TelephoneIntegration for MS CRM 2011

Version 5.0

User Guide
(How to work with TelephoneIntegration for MS CRM 2011)

Table of Contents

1   User Guide

This guide gives detailed explanations of all functionalities provided by **TelephoneIntegration** for MS CRM 2011.

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

2   Introduction

TelephoneIntegration for Microsoft CRM 2011 (**TI**) is a CRM Add On which enables you to connect your Telephone System (CTI) to Microsoft CRM 2011.
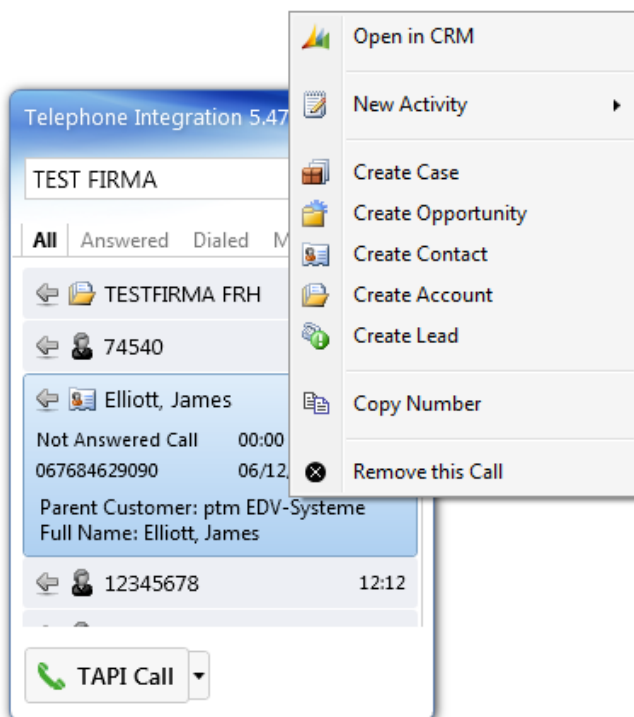
This Guide contains important information about:

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

3   Installing the TI-Client for MS CRM 2011

3.1   Prerequisites

3.2   Introduction

Run the TelephoneIntegration Client for MS CRM 2011 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
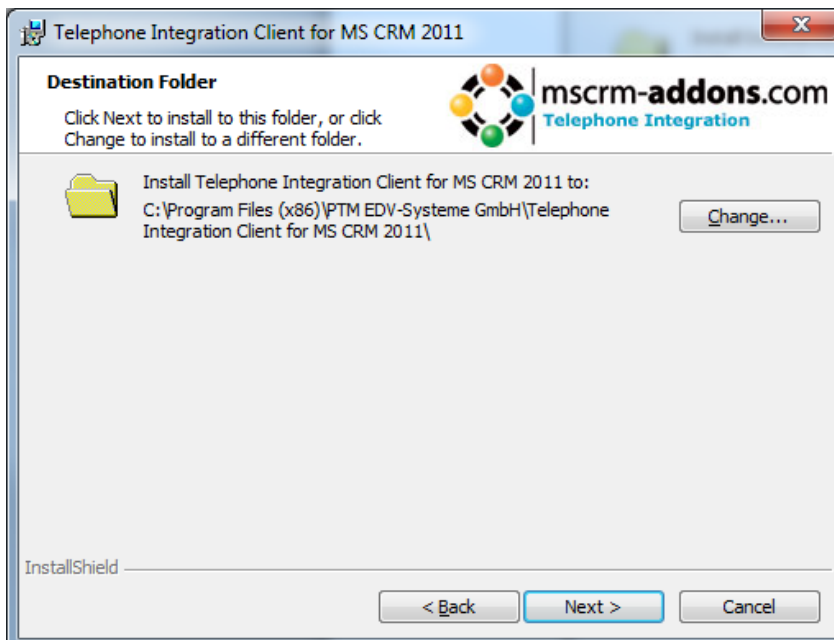
Click [Change] to specify a different installation path
Click [Next] to proceed

3.5   Start Options

Configure the start options and proceed with a click on [Next]
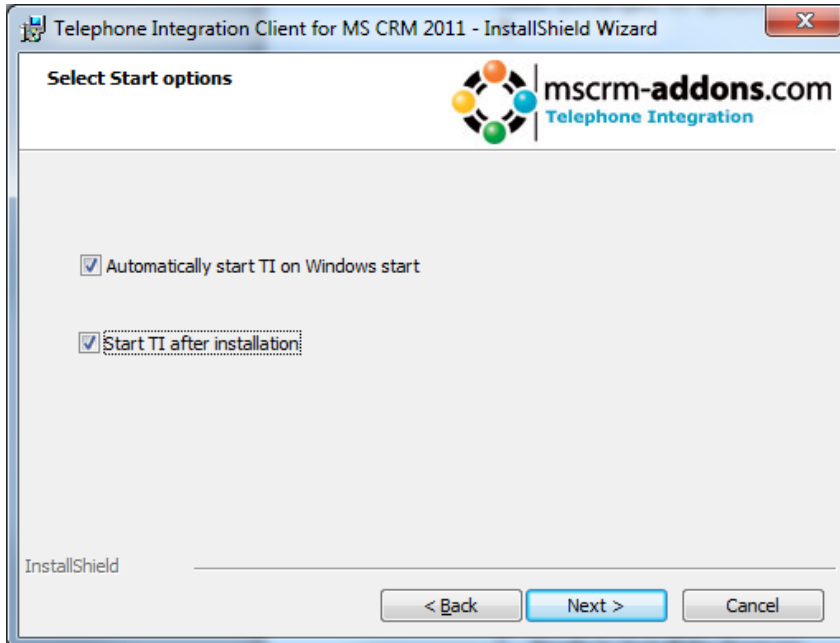
3.6   Confirm Installation
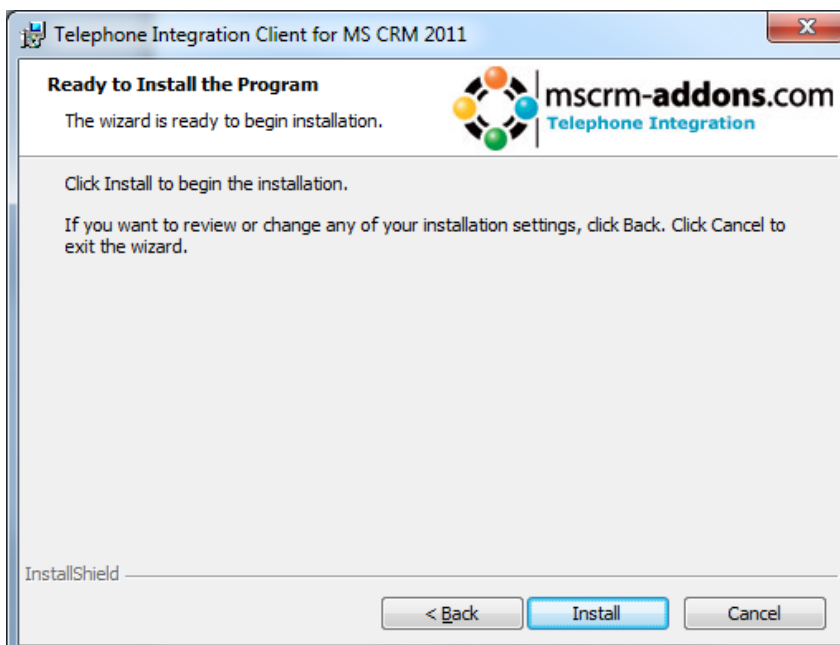
To start the installation, click on [Install].
To change the settings, click on [Back].

3.7   Install Windows Identity Foundation

In order to use TI-Client for MS CRM 2011 you first have to install Windows Identity Foundation.
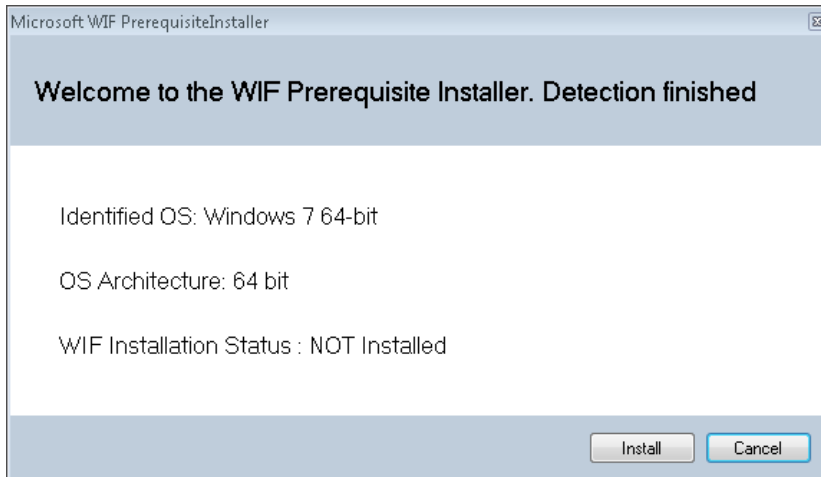
3.8   Configure CRM-Connection

To configure your CRM Server, select your Profile or create a new profile and select your CRM Server type:
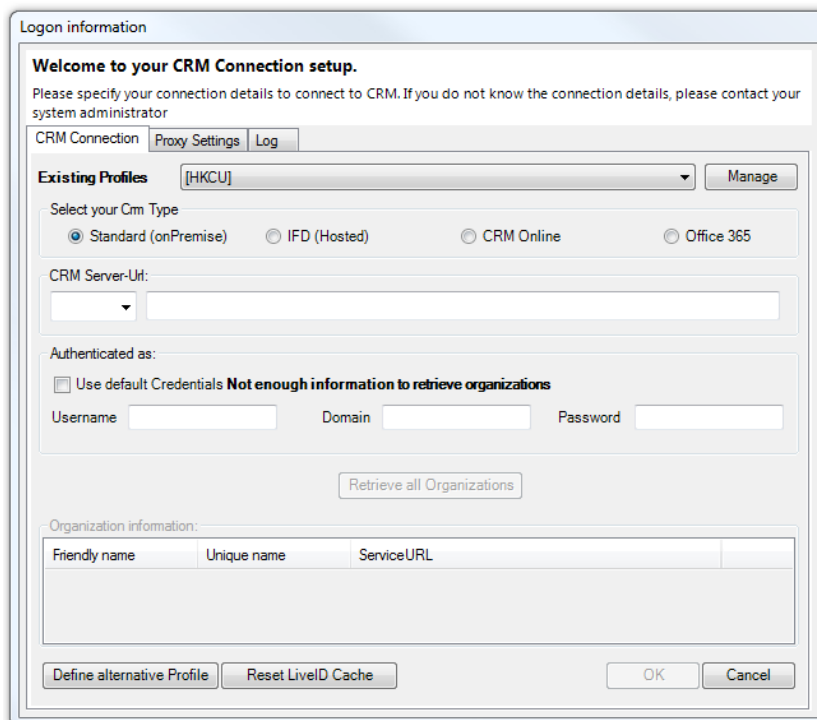
Choose the server path and add your login credentials by filling in the field's username, password and domain or choose the default credentials.

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

3.9   Configure Integrations

There are five possible interfaces that can be used with the TelephoneIntegration-Client:
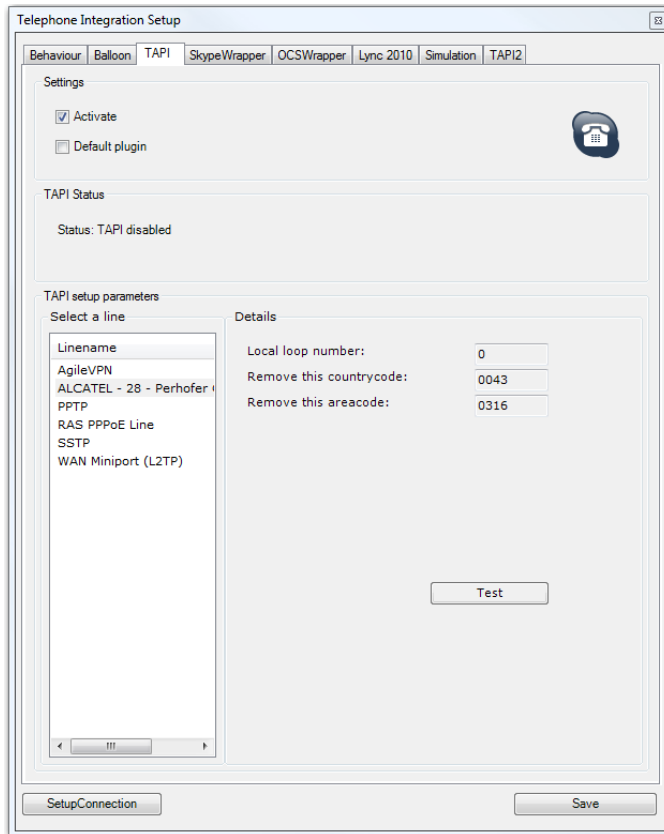
3.9.1   TAPI: direct connection via your telephone system. If an adequate driver is installed, your phone-line will appear in the "Select Line"-list. For configuration details see chapter 9.3

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   Lync: allows using the Lync Wrapper to handle calls. For configuration details see chapter 9.5

3.9.5   Simulation: allows simulating an incoming and outgoing call. For configuration details see chapter 9.6

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.

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 2011 or from the Installation Directory.

It is possible to configure the TelephoneIntegration-client to automatically start on windows-startup.
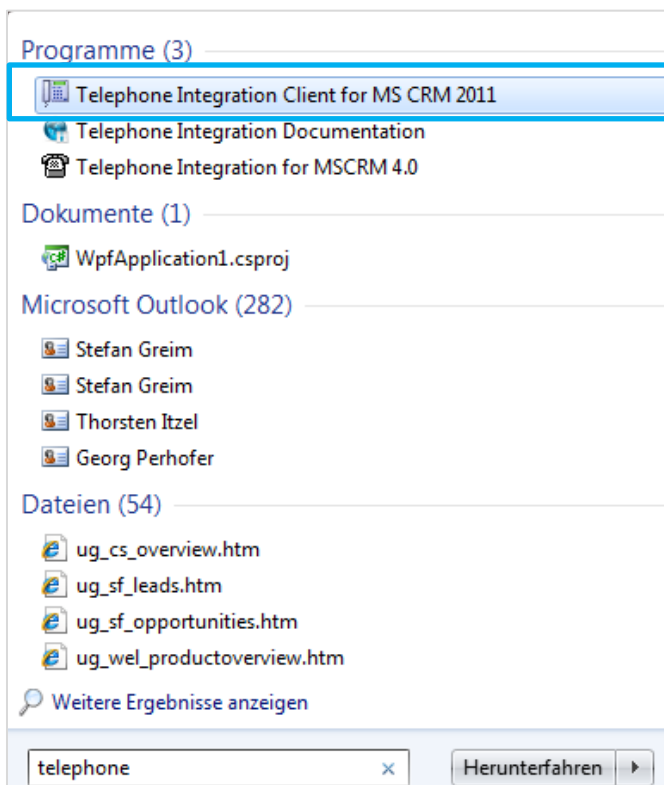
Once started, an icon appears in the taskbar:

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

The client is ready to use. Click on the icon to open the TI Balloon.

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

This Screenshot shows the server-setting:
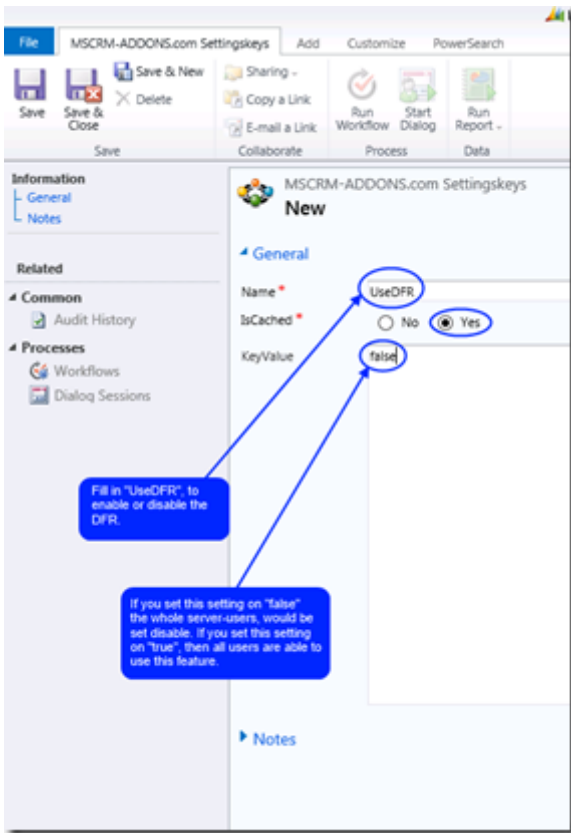
How to enable/disable DFR by Client-side:
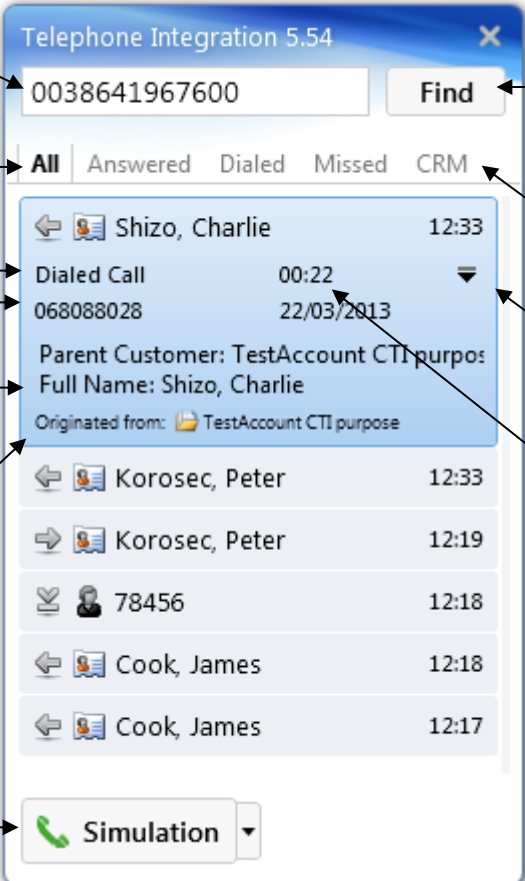
Open your TI client. Now you can create a new string. Name the new string "UseDFR", then click twice on your new string, after this, you have the chance to set DFR enable or disable by "true" or "false".

- 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.
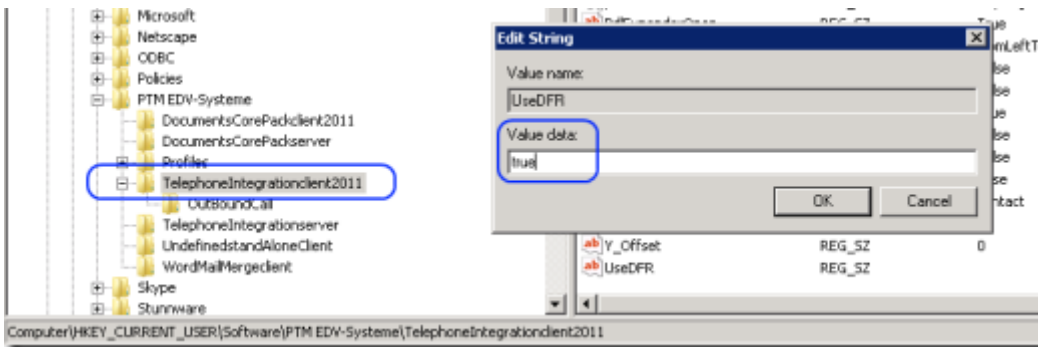
5.2 The TI Balloon

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

[number_textfield]

All Phone calls, Answered calls ...

Call status information

Phone number

CRM data records details

Called out from CRM site

The Call-button, select your desired call-plugin like OCS, TAPI, Skype or Lync and press the Button to call.

Find Entities in CRM or **Call** the inserted number (Ctrl+Enter)

CRM find results from the search above.

Open the **Context Menu**

Duration of the call

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.
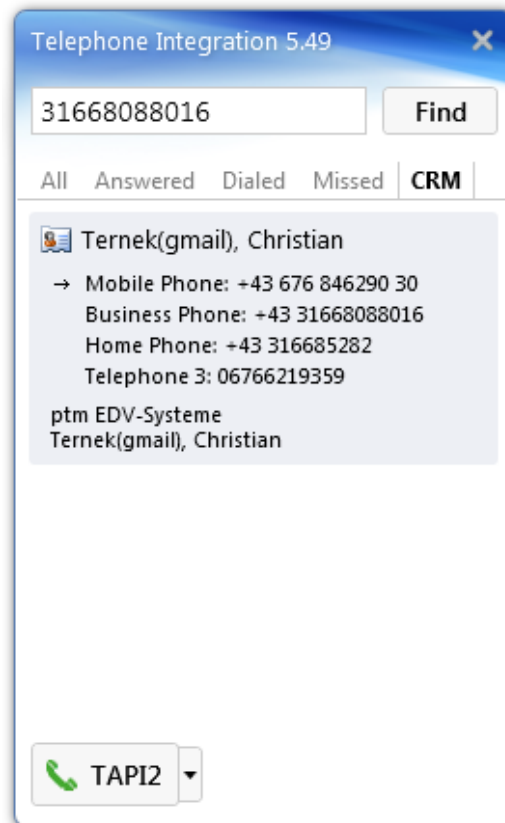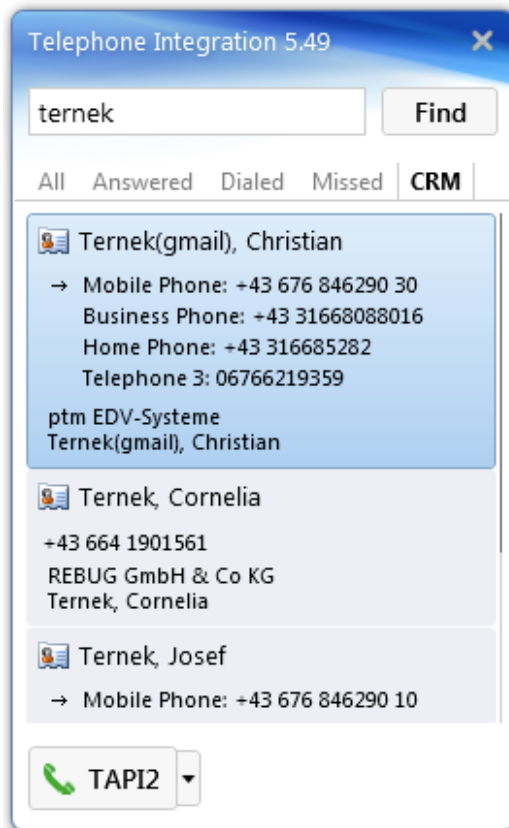
5.4   The Context Menu

Several CRM-functionalities are available in the context menu of a phone call:
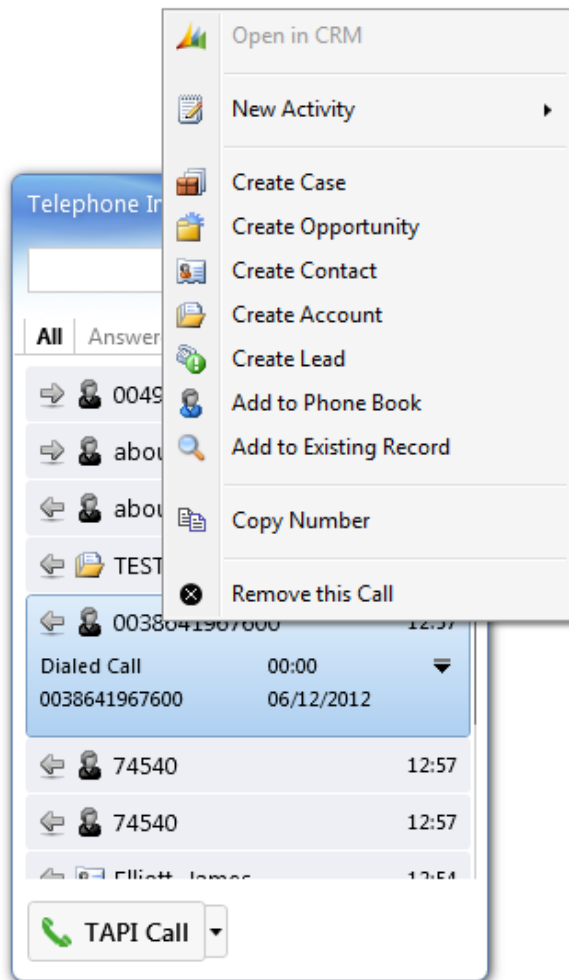
If the user has no sufficient CRM-rights to create those records, these functionalities are automatically disabled.

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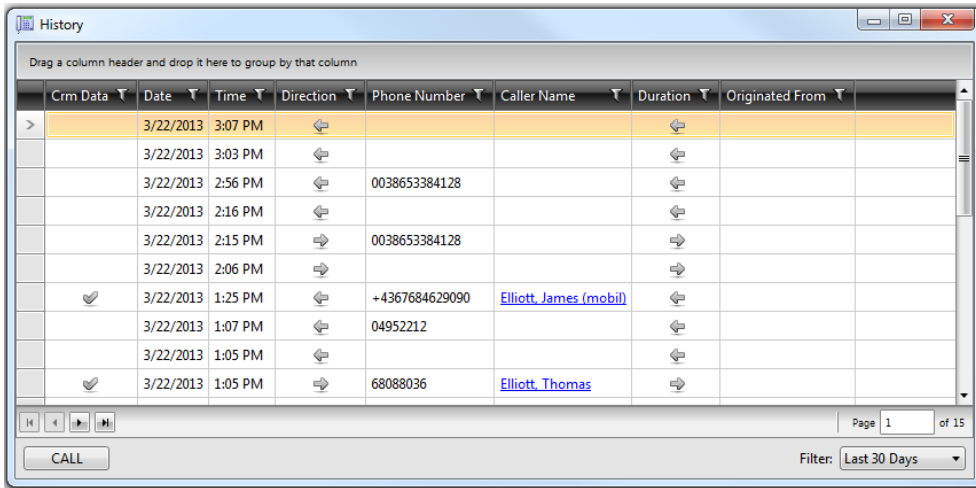
Right-click on the TI toolbar icon to open the Application-Menu. It provides the possibility to:

- 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 Predictive Dialer (see chapter 11)
- Show info (license state)
- Drop call and reset (see screenshot)
- Open Setup
- Exit (shutdown the CTI client)

Quick-Call/Clipboard-Action:
The number saved in the clipboard can be called from this menu directly.

Drop calls and reset:
The CTI will be restarted. In case of any communication issues with the connected call-info provider, chose this functionality.

Setup the Telephone Integration Configuration (chapter 9)
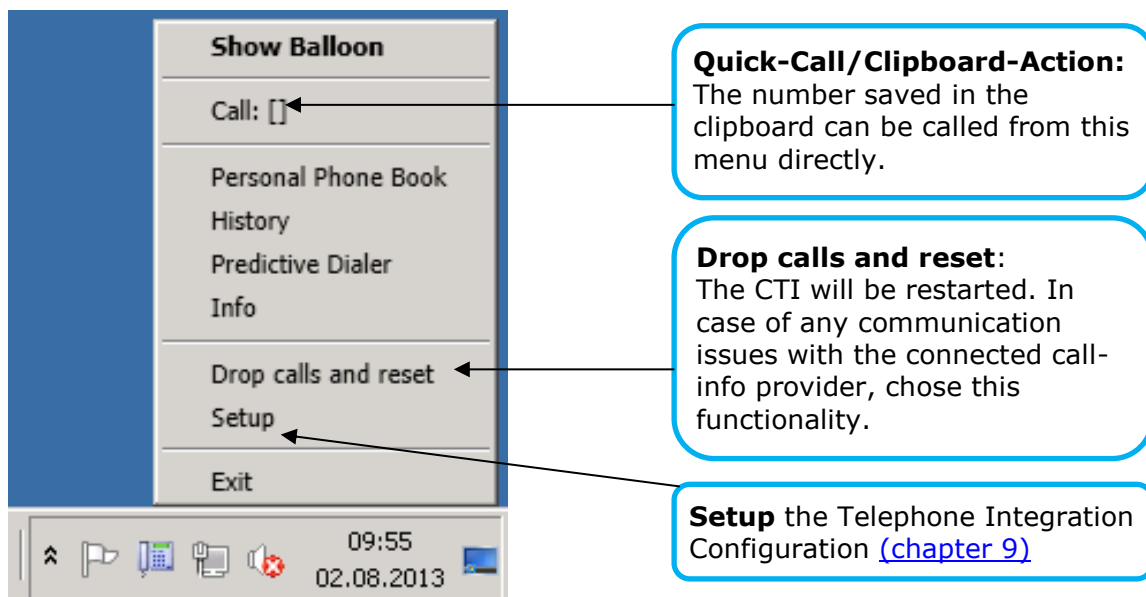
5.6 History Window

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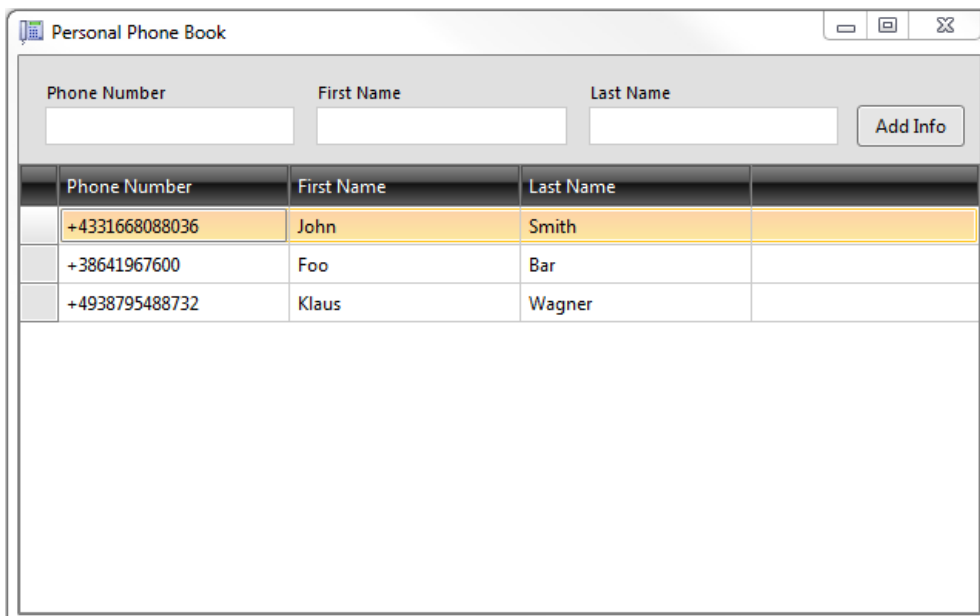
You can also use redialing in History window by selecting the phone call record and pressing the [Call] button.

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.
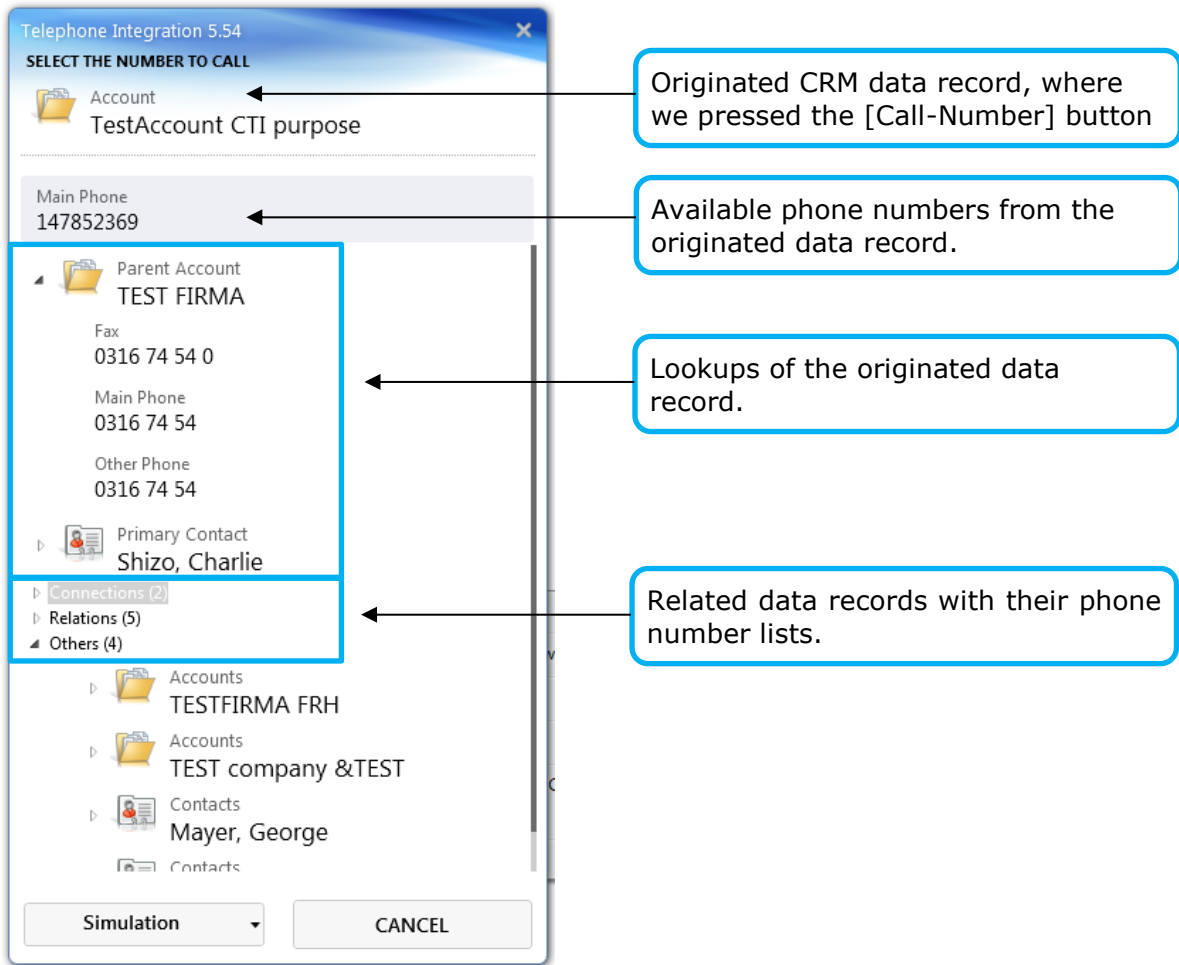
6   MS-CRM 2011 Integration

6.1   Start an outgoing Call from MS-CRM 2011

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.
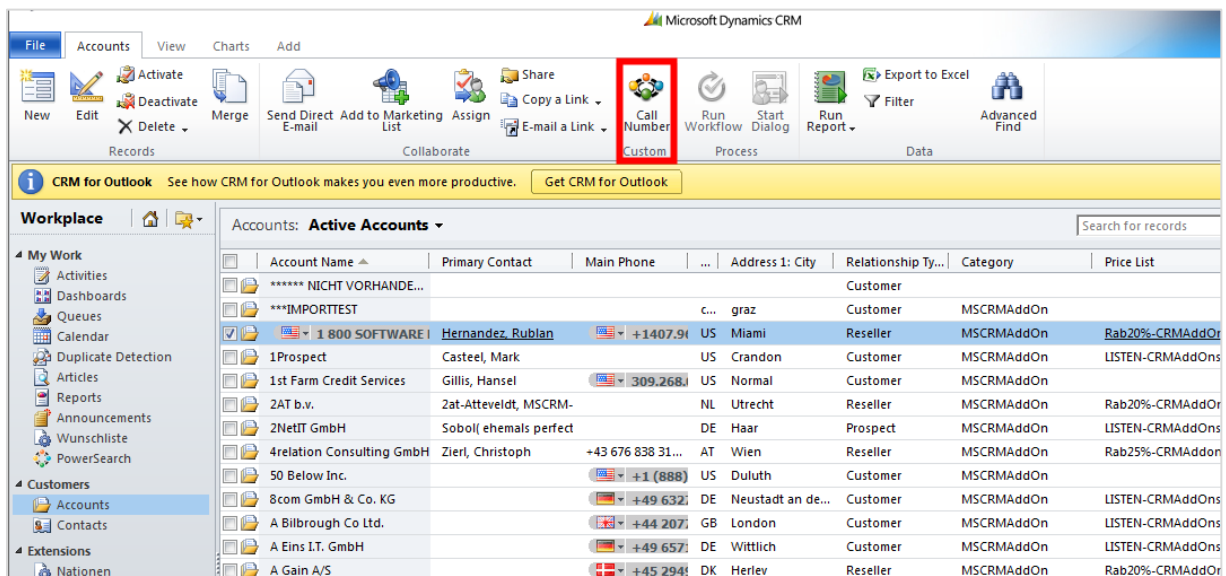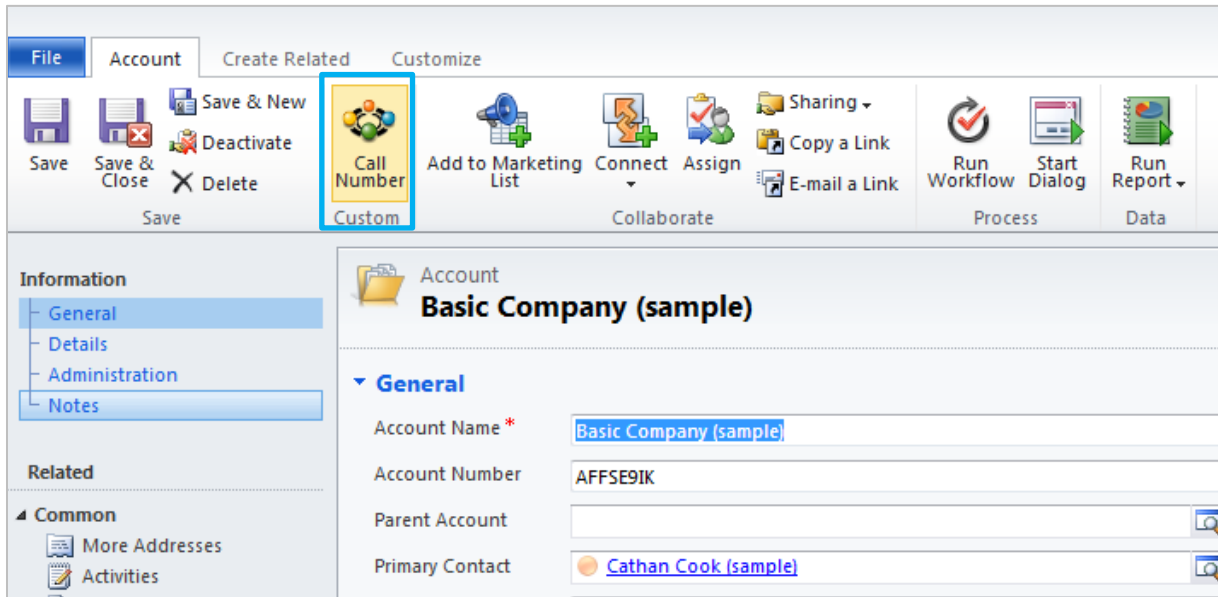
Telephone Integration 5.54 ✕
SELECT THE NUMBER TO CALL

Account
TestAccount CTI purpose

Main Phone
147852369

Parent Account
TEST FIRMA

Fax
0316 74 54 0

Main Phone
0316 74 54

Other Phone
0316 74 54

Primary Contact
Shizo, Charlie

Connections (2)
Relations (5)
Others (4)

Accounts
TESTFIRMA FRH

Accounts
TEST company &TEST

Contacts
Mayer, George

Contacts

Simulation ▾   CANCEL

Originated CRM data record, where we pressed the [Call-Number] button

Available phone numbers from the originated data record.

Lookups of the originated data record.

Related data records with their phone number lists.

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.

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\TelephoneIntegrationclient2011

- 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 Record" (see screenshot below).
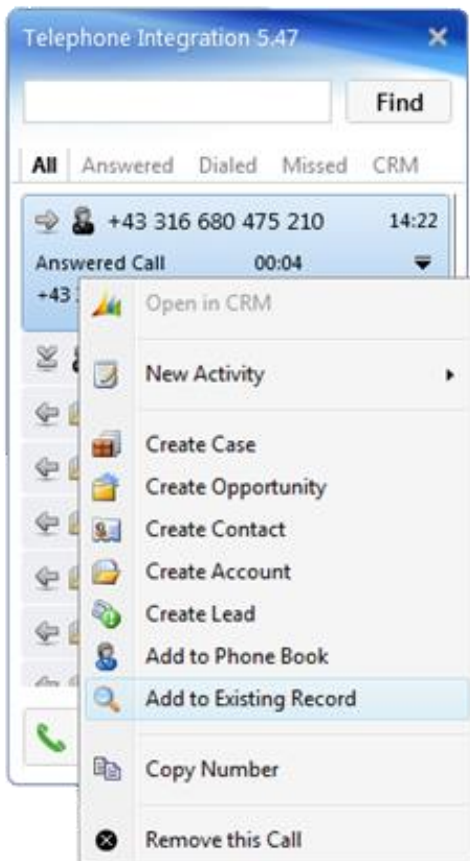
Screenshot: TelephoneIntegration balloon with option to assign unresolved number to existing CRM record or to create new record.

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.
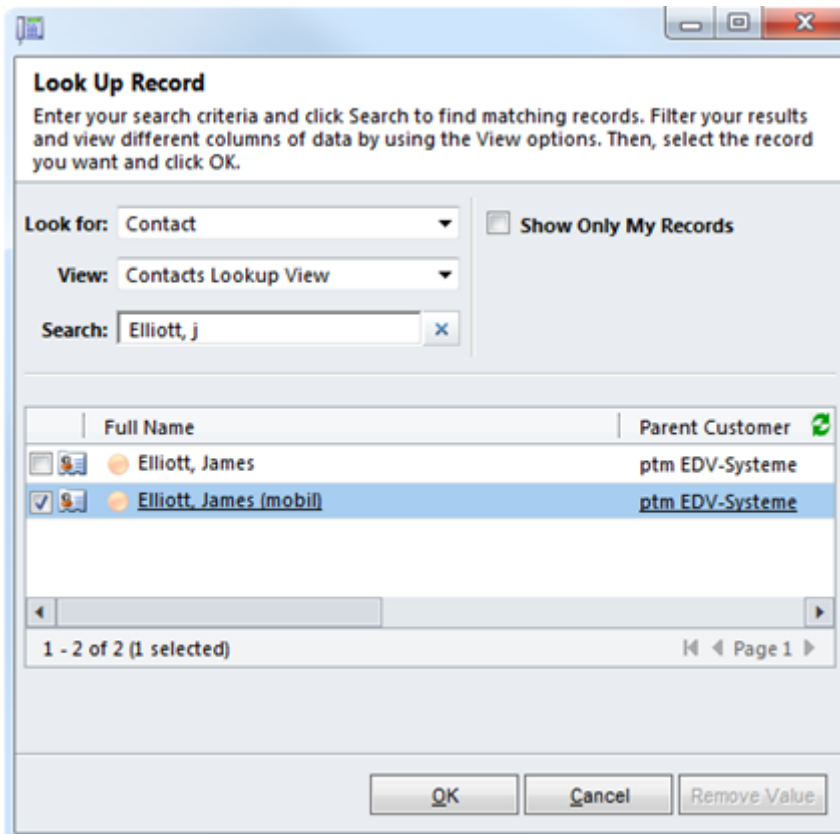
Screenshot: search window

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 your CRM in the Internet Explorer
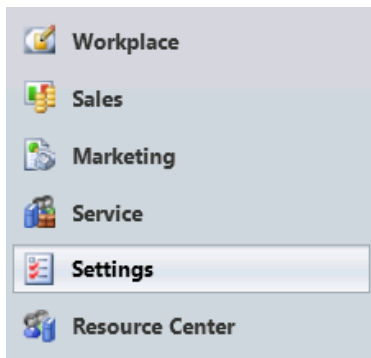
2. Navigate to the CRM Settings

Screenshot: CRM Settings in the CRM sitemap

3. Choose 'MSCRM-ADDONS.com Products' from the 'Extensions' in the menu on the left.

Screenshot: MSCRM-ADDONS.com Products in the CRM Settings

4. (1) Click the checkbox in front of 'TelephoneIntegration' and then (2) click on 'Edit'.
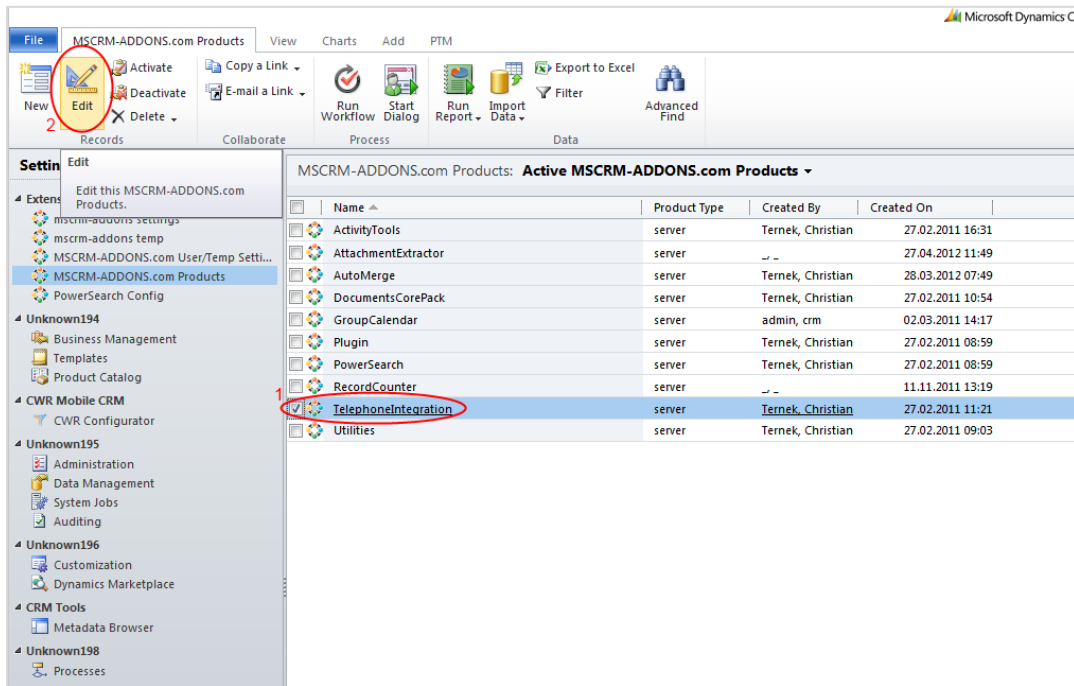
Screenshot: Edit TelephoneIntegration in the CRM Settings

5. A new CRM window will open. Within this window, (1) click on 'MSCRM-ADDONS.com Settingskeys' within the 'Common'-area and (2) click on 'Add New MSCRM-ADDONS.com Settingskeys'.
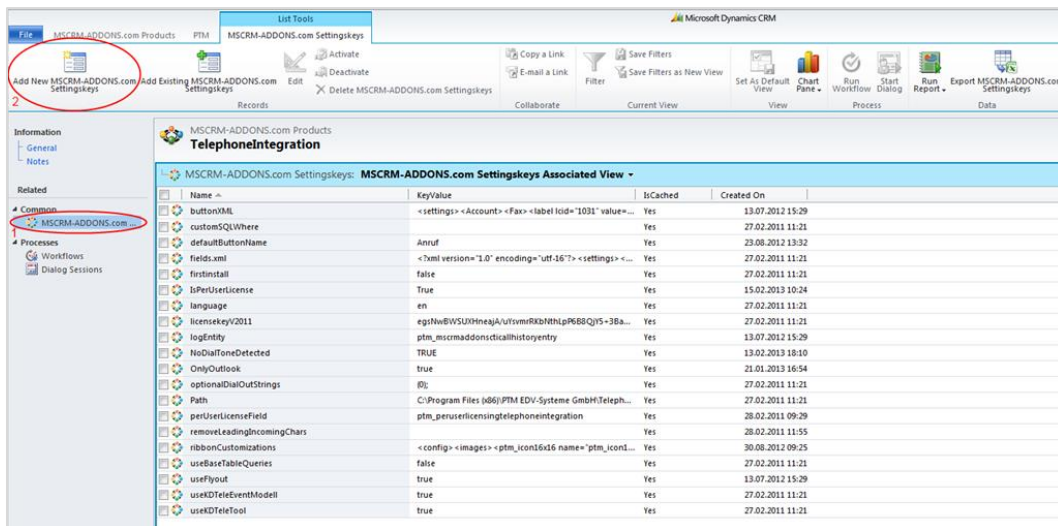
Screenshot: View and add settingskeys for TelephoneIntegration in the CRM settings

6. 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" >

Screenshot: create new settingskey

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.
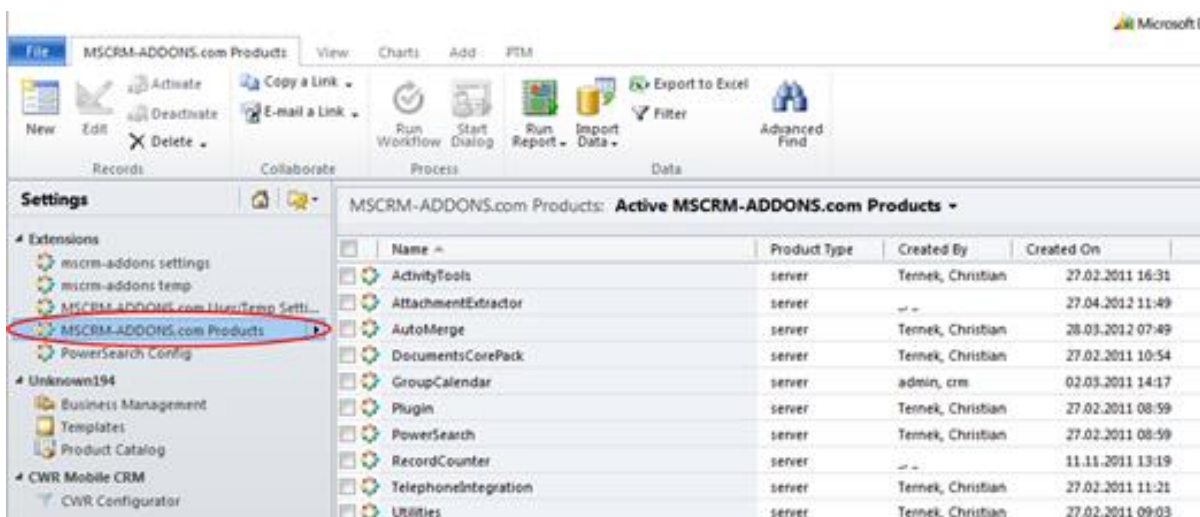
Please follow the steps below to do so:

1. Open your CRM in the Internet Explorer
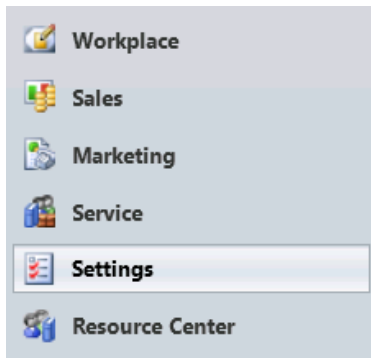
2. Navigate to the CRM Settings

Screenshot: CRM Settings in the CRM sitemap

3. Choose 'MSCRM-ADDONS.com Products' from the 'Extensions' in the menu on the left.
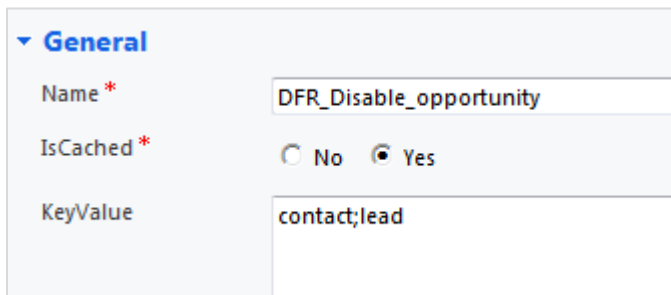

Screenshot: MSCRM-ADDONS.com Products in the CRM Settings

4. (1) Click the checkbox in front of 'TelephoneIntegration' and then (2) click on 'Edit'.
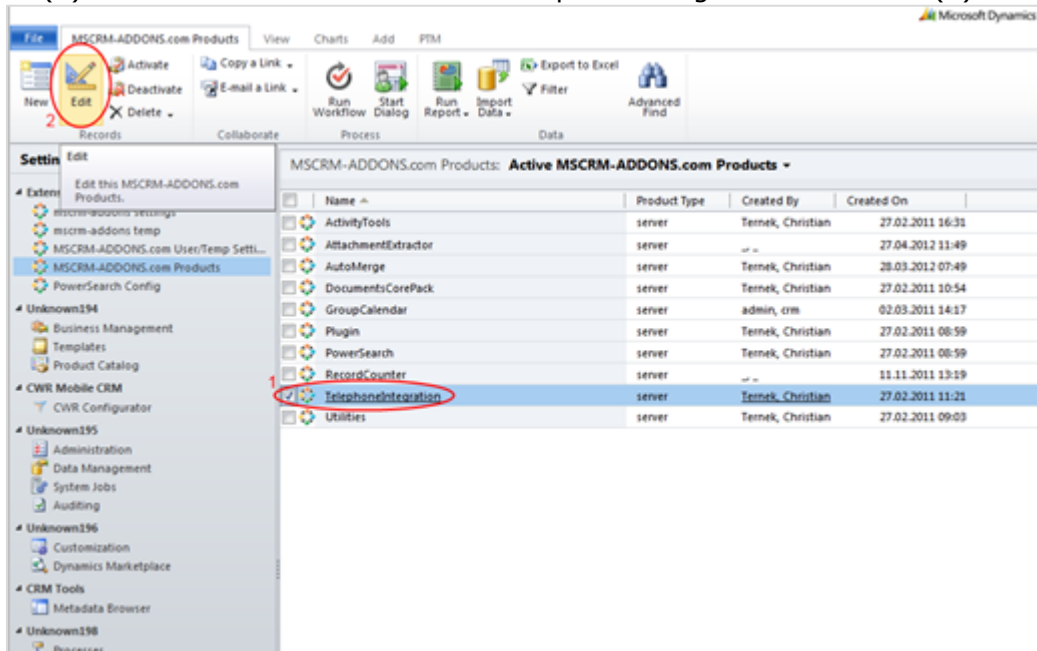
Screenshot: Edit TelephoneIntegration in the CRM Settings

5. A new CRM window will open. Within this window, (1) click on 'MSCRM-ADDONS.com Settingskeys' within the 'Common'-area and (2) click on 'Add New MSCRM-ADDONS.com Settingskeys'.

Screenshot: View and add settingskeys for TelephoneIntegration in the CRM settings.

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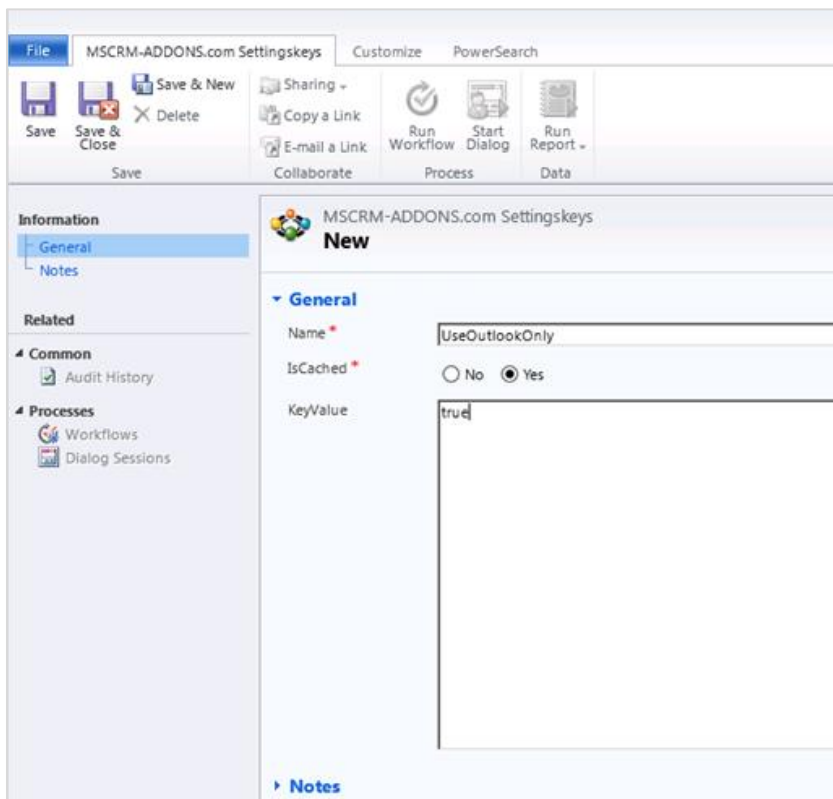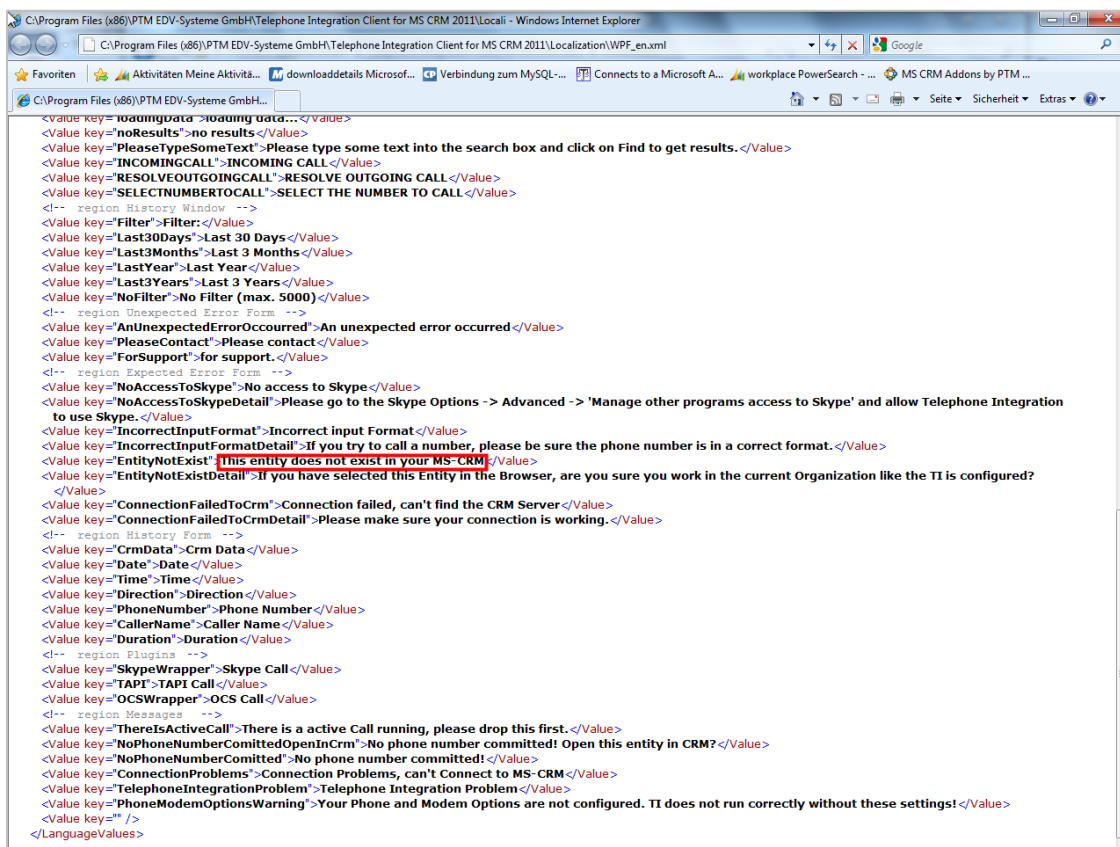
Restart the client. TelephoneIntegration will open all windows in Outlook instead of an internet browser.

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: <u>Never</u> change the Key attributes! Only change the values!

9 Configuration Setup

To change the configuration start Telephone Integration Setup via the Application Menu. (chapter 5.5)

Following window will appear:

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 a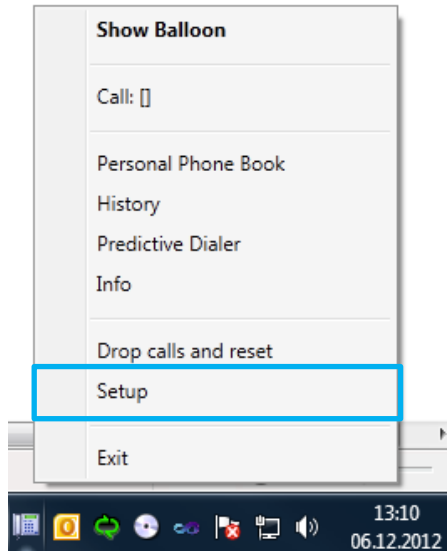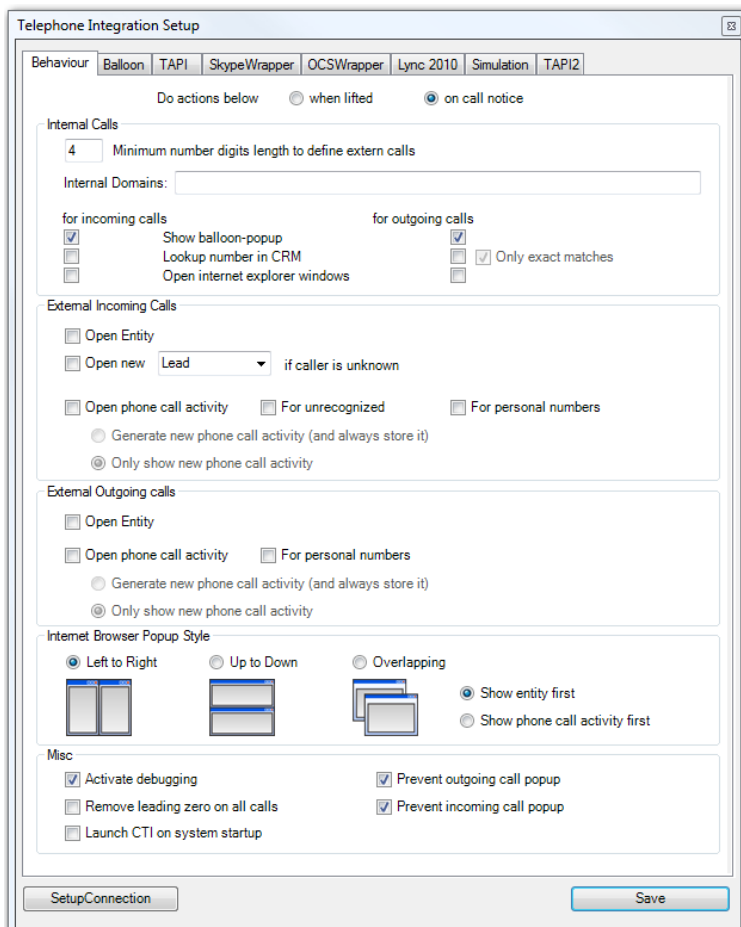re determined as those, who have a number length less than 4 digits, or who have a domain ptm-edv.at or mscrm-addons.com in their SIP numbers.

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.
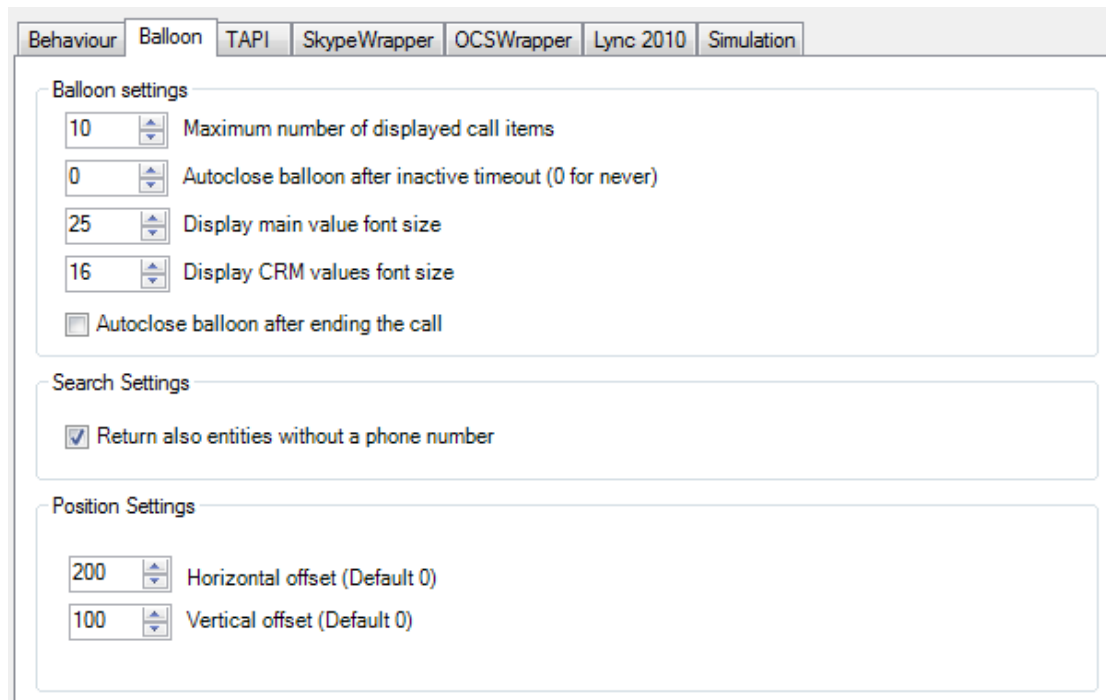
EXTERNAL OUTGOING CALLS:

- **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.

OTHERS:

- **Debugging active:** Activate Debugging. You find the log file under: C:\Programme (x86)\PTM EDV-Systeme GmbH\Telephone Integration Client for MS CRM 2011\log\.

- **Start TI automatically:** As soon as Computer boots.

- **Removing leading Zero when calling**

- **Do not show popup by incoming calls:** When choosing this field, Popup-Balloon will not show up by incoming calls.

- **Show call first:** Internet Explorer window will shop up first with the displayed entity. (Entity will show up first)

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

- Spacing between the CTI balloon and the right screen edge.
- Spacing between the CTI balloon and the bottom screen edge.
- In case of using LyncWrapper, 100 is a minimum recommended value, otherwise the balloon and the Lync client notification popup overlap.

9.1.1 Skype Plugin Configuration
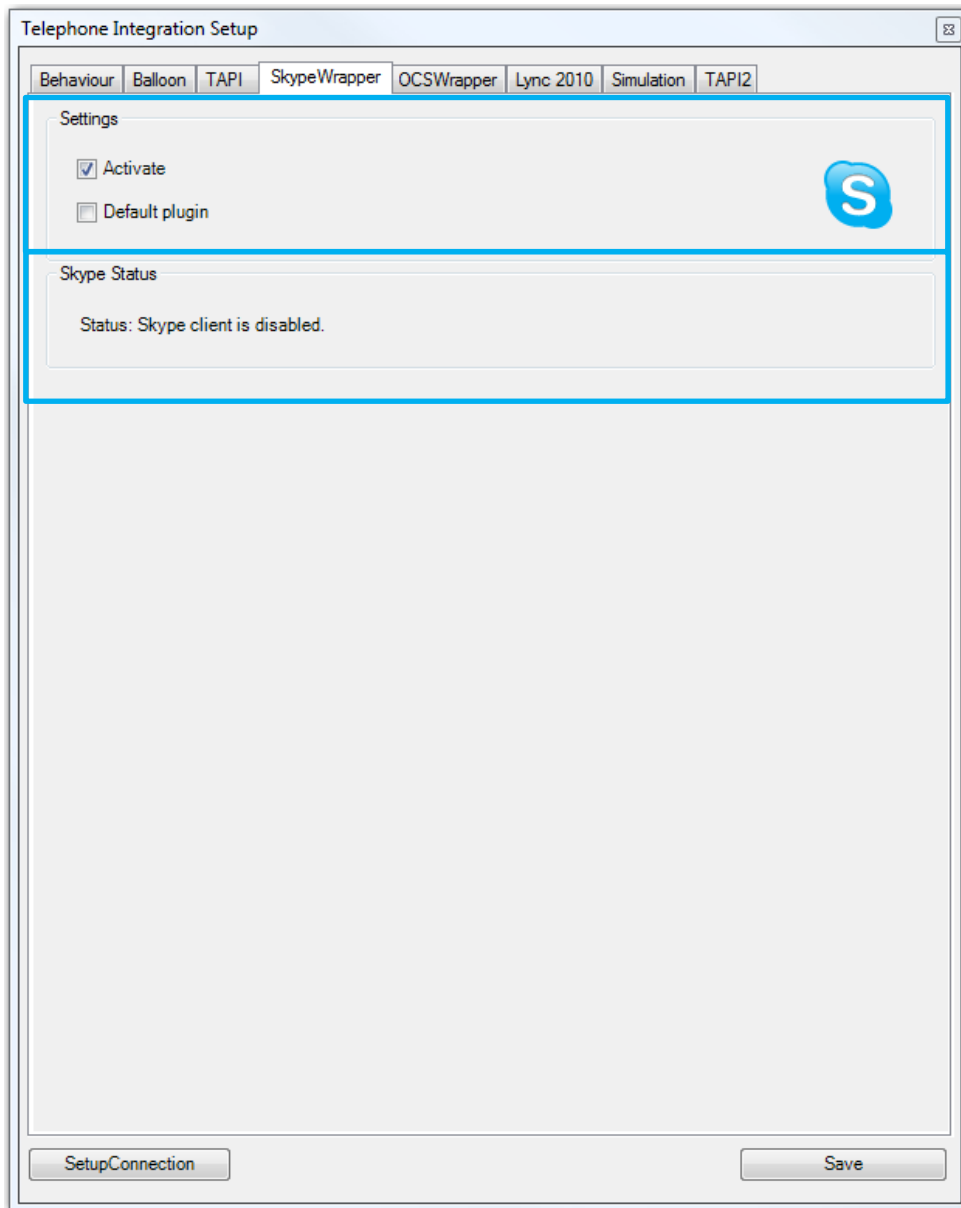
Settings section

- **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.

9.1.2   Skype Plugin Authorization

Starting TelephoneIntegration

After starting TelephoneIntegration you will get an Authorization Request message from your Skype-Client (only for the first time):
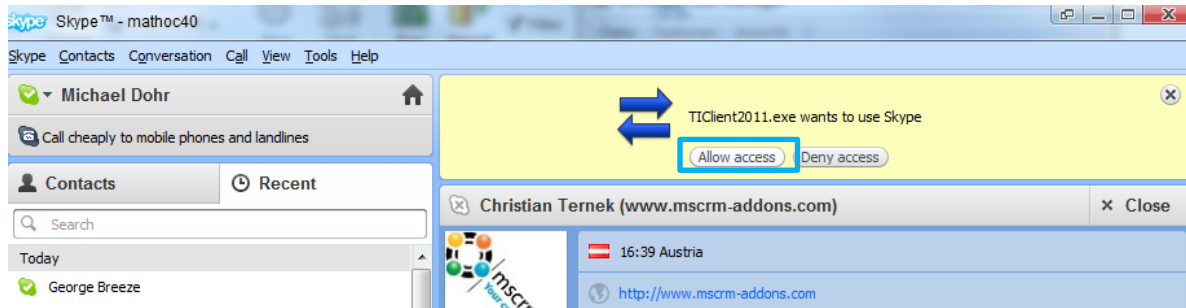
Click on "allow Access" to proceed

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".
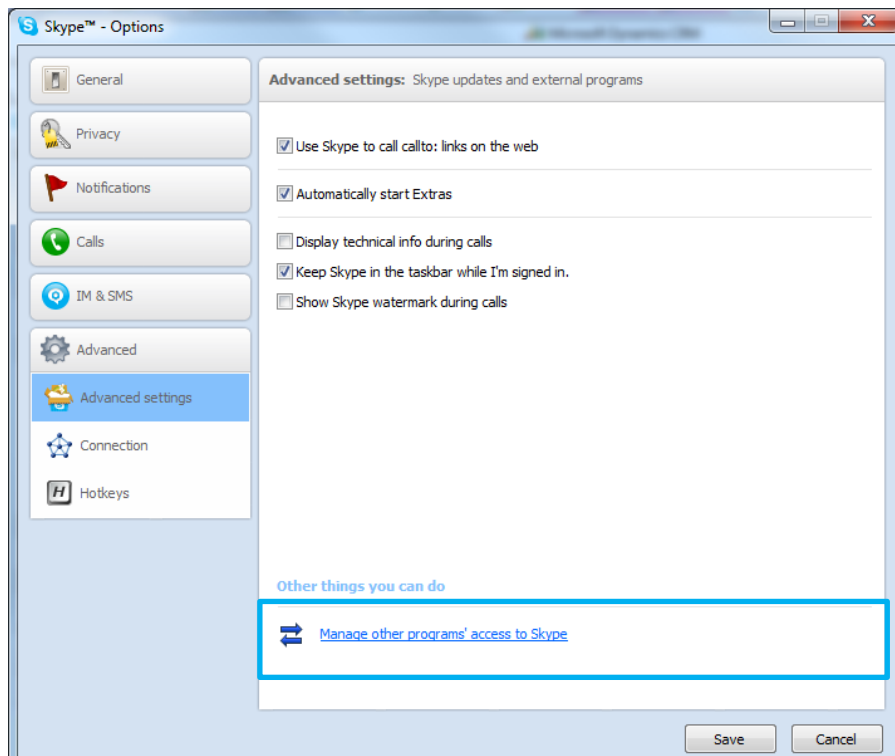
2. "Manually Manage API Access Control" pops up. Click on "Change" button:
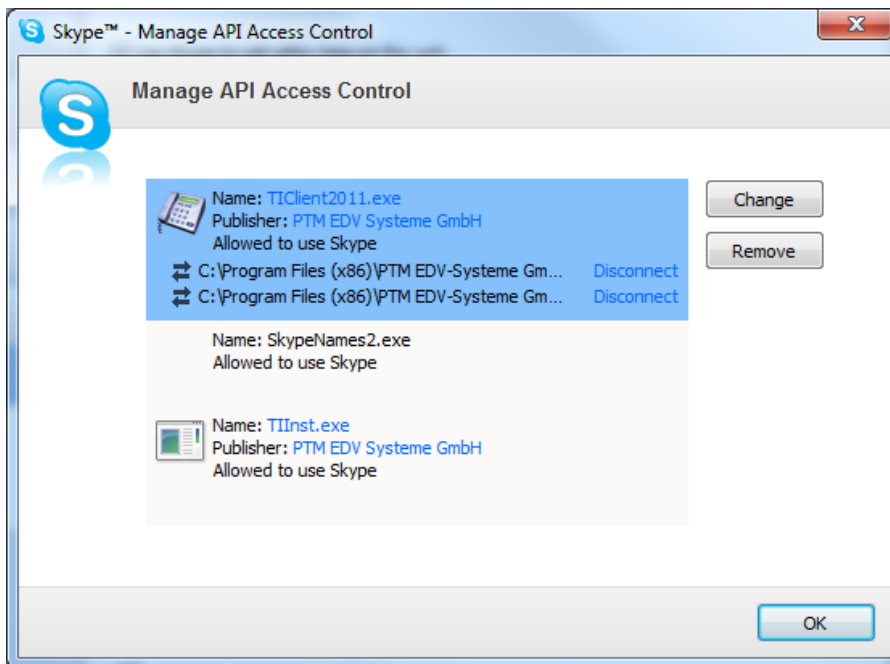
3. Choose if you want to allow the program access to the Skype Client.
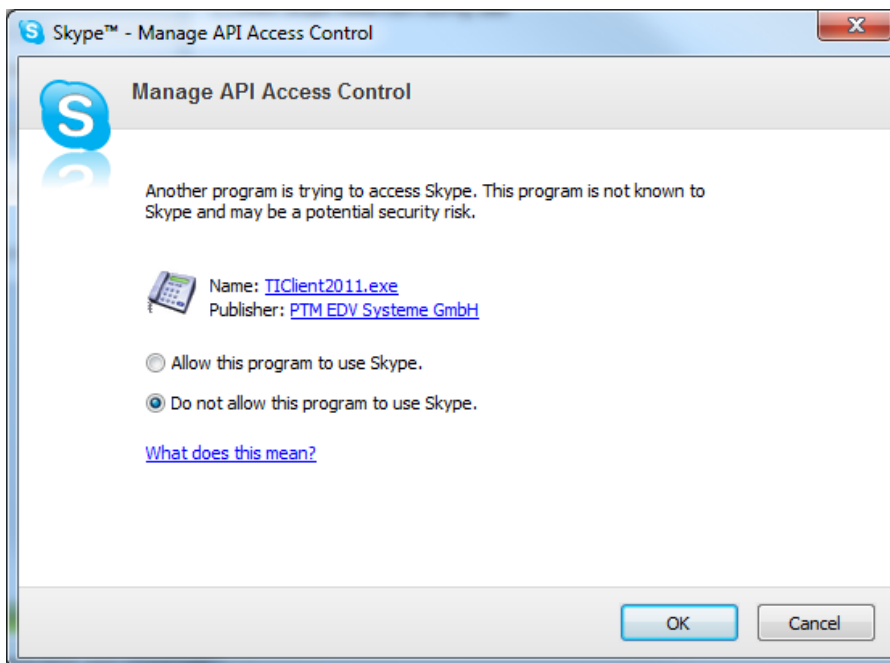
9.2   How to position popup windows

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.
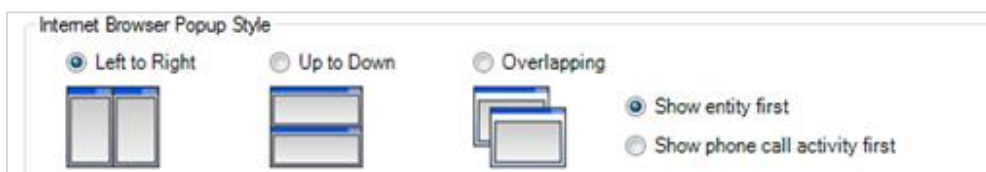
Screenshot: "Internet Browser Popup Style"-section within TelephoneIntegration setup
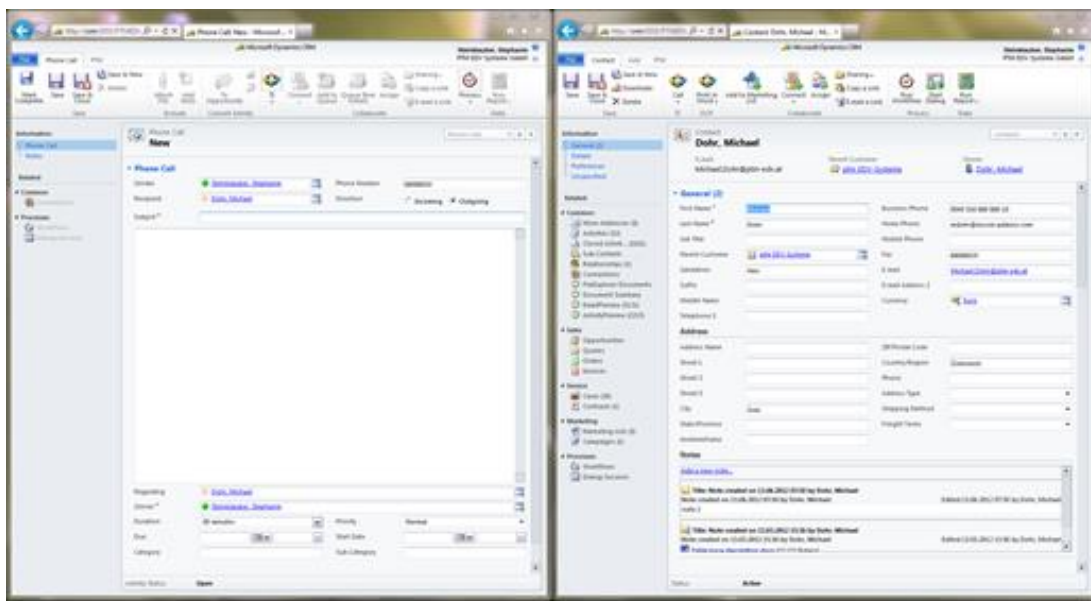
Screenshot: CRM record-window and phone-call-activity-window shown left to right
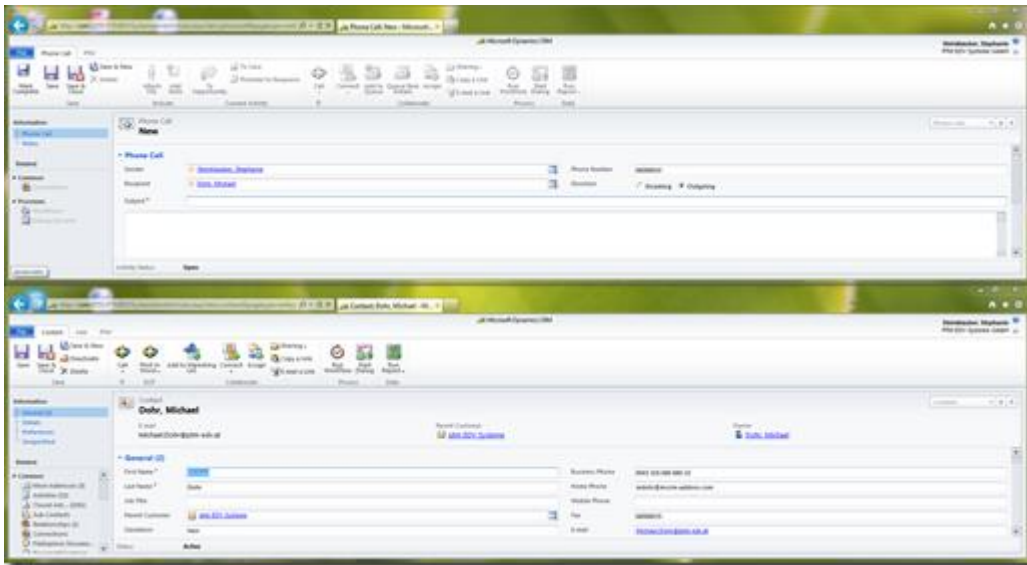
Screenshot: CRM record-window and phone-call-activity-window shown up to down
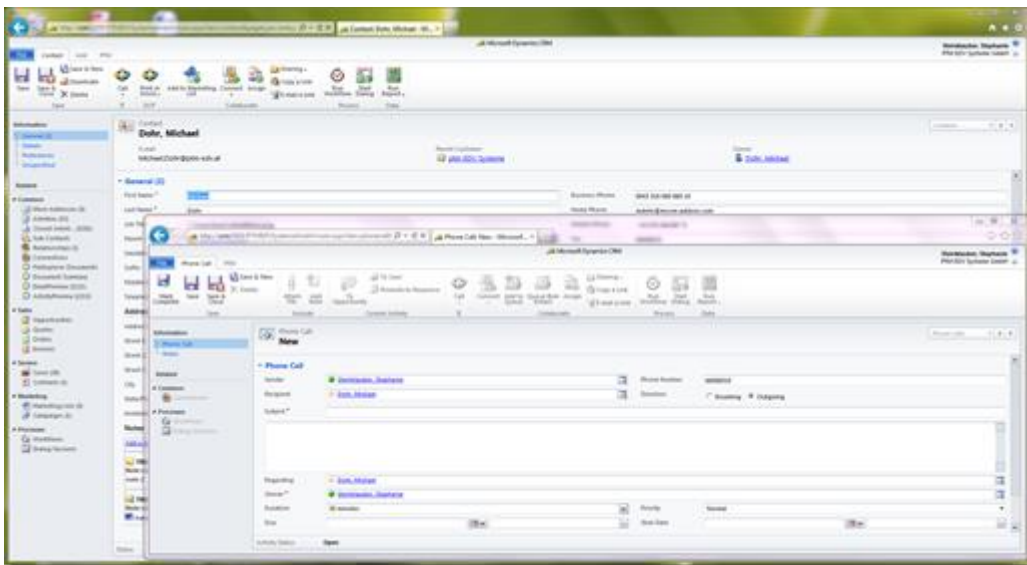
Screenshot: CRM record-window and phone-call-activity-window shown overlapping

9.3 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 Telephone Integration 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 / Telephone Integration 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 Telephone Integration Client will work fine with it.
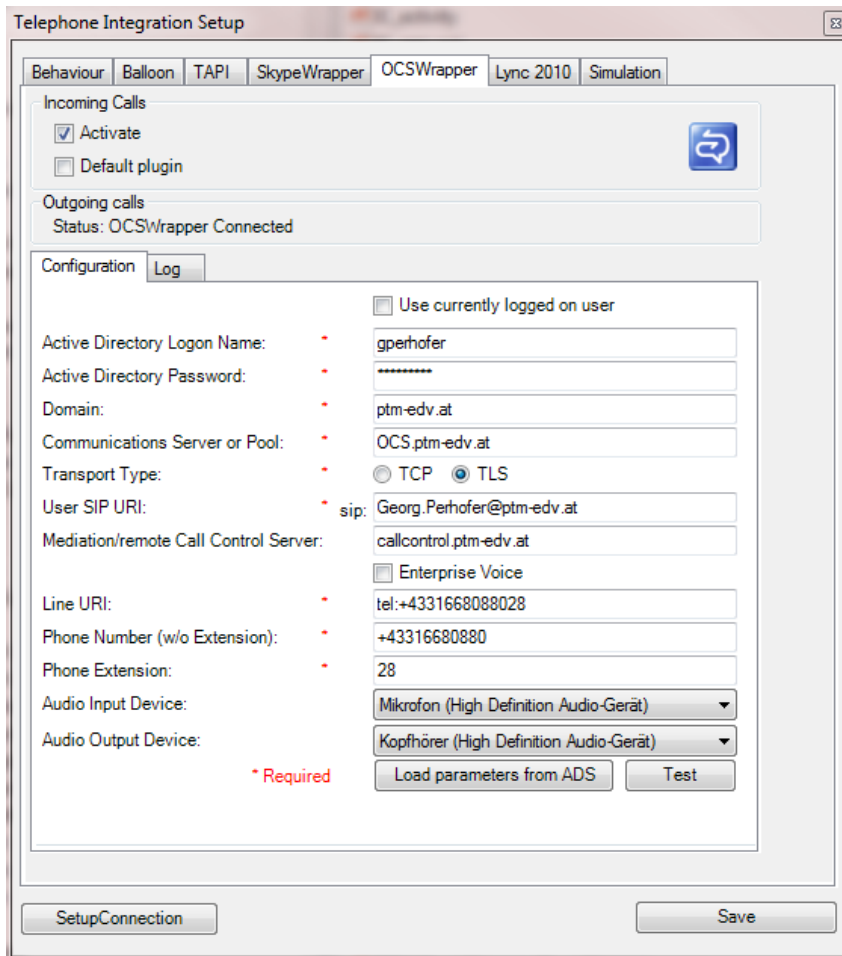
For users who can access 2 TAPI lines at the same time, they can activate TAPI2 Wrapper.
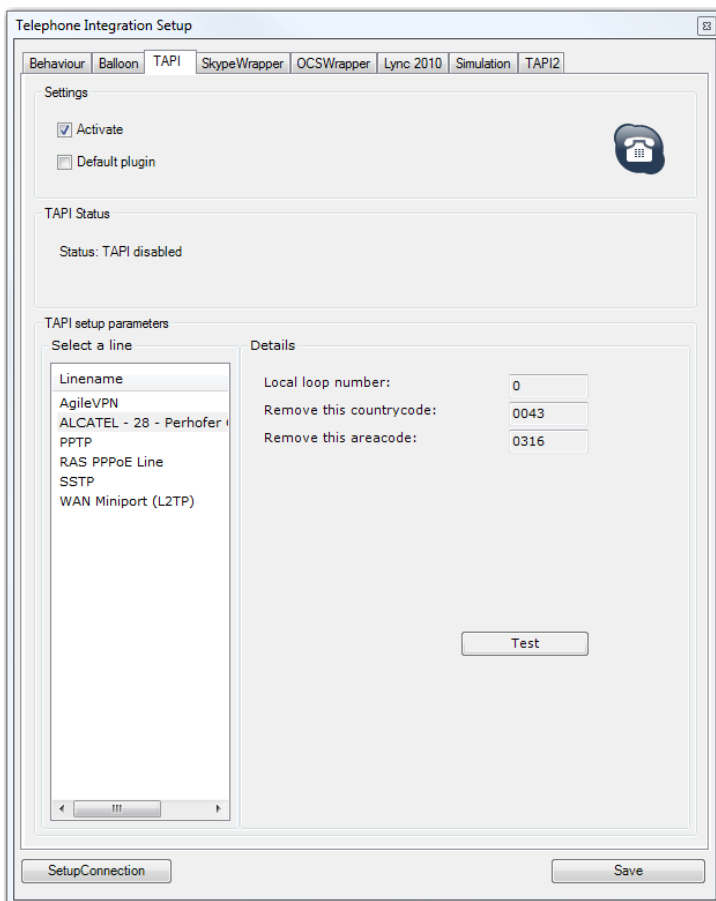
Settings

- **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

9.4   OSC Wrapper

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
  - o Regular Active Directory username

- Active Directory Password
  - o Regular Active Directory user password

- Domain
  - o The Active Directory domain (e.g. mydomain.com)

- Communications Server or Pool
  - o OCS Frontend server name (e.g. ocs.mydomain.com)

- Transport Type
  - o Type of connection used by OCS system

- User SIP URI
  - o The SIP URI for that user.
    (e.g. 'sip:myFirstname.MySecondName@myDomain.com')

- Mediation/Remote Call Control Server
  - o Mediation or telephone control server name (e.g. callcontrol.mydomain.com)

- Enterprise Voice
  - o 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
  - o 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)
  - o The basic telephone number **without** extension (e.g. +43316123456). The extension is usually a user's internal telephone number.

- Extension
  - o The extension of the telephone or internal number that should be used to route calls to/from

- Audio Input/output Devices
  - o 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.
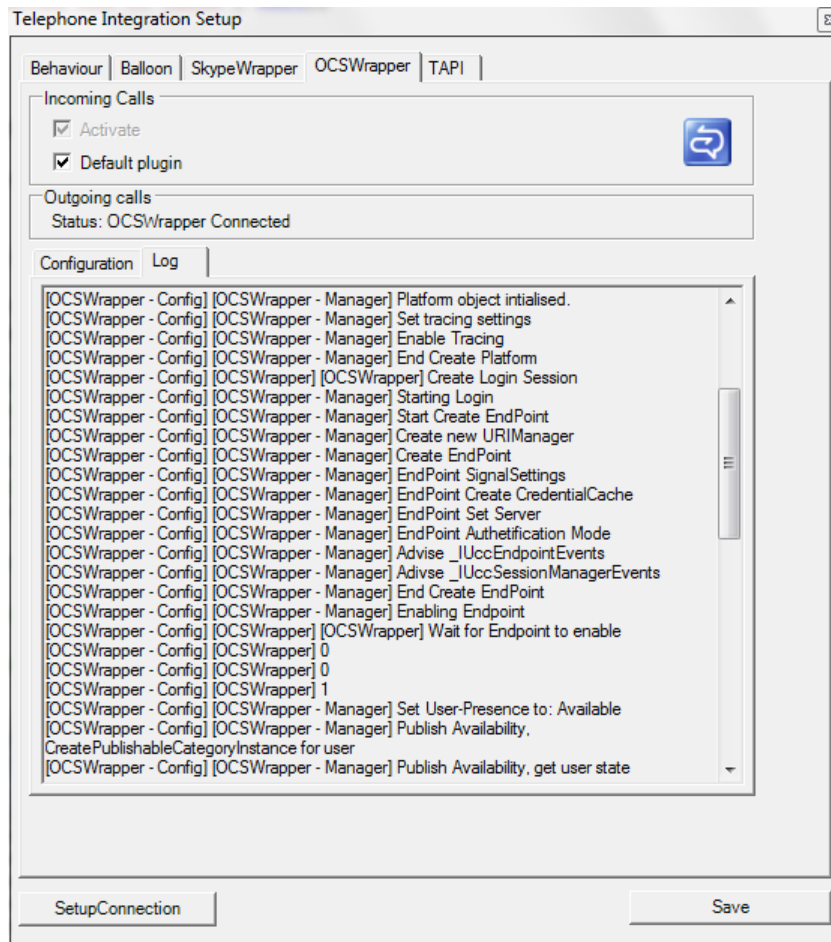
9.4.1 OCS Transfer Call

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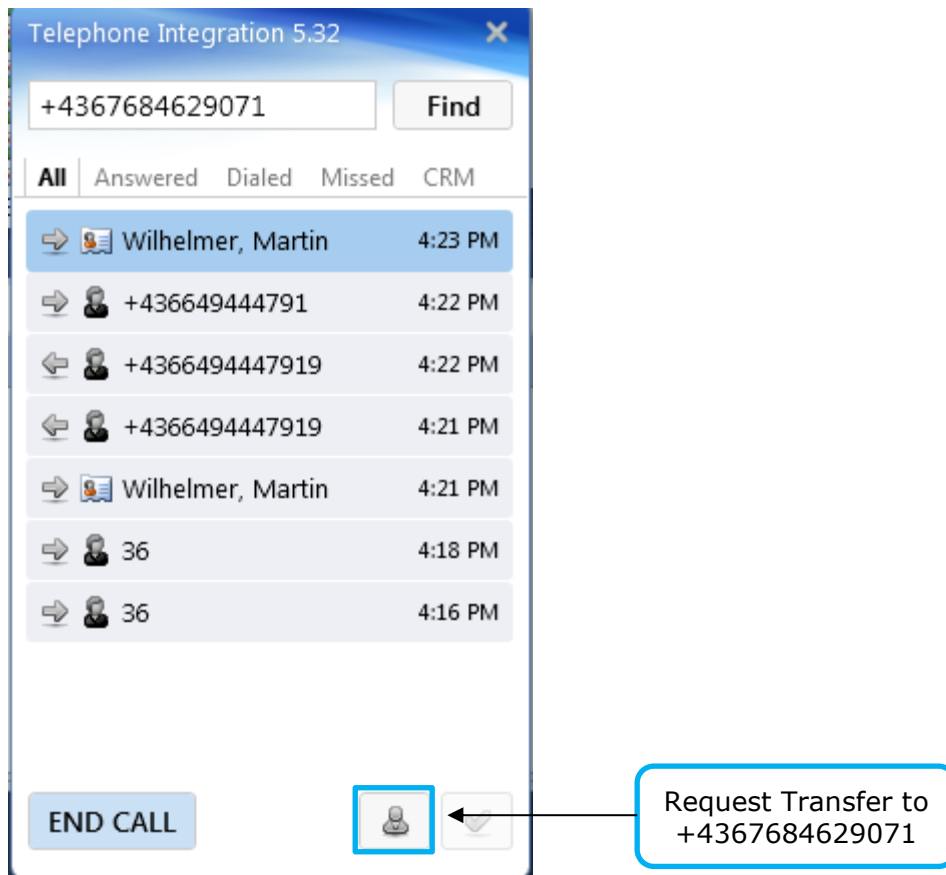
By clicking on the button, a new call is being established from you to the third participant +4367684629071. After the third party participant accepts your consulting call, you receive notification about it and a new visible button (see next page). You can use that functionality for incoming and outgoing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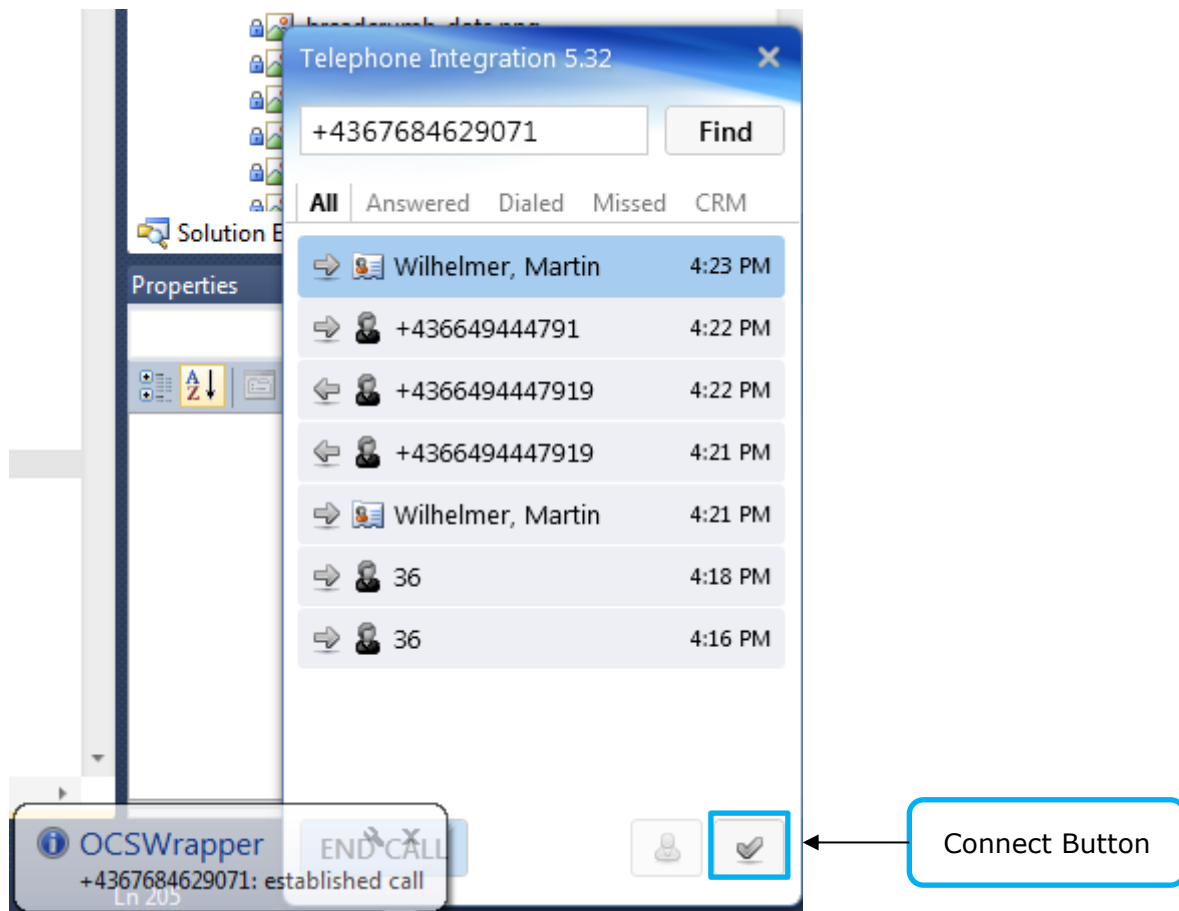
After the third party has agreed to accept the original call, press the Connect button to transfer the initial call to the third party.

9.5 Lync Wrapper

For using the Lynch Wrapper, the user has to be logged in in Lync client.
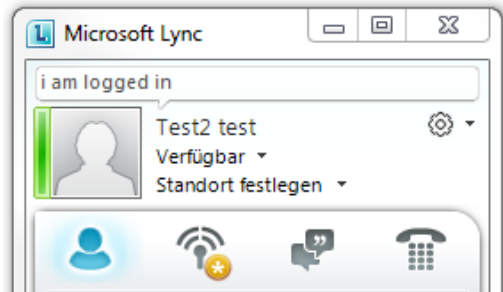
After that you can activate the Lynch Wrapper

Settings (Section)

- **Activate**: Here you can activate/deactivate the LyncWrapper plugin that has a reference to your installed and signed-in Microsoft Lync client. This requires a restart of the application.

- **Default plugin**: Make LyncWrapper 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)
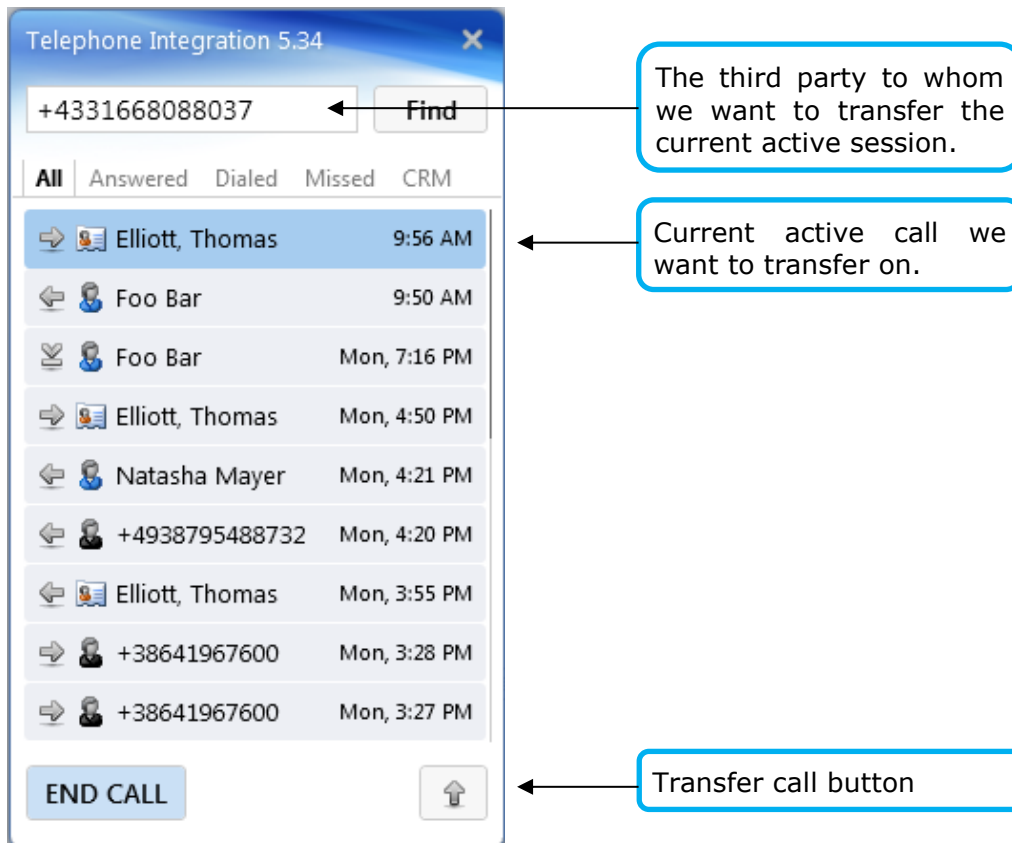
After pressing the [Transfer Call] button, you are no longer in the call session.
The original call was transferred to the third party participant +4331668088037.

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, …)
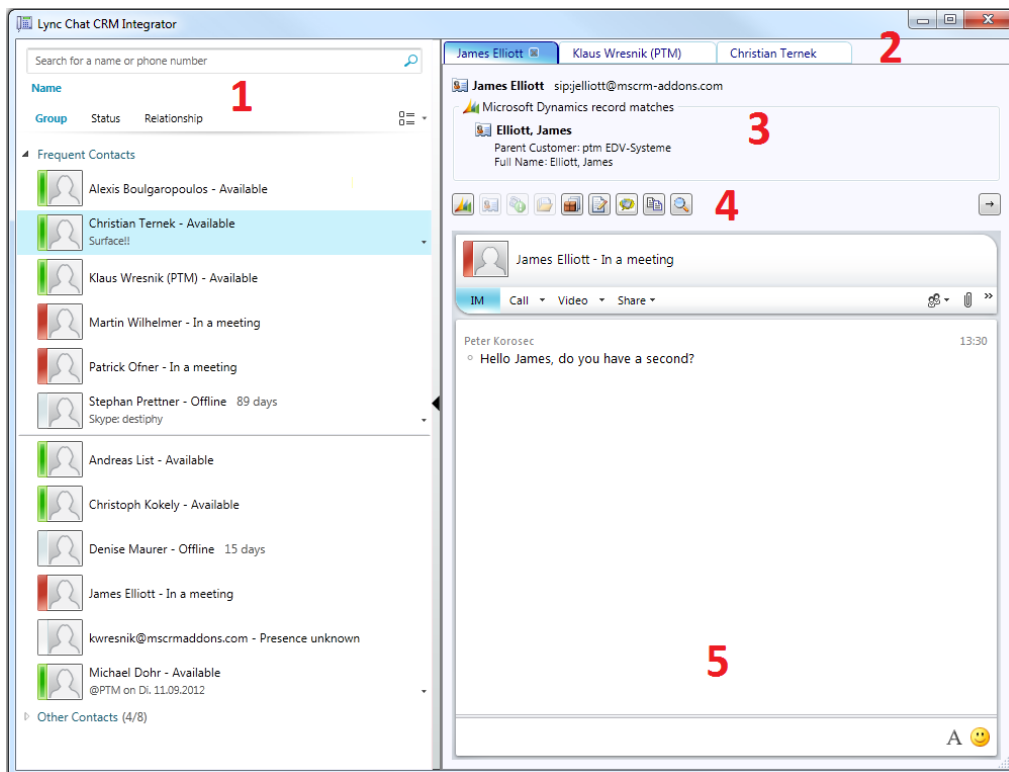
The LyncChat window is divided into five logical sections.

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   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.
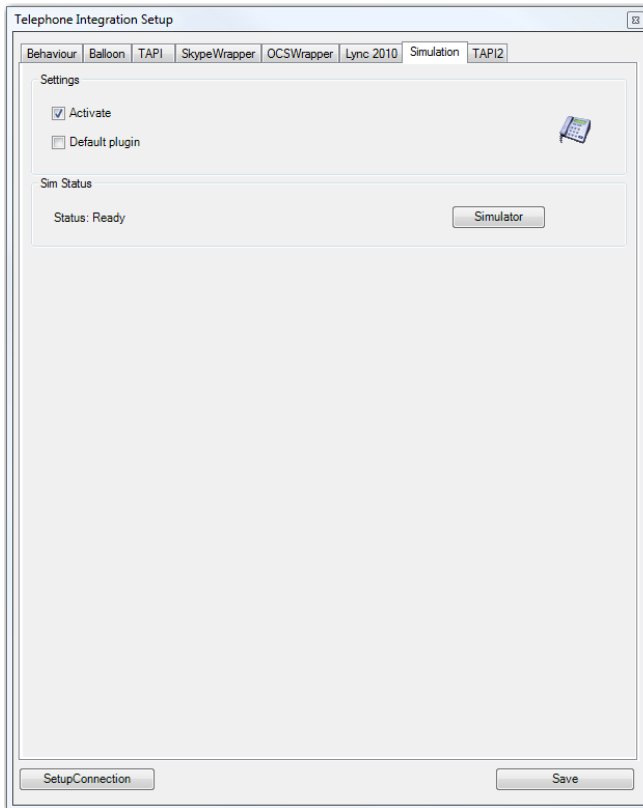
Enter a phone number to simulate an incoming call.
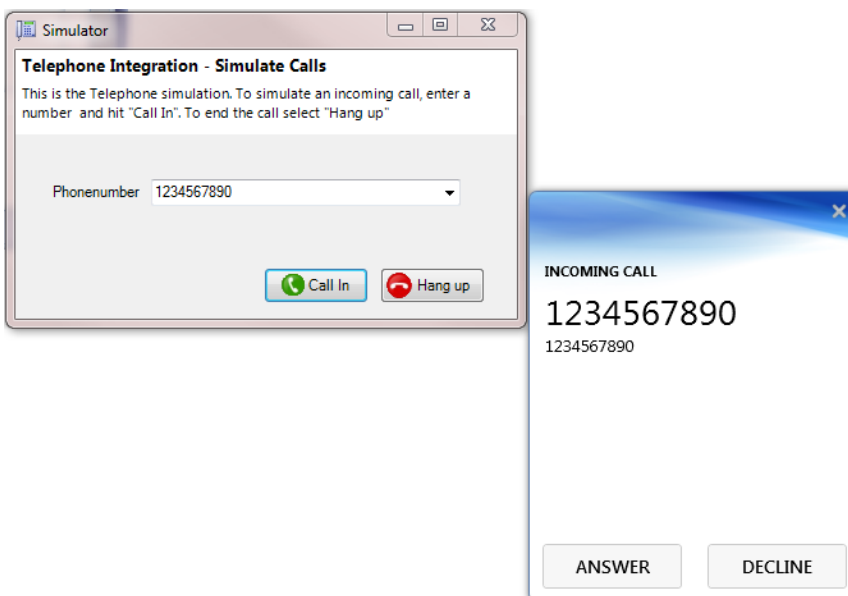
You can also simulate an outgoing call through our CTI client. Press the Simulation call button for this purpose.
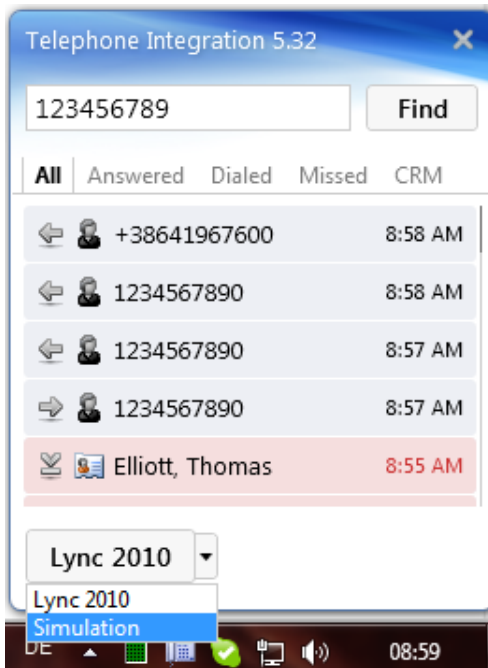
9.7 Setup Connection

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.
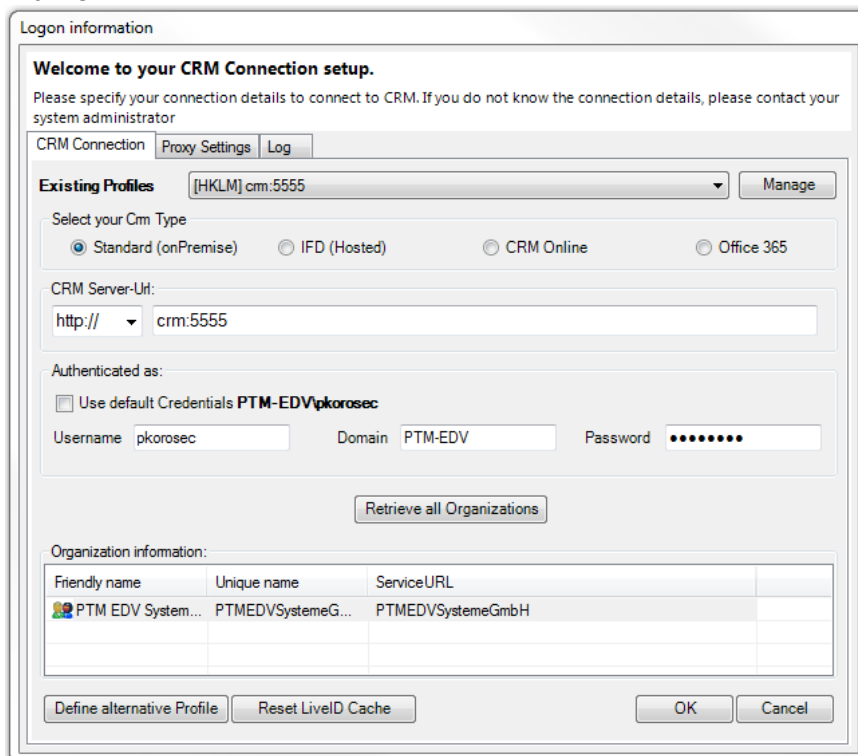
10 Reporting and possible Syncing

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)

11 Predictive Dialer

Predictive dialing is offering semi-automated call queues for CTI 2011. A server-side integration allows to mark CRM Campaign/Campaign Activities as predictive dialer lists. The TI client can attach to and process the calls attached to these predictive dialing lists.
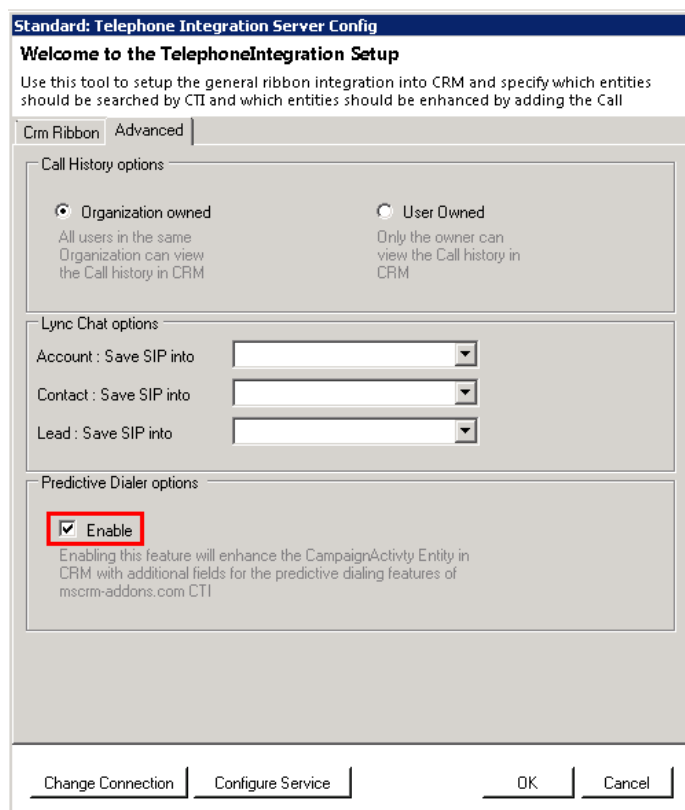
The base for the Predictive Dialer is the extended CRM Campaign/Campaign Activity entity. The Predictive Dialer processes the phone calls created in the CRM call-campaign-activity. The term "Predictive dialing list" refers to a CRM call-campaign-activity, marked as Predictive Dialing list.

Users participating in the Predictive 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 Predictive Dialer, the creation of a team in CRM settings-area is mandatory.

11.1 Server-side Requirements

For using the Predictive Dialing functionality, the Predictive 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.

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

Beim Erstellen einer Anruf-Kampagne-Aktivität müssen wir folgende Einstellungen vornehmen:

- **Active**: The campaign-activity is enabled as Predictive Dialing list
- **PD List Name**: The name of predictive 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 Predictive 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 postprocessing 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.

11.1.1 Extended Phone Call Entity

New attributes are added to phone-call entity.

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

11.2 Starting of Predictive Dialer

TI Client retrieves the server-side setting "UsePredictiveDialing" on StartUp. If predictive 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 Predictive Dialer overview window by choosing "Predictive Dialer" in the Application Menu.
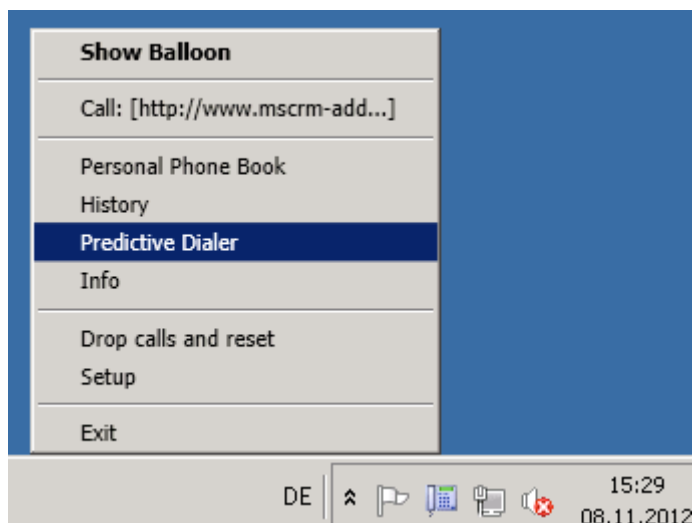
A new window with a list of active campaign-activities appears with details for each campaign-activity. This window is referred to as "Available Dialer Preview List".

- **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.
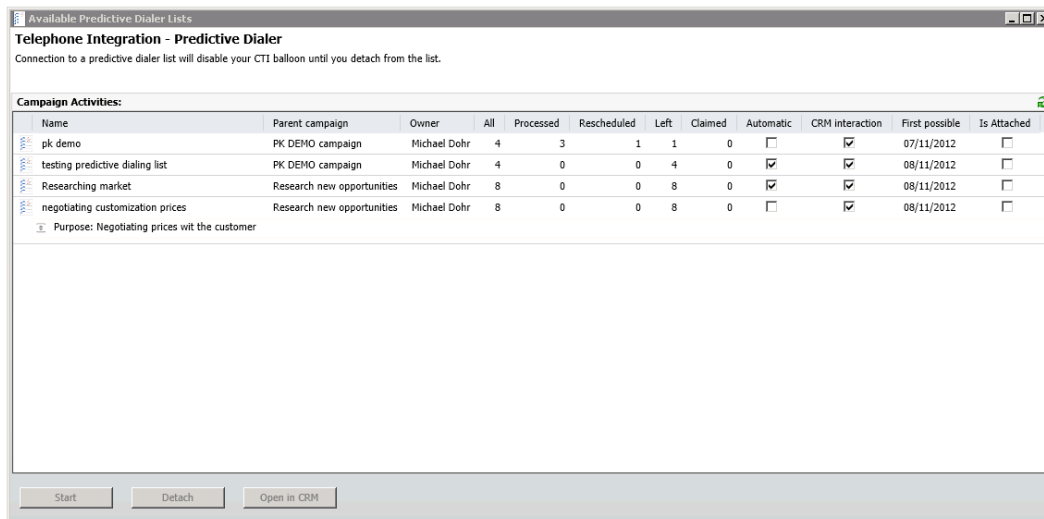
- **Rescheduled**: The number of all rescheduled phone calls. These phone calls are still open.

- **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 predictive 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 predictive dialer list are processed in a separate window, known as "Predictive 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.
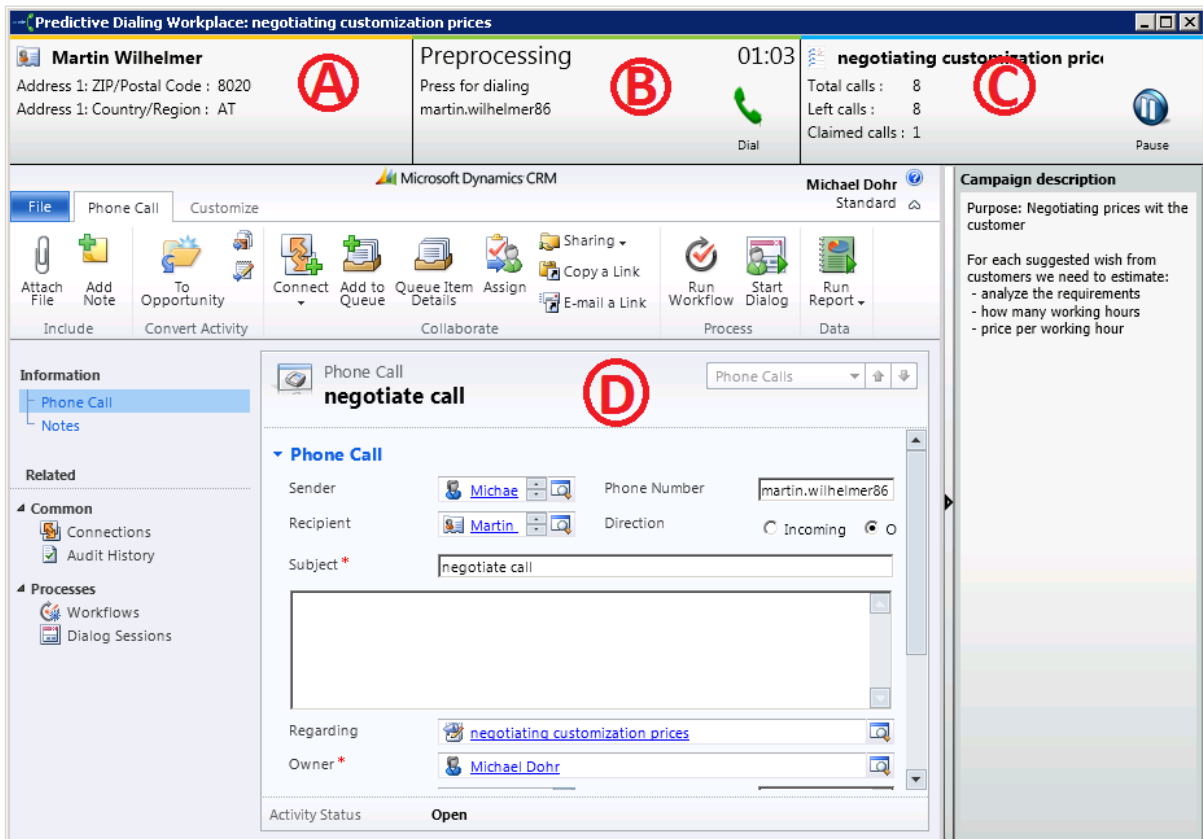
Section A shows CRM information about the recipient of the planned phone call activity.

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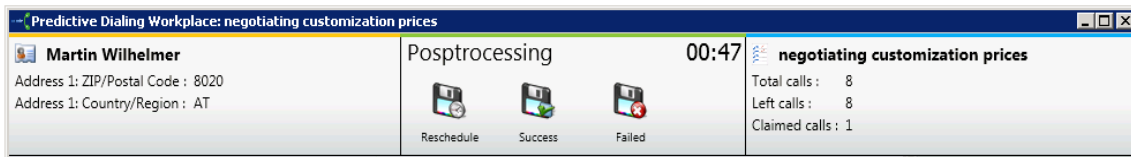
After you have selected one of the three options predictive dialer saves all user input into the existing call activity, speaks to another, unfinished call as in the preparatory state of the next call.

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 predictive dialing list, like the name of predictive 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.

11.3   Closing of Predictive Dialer Workplace

For closing (detaching from) the Predictive Dialer Workplace window, the Predictive 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.

12 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

13   TelephoneIntegration Overview
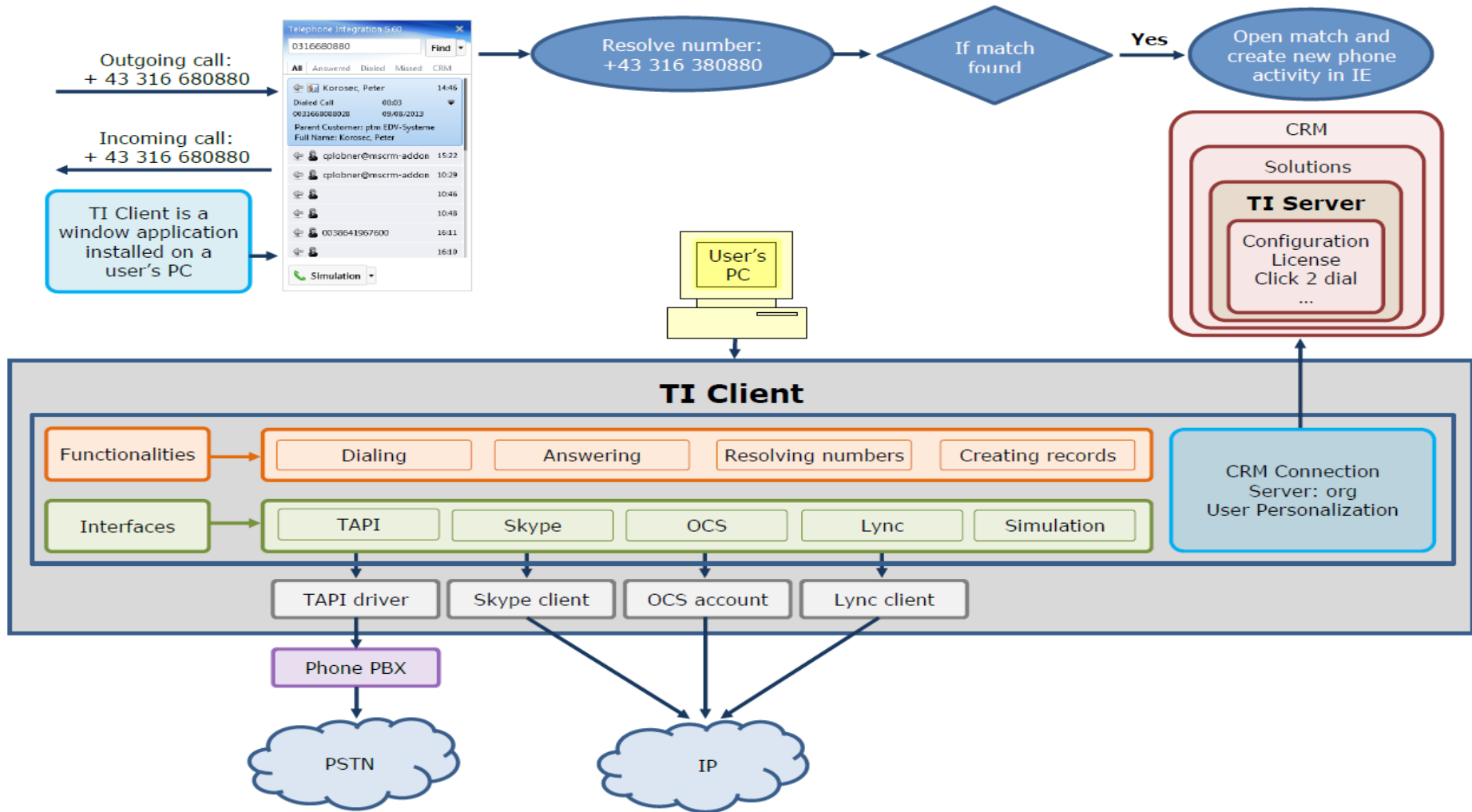
14 Contact

If you have questions to the product send an Email to
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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