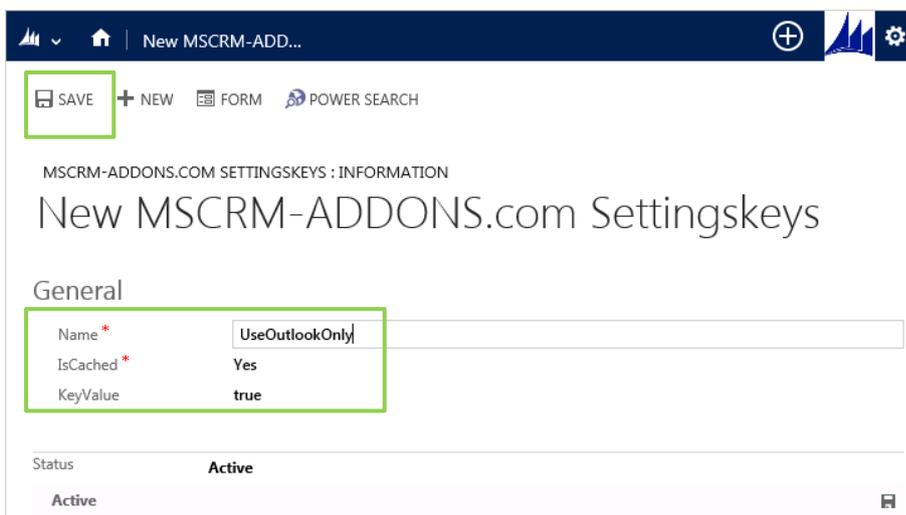
5. Within this window, (1) click on the dropdown-button next to TelephoneIntegration on the Top of the window and navigate to 'MSCRM-ADDONS.com Settingskeys' on the top and (2) click on 'Add New MSCRM-ADDONS.com Settingskeys'.



This action will open following window:



6. Again, a new window will open. Within this window, put the name 'UseOutlookOnly' and the KeyValue 'true'. Furthermore, set 'IsCached' as 'yes'. (see screenshot below)

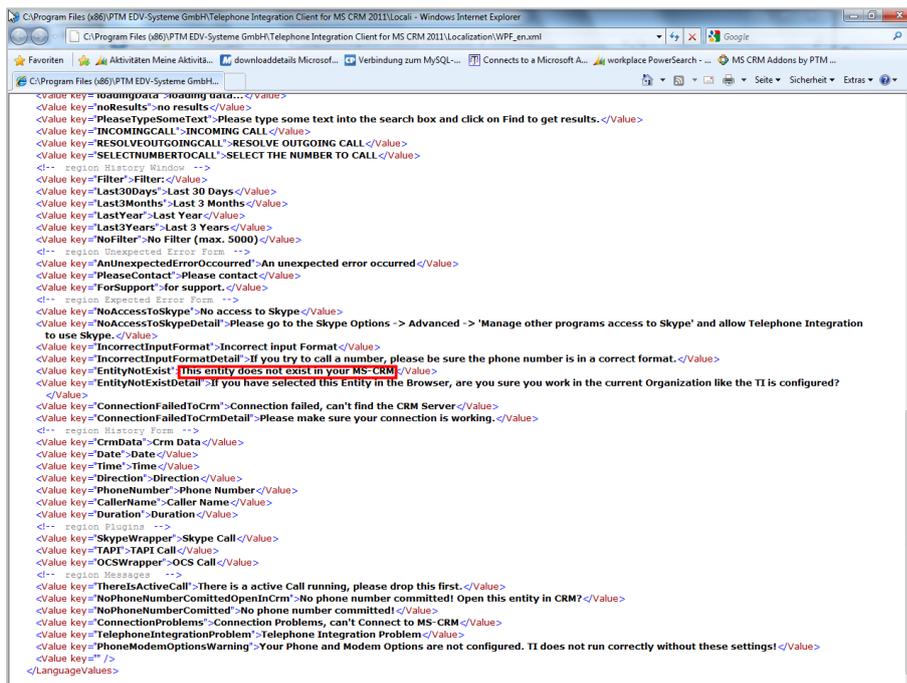


Restart the client. TelephoneIntegration will open all windows in Outlook instead of an internet browser.

## 8 Localization/Custom Language packs

To select another language pack, go into your installation path and search for the "Localization"-Folder. You can install language files (XML-documents) here or change already existing language file. To change values inside of the file open the XML-file and change the following Values and save the file by closing it. You should make a backup-file of the file you are editing.

**Important: Never change the Key attributes! Only change the values!**

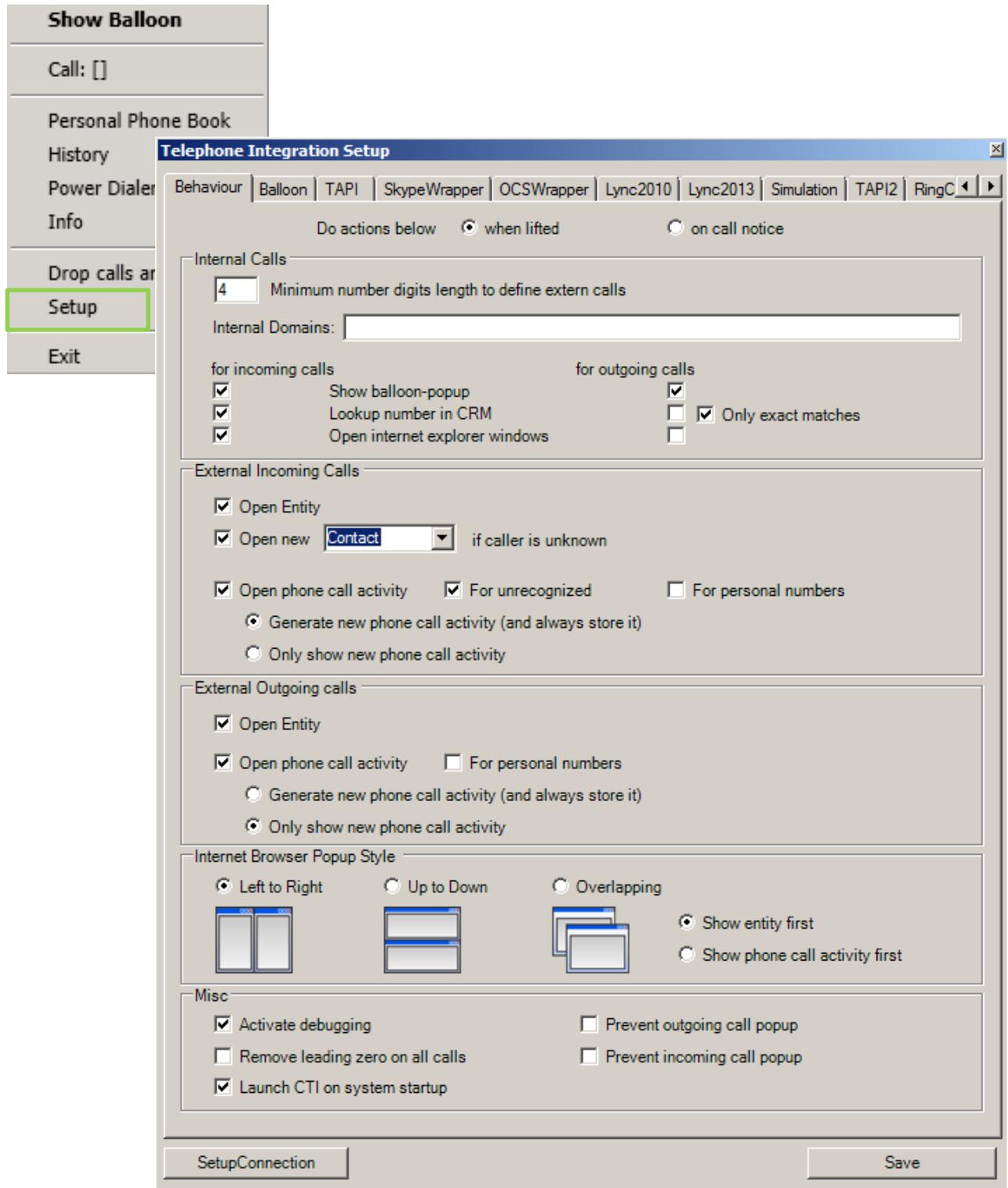


```

<Value key="IncomingData">Incoming data...</Value>
<Value key="NoResults">no results.</Value>
<Value key="PleaseTypeSomeText">Please type some text into the search box and click on Find to get results.</Value>
<Value key="INCOMINGCALL">INCOMING CALL.</Value>
<Value key="RESOLVEOUTGOINGCALL">RESOLVE OUTGOING CALL.</Value>
<Value key="SELECTNUMBERTOCALL">SELECT THE NUMBER TO CALL.</Value>
<!-- region: Blaupunkt-Windows -->
<Value key="Filter">Filter:</Value>
<Value key="Last30Days">Last 30 Days.</Value>
<Value key="Last3Months">Last 3 Months.</Value>
<Value key="LastYear">Last Year.</Value>
<Value key="Last3Years">Last 3 Years.</Value>
<Value key="NoFilter">No Filter (max. 5000).</Value>
<!-- region: Unexpected Error Form -->
<Value key="AnUnexpectedErrorOccured">An unexpected error occurred.</Value>
<Value key="PleaseContact">Please contact.</Value>
<Value key="ForSupport">for support.</Value>
<!-- region: Expected Error Form -->
<Value key="NoAccessToSkype">No access to Skype.</Value>
<Value key="NoAccessToSkypeDetail">Please go to the Skype Options -> Advanced -> 'Manage other programs access to Skype' and allow Telephone Integration to use Skype.</Value>
<Value key="IncorrectInputFormat">Incorrect input Format.</Value>
<Value key="IncorrectInputFormatDetail">If you try to call a number, please be sure the phone number is in a correct format.</Value>
<Value key="EntityNotExist">This entity does not exist in your MS-CRM.</Value>
<Value key="EntityNotExistDetail">If you have selected this Entity in the Browser, are you sure you work in the current Organization like the TI is configured?</Value>
</Value>
<Value key="ConnectionFailedToCrm">Connection failed, can't find the CRM Server.</Value>
<Value key="ConnectionFailedToCrmDetail">Please make sure your connection is working.</Value>
<!-- region: History Form -->
<Value key="CrmData">Crm Data.</Value>
<Value key="Date">Date.</Value>
<Value key="Time">Time.</Value>
<Value key="Direction">Direction.</Value>
<Value key="PhoneNumber">Phone Number.</Value>
<Value key="CallerName">Caller Name.</Value>
<Value key="Duration">Duration.</Value>
<!-- region: Plugins -->
<Value key="SkypeWrapper">Skype Call.</Value>
<Value key="TAPI">TAPI Call.</Value>
<Value key="OCSWrapper">OCS Call.</Value>
<!-- region: Messages -->
<Value key="ThereIsActiveCall">There is a active Call running, please drop this first.</Value>
<Value key="NoPhoneNumberCommittedOpenInCrm">No phone number committed! Open this entity in CRM?</Value>
<Value key="NoPhoneNumberCommitted">No phone number committed!</Value>
<Value key="ConnectionProblems">Connection Problems, can't Connect to MS-CRM.</Value>
<Value key="TelephoneIntegrationProblem">Telephone Integration Problem.</Value>
<Value key="PhoneModemOptionsWarning">Your Phone and Modem Options are not configured. TI does not run correctly without these settings!</Value>
<Value key="" />
</LanguageValues>
    
```

## 9 Configuration Setup

To change the configuration start TelephoneIntegration Setup via the Application Menu ([chapter 5.5](#)).



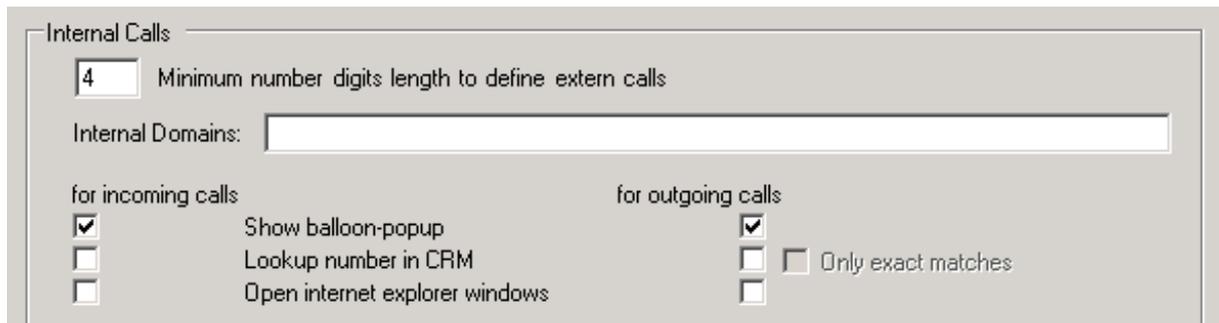
### Balloon general:

TI client distinguish between internal calls and external calls. Regarding on those two types, TI client can determine if the phone call with that number should be processed or not. By processed it is meant:

- Should the number be recognized (resolved) as a CRM record?
- Should corresponded CRM entity open for that call?
- Should Call Phone activity open for that call?

Internal calls are determined with the number length or with the domain name in case of SIP numbers. In the figure below, internal calls are determined as those, who have a number length less than 4 digits, or who have a domain ptm-edv.at or mscrm-addons.com in their SIP numbers.

Below a sample is shown that by an incoming internal phone call the balloon should popup and the number will be resolved with the exact match. By outgoing internal calls, only the balloon should popup.



**Minimum number digits length to define extern calls:** Defines the minimum number length, which has to be inserted to begin call processing. Calls that have less than the desired amount of digits will not be checked in CRM for caller-information unless we explicitly allow it.

**Internal Domains:** Contains the internal domains for sip numbers you do not want to check in CRM for additional information. For example:

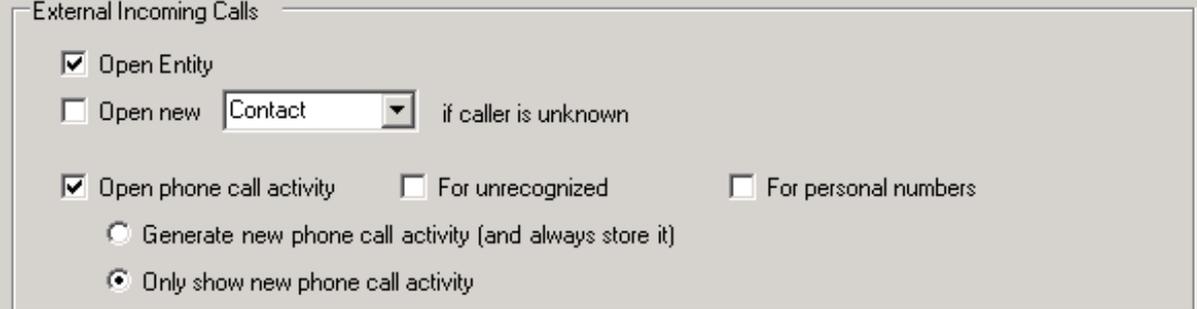
On an incoming/outgoing call with the caller having a sip address sip:username@mscrm.addons.com and you don't want that this address to be resolved, you need to add "mscrm-addons.com" domain into the text field. Multiple domains are separated with semicolon ";".

**Show balloon popup:** Defines should the TI Balloon popup by internal incoming or internal outgoing calls.

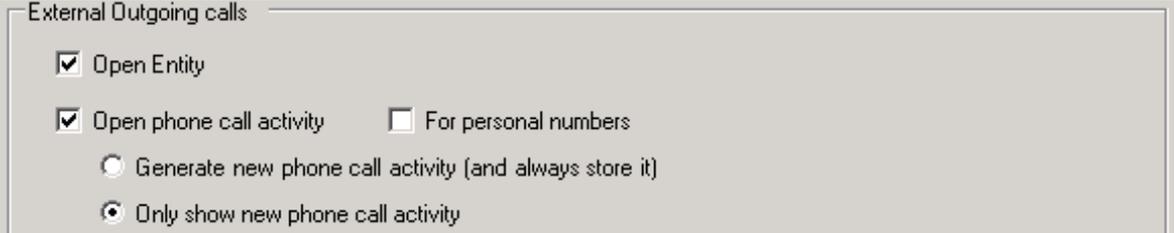
**Lookup number in CRM:** Defines should the TI client search in CRM for record that matches this phone number by incoming or outgoing calls.

**Only exact matches:** Shows only those records that are equal to the phone number. Otherwise it shows also those who ends with the searched phone number digits.

**Open internet explorer windows:** Defines, should the general action settings for opening CRM entities and Phone Call activities by also applied for internal incoming or internal outgoing calls.

**EXTERNAL INCOMING CALLS:**


- **Open Entity:** Open the Entity in CRM that contains incoming caller data.
- **Open Contact/Account on call:** Defines whether a CRM record that contains the number that is calling in should be opened automatically or not.
- **Open phone call activity:** if you are called and you lift the handset **TI** will create a Phone Call Activity...
  - **Generate new phone call activity (and always store it):** stores it and opens it for you.
  - **Only show phone call activity:** generates a new phone call activity without storing.
  - **For unrecognized:** Phone Call Activity will open always when the incoming call is from an unknown number, which is not stored under any contact in our CRM.
  - **For personal numbers:** Phone Call Activity will open always when the incoming call comes from a known contact in our CRM.

**EXTERNAL OUTGOING CALLS:**


- **Open Entity:** Open the Entity in CRM that contains data from called target.
- **Open phone call activity:** if you are caller and the called participant lift the handset **TI** will create a Phone Call Activity...
  - **Generate new phone call activity (and always store it):** stores it and opens it for you
  - **Only show phone call activity:** generates a new phone call activity without storing.

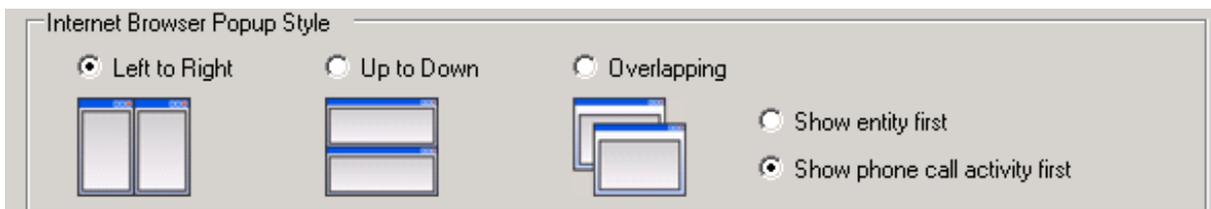
- **For personal numbers:** Phone Call Activity will open always when the outgoing call goes to a known contact in our CRM.

### INTERNAL BROWSER POPUP STYLE

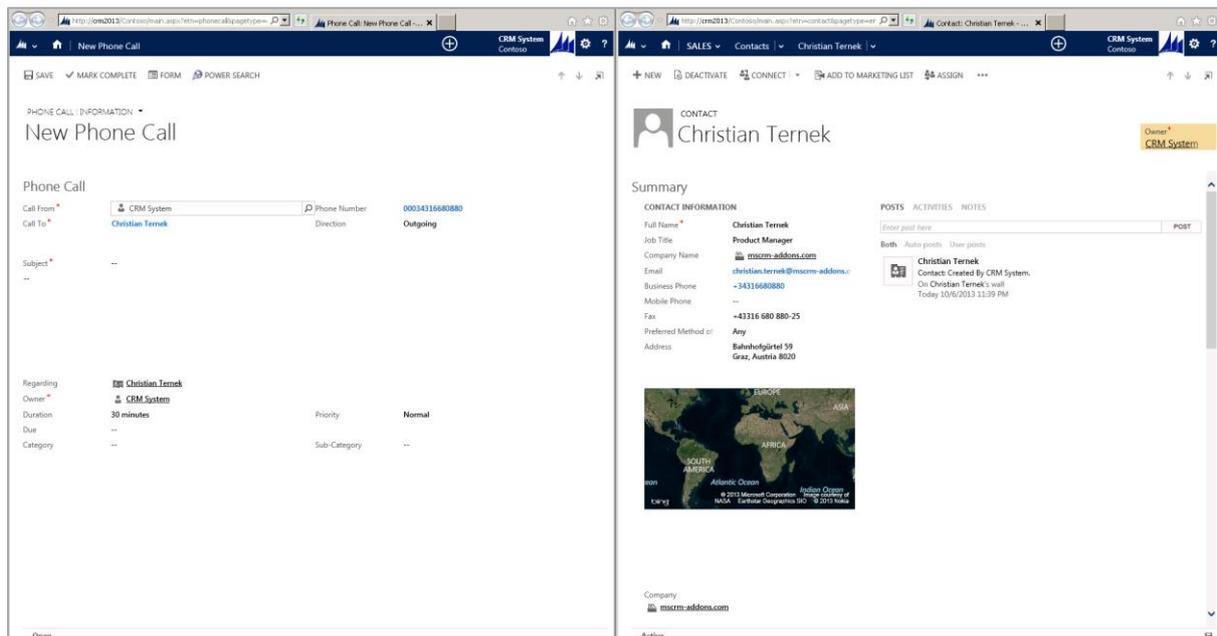
TelephoneIntegration provides the possibility to automatically open CRM records and a new phone-call activity in separate Internet Explorer windows. Users can define the order and position of the CRM record-window and the phone-call-activity-window.

Open the TelephoneIntegration setup with a right-click on the TI-icon located in the taskbar on the bottom of your desktop. Within the setup, chose the "Behavior"-tab and go to the "Internet Browser Popup Style"-section (see screenshot below).

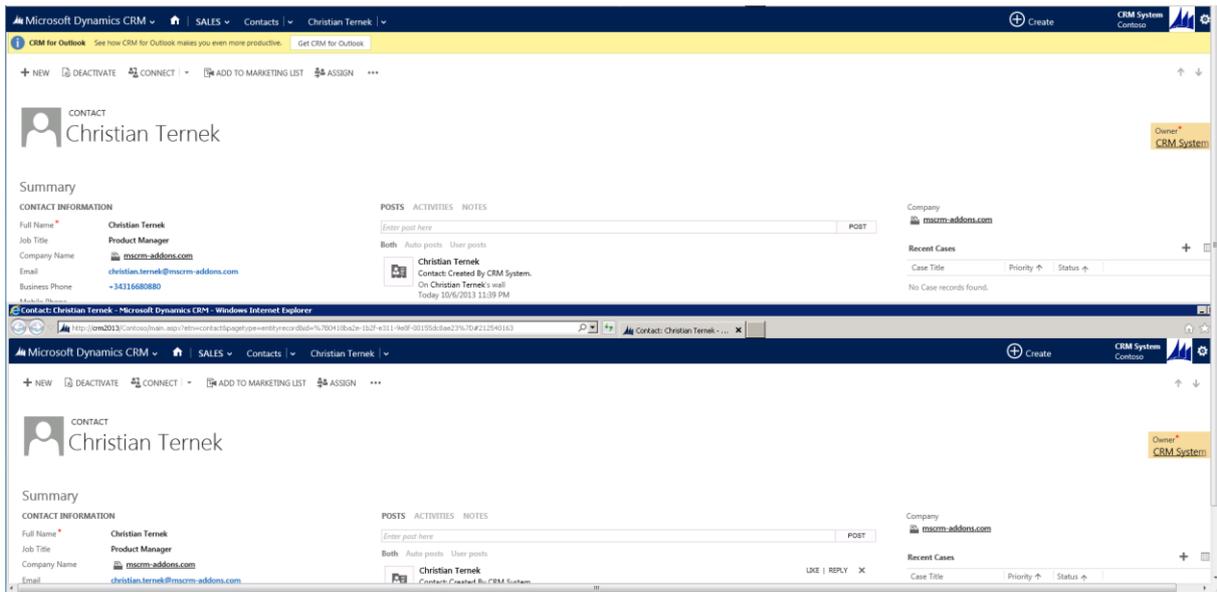
Here you have several positioning-options (left to right, up to down, overlapping) and order-options (show entity first, show phone call activity first). Select your favorite positioning- and order-option. Changes are adopted immediately with the next call.



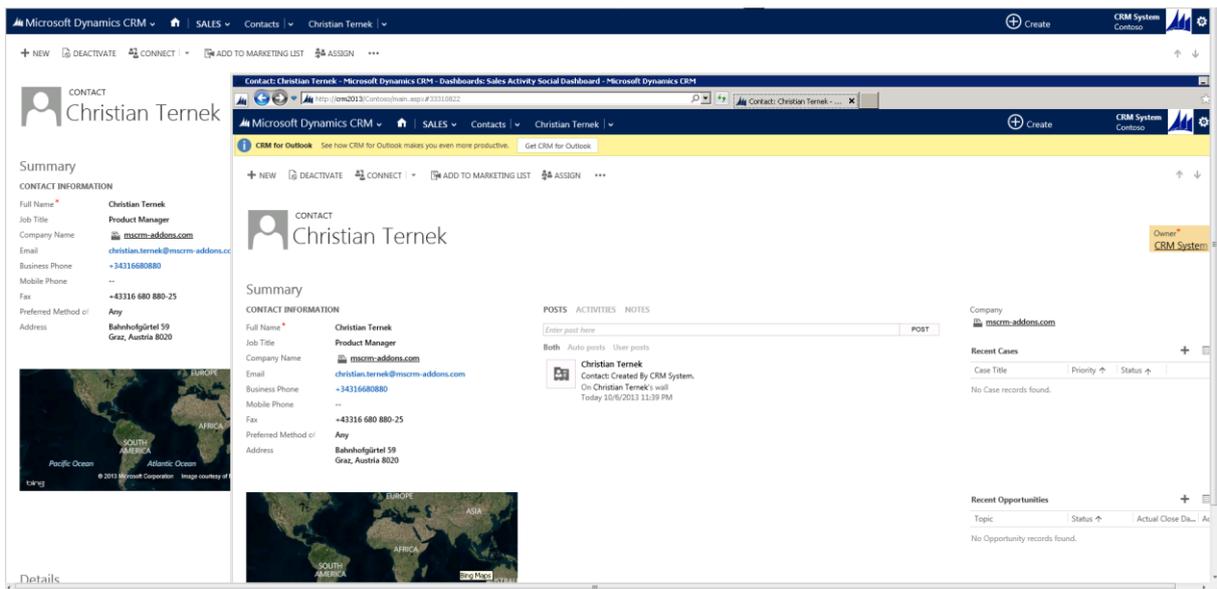
Screenshot: "Internet Browser Popup Style"-section within TelephoneIntegration setup



Screenshot: CRM record-window and phone-call-activity-window shown left to right

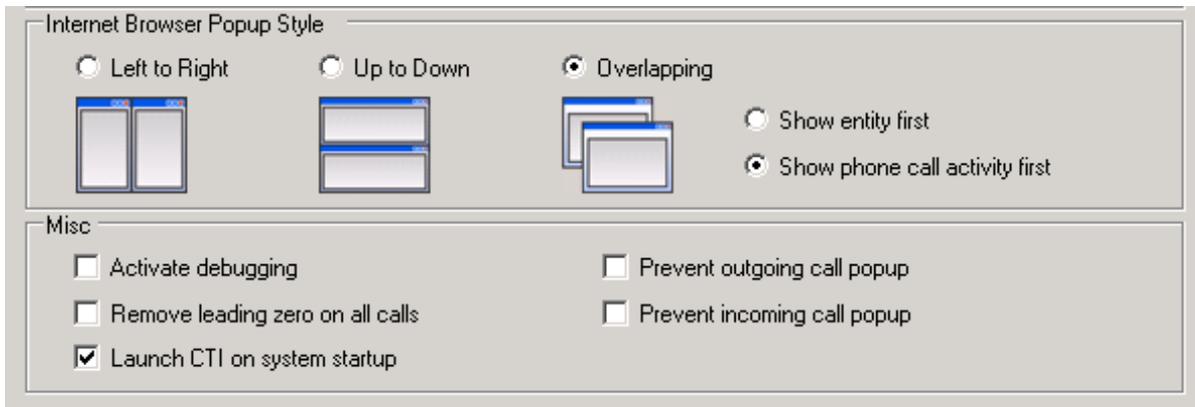


Screenshot: CRM record-window and phone-call-activity-window shown up to down



Screenshot: CRM record-window and phone-call-activity-window shown overlapping

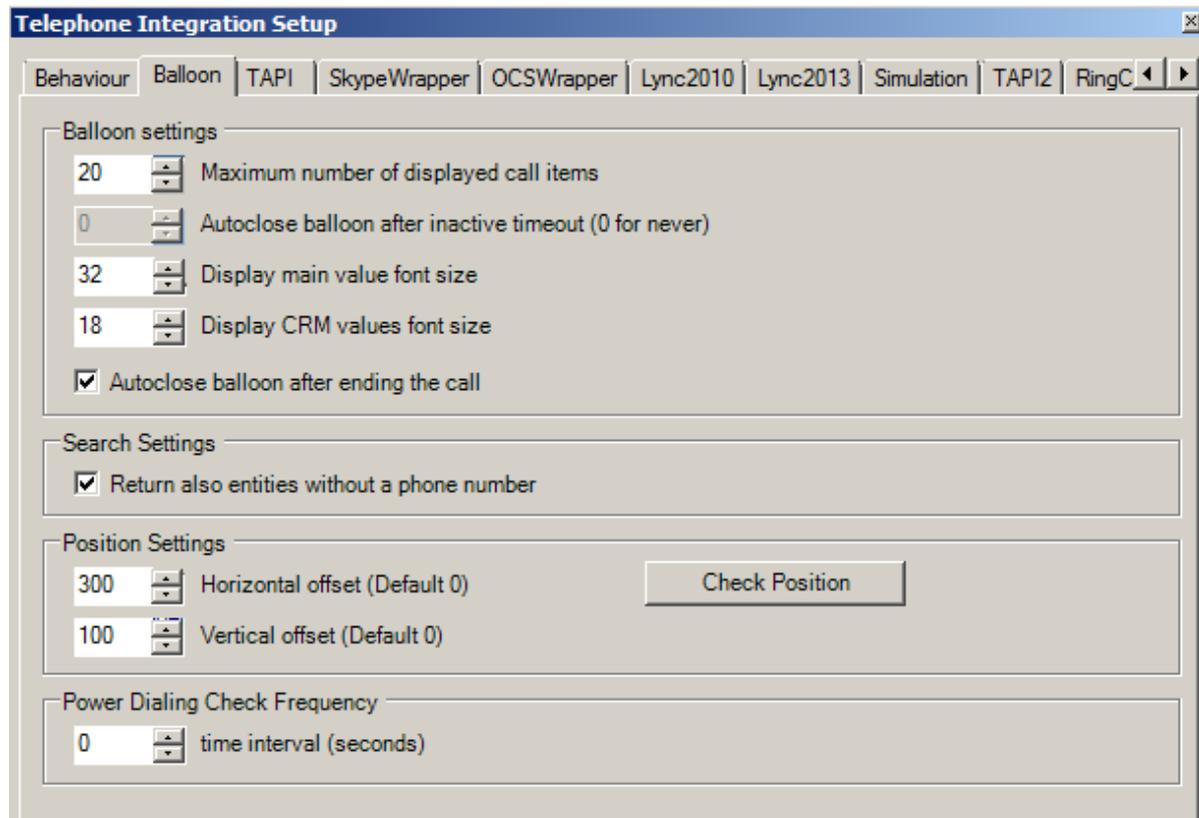
- **Show entity first:** Internet Explorer window will show up first with the displayed entity.
- **Show phone call activity first:** Internet Explorer window will show up first with the phone call activity

**OTHERS:**

The screenshot shows a configuration dialog box with two sections. The top section, titled "Internet Browser Popup Style", contains three radio button options: "Left to Right" (unselected), "Up to Down" (unselected), and "Overlapping" (selected). Below these are three small icons representing the popup styles. To the right of these icons are two more radio button options: "Show entity first" (unselected) and "Show phone call activity first" (selected). The bottom section, titled "Misc", contains five checkboxes: "Activate debugging" (unselected), "Remove leading zero on all calls" (unselected), "Launch CTI on system startup" (checked), "Prevent outgoing call popup" (unselected), and "Prevent incoming call popup" (unselected).

- **Activate Debugging:** You find the log file under: C:\Programme (x86)\PTM EDV-Systeme GmbH\Telephone Integration Client for MS CRM 2011\log\.
- **Removing leading Zero when calling**
- **Launch CTI on system startup:** Start TI automatically, as soon as computer boots.
- **Prevent outgoing call popup:** When choosing this field, Popup-Balloon will not show up by outgoing calls.
- **Prevent incoming call popup:** When choosing this field, Popup-Balloon will not show up by incoming calls.

## 9.1 Balloon Settings



### Balloon section

- Maximum number of displayed call items.
- Auto close balloon after inactive timeout: in minutes. If 0 then this feature is disabled.
- Font size for displaying the CRM main value by incoming or outgoing call.
- Font size for displaying the CRM result values by incoming our outgoing call.
- AutoClose balloon after ending the call.

### Search section

- Return also entities that do not contain a phone number.

### Position section

- Horizontal offset (Default 0): Spacing between the CTI balloon and the right screen edge.
- Vertical offset (Default 0): Spacing between the CTI balloon and the bottom screen edge.
- [Check Position] use this button to see the final position of CTI balloon.
- In case of using LyncWrapper, 100 is a minimum recommended value, otherwise the balloon and the Lync client notification popup overlap.

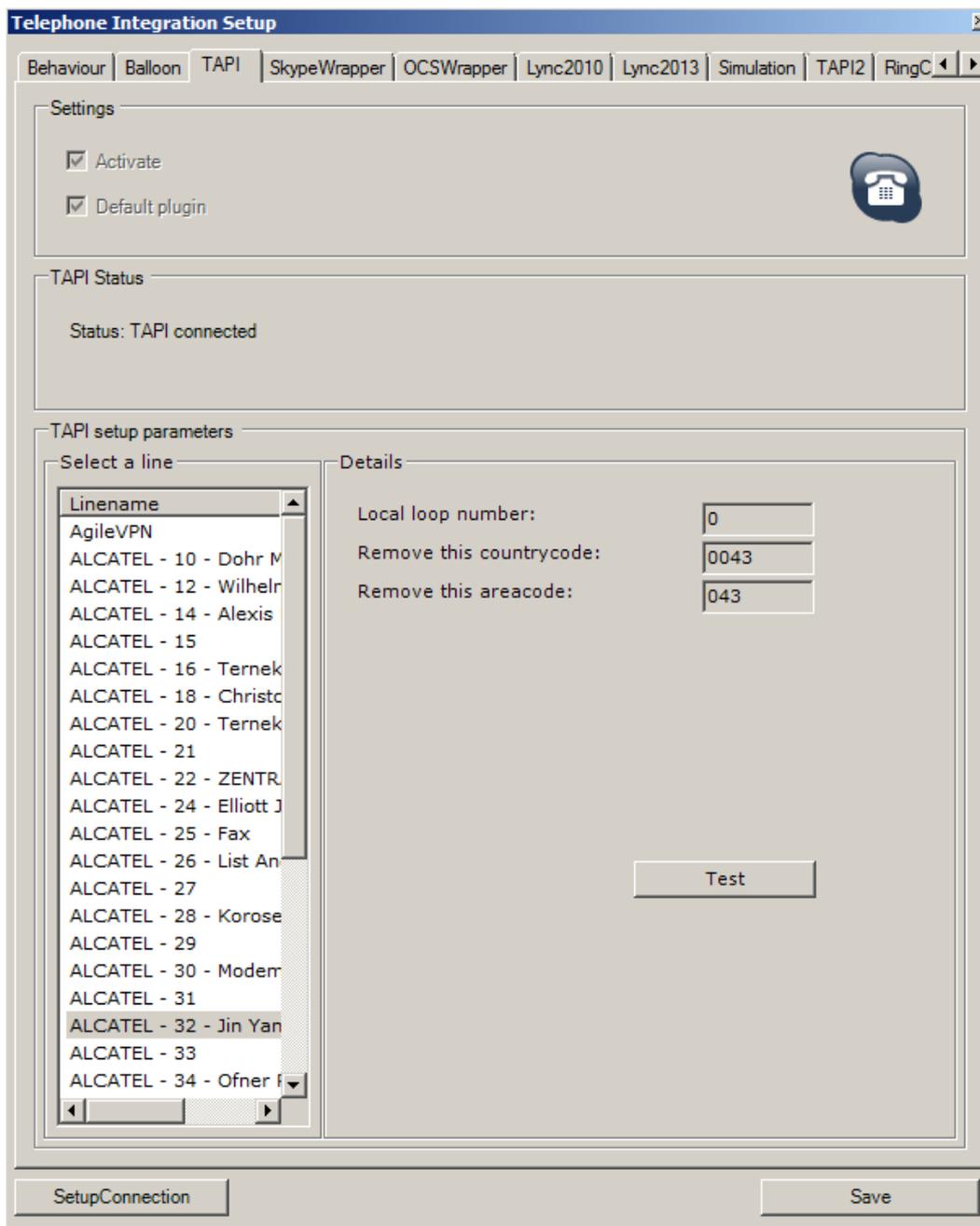
### Power Dialing Frequency

- Time interval of refreshing the power dialer lists.

## 9.2 TAPI

For using this layer, you need to have a valid TAPI driver installed on your computer. TAPI drivers are PBX dependent, so please contact your PBX vendor for help. Before you proceed to TelephoneIntegration Client setup, please check the installed TAPI driver with our [TAPI Test Tool](#), which can be found on our mscrm-addons.com web page under Download / TelephoneIntegration for MS CRM 2011 section.

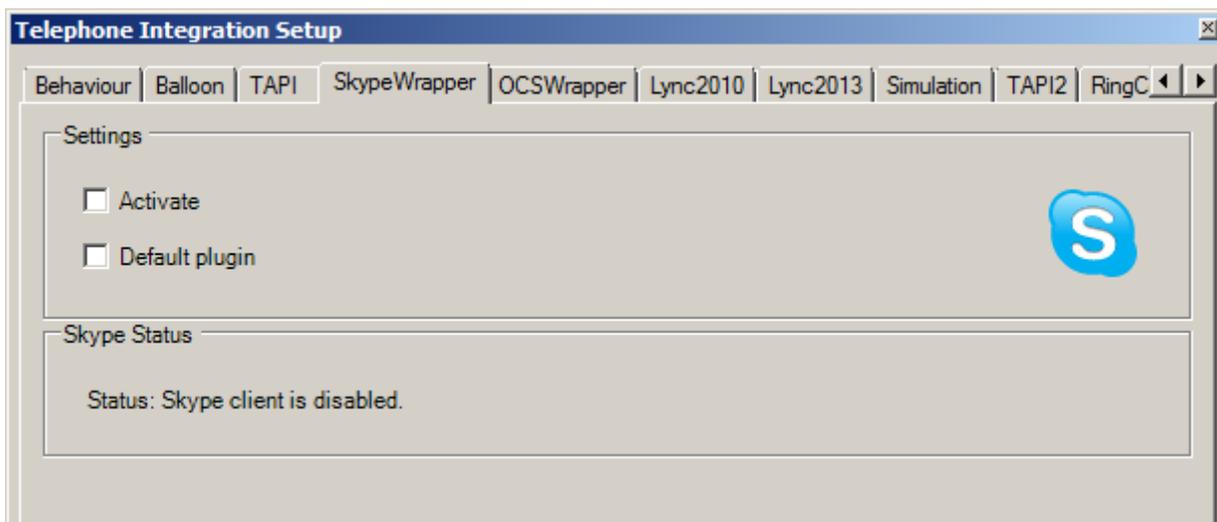
To be sure, you can also check by calling out over with the windows dialer.exe. If all goes well, then the TAPI driver is working properly and the TelephoneIntegration Client will work fine with it. For users who can access 2 TAPI lines at the same time, they can activate TAPI2 Wrapper.



### Settings

- **Activate:** here you can activate/deactivate TAPI.
- **Default plugin:** make TAPI default plugin (you can only have one default plugin)
- **TAPI Status:** displays status of the TAPI-connection
- **Status:** displays status of the TAPI-plugin

## 9.3 Skype Wrapper



### PLUGIN CONFIGURATION

#### Settings section

- **Activate:** Here you can enable/disable the Skype Plugin. This requires a restart of the application.
- **Default plugin:** Make Skype Plugin to your Default Plugin. Checking this checkbox checks the "Activate"-checkbox. Only one plugin can be the default plugin.

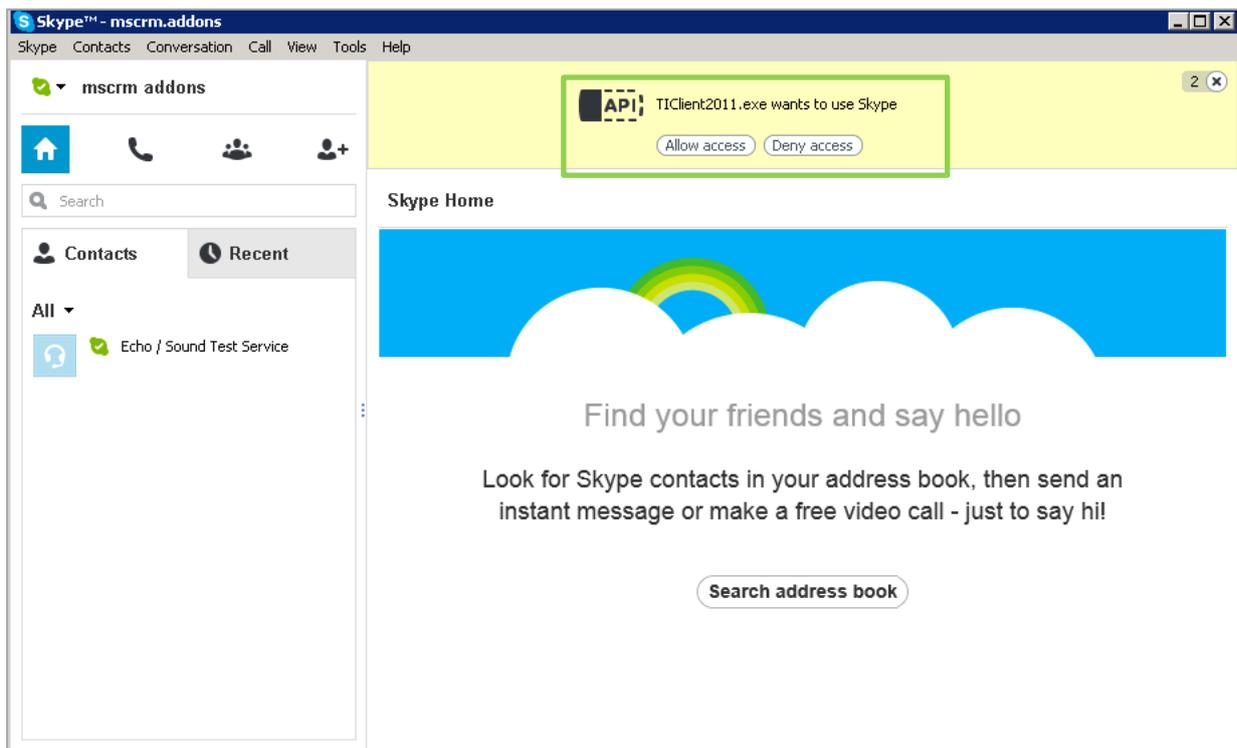
**Skype Status section:** Shows the current status of the Skype Plugin.

- **Status:** Shows the current status of the Skype Plugin.

### 9.3.1 Skype Plugin Authorization

#### Starting TelephoneIntegration

After starting TelephoneIntegration you will get an Authorization Request message from your Skype-Client (only for the first time):

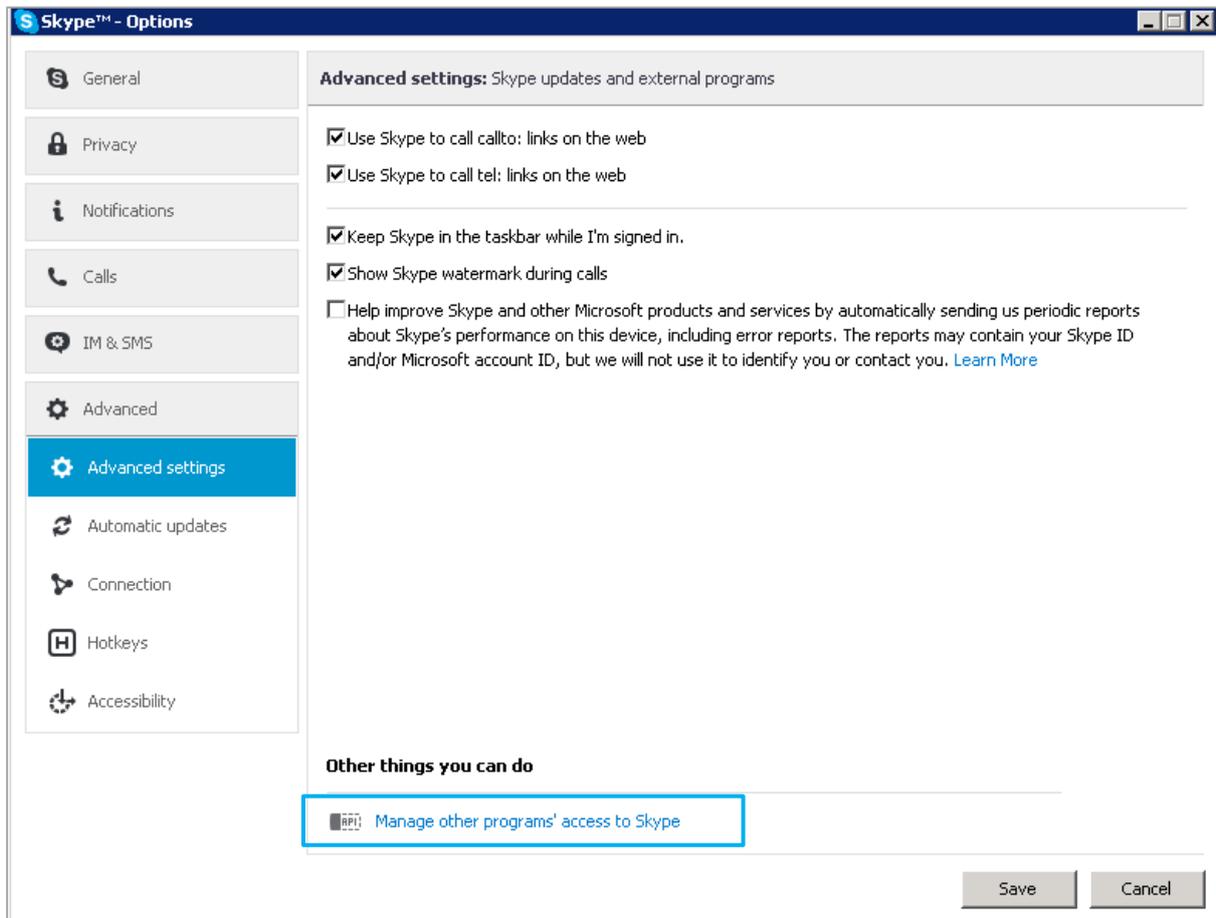


Click on [allow Access] to proceed

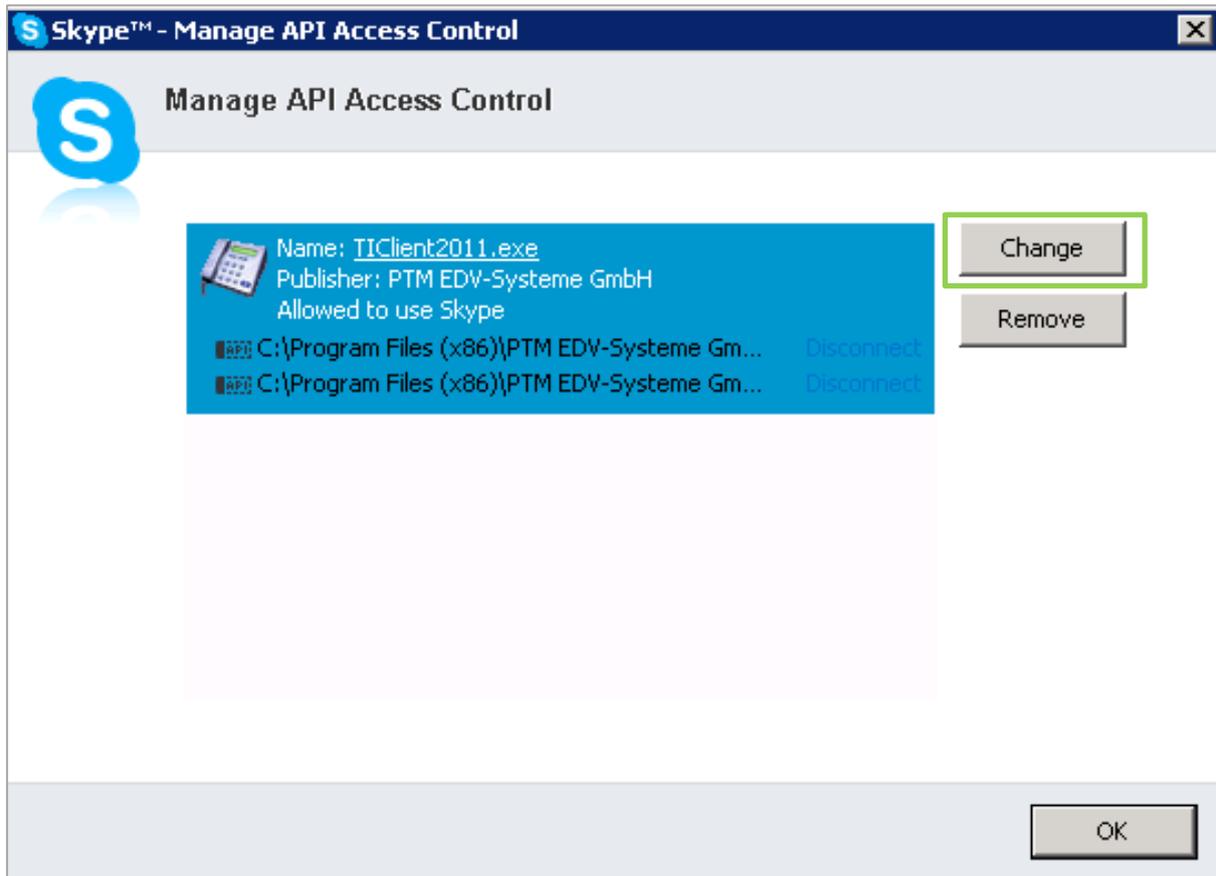
## Manually Manage API Access Control

You have the opportunity to manually control the access of programs to the Skype client. The setting can be found in "tools" → "Options" → "Advanced":

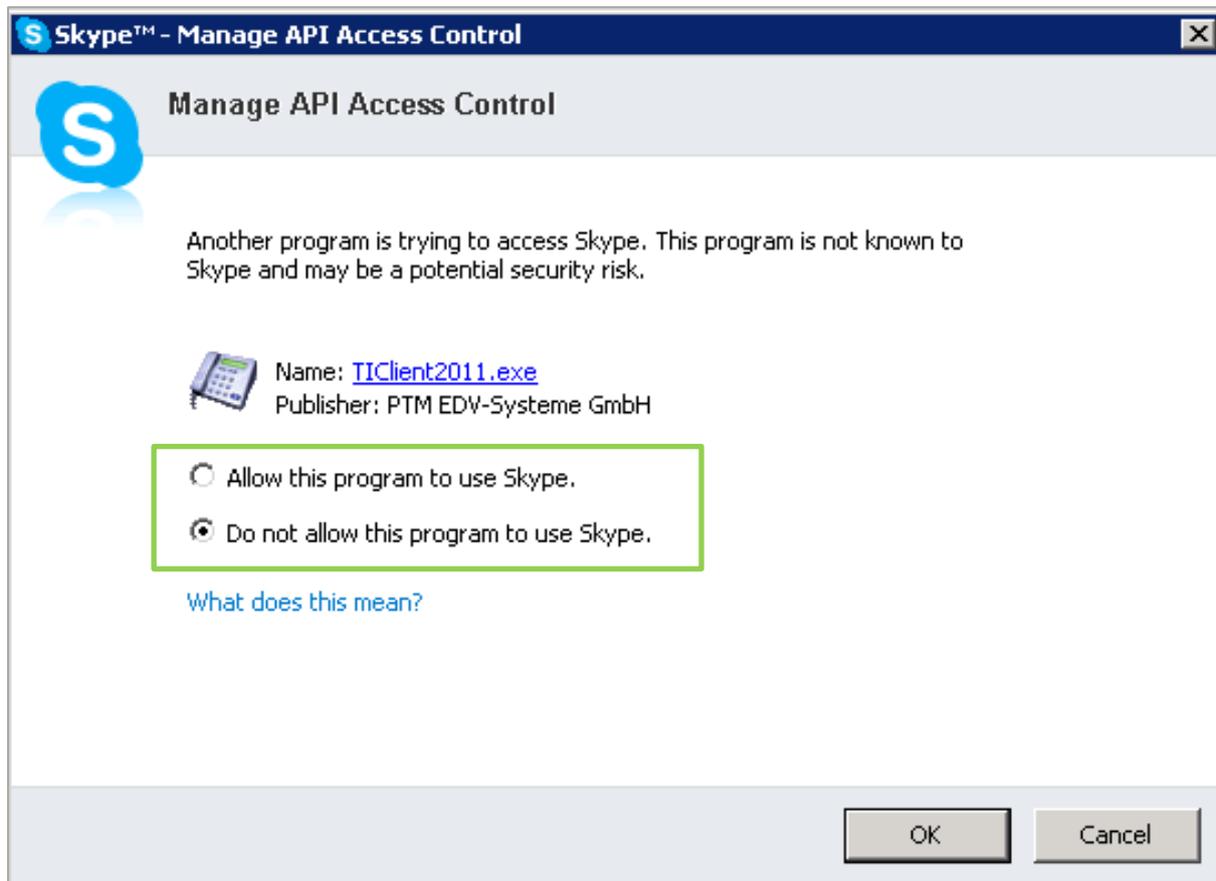
1. Click on "Manage other programs' access to Skype".



2. "Manually Manage API Access Control" pops up. Click on "Change" button:



3. Choose if you want to allow the program access to the Skype Client.



## 9.4 OSC Wrapper

**Telephone Integration Setup**
✕

Behaviour
Balloon
TAPI
SkypeWrapper
OCSWrapper
Lync2010
Lync2013
Simulation
TAPI2
RingC

External Incoming Calls

Activate

Default plugin ↻

External Outgoing calls

Status: OCSWrapper Disabled

Configuration
Log

Use currently logged on user

Active Directory Logon Name: \*

Active Directory Password: \*

Domain: \*

Communications Server or Pool: \*

Transport Type: \*  TCP  TLS

User SIP URI: \* sip:

Mediation/remote Call Control Server:

Enterprise Voice

Line URI: \*

Phone Number (w/o Extension): \*

Phone Extension: \*

Audio Input Device:

Audio Output Device:

\* Required

SetupConnection

Save

All fields marked with an asterisk ( \* ) must be provided with the correct information, otherwise the wrapper will not be able to sign into the OCS system properly.

A corresponding error message is shown if you are missing some values.

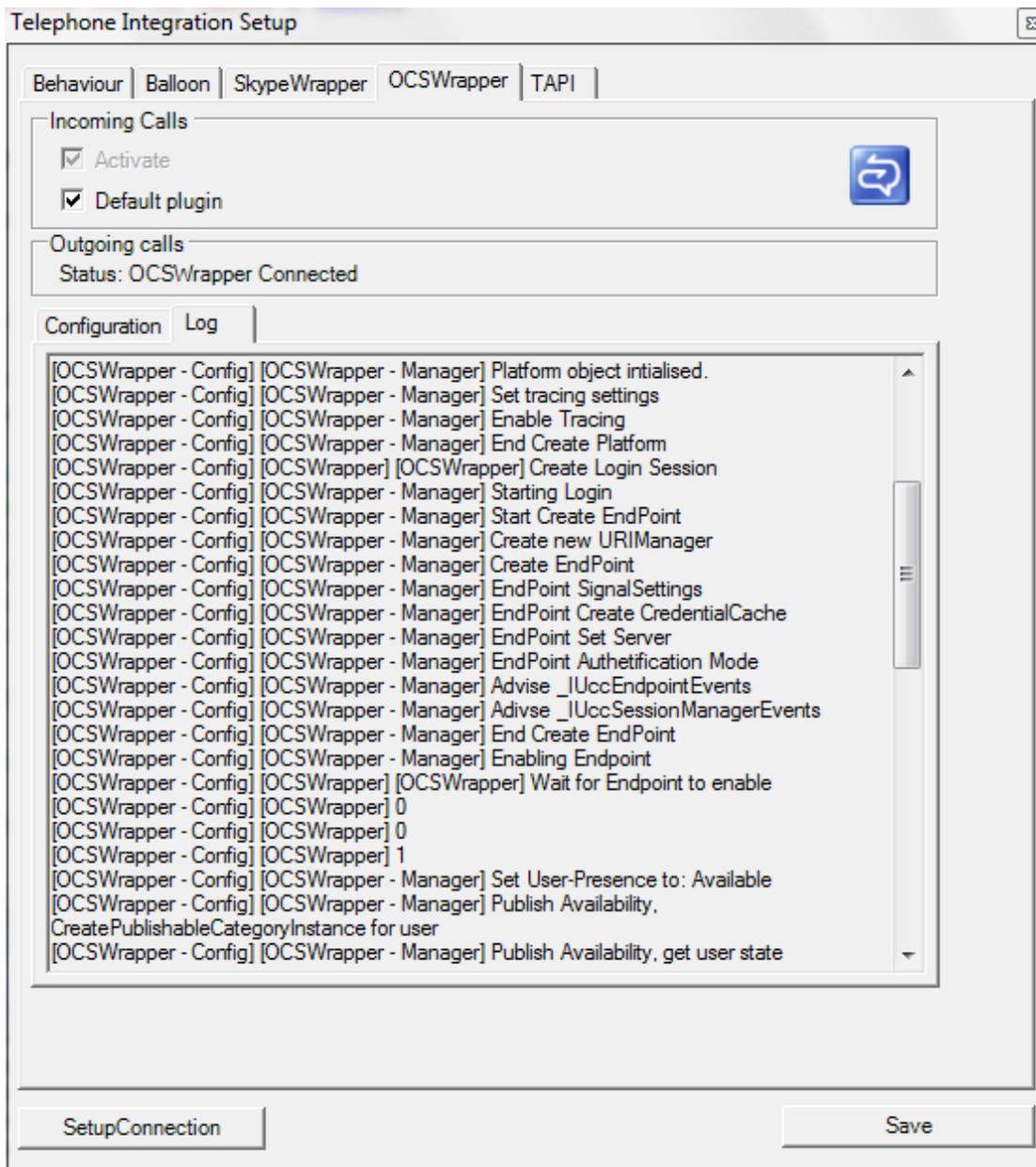
The login information should be provided as follows:

- Active Directory Logon Name
  - Regular Active Directory username
- Active Directory Password
  - Regular Active Directory user password
- Domain
  - The Active Directory domain (e.g. mydomain.com)
- Communications Server or Pool
  - OCS Frontend server name (e.g. ocs.mydomain.com)
- Transport Type
  - Type of connection used by OCS system
- User SIP URI
  - The SIP URI for that user.  
(e.g. 'sip:myFirstname.MySecondName@myDomain.com')
- Mediation/Remote Call Control Server
  - Mediation or telephone control server name (e.g. callcontrol.mydomain.com)
- Enterprise Voice
  - A checkbox indicating if the Enterprise Voice configuration is configured for the OCS users. If this is left unchecked, a Remote Call Control scenario is assumed to be set up.
- Line URI
  - The Line URI from the telephony settings of the communications tab in the Active Directory user configuration. Usually formatted similar to this: "tel:+43316123456123" or "tel:+43316123456123;ext=123".
- Phone Number (w/o Extension)
  - The basic telephone number **without** extension (e.g. +43316123456). The extension is usually a user's internal telephone number.
- Extension
  - The extension of the telephone or internal number that should be used to route calls to/from
- Audio Input/output Devices
  - When using the Enterprise Voice feature of OCS, these fields can be used to select the audio devices. This means it is possible to carry out an audio session from TI without having the Office Communicator Client installed. However, this will only work for the OCS calls within the Enterprise Voice environment. The Remote Call Control audio sessions use the configured telephone.

The "Load parameters from AD" button attempts to populate the fields from the Active Directory, making the initial configuration easier. The values obtained from the Active Directory should be checked before saving as this feature only provides a "best-effort" result. The Transport Type and Enterprise Voice configuration are not read from the Active Directory.

The "Test" button allows you to test the connection using the newly entered credentials. It will take a short while to complete the test and will give a success or failure message. During this test, the OCS Wrapper will provide output on the "Log" tab. Any errors or problems that make the connection test fail are reported here (the log is cleared before each test).

Per default the OCS Wrapper is not activated. Activating it will register UccApi.dll and this can potentially cause conflicts with your Lync 2013 clients. Activate this only if you are sure that you do not have Lync2013 client installed on your PC.

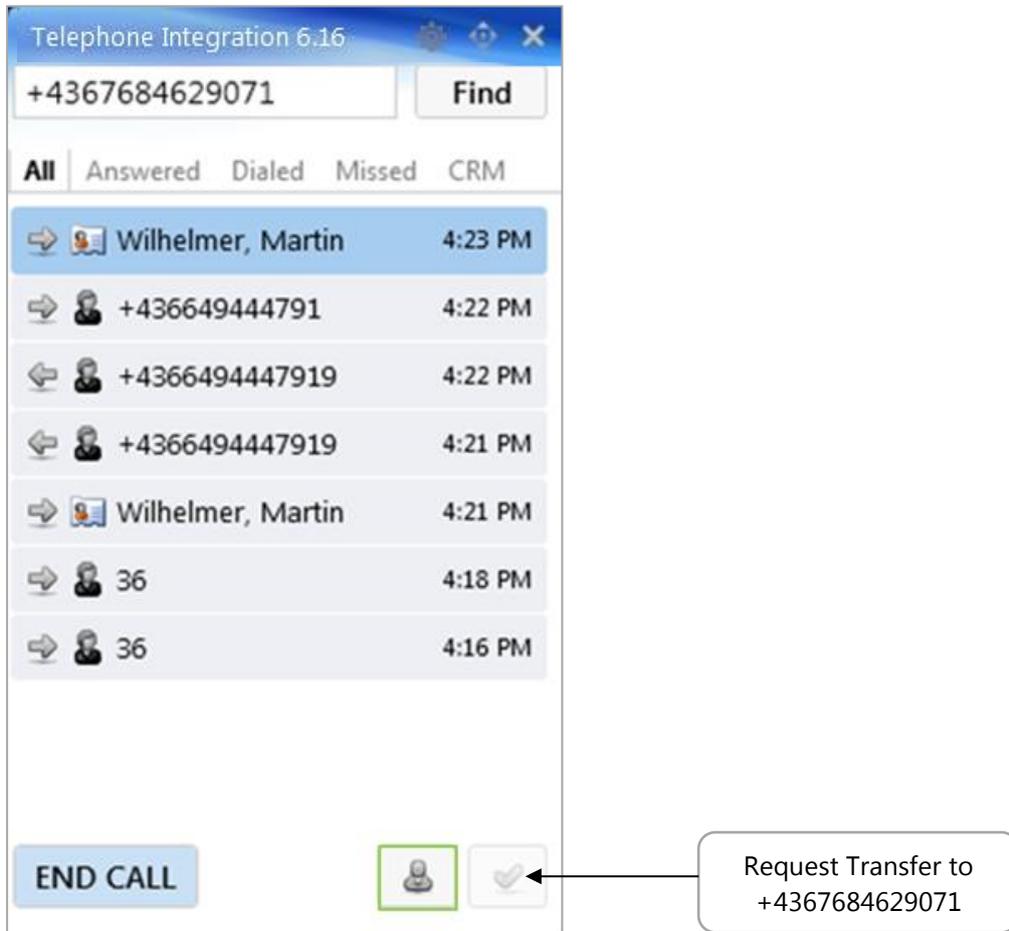


## 9.4.1 OCS Transfer Call

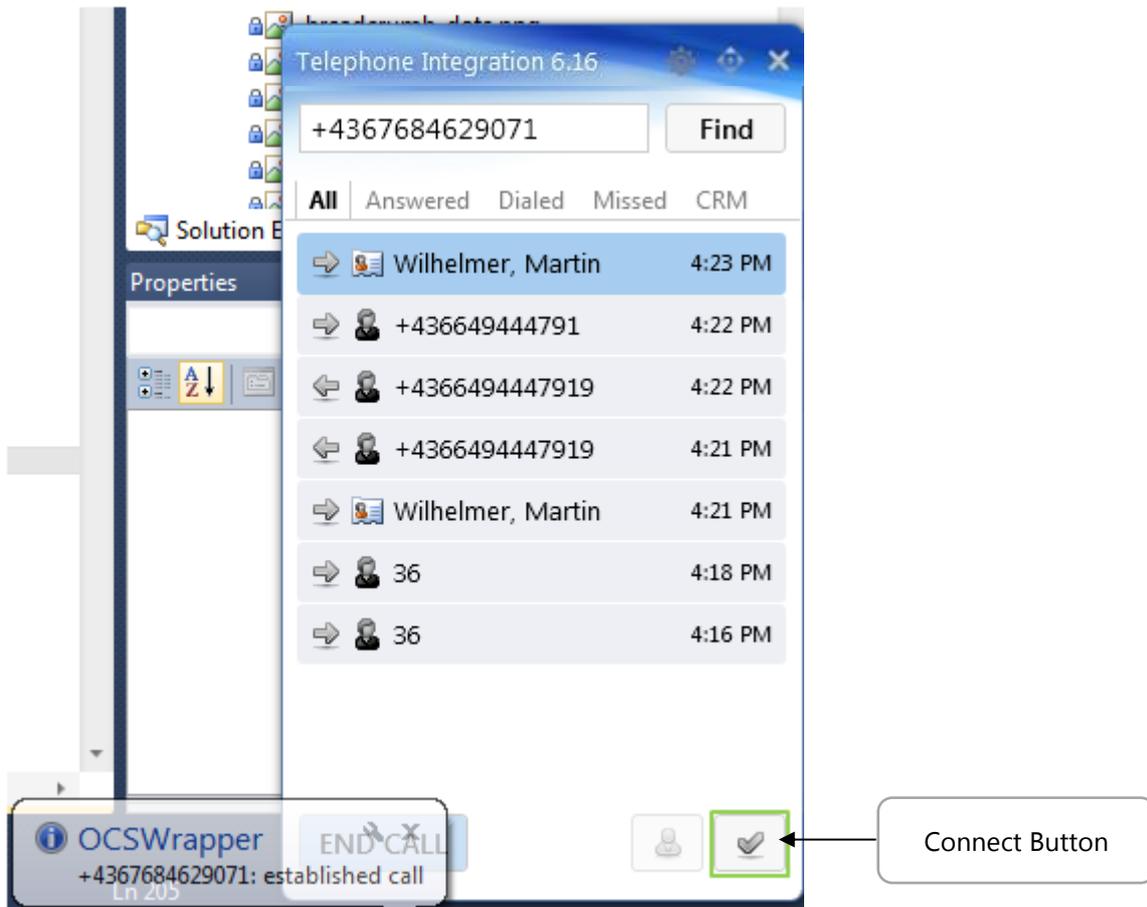
**Transferring the call**

After accepting or initiating an audio call, you have the possibility, to transfer the existing active call to a third party.

Type in a phone number and a new button will become visible in the bottom-right corner.



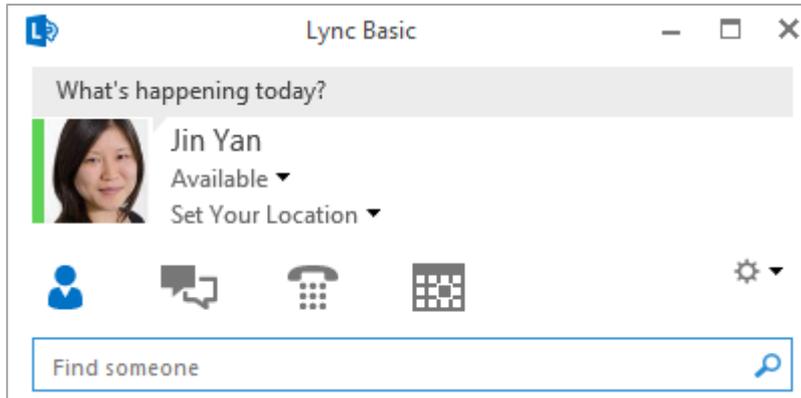
By clicking on the button, a new call is being established from you to the third participant +4367684629071. After the third party participant accepts your consulting call, you receive notification about it and a new visible button (see next page). You can use that functionality for incoming and outgoing calls.



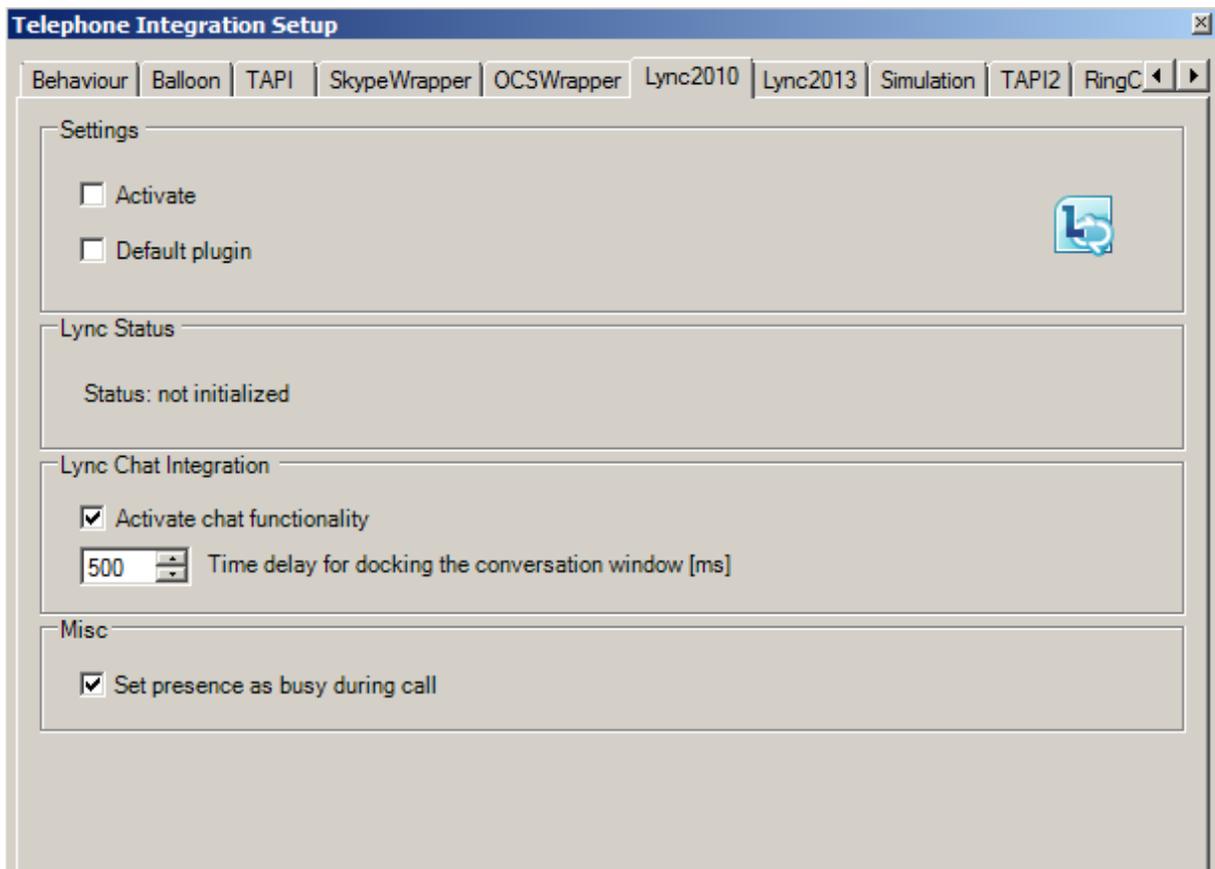
After the third party has agreed to accept the original call, press the Connect button to transfer the initial call to the third party.

## 9.5 Lync2010 Wrapper

For using the Lync2010 Wrapper, the user has to be logged in in Lync2010 or Lync2013 client. Lync2013 Wrapper works only with Lync2013 clients. Both Lync Wrapper must not be activated at the same time!!!



After that you can activate the Lync2010 Wrapper



---

### Settings (Section)

- **Activate:** Here you can activate/deactivate the Lync2010 Wrapper plugin that has a reference to your installed and signed-in Microsoft Lync client. This requires a restart of the application.
- **Default plugin:** Make Lync2010 Wrapper plugin to your default plugin. Checking this checkbox checks the "Activate"-checkbox. Only one plugin can be the default plugin.

### Lync Status (Section)

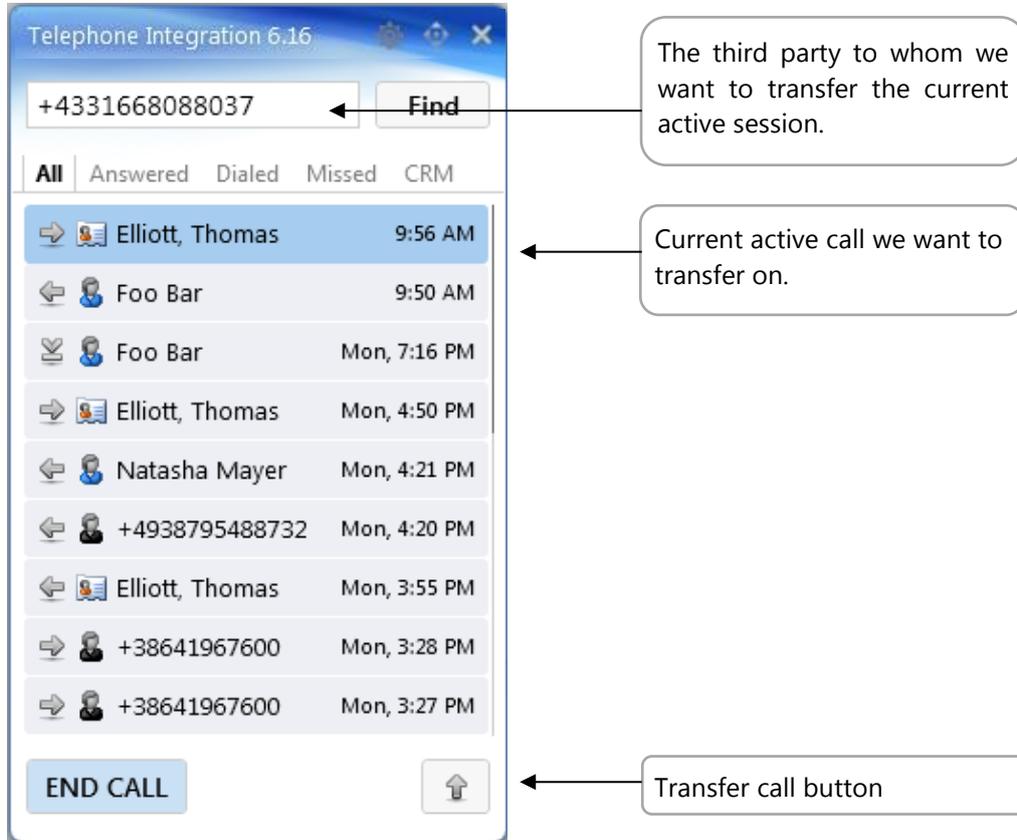
- **Status:** Shows the current status of the Lync Plugin.

### Lync Chat Integration (Section)

- **Activate:** Here you can activate/deactivate LyncChat window where all InstantMessage conversations are tabbed. LyncChat window cannot be closed unless you deactivate it.
- **Time delay for docking:** Sometimes the Lync conversation window is not yet ready to be docked into our LyncChat window and the conversation window appears as minimized. For that purpose a user can set an amount of milliseconds to delay that action.

### 9.5.1 Lynch Transfer Call

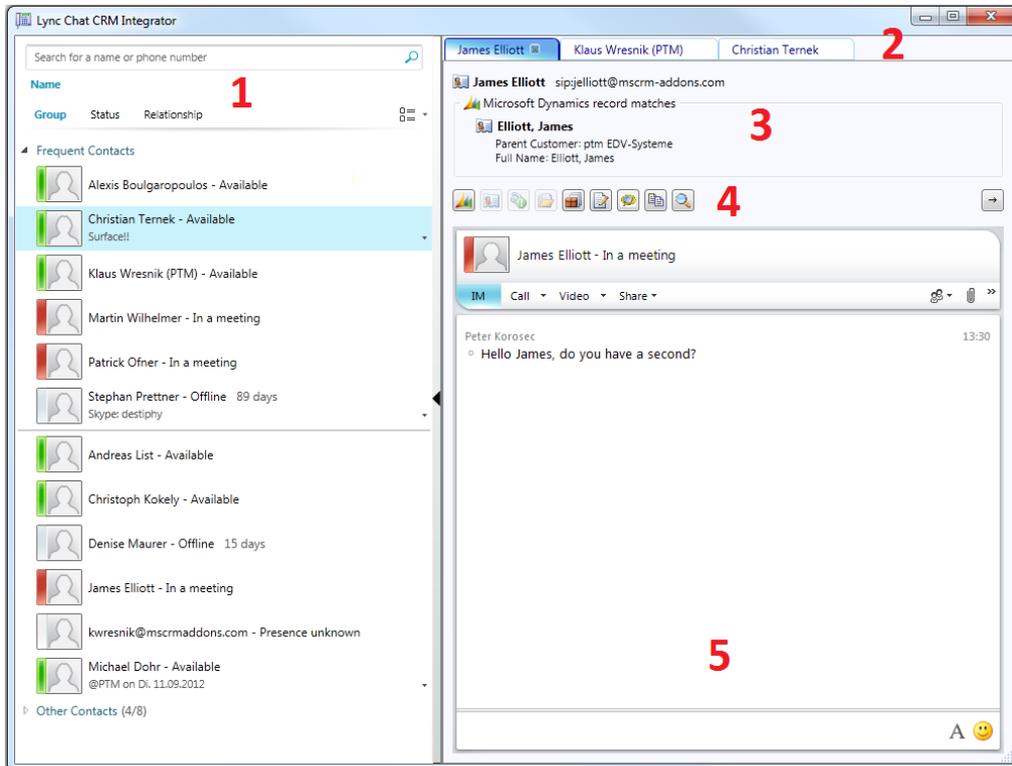
Having a connected call, you can transfer that call to a third party. For this you use the Transfer Call button (see picture)



After pressing the [Transfer Call] button, you are no longer in the call session. The original call was transferred to the third party participant +4331668088037.

## 9.5.2 LyncChat

The Lync Chat functionality allows you to have all your InstantMessage conversations collected on one tab. Based on the sip address of the remote participant you can see its correspondent CRM record (Contact, Lead, Account...)



The LyncChat window is divided into five logical sections.

**First section** represents Lync client control.

**Second section** shows all conversations tabs.

**Third section** shows CRM information for this lync contact.

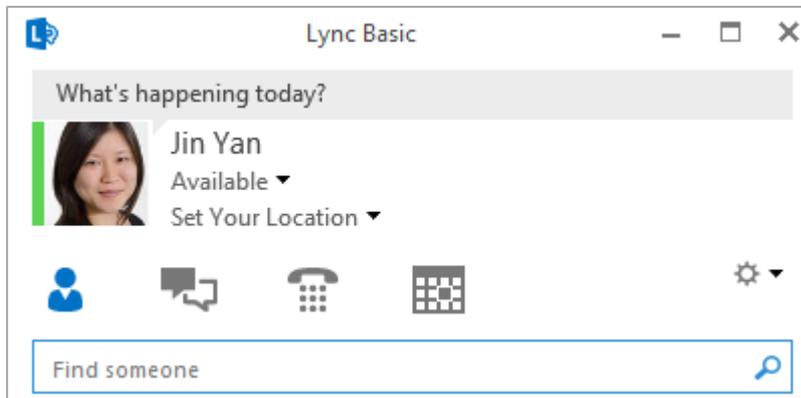
**Fourth section** contains CRM related operations like:

- Open CRM record in IE browser
- Create new Contact, Lead or Account based on this lync contact.
- Create new Case based on this lync contact.
- Create new Letter activity based on this lync contact and the chat content.
- Create new Chat activity based on this CRM record and the chat content.
- Chat activity entity is generated with TI Server part v5.28 upwards.
- Copy chat content to clipboard.

**Fifth section** contains a docked lync conversation window.

## 9.6 Lync2013 Wrapper

For using the Lync2013 Wrapper, the user has to be logged in Lync2013 client. Lync2013 Wrapper works only with Lync2013 clients. Both Lync Wrapper must not be activated at the same time!!!



After that you can activate the Lync2013 Wrapper:



### Settings (Section)

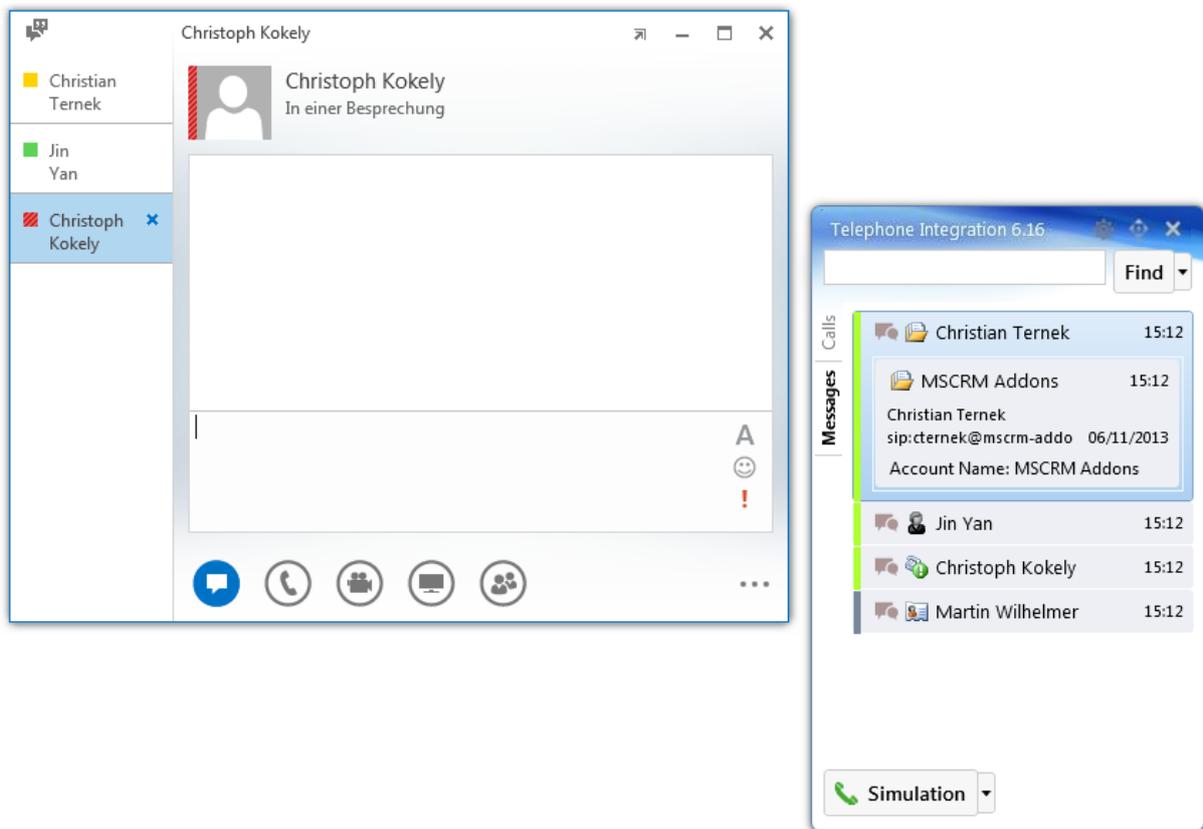
- **Activate:** Here you can activate/deactivate the Lync2013 Wrapper plugin that has a reference to your installed and signed-in Microsoft Lync2013 client. This requires a restart of the application.
- **Default plugin:** Make Lync2013 Wrapper plugin to your default plugin. Checking this checkbox checks the "Activate"-checkbox. Only one plugin can be the default plugin.

### Lync Status (Section)

- **Status:** Shows the current status of the Lync Plugin.

### Lync Chat Integration (Section)

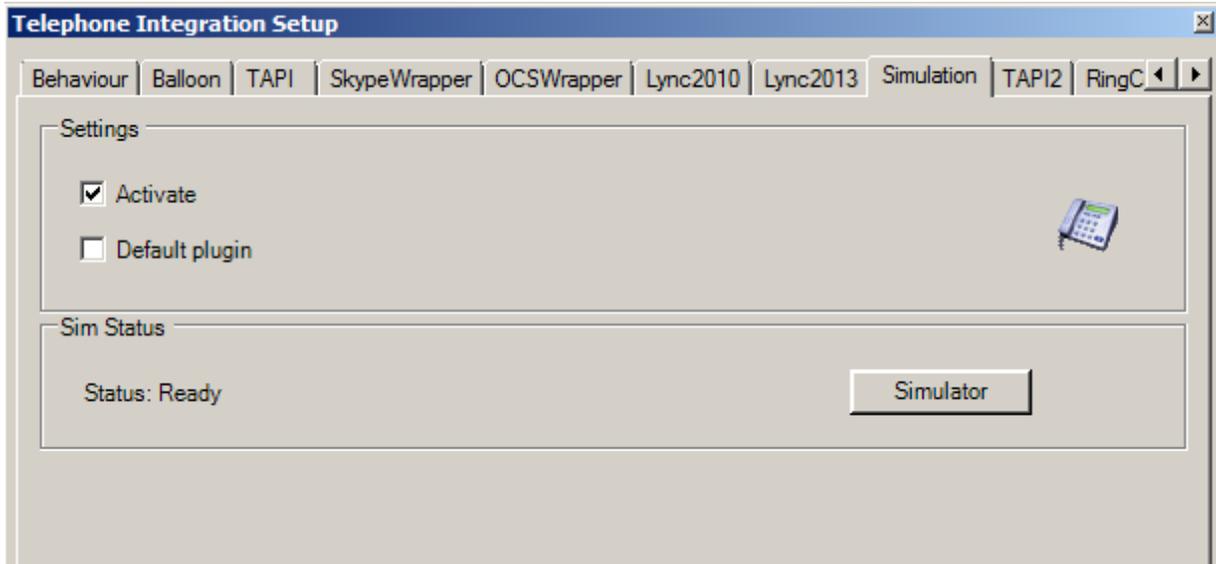
- **Activate:** always activated.



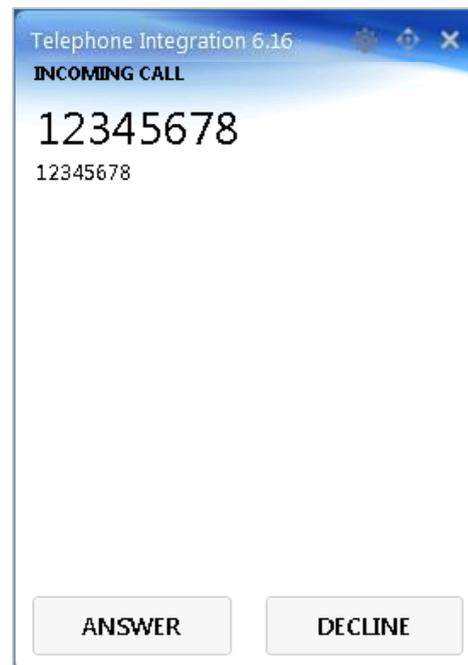
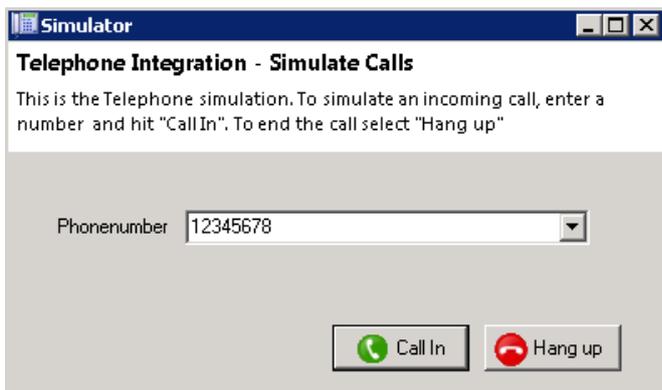
Lync2013 Wrapper keeps track of every Lync2013 conversation window, where every Lync participant is linked with the correspondent CRM record, based on its Lync SIP address. CRM field that contains Lync SIP address needs to be configured as phone field.

## 9.7 Simulation

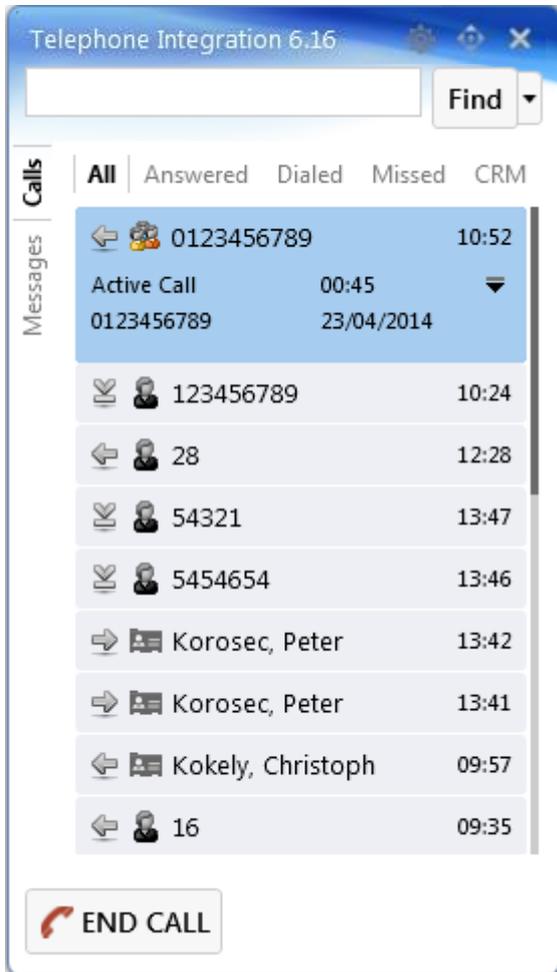
To simulate an incoming call to CTI client, you can use the Simulation Wrapper by pressing the Simulator button. For a simulation purposes you do not need to have any other wrapper activated.



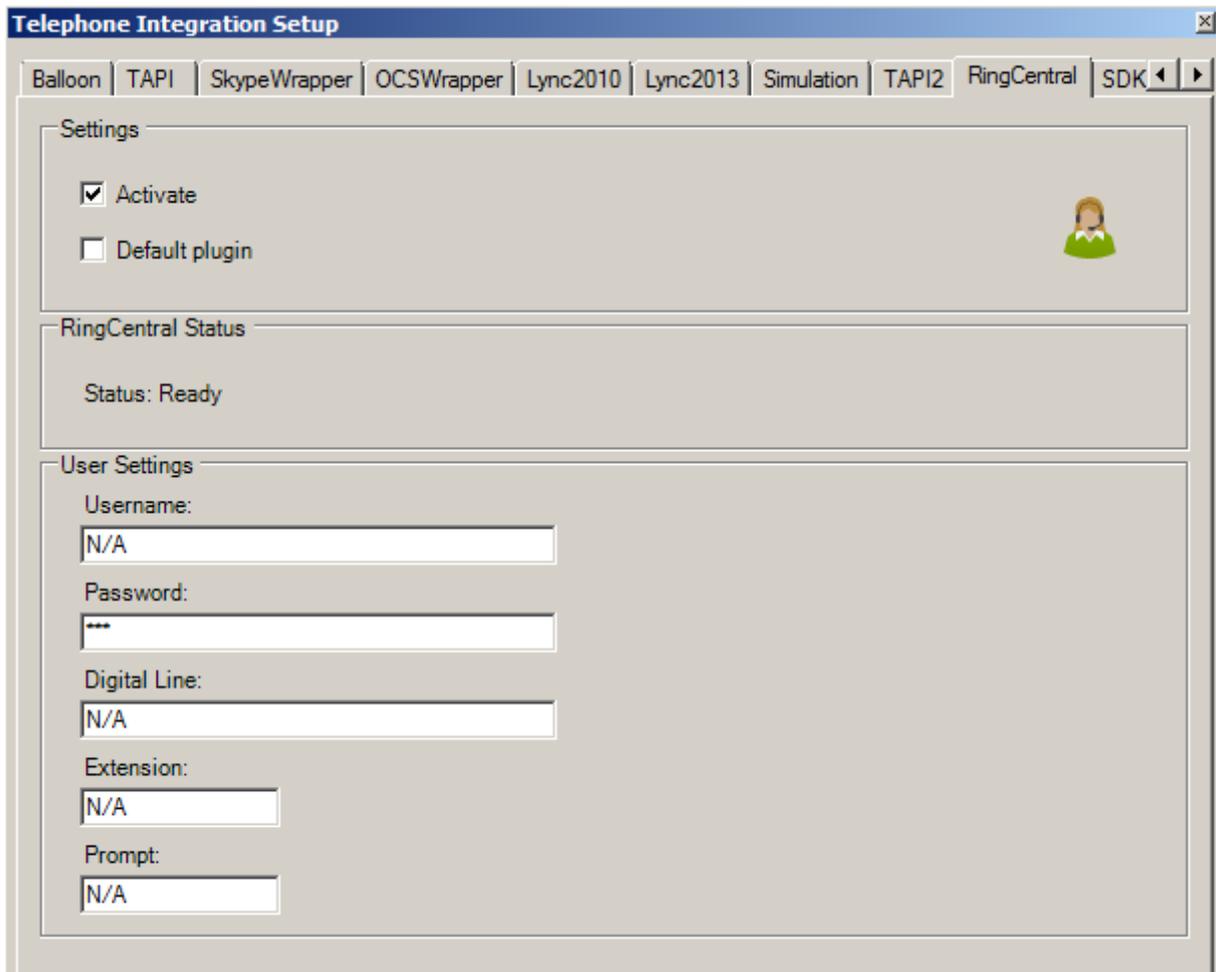
Enter a phone number to simulate an incoming call.



You can also simulate an outgoing call through our CTI client. Press the Simulation call button for this purpose.

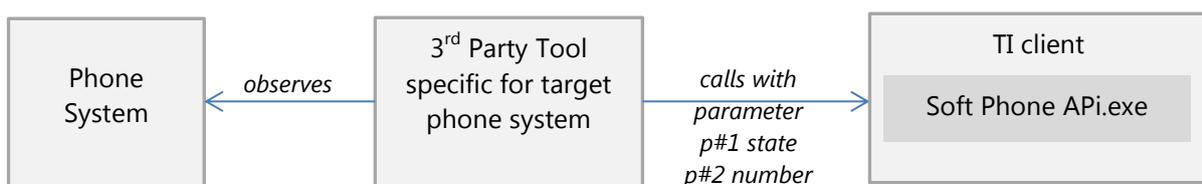


## 9.8 RingCentral Wrapper



RingCentral Wrapper provides a way for 3<sup>rd</sup> Party tools to control TI client behavior by incoming calls. The control is proceeding with calling the SoftPhoneAPI.exe with the proper parameters. The SoftPhoneAPI.exe is a part of our TI client solution and is placed in the installation path of TI client.

By 3<sup>rd</sup> Party tool we refer to phone specific softphone that has direct access to user's phone system and is able to monitor the phone call state (offering, connected, disconnected) and to fetch the caller number.



The 3<sup>rd</sup> party controller can be a softphone which extended configuration can call external applications with parameters. We don't offer 3<sup>rd</sup> party controller for your phone system. We just provide a possible way to connect your phone system with our TI client add-on.

This RingCentral Wrapper is suitable for scenario where you have a XY phone system that offers no suitable TAPI driver, but it offers a customizable softphone that is able to call external applications.

The external call is done like following:

***SoftPhoneApi.exe [paramValue1] [paramValue2]***

paramValue1 presents the state of the call and paramValue2 the phone number.

The state is represented as

- 0 ... for disconnected
- 1 ... for connected
- 6 ... for offering

Based on these simple values, combinations are possible as well:

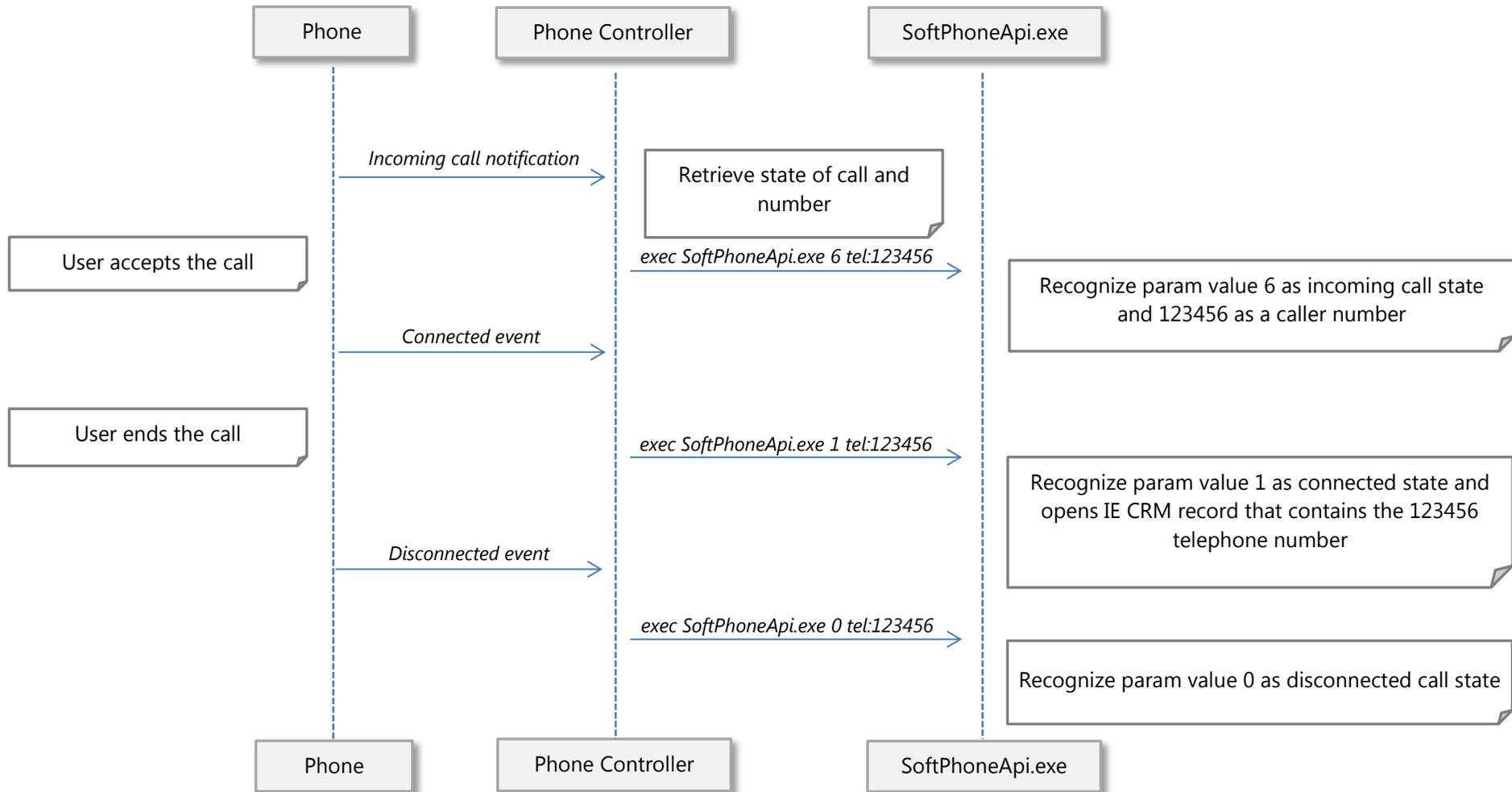
- 60 ... for offered call that was disconnected right after
- 61 ... for offered call that was connected immediately after
- 610 ... for offered call that was connected and disconnected right after.

Let's assume that you got an incoming call with a number 123456. Your softphone application will recognize incoming offering state from a number 123456. At this point it should call the SoftPhoneApi.exe with parameter 6 and parameter <tel:123456>. The prefix <tel:> can be omitted.

TI client will then try to resolve the number 123456.

If the user accepts the call, the phone controller should call the SoftPhoneApi.exe with parameter 1,, that indicates the connected state. TI client will show the 123456 call as connected call.

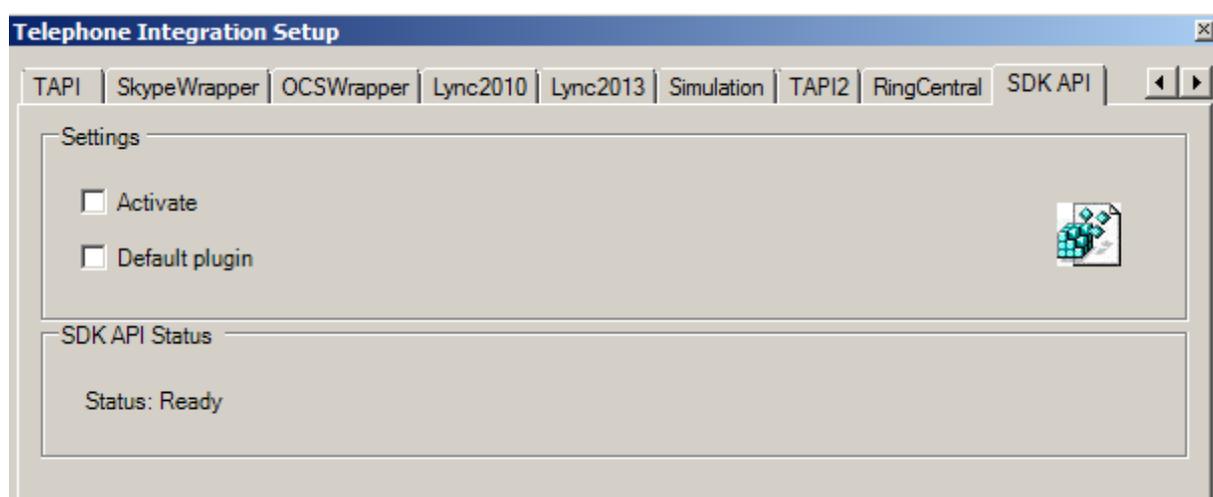
If the user rejects the call, the phone controller should call the SoftPhoneApi.exe with parameter 0, that indicates the disconnected state. TI client will show the 123456 call as disconnected.



**Restrictions:**

- RingCentralWrapper is not able to see outgoing calls that are being made from RingCentral softphone.
- RingCentralWrapper is able to initial outgoing calls over TI client balloon.
- RingCentralWrapper is able to end outgoing calls that was made over the TI client balloon.
- RingCentralWraper is not able to end outgoing calls that was not made over the TI client balloon.

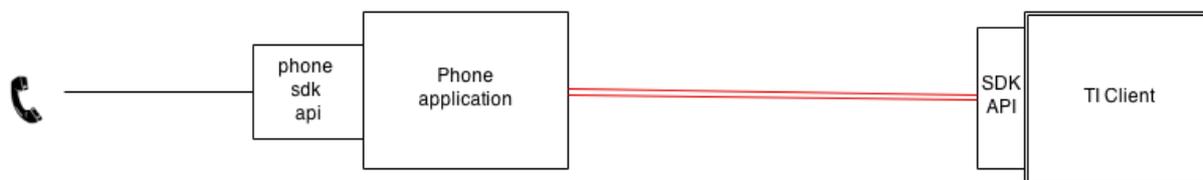
### 9.9 SDK API Plugin



SDK API plugin enables the connection between TelephoneIntegration client and a .NET application that can communicate with a specific phone device based on its specific SDK with basic phone commands:

- dialing
- answering
- ending the call

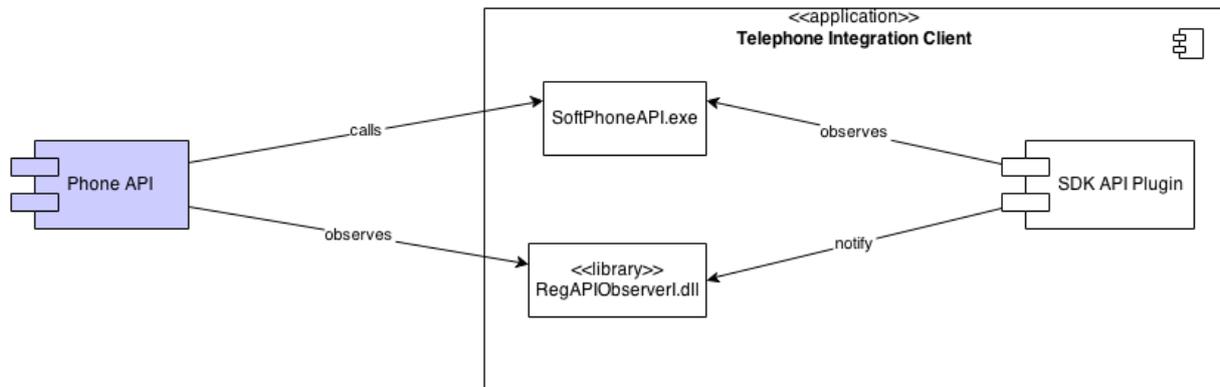
It allows third-party agents to interact with TelephoneIntegration Client.



This plugin addresses the following question from users:

*"I have a phone system for which there are no TAPI drivers, but I have a SDK .net API that enables me to connect to my phone device and control it. Is there a way that I can connect it to your TelephoneIntegration Client?"*

And the answer is yes, but a small amount of programming skills is required.



The Phone API (left) component is not a part of TelephoneIntegration Client. It is phone specific application that must be able of two things:

- to control state of phone calls on the specific phone and pass it to TI client.
  - Over *SoftPhoneAPI.exe* with proper parameters
- to observe which commands the user triggers over the TI client and pass those to the specific phones
  - Over .net *RegAPIObserver.dll* library

Whatever happens on the phone device (ringing, dialing, connected or disconnected state), the Phone API recognizes it and pass this information through *SoftPhoneAPI.exe* to TelephoneIntegration client. Whatever command (dial, answer or hang up) the user presses on the TelephoneIntegration Clients surface, Phone API can observe over the *RegAPIObserver.dll* library. The *RegAPIObserver.dll* library contains *CTICommandEvent* that hold an information about a command that was executed on the TI client.

Below is a code sample that needs to be integrated into Phone API application to observe commands on TI client side. This is addressed also as a direction from TI client to the specific phone.

First a reference to *RegAPIObserver.dll* needs to be added. This DLL library remains in the INSTALLATION path of TI client.

Then we can register to *CTICommandEvents*.

```
PTM.RegAPIObserver.Observer.SingInstance.CTICommandEvent += CTICommandEventHandler;
```

And the handler method that should contain proper actions based on the command info.

```
static void CTICommandEventHandler(object sender, TICommandEvent data)
{
    System.Console.WriteLine(sender.ToString() + ": command: "
        + data.RequestedCommand.ToString() + " " + data.RequestedData);

    switch(data.RequestedCommand)
    {
        case EnumCommand.Answer:
            // happens when user wants to answer incoming call over TI client
            // call Answer command your specific phone device

            // .....
            break;

        case EnumCommand.Dial:
            string number = data.RequestedData;
            // happens when user wants to dial out over TI client
            // dial number on your specific phone device

            // .....
            break;

        case EnumCommand.Drop:
            // happens when user wants to drop or cancel the call over TI client
            // call Drop call command on your specific phone device

            // .....
            break;

        case EnumCommand.None:
            break;

        default:
            break;
    }
}
```

This covers the direction from TelephoneIntegration client to the specific phone device.

Now the sample of code for the direction from specific phone device to TI client.

Phone API should import the phone specific DLL that enables the application to work with the specific phone device. After it connects to the phone device, the Phone API application should be able to catch the following state events:

- Dialing
- Offering
- Connected
- Disconnected

Based on the state of the phone device, the Phone API should pass this information on by executing the SoftPhoneAPI.exe with following 3 parameters:

**SoftPhoneAPI.exe /reg /state:state /tel:number**

The parameter */reg* is indicating that the ThirdPartyReg plugin is working with this call and not with the RingCentral plugin.

The parameter *number* is the number that is being dialed or offered. It is mandatory

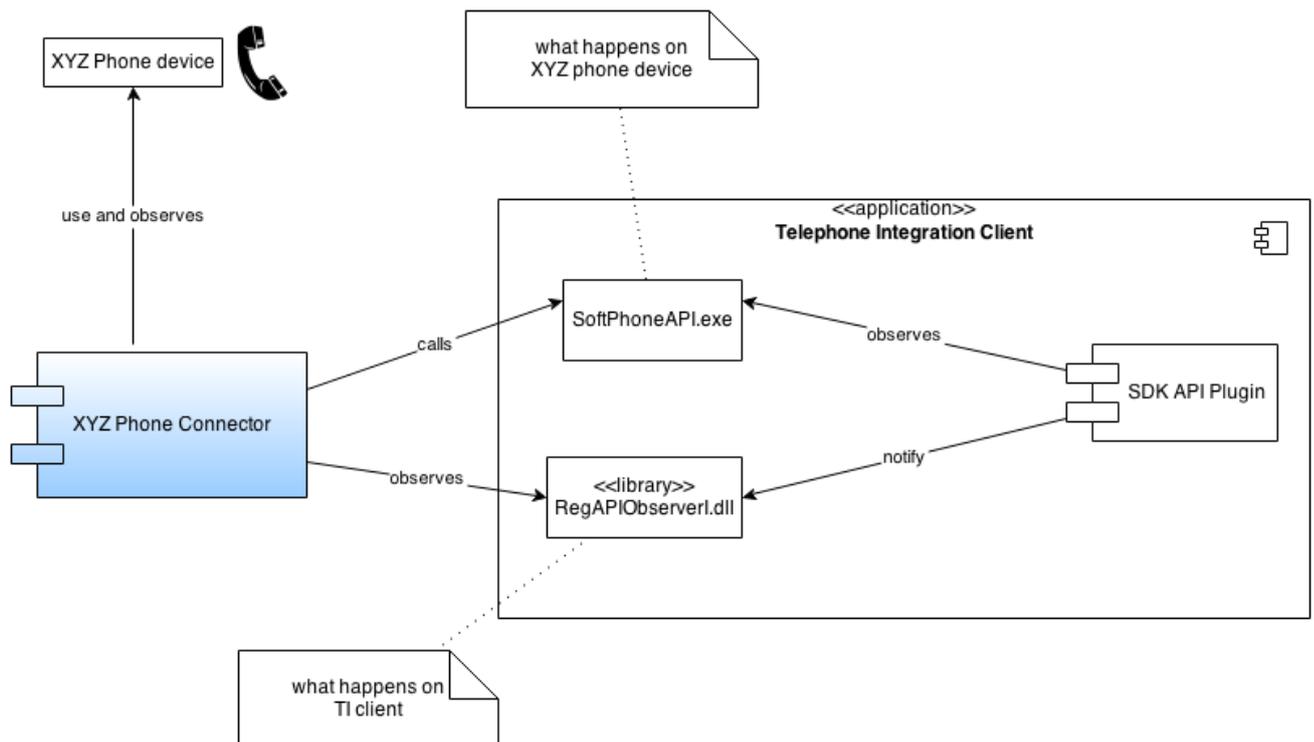
The parameter *state* can be:

- 0 - for disconnected state
- 1 - for connected state
- 6 - for offering state
- 3 - for dialing state

Also can there be combinations of it like:

- 61 – for offered call that is immediately accepted
- 60 – for offered call that is immediately rejected
- 610 - for offered calls that is immediately accepted and ended.
- 31 – for dialed call that is immediately answered
- 30 – for dialed call that is immediately rejected
- 310 – for dialed call that is immediately answered and dropped.

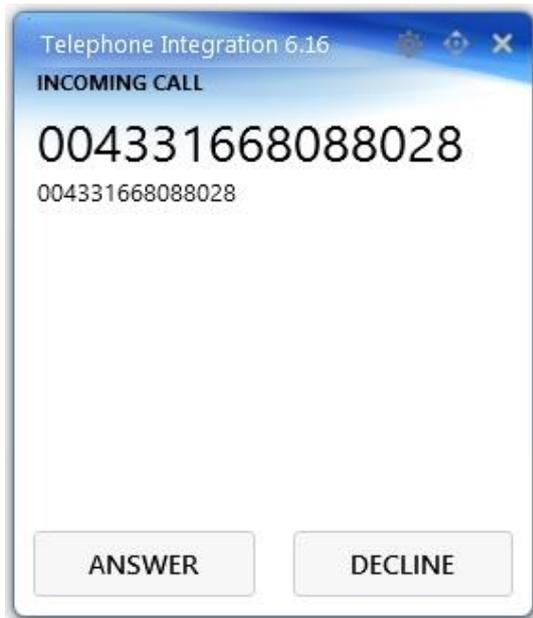
Let assume we have a XYZ phone system and a XYZ SDK API that enables us to write a XYZ Phone Connector.



In case XYZ phone device rings and the caller number is +43.316.680880-28, the XYZ Phone Connector application should execute the SoftPhoneAPI.exe as

```
>SoftPhoneAPI.exe /reg /state:6 /tel:+4331668088028
```

The TI client will show the offering state

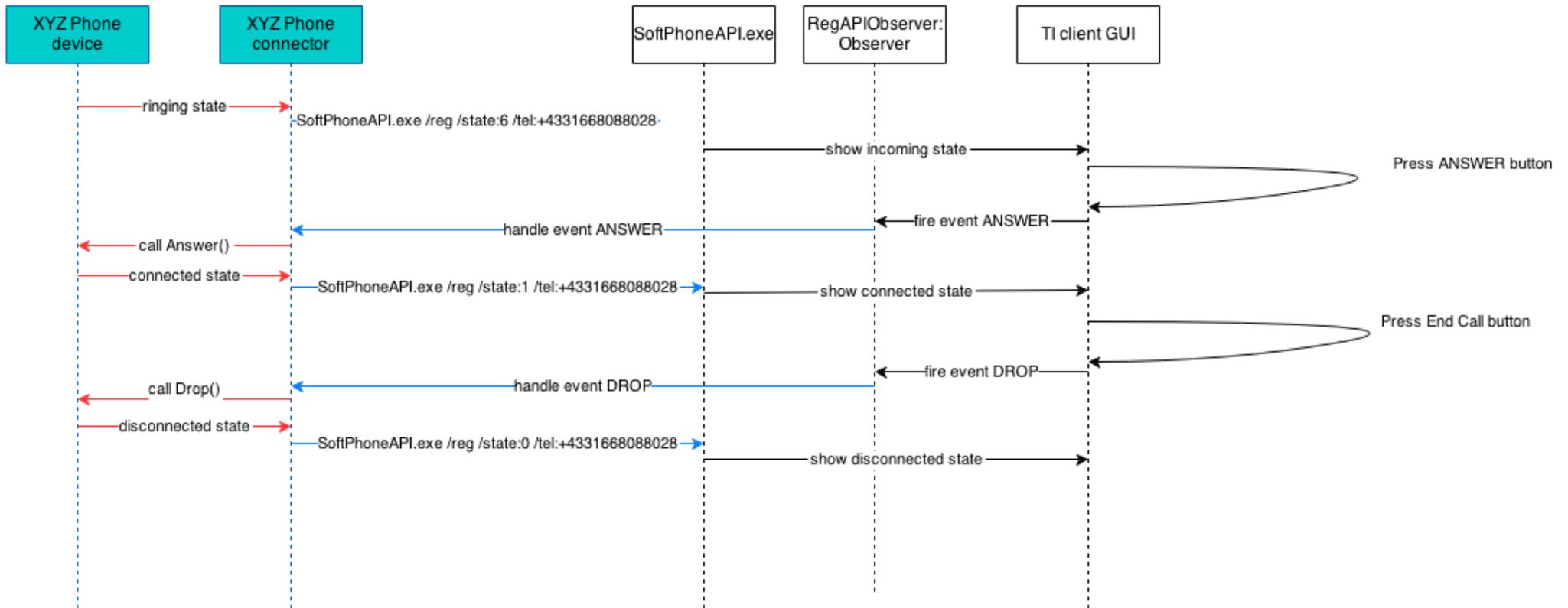


When pressing the [ANSWER] button, the TelephoneIntegration Client would trigger the event CTICommandEvent of class Observer in RegAPIObserver.dll which XYZ Phone connector can catch and pass the ANSWER command to the XZY phone device.

If the user would press the [DECLINE] button, the TelephoneIntegration Client would trigger another CTICommandEvent with command "DROP" and the XYZ Phone connector would catch this and pass it on to XYZ phone device.

If the user wants to dial over 3<sup>rd</sup> Reg plugin, the TelephoneIntegration Client would trigger the CTICommandEvent of class Observer in RegAPIObserver.dll, which the XYZ Phone connector can catch and pass the DIAL command with the number to the XYZ phone device.

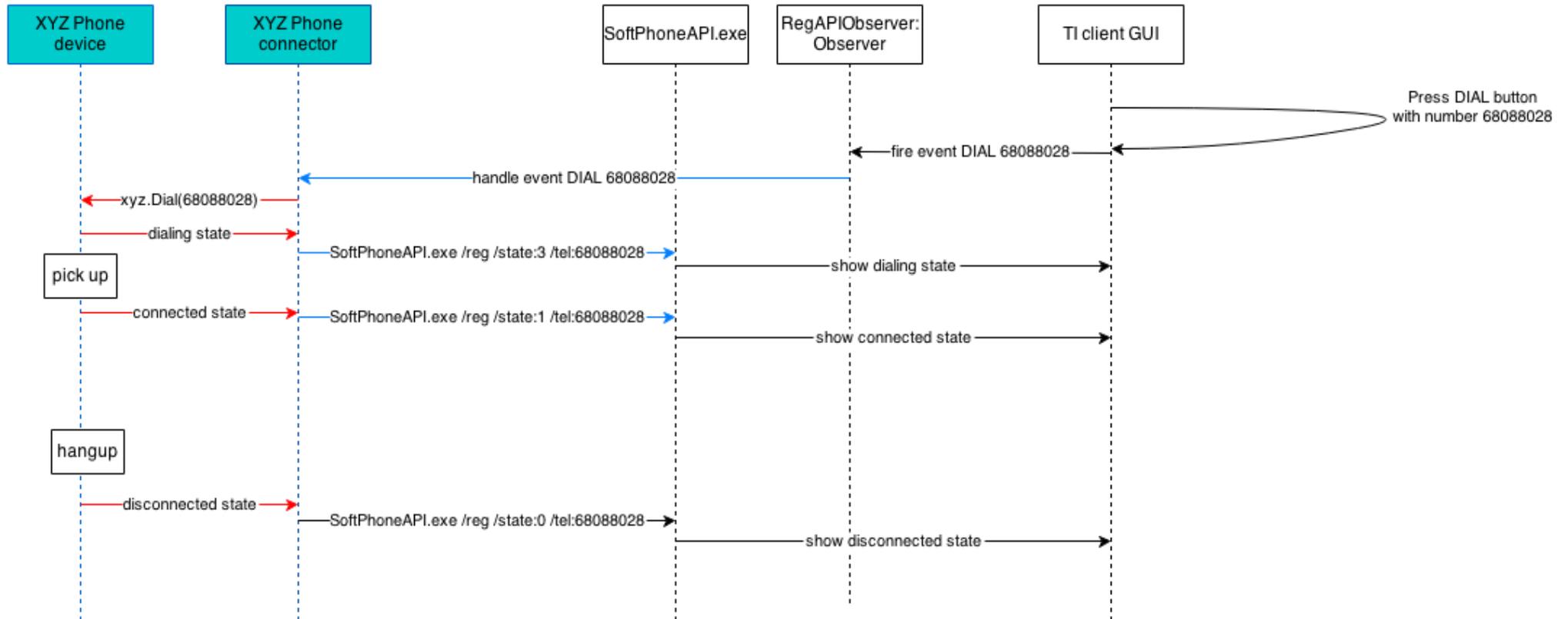
Below is a sequence diagram for an **incoming** call that is accepted and then ended through TI client balloon.



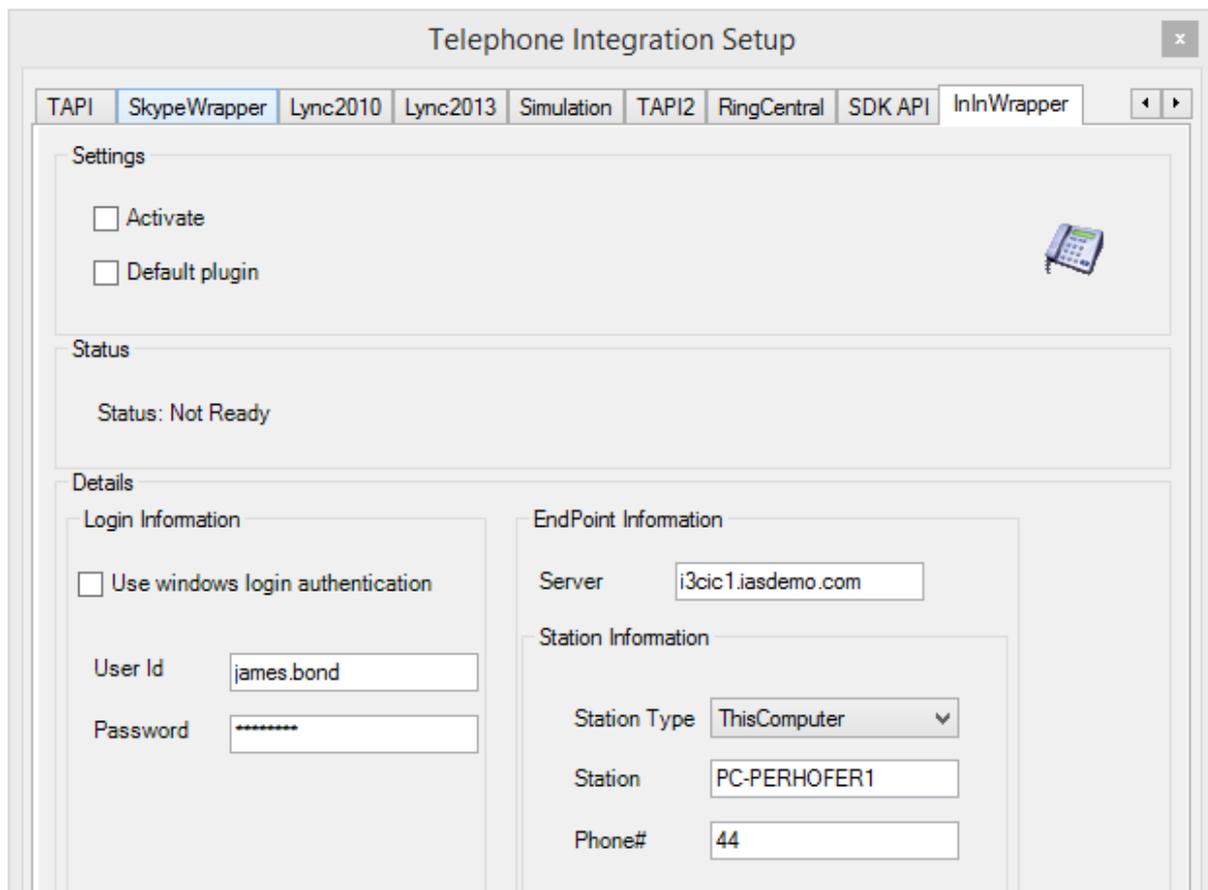
The red arrows are XYZ API specific.

The blue arrows indicate the connection between the XYZ Phone device and the TI Client.

Below is a sequence diagram for an **outgoing** call that is dialed from TI client balloon and then ended through XYZ phone device.



## 9.10 Interactive Intelligence



The screenshot shows the 'Telephone Integration Setup' window with the 'InInWrapper' tab selected. The window is divided into several sections:

- Settings:** Contains two checkboxes: 'Activate' and 'Default plugin', both of which are currently unchecked.
- Status:** Displays the text 'Status: Not Ready'.
- Details:** This section is further divided into:
  - Login Information:** Includes a checkbox for 'Use windows login authentication' (unchecked), a 'User Id' field containing 'james.bond', and a 'Password' field with masked characters.
  - EndPoint Information:** Includes a 'Server' field containing 'i3cic1.iasdemo.com'.
  - Station Information:** Includes a 'Station Type' dropdown menu set to 'ThisComputer', a 'Station' field containing 'PC-PERHOFER1', and a 'Phone#' field containing '44'.

InInWrapper enables dial out functionality for [Interactive Intelligence phone system](#). The user needs to configure its Interactive Intelligence profile:

- Username and password
- Server name
- Station Type and Name
- Phone number extension

## 10 Setup Connection

In this section it is possible to change/alter the connection to the CRM server. Note, that in a “CRM Server-Url” field you put in only a server name:port, **without** an organization name.

**Logon information**

**Welcome to your CRM Connection setup.**  
Please specify your connection details to connect to CRM. If you do not know the connection details, please contact your system administrator

CRM Connection | Advanced Settings | Log

Existing Profiles: [HKLM] crm2013 - Contoso [Manage]

Select your Crm Type:  
 Standard (onPremise)   
  IFD (Hosted)   
  Crm Online

CRM Server-Url:  
 http:// [crm2013] ✓

Authenticated as:  
 Use default Credentials **Integrated Security (CONTOSO\administrator)**  
 Username [ ] Domain [ ] Password [ ]

[Retrieve all Organizations]

Organization information:

Friendly name	Unique name	ServiceURL
Contoso	Contoso	Contoso

[Define alternative Profile] [Reset LiveID Cache] [OK] [Cancel]

## 11 Reporting and possible Syncing

All data for reporting and syncing is stored in the entity "MSCRM-ADDONS.com CTI Call History Entry".

### **Always available data:**

**ptm\_duration:** Duration of the phonecall in seconds

**ptm\_outboundcall:** Flag indicating if the call is outbound. "True" on outbound, "False" on inbound calls

**ptm\_phonenumber:** Saves the phone number as delivered by the TAPI driver! It might not match the formatting of the number saved with the entity referenced by ptm\_entityid & ptm\_entitytypecode.

**ptm\_startdatetime:** UTC time of the start of the call, this is the time when the call was initiated.

**ptm\_userid:** CRM User ID of the logged on user on the CTI.

**ptm\_wasconnected:** True if the call was picked up on both end, false if the call as either denied or not picked up at all.

### **Optional data:**

**ptm\_entityid:** If a crm entity is resolved, this field is storing the unique ID for the entity

**ptm\_entitytypecode:** If a crm entity is resolved, this field is storing the typecode for the entity, identifying the entitytype as defined in CRM (e.g. 1 for account) ptm\_entityid & ptm\_entitytypecode always exists as a pair.

**ptm\_linkedactivityid:** This field is holding the uniqueID of the CRM phone call activity, if the CTI client is setup to always store a phonecall activity. This field is NOT available if you setup the CTI Client to leave the choice of saving a phonecall to the user. This is the only definitive link between the phonecall activity and the CTI Call history item.

### **Field Templates for internal use:**

**ptm\_lastsyncdatetime:** Unused by CTI, offers a standardized field for saving timestamps for syncing operations you might want to do in your CRM. (Sync between the CTI Call History and the actual phone calls is not part of CTI Product, as it is heavily depending on your own demands and workflows)

For synchronizing the phone-call duration with the actual duration as recorded in the TelephoneIntegration history please read our blog article: <http://blogs.mscrm-addons.com/post/2013/09/19/Synchronizing-Telephone-Integration-history-with-actual-phonecalls.aspx>

## 12 Power Dialer

Power dialing is offering semi-automated call queues for CTI 2013.

Power dialing is based on CRM Campaign Activities or on a custom *power dialer list* entity.

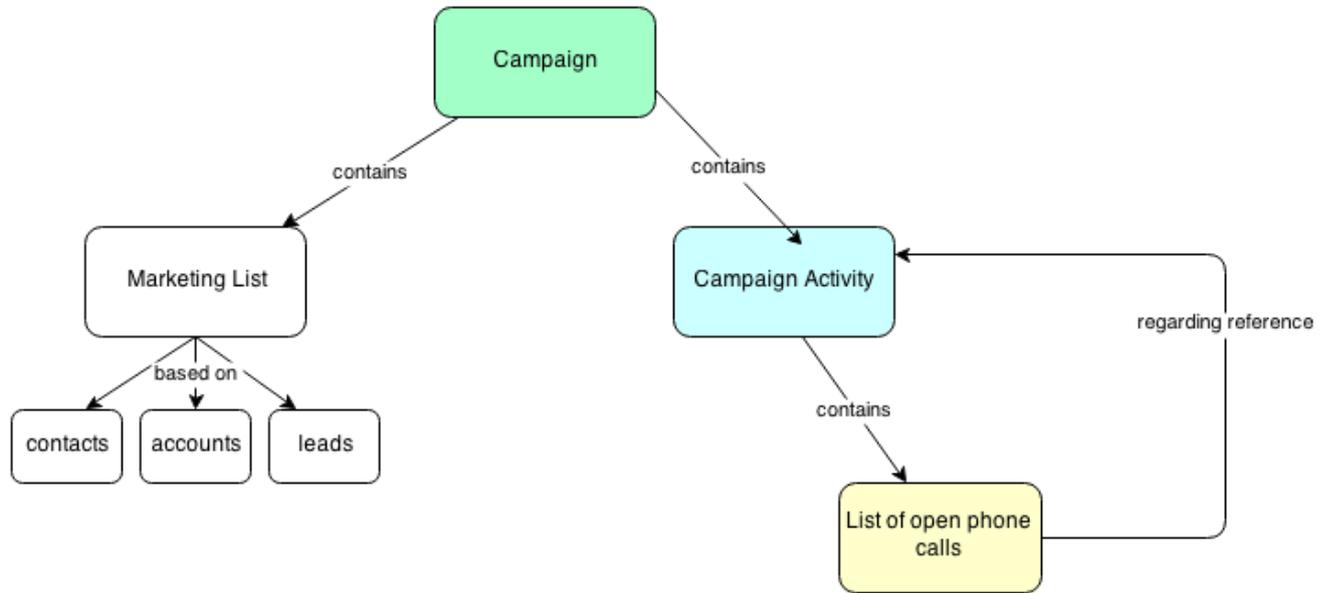


Figure: campaign-activity based power dialing.

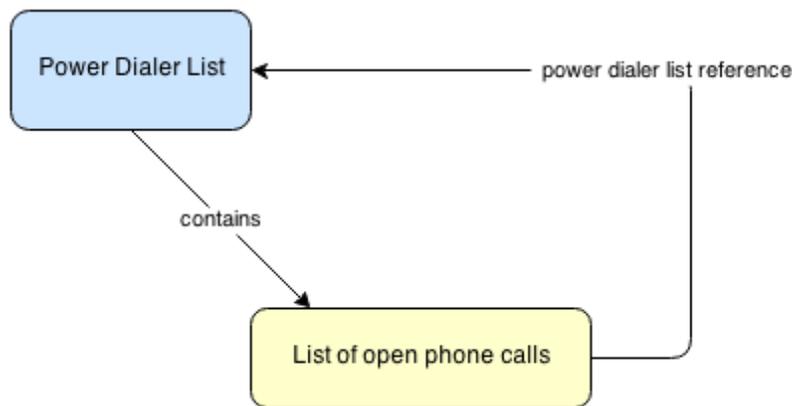


Figure: power dialer list based power dialing.

A server-side integration allows to mark CRM Campaign/Campaign Activities as power dialer lists. The TI client can attach to and process the calls attached to these power dialing lists.

The base for the Power Dialer is the extended CRM Campaign/Campaign Activity entity. The Power Dialer processes the phone calls created in the CRM call-campaign-activity. The term "Power dialing list" refers to a CRM call-campaign-activity, marked as Power Dialing list.

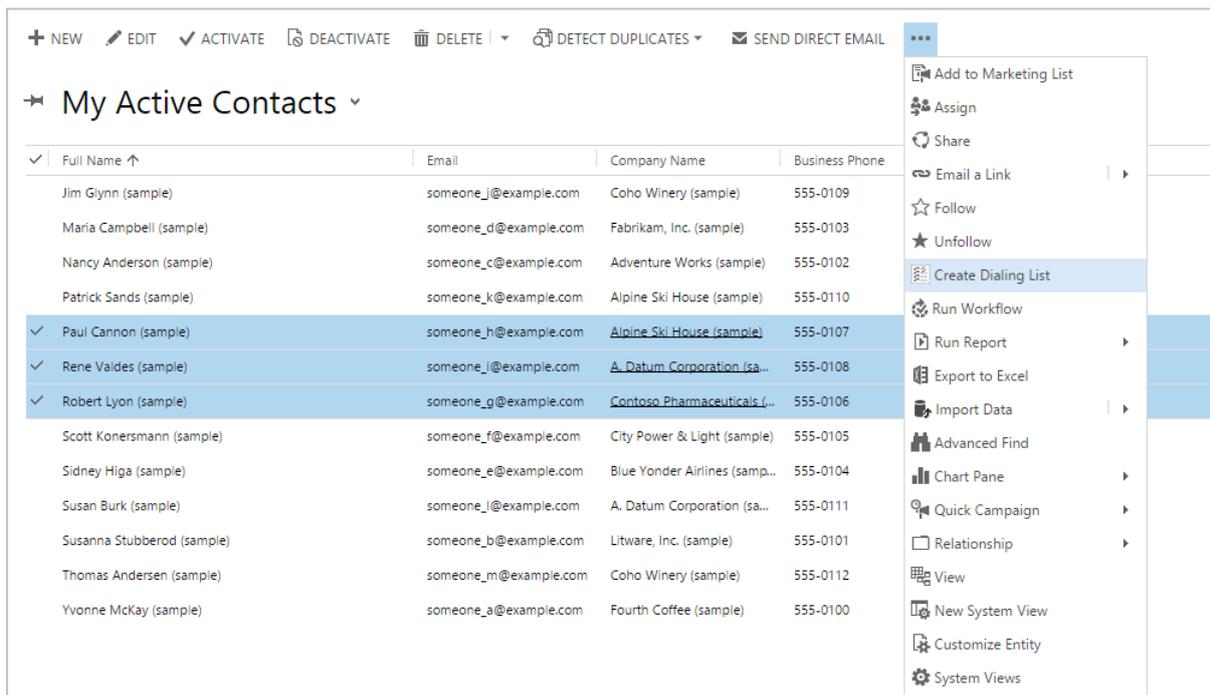
Users participating in the Power Dialer are defined via the ownership of the created phone calls of a CRM call-campaign-activity. This is either a specific user or a team. To assign multiple persons to a Power Dialer, the creation of a team in CRM settings-area is mandatory.

Creating a campaign activity based Power dialer list consists of following steps:

- Crate a marketing list of selected contacts, leads or accounts.
- Create a campaign and add the previously created marketing list.
- Create a campaign activity and distribute it to marketing list members by using the phone channel.

Creating a Power dialer list based on custom power dialer list entity consists of following steps:

- Select contacts, accounts and lead in CRM view and press *Creating Dialing Lists* button in the ribbon.



- Fill out the form and press *Create New* or *Add to existing*.

**TI PowerDialingList** ✕

Use this dialog to create a new PowerDialingList, or add new phone calls to an existing.

---

Subject

Description

- A new *power dialer list* record

POWER DIALER LIST : INFORMATION

## New PowerDialingList

**General**

Name *	<b>New PowerDialingList</b>	Description	--
Owner *	 <b>Peter Korosec</b>	Allow Crm Interactio	<b>Yes</b>
Active	<b>No</b>	Autoschedule	<b>No</b>
PreProcessing Time	--	PostProcessing Time	--

All Phone Calls ▾ + [grid icon]

Search for records

Subject ↑	Call From	Call To	Regarding	Direction	Phone Num
asking for purchase	Peter Korosec	Paul Cannon (sample)		Outgoing	
asking for purchase	Peter Korosec	Rene Valdes (sample)		Outgoing	
asking for purchase	Peter Korosec	Robert Lyon (sample)		Outgoing	

- User has to change adopt fields to its needs and then save the changes. Power dialer list record is now ready for using it in clients Power Dialer.

Now the Power Dialing functionality must be enabled in the TI Server Configuration. For details please read the next chapter.

## 12.1 Server-side Requirements

For using the Power Dialing functionality, the Power Dialing functionality must be enabled in the TI Server configuration. Changing this setting requires a restart of the client application.

The entity type of the recipient of the planned phone call must be included in the settings of Telephone Integration Server Configuration. CTI ignores all entity types that are not enabled in the Telephone Server Configuration.

The screenshot shows the 'Telephone Integration Setup' configuration window for organization 'orgd3d23ef8'. The window has a title bar and a main header area with the text: 'Welcome to the TelephoneIntegration Setup. Use this tool to setup the general ribbon integration into CRM and specify which entities should be searched by CTI and which entities should be enhanced by adding the Call functionality to its ribbon in CRM'. Below the header are two tabs: 'Crm Ribbon' and 'Advanced'. The 'Advanced' tab is selected. The configuration is organized into several sections:

- Call History options:** Contains two radio button options: 'Organization owned' (selected) and 'User Owned'. The 'Organization owned' option has the description: 'All users in the same Organization can view the Call history'. The 'User Owned' option has the description: 'Only the owner can view the Call history in CRM'.
- Lync Chat options:** Contains three dropdown menus: 'Account : Save SIP', 'Contact : Save SIP into', and 'Lead : Save SIP into'.
- Power Dialer options:** This section is highlighted with a green box. It contains a checked checkbox labeled 'Enable'. Below the checkbox is the text: 'Enabling this feature will enhance the CampaignActivity Entity in CRM with additional fields for the power dialing features of mscrm-addons.com CTI'.
- Dialing from Relations:** Contains three radio button options: 'Enabled for all users' (selected), 'Disable for all users', and 'Client side enabled'. Below these is the text: 'Dialing from relations can be enabled or disabled for all users or left to the client installations to decide on a perUser basis'.

At the bottom of the window are four buttons: 'Change', 'Configure Service', 'OK', and 'Cancel'.

When creating a call-campaign-activity, we have to set following settings:

MSCRMS-Addons Power Dialing

**General options**

Active

PD List Name Power dialing compaign activity

**Client Automatism options**

Enable Automatic Di...

Display CRM Forms

Preprocessing Time i 90 Postprocessing Time 90

Open

Please note, that the view shown in the screenshot above is only visible if you use the campaign-activity information form. See next example screenshot:

CAMPAIGN ACTIVITY : INFORMATION ▾

- **Active:** The campaign-activity is enabled as Power Dialing list
- **PD List Name:** The name of power dialing list. If none is set, the name of the campaign-activity is taken.
- **Owner:** The user or team who owns the campaign-activity.
- **Enable Automatic Dialing:** The user gets a predefined amount of time for pre-processing the call. When time runs low, the timer blinks red for alerting the user to act. In this preprocessing state, the number is automatically dialing after the predefined time runs out.
- **Display CRM Forms:** The user has access to the CRM phone-call activity form inside Power Dialer window.
- **PreProcessing Time in seconds:** Set a span in which the user can prepare for the next phone call. If automatic dialing has been enabled, a call will be started after this time has run out.
- **PostProcessing Time in seconds:** Set a span in which the user can finish the post-processing of a call (Writing a summary, triggering further actions).

TI client periodically checks for changes in the CRM campaign-activities and applies the changes to the CTI Client.

### 12.1.1 Extended Phone Call Entity

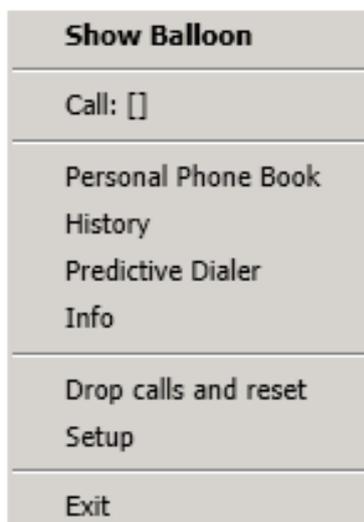
New attributes are added to phone-call entity.

- **PDState:** Collection of state values referring to power dialing.
  - Unprocessed
  - Claimed
  - Successful
  - Failed
  - Rescheduled
- **Reschedule:** Define a date and time for the rescheduled phone-call.

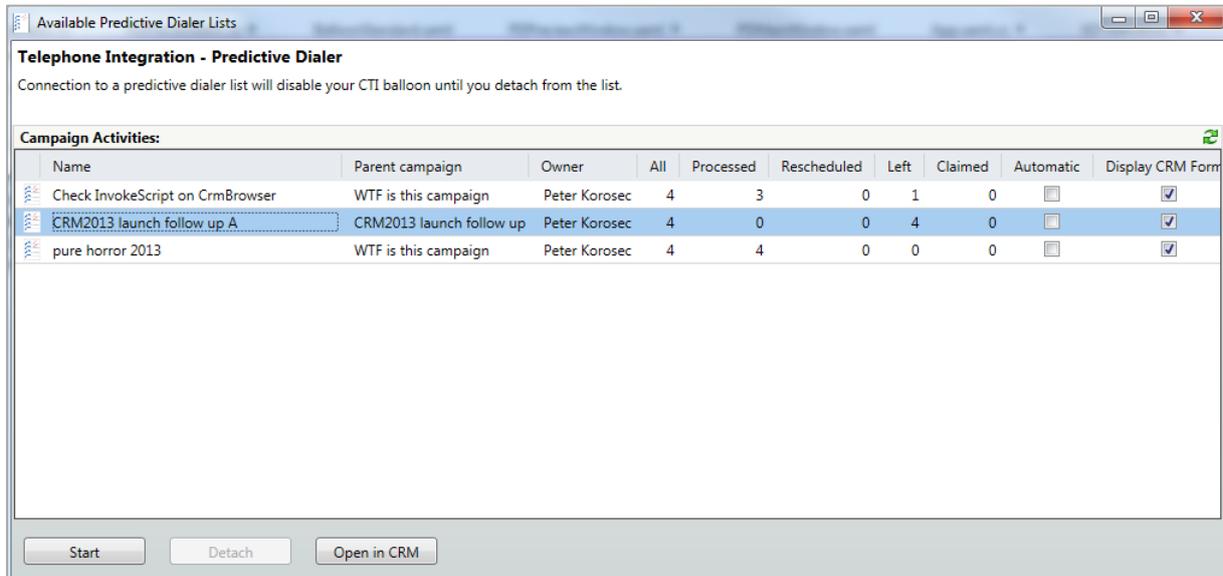
## 12.2 Starting of Power Dialer

TI Client retrieves the server-side setting "UsePowerDialing" on StartUp. If power dialing is enabled, the client checks for updates every minute. If any updates apply to the logged on user, a notification window is displayed.

You can open the Power Dialer overview window by choosing "Power Dialer" in the Application Menu.



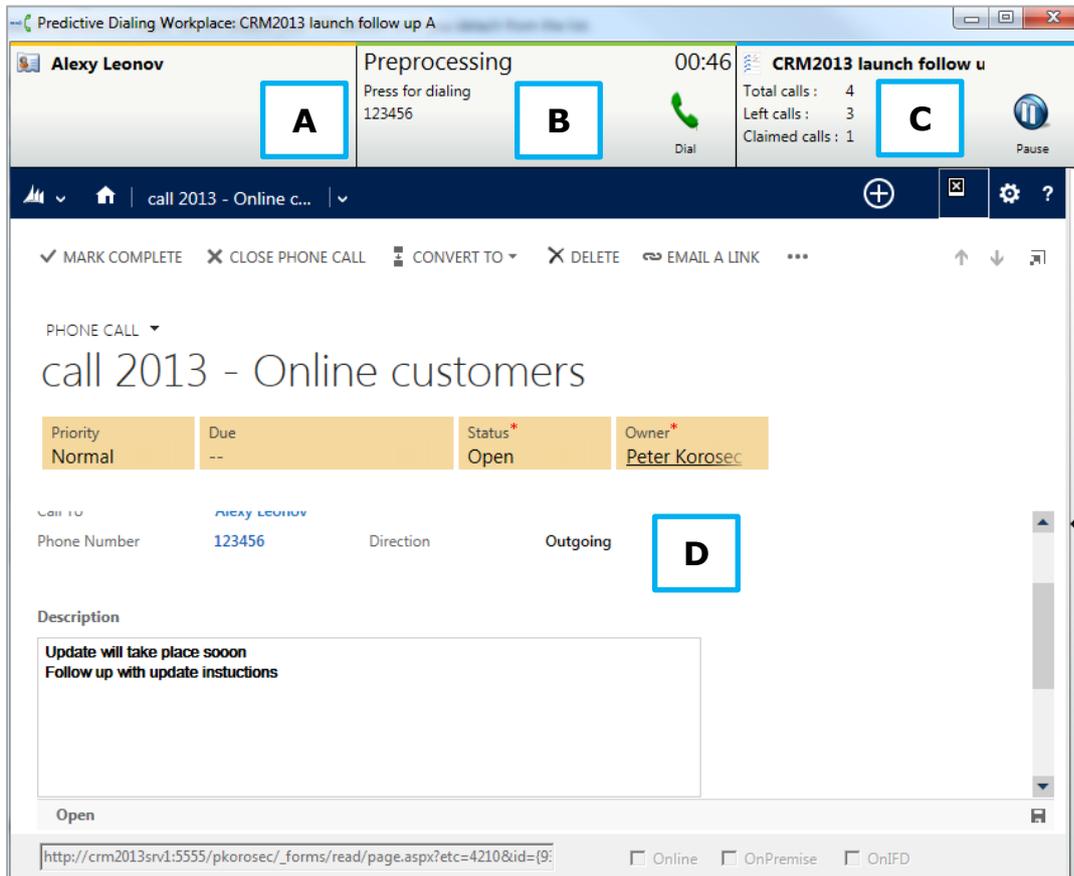
A new window with a list of active campaign-activities appears with details for each campaign-activity. This window is referred to as "Available Dialer Preview List".



- **Name:** The name of the campaign activity
- **Parent campaign:** The name of the parent campaign
- **Owner:** The owner of the campaign activity
- **All:** The number of all planned phone calls that belong to the campaign-activity.
- **Processed:** The number of all completed phone calls.
- **Rescheduled:** The number of all rescheduled phone calls. These phone calls are still open.
- **Left:** The number of all phone calls which have not been completed in this campaign-activity.
- **Claimed:** The number of all claimed phone calls. Claimed means that somebody is processing this phone call in this moment.
- **Automatic:** If automatic dialing is enabled, the presets of preprocessing and postprocessing time are handled via a countdown.
- **CRM Interaction:** If activated, users can directly interact with the planned CRM phone-call activity-form over embedded web controller.
- **First possible Call:** Date of first possible call within a power dialer list. If we have only rescheduled calls, then we take the earliest rescheduled date.
- **Is attached:** Is the user executing this campaign-activity in this moment.

Users can start (attach) to execute only one campaign activity at time. During that time, the default TI balloon is disabled. The calls of a power dialer list are processed in a separate window, known as "Power Dialer Workplace". The window is divided into 4 sections (See image below)

Detaching is possible only if the PDL client is in Pause mode. User can only activate **Pause** mode in preprocessing state.



**Section A** shows CRM information about the recipient of the planned phone call activity.

**Section B** shows the state of processing the phone call. Possible states are

- Pre-processing (user can prepare for the call)
- Active Conversation (during dialing and connected call)
- Post-processing (after ending the call)

Preprocessing state

represents the state before the recipient is called. This time span is used to prepare for that call. Preprocessing state can be attached to a timer.

Active Conversation state

represents the timespan from dialing to finishing the call.

Postprocessing state

represents the state where the call is summarized, e.g. defining the claimed call as successful, failed or reschedule the call to another date. Setting the call as successful or failed, marks the call as completed.



After you have selected one of the three options power dialer saves all user input into the existing call activity, speaks to another, unfinished call as in the preparatory state of the next call.

The time required that a user needs for pre-and post-processing phase of a call will be stored in 'Actual preparation time "or" Actual work time ".

**Section C** shows statistics about the power dialing list, like the name of power dialing list, the total number of all planned phone calls, the number of still open calls and the number of claimed phone calls.

**Section D** shows the current call or a feedback option. If "Display CRM Forms" is disabled, the CRM call-form will be replaced by a text-editor, which can be filled in by the users and which is saved as the description of the phone-call activity associated with the actual call.

### 12.3 Closing of Power Dialer Workplace

For closing (detaching from) the Power Dialer Workplace window, the Power Dialer needs to be in preprocessing state. Closing the window during an active conversation or postprocessing phase is not possible.

After closing the window, the CTI balloon is enabled again.

## 13 Troubleshooting

Blogs about troubleshooting TI client problems can be found [here](#):

Q: How to generate debug log files?

<http://blogs.mscrm-addons.com/post/2011/04/04/How-to-activate-debugging-for-Telephone-Integration-for-MS-CRM-2011.aspx>

Q: The TAPI wrapper makes no outgoing / incoming calls

<http://blogs.mscrm-addons.com/post/2011/11/28/The-TAPI-wrapper-is-not-working-properly.aspx>

Q: The Lync / OCS wrapper stop making outgoing calls.

<http://blogs.mscrm-addons.com/post/2011/11/25/The-Lync-OCS-wrapper-stop-making-outgoing-calls.aspx>

Q: How to find fields.xml settings?

<http://blogs.mscrm-addons.com/post/2011/11/25/How-to-find-the-fieldsxml-settings.aspx>

Q: The phone call activity or entity does not open.

<http://blogs.mscrm-addons.com/post/2011/11/28/By-outgoing-calls-the-Entity-or-PhoneCall-activity-will-not-open-sometimes.aspx>

Q: The CTI does not resolve the incoming / outgoing numbers correctly.

<http://blogs.mscrm-addons.com/post/2012/03/02/CTI-does-not-resolve-phone-number.aspx>

Q: Calling out from CRM by pressing Call Number button, does not react.

<http://blogs.mscrm-addons.com/post/2011/11/28/Calling-out-from-CRM-Entity-by-pressing-Call-Number-button-triggers-no-reaction.aspx>

Q: How to use TAPI Test Tool?

<http://blogs.mscrm-addons.com/post/2012/03/12/TAPI-Test-Tool.aspx>

Q: How does dialing the related CRM-Record work?

<http://blogs.mscrm-addons.com/post/2013/03/25/Setting-restrictions-by-dialing-from-relationships.aspx>

Q: How to set restrictions for dialing from a related CRM-record?

<http://blogs.mscrm-addons.com/post/2013/03/27/How-to-set-restrictions-for-dialing-from-a-related-CRM-record.aspx>

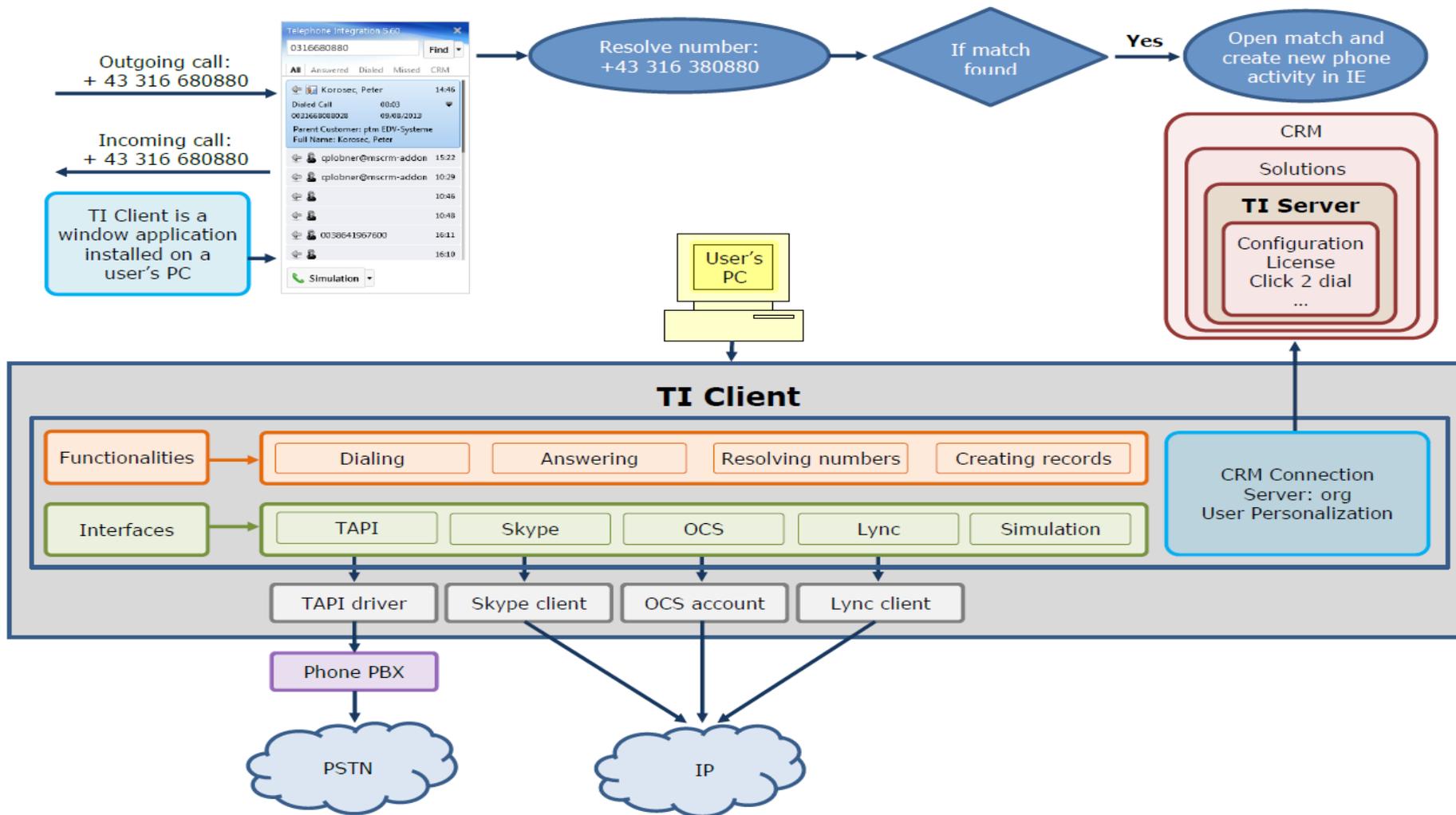
Q: How to rebuild the phone number index table?

<http://blogs.mscrm-addons.com/post/2013/07/03/How-to-rebuild-phone-number-index-table.aspx>

Q: How to synchronize phone-call duration

<http://blogs.mscrm-addons.com/post/2013/09/19/Synchronizing-Telephone-Integration-history-with-actual-phonecalls.aspx>

## 14 TelephoneIntegration Overview



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## 15 Contact

If you have questions to the product send an email to

[support@mscrm-addons.com](mailto:support@mscrm-addons.com)

or visit our blog

<http://blogs.mscrm-addons.com>

For shorten the time for solving the problem, it would be most helpful if you provide us with the following information when sending an email.

- The version number of your CTI client. Is it updated with the latest version?
- Which communication layer you use? TAPI, Skype, OCS or Lync?
- The content of file fields.xml.
- The debug log file.

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