Developer Guide - Getting Started

V5.1.1 Q3 2022

Contents

Introduction

This guide is designed to help developers get started with using Mondago's CRM Integration API, **partnerCRM**, enabling CRM integration within the partner's own CTI/UC desktop client.

Getting Started

Download

Download and install the **partnerCRM** installation file relevant to the OS you wish to target (PC or MAC) (If this is not available to you, please contact your Mondago Account Manager.)

Notes on PC

The installation file can be run as a normal installation during the development evaluation. However, **partnerCRM** will NOT appear in the Windows add/remove programs list. This is by design, as it is intended to be a component of your product and should not be visible in the programs list. partnerCRM can be installed using standard Microsoft installer command line options: **/quiet /silent /s** are all supported to hide installation prompts from the user.

To remove **partnerCRM**, run the installation again but with the **/uninstall** command line parameter, or to remove silently, use **/uninstall /s**

Notes on Mac

This is installed as a pkg file on the Mac environment.

To install on MAC

- Double click the pkg file and the install script will install the API

Launch / Start the API

For PC

To launch on a PC, use the following syntax with Windows Run command line, or a web browser:

Integratorlaunch:<ACTION comma separated>,<Parameter List, **semi colon** separated>

To launch, the ACTION is "RUN, INTEGRATOR"

Parameter List

user= *<userid>*; tel=<*phone number*>; accesscode=<*accesscode*>

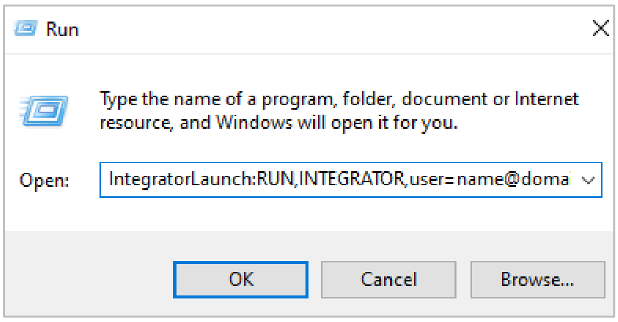
Where:

<userid>	name or email - this is the (unique) id used to license the user (typically the username required to login to your application)
<phone number>	minimally a country and area code. This is used to determine the country and area code of the user for accurate telephone number matching.
<accesscode>	your unique access code assigned by Mondago engineering.

Example command line:

Windows > Run

IntegratorLaunch:RUN,INTEGRATOR,user=*name@domainname.com*;tel=*+441733667800*; accesscode=*pcrm-mycompany*



A sample "partnerCRM.html" file is also available to offer launch options – just edit and customize to include the above configuration as required.

Note: for your production release, a unique access code will be provided, which will require a licensed user identifier to be provided. For testing, a proof-of-concept Access code is made available which ignores licensing. Once the client starts, a splash screen will be displayed briefly, followed by a system tray icon to show the software client is running: 

For Mac

To launch on a Mac, use a web page with the command syntax:

Integratorlaunch:<ACTION comma separated>,<Parameter List, **semi colon** separated>

To launch, the ACTION is "RUN, INTEGRATOR"

Parameter List

user=*<userid>*; tel=*<phone number>*; accesscode=*<accesscode>*

Where:

<userid> name or email - this is the (unique) id used to license the user (typically the username required to login to your application)

<phone number> minimally a country and area code. This is used to determine the country and area code of the user for accurate telephone number matching.

<accesscode> your unique access code assigned by Mondago engineering.

Example command line:

IntegratorLaunch:RUN,INTEGRATOR,user=*name@domainname.com*;tel=*+441733667800*; accesscode=*pcrm-mycompany*

Using the API test harness

Once the API is running you can use the API Test Harness to start testing the **partnerCRM** API.

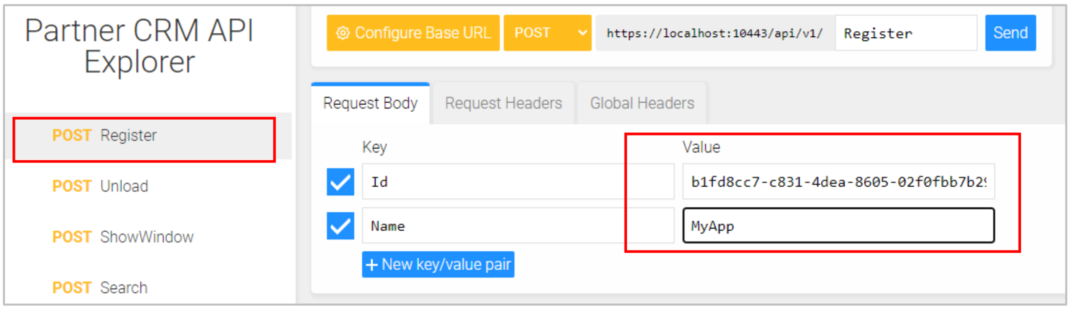
Test harness: https://api-partnercrm.mondago.com/

"Register" your application

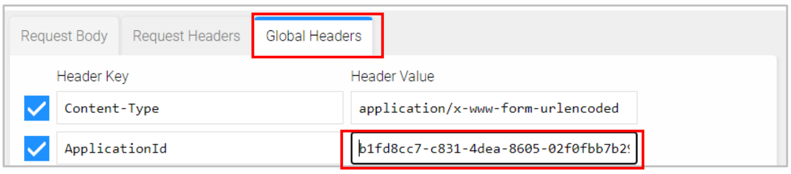
The first step is to register your application for use with the **partnerCRM** API:

1) Click on "**POST** Register" in the left pane to open the application registration form

2) Enter the required data:
   a. Id – Enter a GUID used to identify your application (AppID)
   b. Name – Enter the app reference for your application.

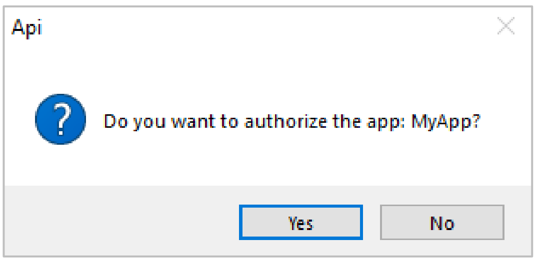


At this point it is also useful to add the same GUID to the Global Headers tab so that other commands are automatically populated with the correct GUID value:

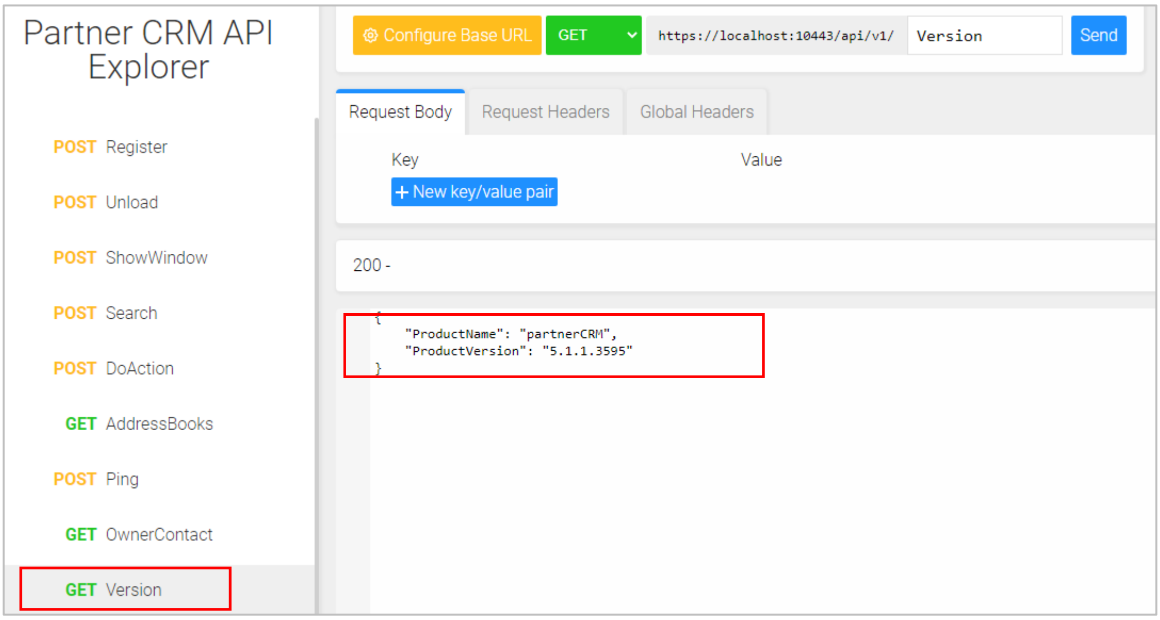


3) Press **Send** to initiate the app registration request.

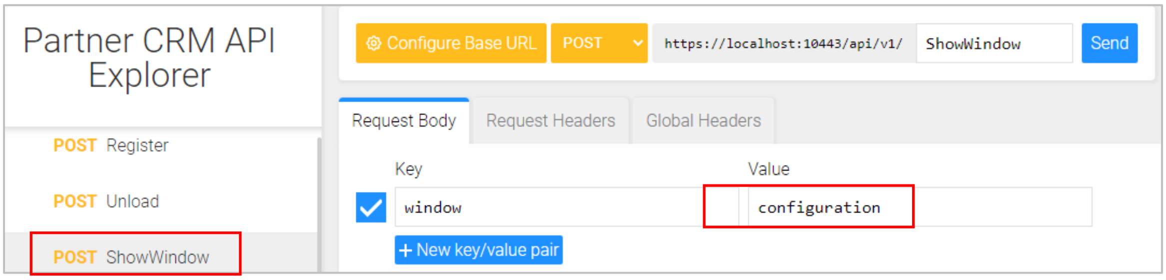
4) When registering a new app, the **partnerCRM** client must accept the registration. An authorization pop-up appears asking to approve the registration (check this isn't hidden behind other windows). Select "Yes" to complete app registration.



5) A useful command to check the connection and retrieve a response is the **GET** Version action:

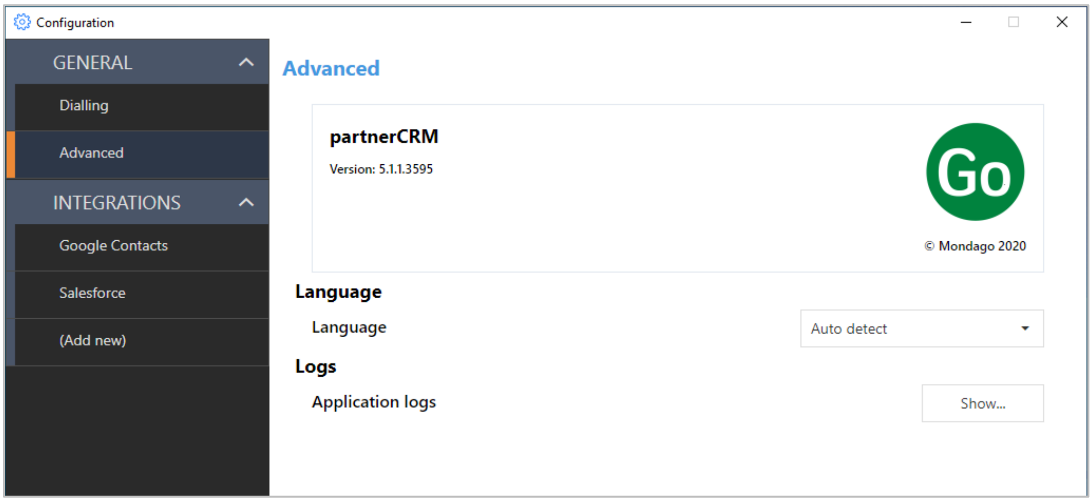


6) Finally, to check that **partnerCRM** configuration is accessible, send "**POST** ShowWindow" with the default "configuration" value:



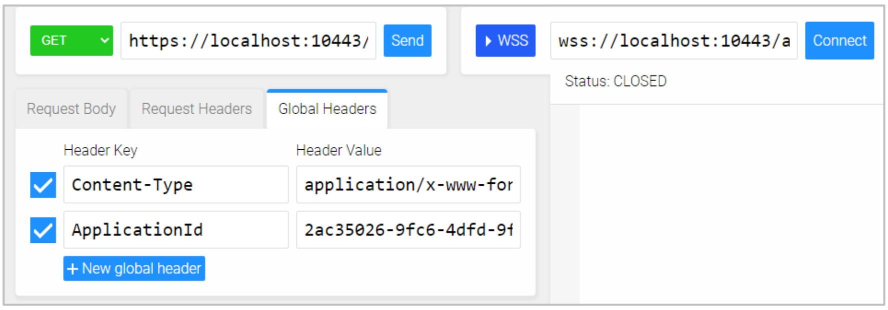
Note: You will also need to add the AppID to the value field in the Global Headers tab if it was not inserted at step 3 above.

This will open the **partnerCRM** Configuration window:



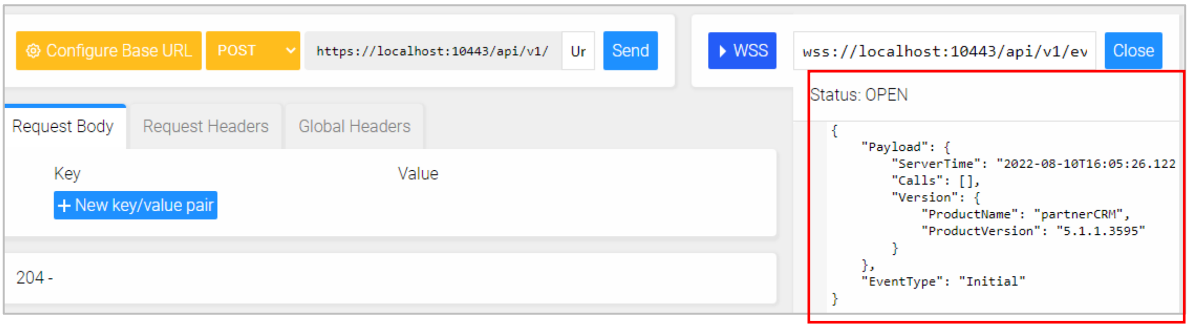
Events system

Events provides information from the **partnerCRM** client through a WebSocket channel to your application. To retrieve Events, use the **WSS** command button in the top right corner of the test harness and add the registered AppID to end of the pre-populated URL:



Example: wss://localhost:10443/api/v1/events***/3a168406-657a-4fc6-87fa-7eb155defff2***

Click "**Connect**" and, if successful, the Status should be "**OPEN"** and events will be presented to the display window.



The following Events are presented:

- ***ConfigurationChanged*** Any changes to a configuration setting.
- ***CrmConfigurationchanged*** Any changes to a CRM integration e.g. add, remove, edit.
- ***MakeCallRequest*** The number requested for dialing will be in the Tel: property
- ***Unload*** When a request to close the **partnerCRM** client is received

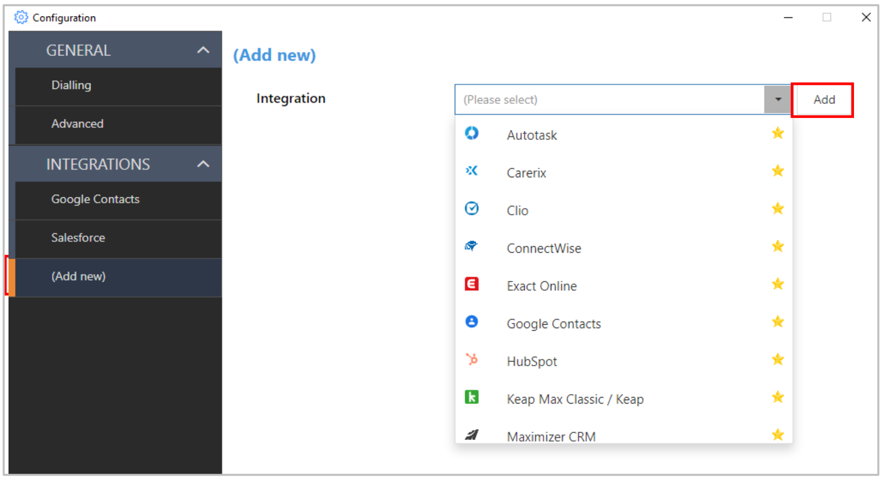
Exploring the API further

The key features of the **partnerCRM** API are the integration with CRM business applications for name matching and contact popping on incoming and outbound calls and searching by name or number.

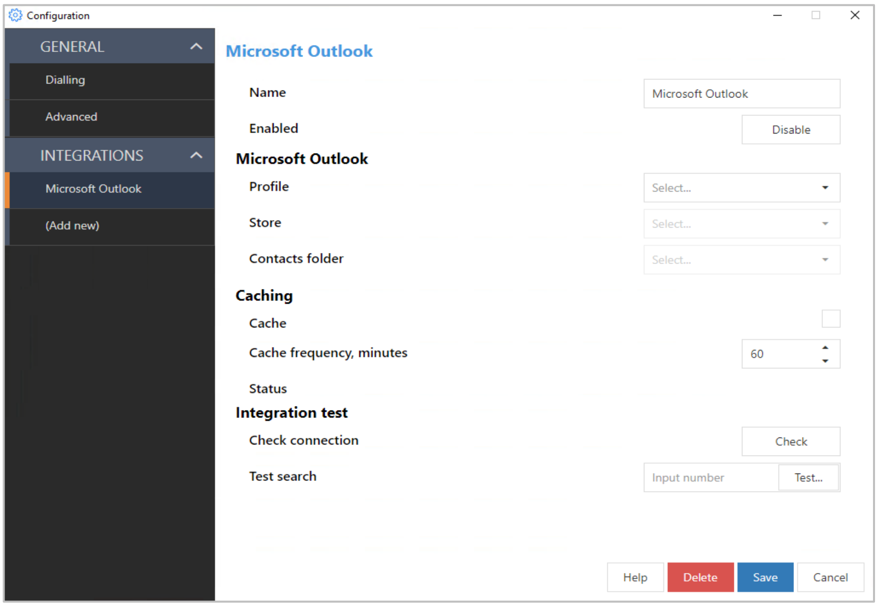
Add CRM integration (Address books) to your client

From the "Configuration" window, you can add CRM business application add-ins under the INTEGRATIONS section:

1) Select **(Add new)** under INTEGRATIONS, choose an integration from the drop-down list and then click "**Add**" to open the configuration page for the selected integration:



2) The setup page, specific to the selected integration, prompts for the required configuration data. Online **Help** is available at any time to assist with correct configuration for the specific business application (in this example, Microsoft Outlook):

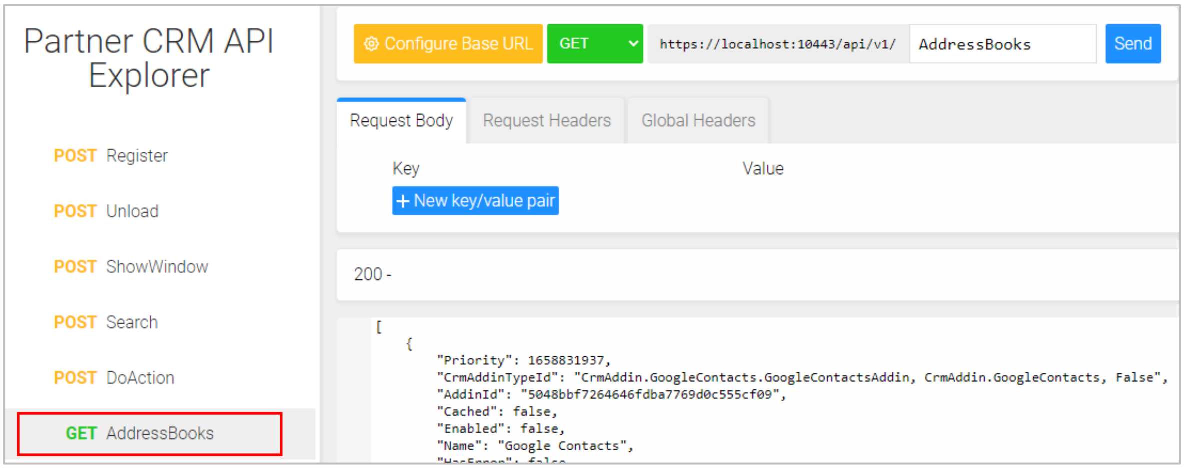


3) After completing the configuration form, you can **Check** the connection and **Test** telephone number matching.
4) Finally, click **Save** to complete the setup.

Once one or more CRM integrations are configured, you can test the API functions such as **Get Addressbooks**, **Search** and **DoAction**.

GET AddressBooks

This command will provide a list of all configured address books. Each address book listed contains a header describing which integration add-in has been configured:

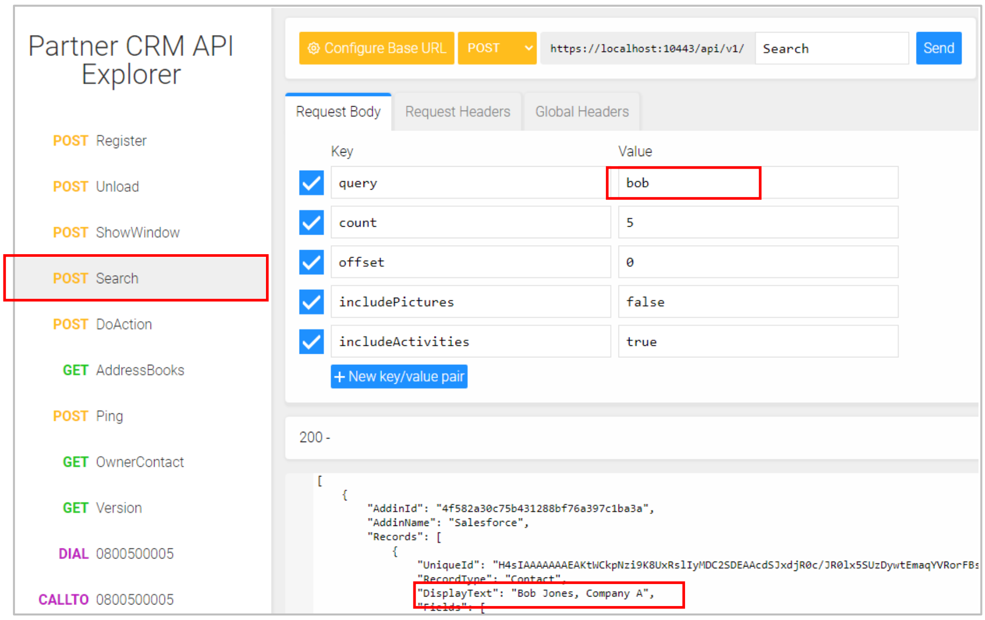


It is recommended to recall this command on receiving a ***ConfigurationChanged*** event.

POST Search

This command will initiate a search for contacts in any available address book.

- **query** is your search term: name or number (telephone number search is performed when the query value only contains numbers)
- **count** controls the quantity of matching results to return
- **offset** is used for pagination
- **includePictures** is used to return contact images, if supported by the integrated CRM
- **includeActivities** is used to return activity log fields, if supported by the integrated CRM



POST DoAction

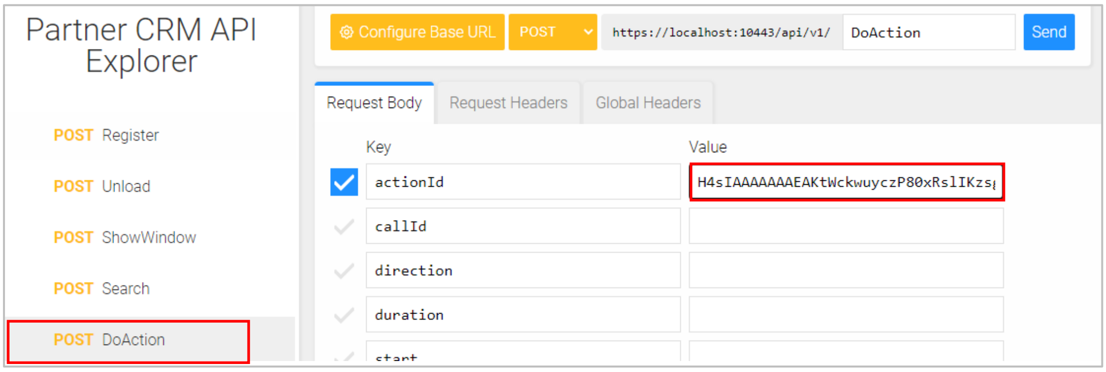
This command is used perform actions such as "**Show Contact**" to open the contact record within the CRM application or "**Create Call Task**" to write an activity log into the CRM entry, if supported.

For each search result, a list of possible actions is included in the output.

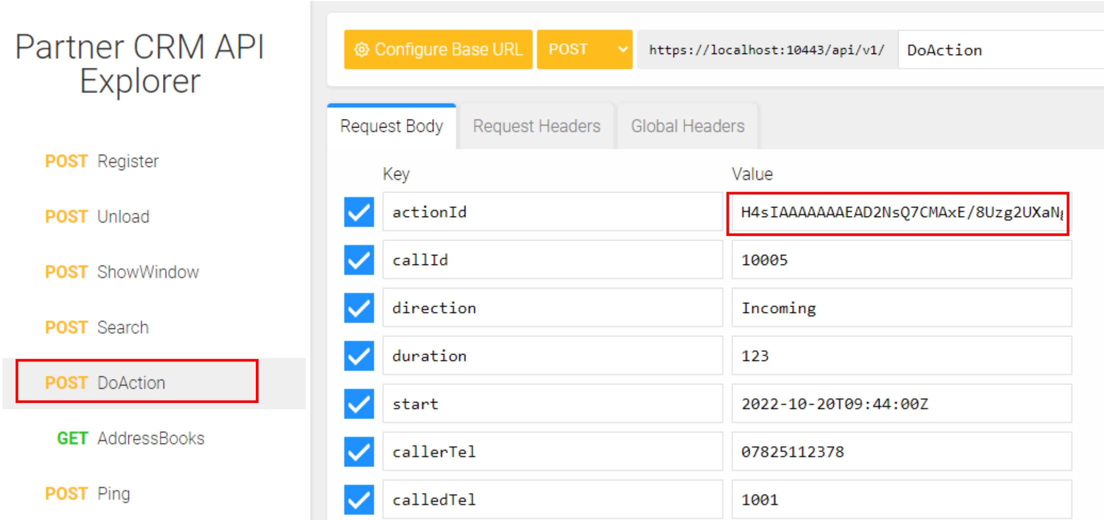

```
"Actions": [
    {
      "UniqueId": "H4sIAAAAAAAEAKtWckwuyczP80xRslIKzsgvD0pNzi9KUdJRgjDA4gYGxhYpBiDgWOrkYuzo6AeUd0xJy
      "ActionId": "ShowRecord",
      "IsMultiple": false,
      "UseDefaultImage": false,
      "DisplayText": "Show Contact",
      "SpecialKind": "Default"
    },
    {
      "UniqueId": "H4sIAAAAAAAEAKtWckwuyczP80xRslJyLkpNLEkNyMjPSwWJ1mWWVCrpKAWlJucXpYAVGBgYW6QYgIBjq
      "ActionId": "CreatePhoneActivity",
      "IsMultiple": false,
      "UseDefaultImage": false,
      "DisplayText": "Create Call Task",
      "SpecialKind": "CallAction"
    },
    {
      "UniqueId": "H4sIAAAAAAAEAKtWckwuyczP80xRslJyLkpNLEkNyMjPSwWJ1mWWVDrmpQRn5Jcr6SgFpSbnF6WA1RkYQ
      "ActionId": "CreatePhoneActivityAndShow",
      "IsMultiple": false,
      "UseDefaultImage": false,
      "DisplayText": "Create and show Call Task",
      "SpecialKind": "CallAction"
```


To perform an action, use the **Unique ID** value for the specific **ActionID** required as the value in the **DoAction** command.

Here, the UniqueID value for the "**ShowRecord**" ActionID is used with the **DoAction** command to open the specific CRM contact record:



Here, the UniqueID value for the "**CreatePhoneActivityAndShow**" ActionID is used with the **DoAction** command to write call activity data to the specific CRM contact record activity log and then open the activity log within the specific CRM application.

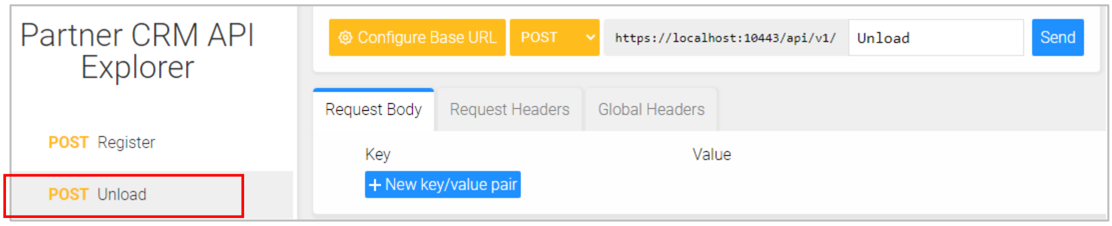


The Activity Log parameters include:

- **callId** a unique, incremental reference number for the particular call event
- **direction** Incoming or Outgoing
- **duration** total length of call (in seconds)
- **start** date and time (ISO 8601 format) of start of call event
- **callerTel** calling party telephone number
- **calledTel** target destination party telephone number

POST Unload

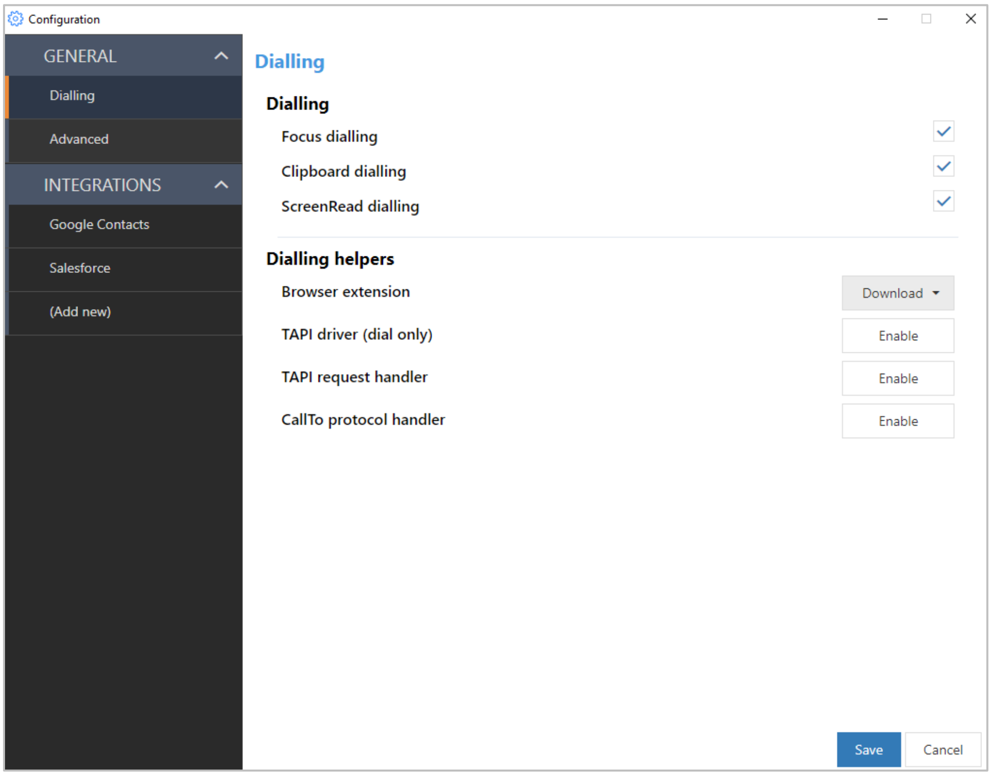
This command will close the **partnerCRM** client and send a closing event.



NOTE: Once unloaded, the API will be disconnected, and you will need to follow the launch process again to re-connect. You do not need to re-register, however it is recommended that you send a Register command and check that a 200 OK message is returned to confirm the AppID is still authorized.

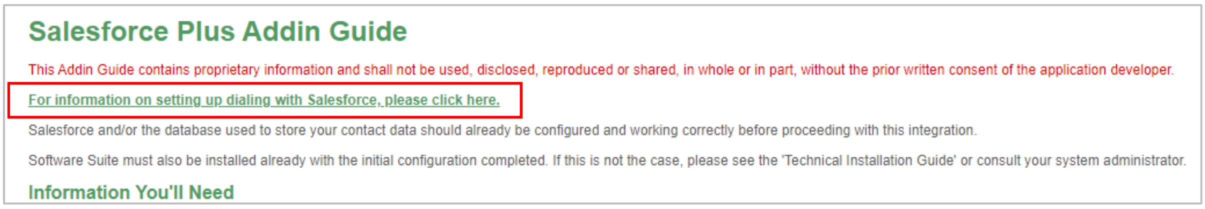
Implementing Click to dial

The Client also provides a range of Click to dial techniques which are configured independently of the CRM integration within the **Dialling** option of the Configuration menu.



To check the preferred dialing method of a particular CRM, use the online Help from within the specific CRM Integration setup page and click the link near the top of the page that states: "***For information on setting up dialing with ****, please click here.***"

Example for Salesforce integration online help page:



This document does not intend to explain how to set up the many types of dialing handlers. Please contact your Account Manager to get access to hep guides.

What is significant is, once the dialing mode required for the chosen CRM is configured, the dial actions will uniformly surface through the Event systems, allowing you to make the call.

Further Develop FAQ's

Deployment

The developer should manage the download and development of the installer. The installer should be viewed as a component of your product, so could be included with your installer managed through a download process. Launching the **partnerCRM** installation with /SILENT hides all installation dialog.

Branding options include:

- Product Naming
- Splash screen
- Tray Icon
- Version page product name, logo and copyright

Note

For the Mac version, the API is intended to be identical, however the feature set is different. For example, not all dialing handlers are available on the Mac version.

Troubleshooting

In the event that the Configuration window does not appear when using the API ShowWindow method, an override can be used, as follows:

```
IntegratorHelper.exe --action=show --name=configuration
```

To enable SSL:

```
IntegratorHelper.exe --action=ENABLE --name=SSL --params="port=10443"
```

END OF DOCUMENT