



QX Integration with Vtiger CRM

Abstract: Epygi has implemented integration of the QX IP PBX with Vtiger CRM. This guide describes how to configure the QX IP PBX with Vtiger CRM and how to use the **Epygi CRM Connection for Vtiger** web application to control and automatically update the information for CRM contacts upon receiving inbound calls from customers on the QX IP PBX.

Document Revision History

Revision	Date	Revision	Valid for Models	Valid for FW
1.0	10-Jun-20	Initial Release	QX IP PBXs, UC IP PBXs	6.3.25 and higher
1.1	24-Jun-20	Updated	QX IP PBXs, UC IP PBXs	6.3.25 and higher
1.2	10-Sep-20	Updated	QX IP PBXs, UC IP PBXs	6.3.26 and higher

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1 Introduction

Epygi provides integration between the QX IP PBX and Vtiger CRM, implemented via the Epygi REST API for CRM. This integration allows to view, automatically create and update the information for Vtiger contacts upon receiving inbound calls from customers on the QX. It is achieved via the **Epygi CRM Connection for Vtiger** web application (see chapter 5).

The CRM integration is a licensable feature for the QX, so a license key should be purchased to make the CRM integration functional on the QX on a simultaneously-connected user basis.

After license activation on the QX, the **CRM Users** configuration page and the **Epygi CRM Connection for Vtiger** web application will be accessible for QX users. Click the **Applications** → **Epygi CRM Connection** link from QX login page or enter the following line <http://xxx.xxx.xxx.xxx/crmconnect> in the address bar of the browser to open the **Epygi CRM Connection for Vtiger** web application, where xxx.xxx.xxx.xxx is the IP address or host name of the QX.

Please Note:

- The described configuration is generic for all Epygi IP PBXs of QX and UC line, namely for QX20, QX50, QX200, QX500, QX3000, QX5000, QXISDN4+, ecQX and UC20, UC80 (henceforth QX).


- The QX configuration details are beyond the scope of this document. For detailed information on how to configure the QX and how to activate the licensable features on the QX refer to the documents under the References section.

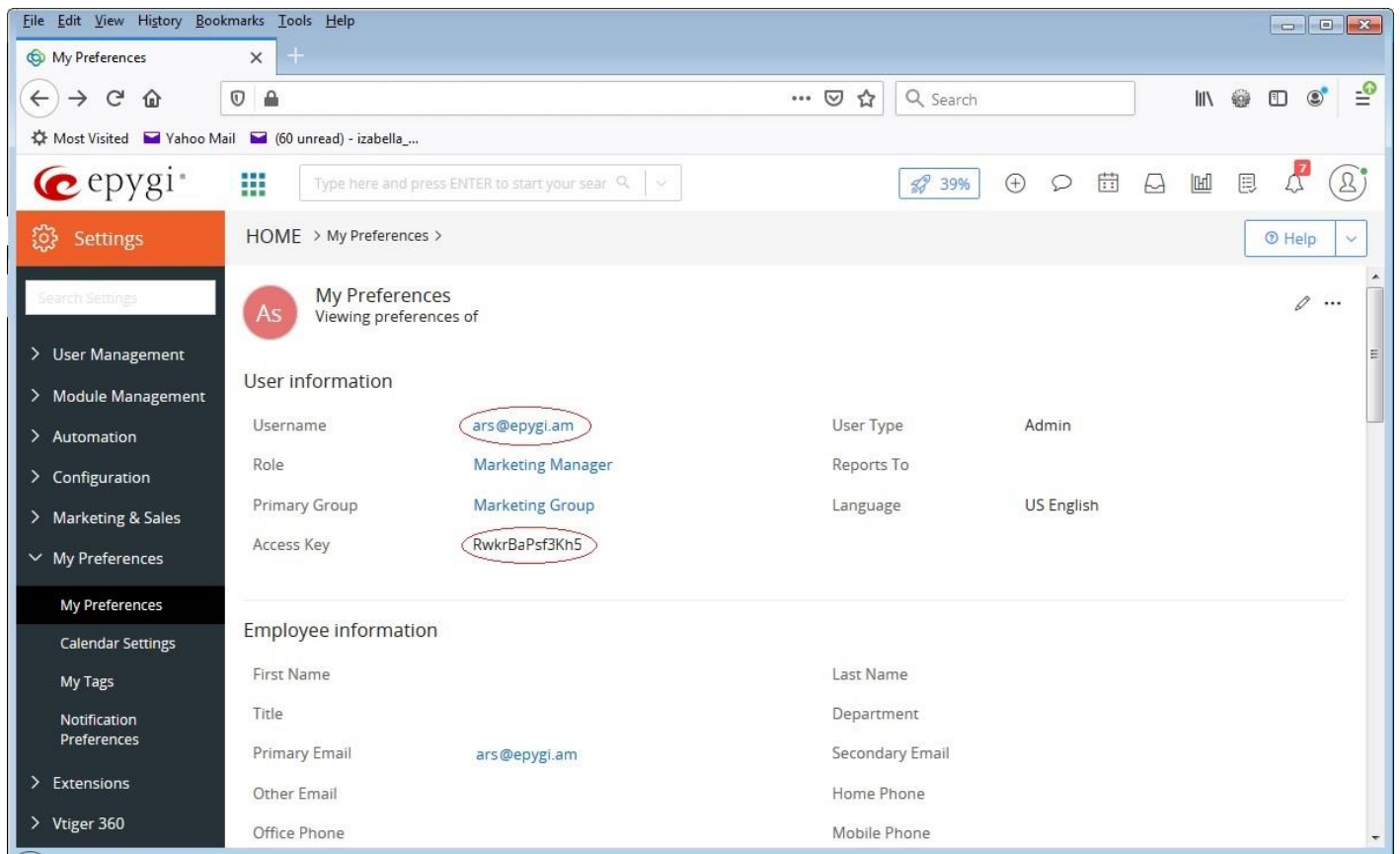
2 Requirements and Prerequisites

- QX running the FW version 6.3.26 and higher
- CRM Integration license purchased and installed on the QX
- CRM user(s) configured on QX.
- Vtiger version 7.2.0 and higher
- User account for the Vtiger (username and access key)
- URL of the Vtiger CRM web site
- Google Chrome, Opera, Microsoft Edge and Mozilla Firefox are recommended WEB browsers to use with the CRM Connection web application.
- The QX and the PC running CRM Connection should be visible to each other. If user is connecting to the QX via the WAN interface, ensure a filtering rule is enabled on the QX firewall for the PC. The CRM Connection will use port 8181. Creating a rule is not required if the firewall on QX is disabled or set to Low level.

3 Vtiger Configuration

Please Note: all listed data below regarding the user accounts for Vtiger are just examples.

- Login to your Vtiger account
- Go to the top right icon (User Profile)  and click on it
- Click on the Gear Icon (“**My References**”)
- Copy the Username and Access Key as highlighted below



The screenshot shows the 'My Preferences' page in a web browser. The page is titled 'My Preferences' and shows the user's profile information. The 'User information' section includes the following details:

Username	ars@epygi.am	User Type	Admin
Role	Marketing Manager	Reports To	
Primary Group	Marketing Group	Language	US English
Access Key	RwkrBaPsf3Kh5		

The 'Employee information' section includes the following fields:

First Name	Last Name
Title	Department
Primary Email	Secondary Email
Other Email	Home Phone
Office Phone	Mobile Phone

Please note. This information (Username and Access Key) must be copied in the **CRM Connection** page on the QX when configuring CRM user (agent) for the **CRM Connection** application.

Please note. The Vtiger CRM with the preconfigured user account and with default settings will support the following main features:

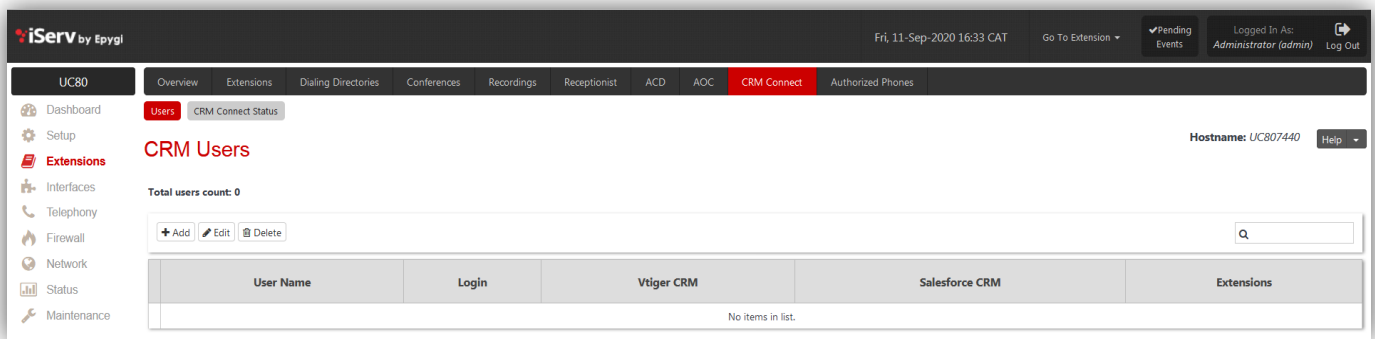
- If an inbound call from an external number matches a contact in the CRM database, it will trigger the contact pop-up in your **CRM Connection** web application. You can then request to view or edit the information for the Contact using the **View Contact Info** option.
- If an inbound call from an external number does not match any contact, you can add the caller as a new contact using the **Add Contact** option.

IMPORTANT: To be able to create/update Vtiger Contacts from **CRM Connection** application, the profile of the Vtiger user's Role needs to have View, Create and Edit permissions for the Contacts module in Vtiger CRM. To verify what Profile the user belongs to, and that what the Profile's permissions are in Vtiger CRM, click on the Roles menu item, navigate to the user's role and verify "Assign Profiles". Then click on the Profiles menu item, select the profile in question, click on "OTHER MODULES" and verify the statuses for View, Create, Edit, and Delete. If the Create or Edit permissions are not set for the user's profile, he cannot create a new record in Vtiger, and accordingly, **CRM Connection** application will provide appropriate Error when user tries to create or update Contact.

4 QX Configuration

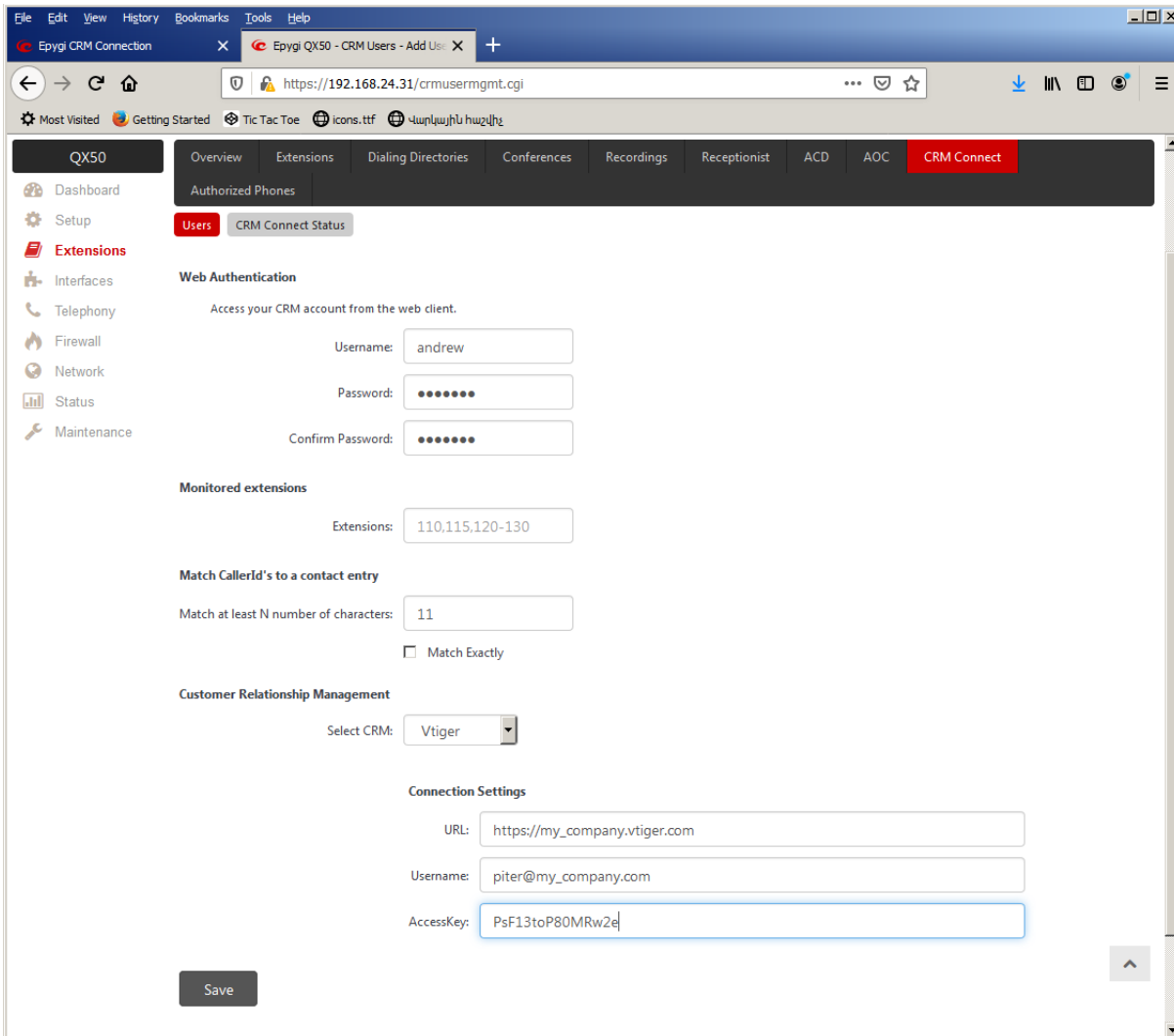
Described below is a piece of configuration to be completed on the QX just for the Vtiger integration. For more details on the QX configuration and settings refer to the guides listed under the **References** section, also available at the Epygi support portal.

Login to the QX as admin and go to the: **Extensions** → **CRM Connect** → **CRM Users** management page.



Add a user by filling in the fields as shown below:

- **User:** the name of the user/agent that allows monitoring inbound calls to the QX via the **CRM Connection** web application.
- **Username and Password:** the web authentication parameters to be used by the user/agent to login to the **CRM Connection** WEB application.
- **Monitored Extensions:** inbound calls to these QX extensions which will be monitored by the **CRM Connection** application.
- **Match at least N number of characters:** the minimal number of digits Epygi REST API will query Vtiger to match a Contact/Lead for the **CRM Connection**. Queries with a smaller number of digits will be ignored, so no Vtiger records will be matched for the **CRM Connection**.
- **Match Exactly:** if checked, only CRM records exactly matching the called phone number will be returned. Otherwise, records with partially matched phone numbers will be returned.
- **Select CRM:** Set this value to Vtiger. **Note:** Currently Epygi supports only Vtiger and Salesforce but is working on integration of other CRMs as well.
- **URL:** URL of your Vtiger web site.
- **Username and AccessKey:** credentials to authorize Epygi REST API over Vtiger CRM.



The screenshot shows a web browser window with the URL `https://192.168.24.31/crmusermgmt.cgi`. The page is titled "CRM Connect" and is part of the "Users" management interface. The left sidebar contains navigation options: Dashboard, Setup, Extensions, Interfaces, Telephony, Firewall, Network, Status, and Maintenance. The main content area is titled "Web Authentication" and includes the following sections:

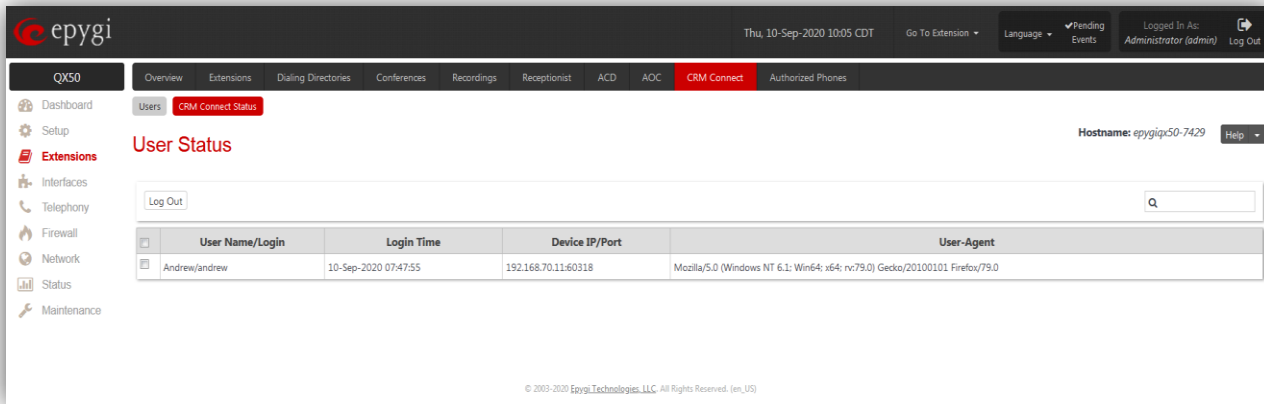
- Web Authentication:** A section for accessing a CRM account from a web client. It contains three input fields: "Username" (with the value "andrew"), "Password" (masked with dots), and "Confirm Password" (masked with dots).
- Monitored extensions:** A section with an "Extensions" input field containing the range "110,115,120-130".
- Match CallerId's to a contact entry:** A section with a "Match at least N number of characters" input field set to "11" and a "Match Exactly" checkbox that is currently unchecked.
- Customer Relationship Management:** A section with a "Select CRM:" dropdown menu currently set to "Vtiger".
- Connection Settings:** A section with three input fields: "URL" (with the value "https://my_company.vtiger.com"), "Username" (with the value "piter@my_company.com"), and "AccessKey" (with the value "PsF13toP80MRw2e").

A "Save" button is located at the bottom left of the form area.

Custom Mandatory Fields: After you save your newly created user account, you can edit it, and at that time new field will appear on user's account screen - **Custom Mandatory Fields**. To be able to create/update Vtiger Contacts, Epygi CRM Connection needs information about mandatory fields defined in your Vtiger CRM. Epygi REST API is smart enough to automatically determine those mandatory fields, which you see in your Vtiger CRM marked with red asterisk (*). However, if in Vtiger there are custom validation rules applied, defining fields as mandatory, which may not be detected by the API – you need to define those custom mandatory fields here.

For that, from the list of Contact fields select those, which your Vtiger CRM requires to be filled, when you create or update a Contact record in your Vtiger CRM. This will form the list of Custom Mandatory Fields.

If you have multiple CRM Connection users linked to the multiple Vtiger accounts, you need to provide the same set of Custom Mandatory Fields for all of them in the CRM Connection GUI. Pressing **Save** will link the CRM Connection user to Vtiger CRM account. The connection status is provided in the CRM Connect Status menu.



5 How to use the CRM Connection

Epygi's **CRM Connection** is a web application integrated with Epygi REST API for CRM, designed to support the CRM users to control and monitor incoming calling sessions on QX and update the Vtiger contacts.

Click the **Application** → **Epygi CRM Connection** link from QX login page or enter the following line <http://xxx.xxx.xxx.xxx/crmconnect/#!/login> in the address bar of the browser, where **xxx.xxx.xxx.xxx** is the IP address or host name of the QX.

Login to **CRM Connection** using the [web authentication](#) credentials for the CRM user.

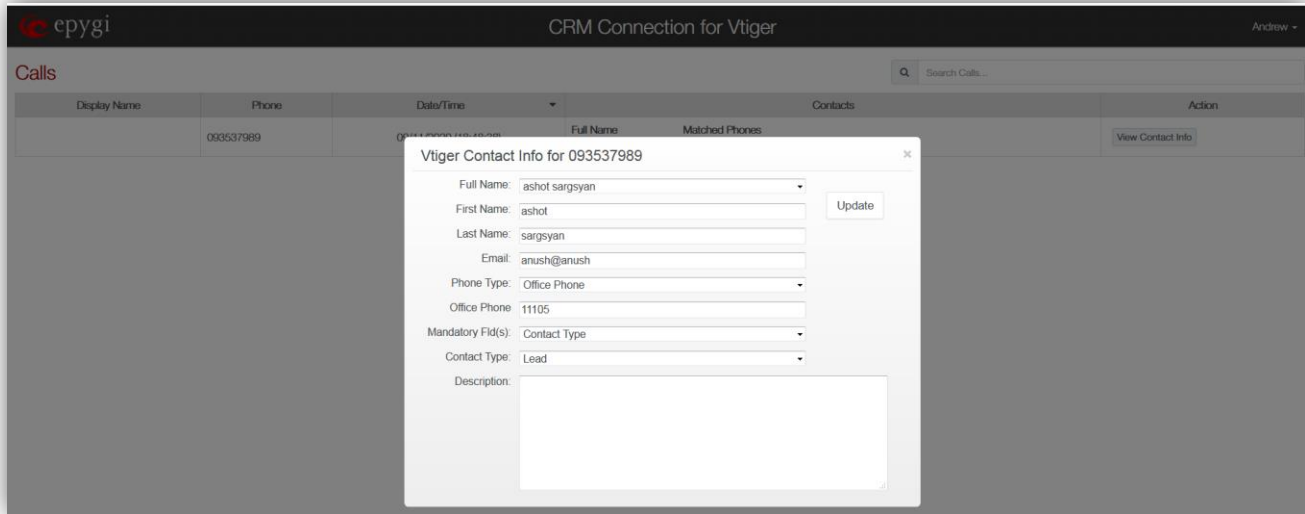


When the QX receives an inbound call to one of the monitored extensions, it checks the Vtiger CRM system to look up the contact name.

- If not found, the **CRM Connection** will indicate the inbound caller as a **no match**; the CRM user can now add it as a new contact.



- If found, the name of the contact is displayed in the **CRM Connection**. The CRM user then has a choice to view all available information for the contact using the **View Contact Info** button, as well as, update that information in the **Update** window.



6 References

Refer to the below-listed resources to get more details about the configuration settings used in this guide at the [Epygi Support Portal](#):

- Manual-II: Administration Guide for QX IP PBXs
- Manual-III: User Guide for QX IP PBXs
- Licensable Features on QX IP PBXs
- Call Routing on QX IP PBXs
- Preventing Unauthorized Calls on QX IP PBXs
- Users Rights Management on QX IP PBXs

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