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Implicit FrontEnd for  
SugarCRM - Exchange

# Implicit FrontEnd™ for SugarCRM - Microsoft Exchange®

## Version 2.0

## Installation and Configuration Guide

**Implicit Inc.**

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# 1. Introduction

## 1.1 Overview

Implicit FrontEnd for SugarCRM - Exchange synchronizes email, contacts, calendars and tasks between SugarCRM and Microsoft Exchange users' mailboxes. The software consists of a Microsoft Windows system service that runs as a background process and performs the synchronization and a configuration tool to allow Exchange/IT administrators to configure the software.

## 1.2 Solution Architecture

The following diagram describes the overall architecture of this solution:

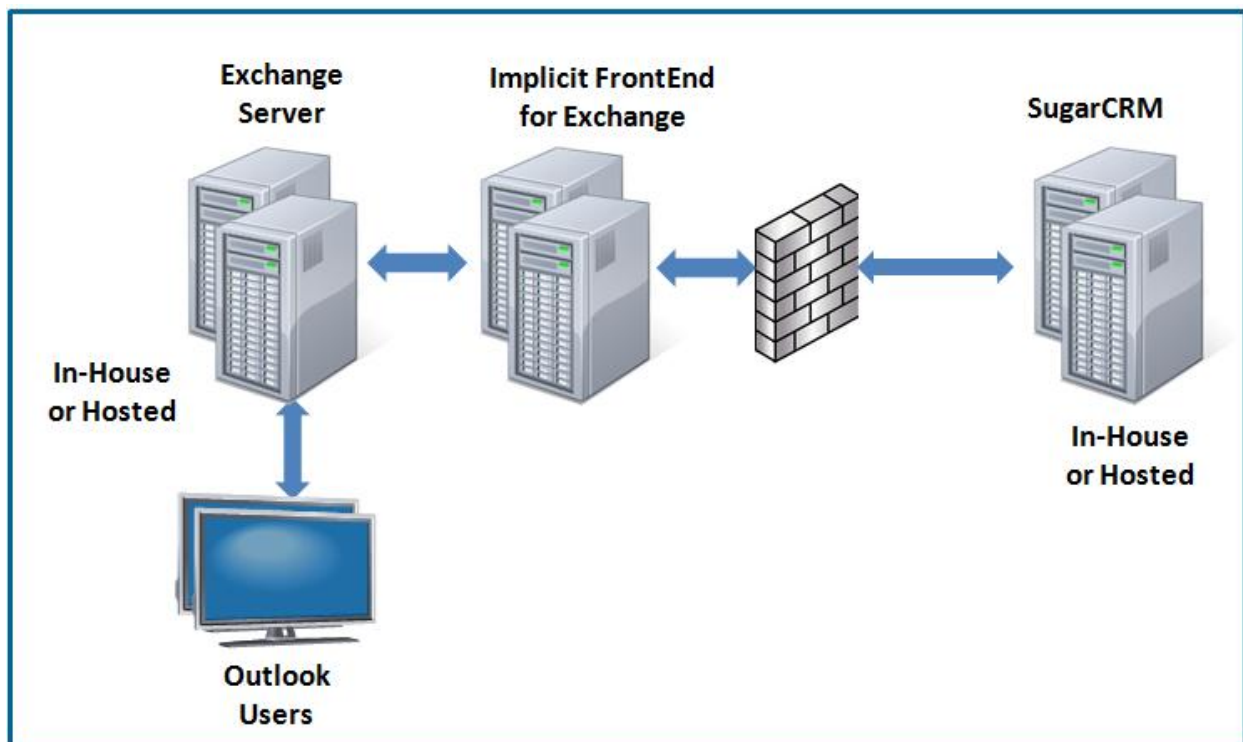


Fig. 1 – Solution Architecture

Implicit FrontEnd supports multiple configurations:

- SugarCRM can be either on premise or hosted
- Microsoft Exchange can be either on premise or hosted
- FrontEnd Server – A single or multiple server depending on require scalability

### 1.3 Implicit FrontEnd Scalable Architecture

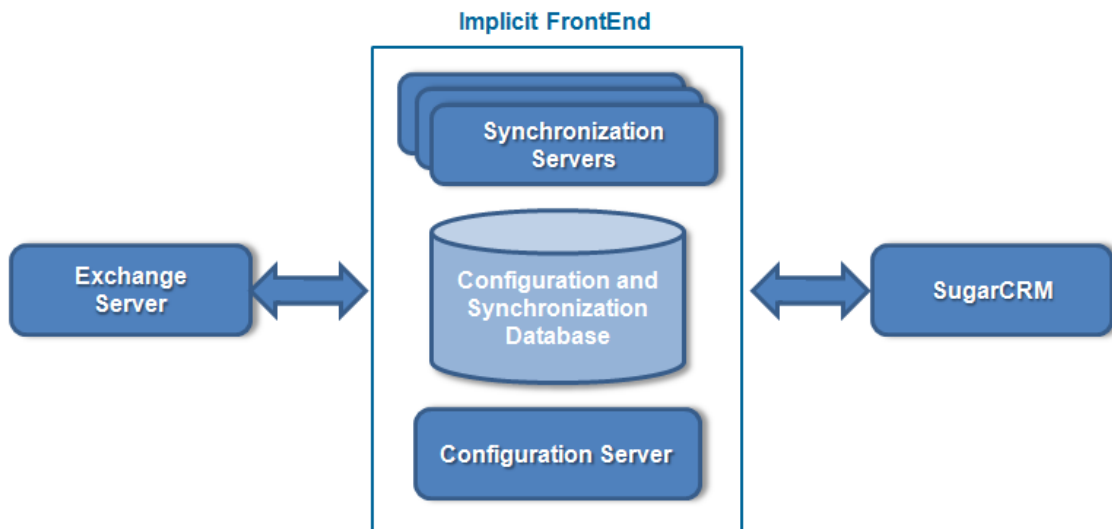


Fig. 2 – FrontEnd Architecture

Implicit FrontEnd offers a highly scalable architecture. The basic configuration consists of a single server where all the services are installed: configuration server, SQL database and a synchronization server. Depending on the number of users and amount of data to synchronize, the architecture can scale up to multiple servers.

## 2. Installation

### 2.1 Preparing for the installation

Before you install Implicit FrontEnd for SugarCRM - Exchange (“Sync Gateway”) installation, please make of the following:

- Your Exchange Server version and the machine you are installing the Sync Gateway are supported. See section 2.4 for supported platforms.
- The Exchange service account you will be using for Sync Gateway has been granted Impersonation privileges or Delegate Access permissions so that it can use Exchange Web Services (EWS) client applications to access other users' mailboxes. See section 2.2 on how to configure impersonation privileges or delegate access permissions.

### 2.2 Setting up Exchange Service Account

#### 2.2.1 On-Premise Exchange Server

For on-premise Exchange (2007/2010/2013) server you need to setup an Active Directory user account with Impersonation privileges so that it can access and synchronize other users' mailboxes. To configure Exchange Impersonation, please review the following Microsoft articles:

- Exchange 2007: [http://msdn.microsoft.com/en-us/library/bb204095\(v=exchg.80\).aspx](http://msdn.microsoft.com/en-us/library/bb204095(v=exchg.80).aspx)
- Exchange 2010/2013: [http://msdn.microsoft.com/en-us/library/office/bb204095\(v=exchg.140\).aspx](http://msdn.microsoft.com/en-us/library/office/bb204095(v=exchg.140).aspx)
- Exchange 2013: [http://technet.microsoft.com/en-us/library/dd776119\(v=exchg.150\).aspx](http://technet.microsoft.com/en-us/library/dd776119(v=exchg.150).aspx)

#### 2.2.2 Exchange Online / Office 365

For Office 365, configure the Exchange URL to:

<https://outlook.office365.com/EWS/Exchange.asmx>

To configure a service account with Impersonation privileges on Exchange Online/Office 365, please review the following Microsoft article:

[http://msdn.microsoft.com/en-us/library/office/dn722377\(v=exchg.150\).aspx](http://msdn.microsoft.com/en-us/library/office/dn722377(v=exchg.150).aspx)

Please note that for hosted Online, Impersonation is only available with the enterprise plans. If you or your customers are using Small business plan, you'll need to configure the account with Delegate Access permissions.

The following article contains useful information on the difference between the two:

<http://blogs.msdn.com/b/exchangedev/archive/2009/06/15/exchange-impersonation-vs-delegate-access.aspx>

### **2.2.3 Hosted Exchange Server / Delegate Access permissions**

For hosted Exchange server (2007/2010/2013), please follow the instructions of your Exchange hosting provider on setting up account with Delegate Access permissions

### **2.3 Setting up Master Exchange Categories**

To allow users to manually select which Exchange data will be synchronized with the CRM, you can create global Exchange categories which would be visible via Outlook to all users. This configuration can be as simple as a single category e.g.: “CRM” which is just a global switch that be can be used to mark items (emails, contacts, appointment/meetings and tasks) for synchronization or you can create multiple categories such as clients, accounts, opportunities etc.

### **2.4 Supported Platforms**

- Supported Microsoft Exchange Versions: Exchange 2007, Exchange 2010, Exchange 2013
- Supported Operating Systems: Microsoft Windows Vista, Windows 7, Windows 8, Windows Server 2008/2012

## 2.5 Installing the Pre-Requisites Components

Before installing the Sync Gateway, the installer will check the desktop for required components and install/upgrade any missing component:

- .Net Framework 4
- Microsoft Sync Framework 2.0 Core Components
- Microsoft Sync Framework 2.0 Provider Services
- Microsoft SQL Compact Edition.

## 2.6 Installing Implicit FrontEnd for Exchange

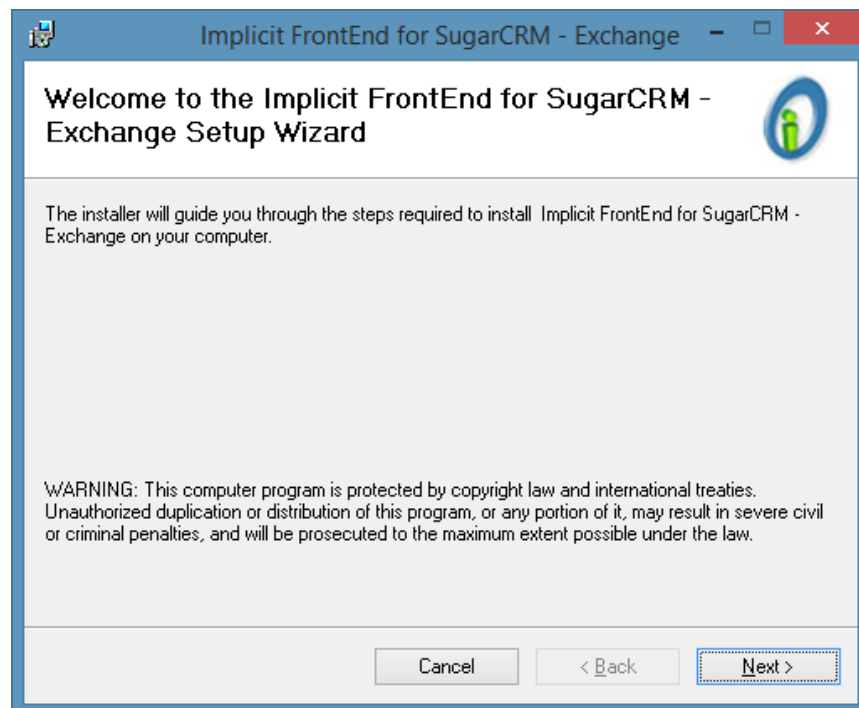


Fig. 3 - Welcome Screen

Click Next to continue. You will be prompted to select the installation folder. By default the installation folder will be set to: \Program Files\Implicit\Implicit FrontEndSugarCRMExchnage. Choose Browse to select a different folder. Then click 'Next'.



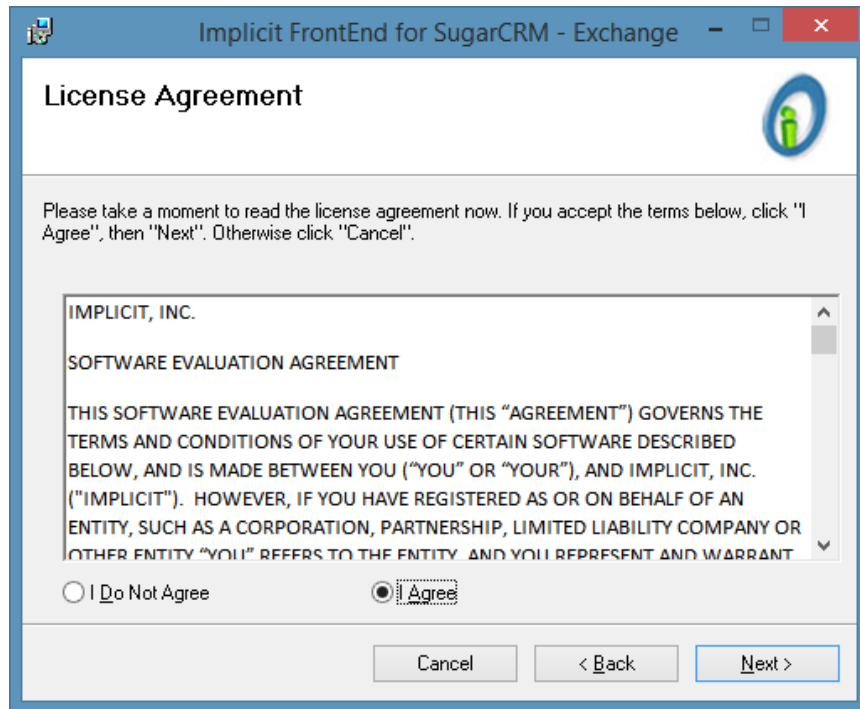


Fig. 4 – License Screen

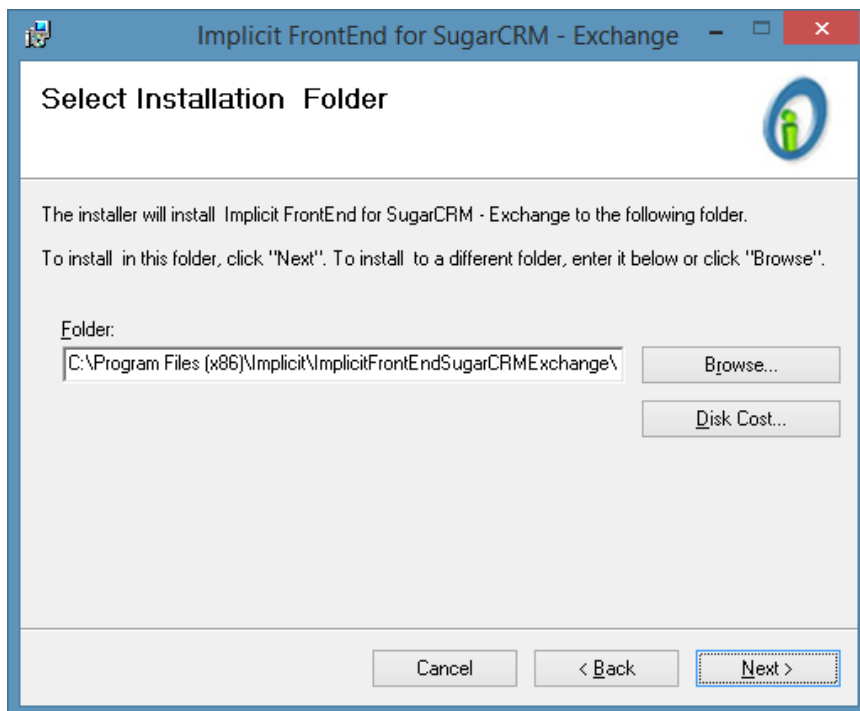


Fig. 5 - Installation Folder Screen

Next, the installer will be prompt you to confirm the installation and start copying the files:

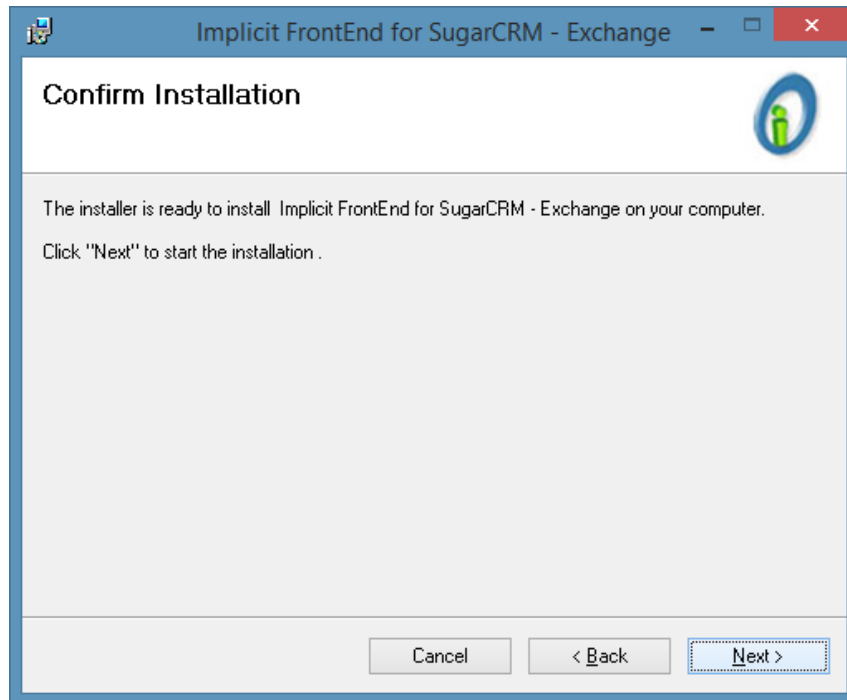


Fig. 6 - Confirmation Screen

Upon completion of the installation, the installer automatically starts the gateways synchronization service.

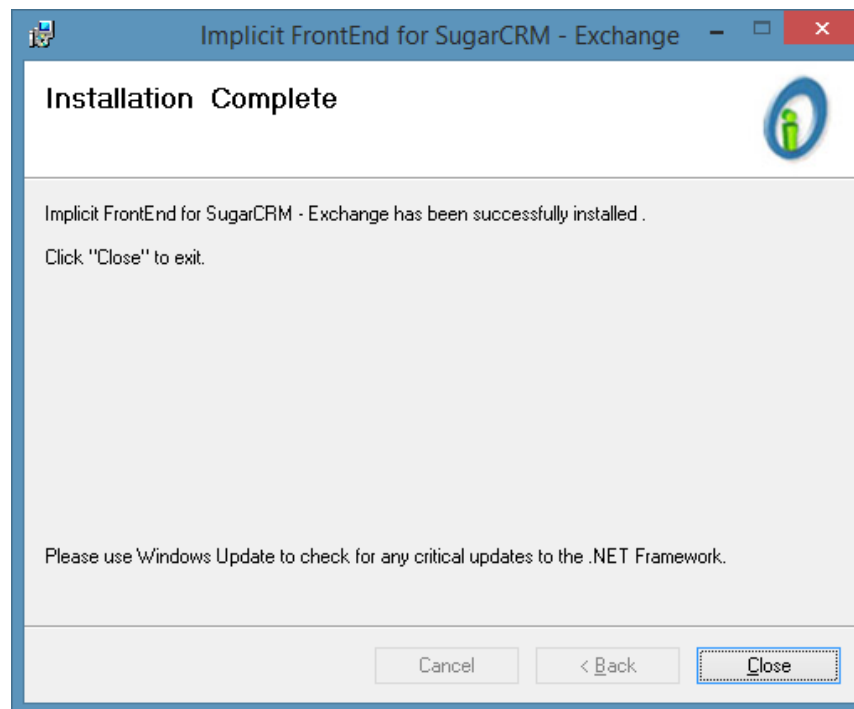


Fig. 7 – Installation Complete Screen

### 3. Configuring Implicit FrontEnd for SugarCRM - Exchange

#### 3.1 Activating License

Upon launching the configuration tool for the first time, you will be prompted to enter a license key:

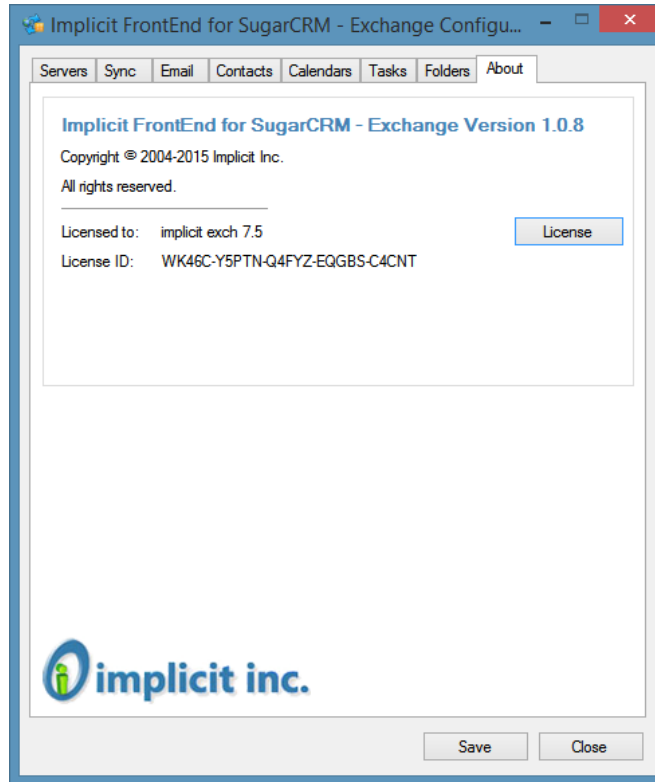


Fig. 8 – Initial About Dialog

Click the “License” button and enter the license key:

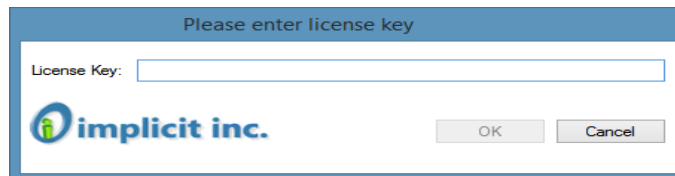


Fig. 9 – License Key Dialog

You can repeat the process any time you need to upgrade the license (e.g. add additional users).

## 3.2 Configuring Servers

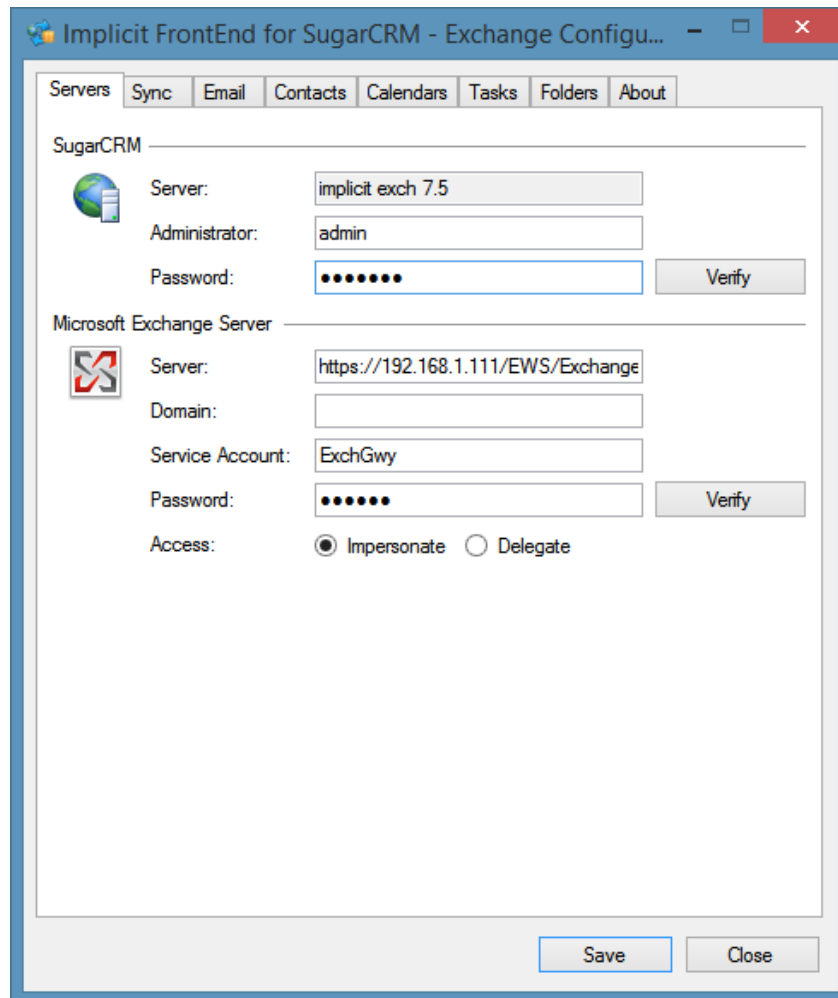


Fig. 10 – Servers Tab

### SugarCRM Server

- Server – SugarCRM server instance URL
- User ID / Password – Specify the SugarCRM admin account.

### Microsoft Exchange Server

- Enter the URL to your server Web Services page. This is typically constructed as follows:  
<https://<Your Exchange server Name/IP Address>/EWS/Exchange.asmx>
- Domain – Enter domain name
- User ID/Password – Name/Password of the service account with Exchange Impersonation / Delegate Access permissions (See section 2.2).
- Access Method: Impersonation or Delegated Access

### 3.3 Configuring General Synchronization Options

To configure general synchronization options, click the Sync tab:

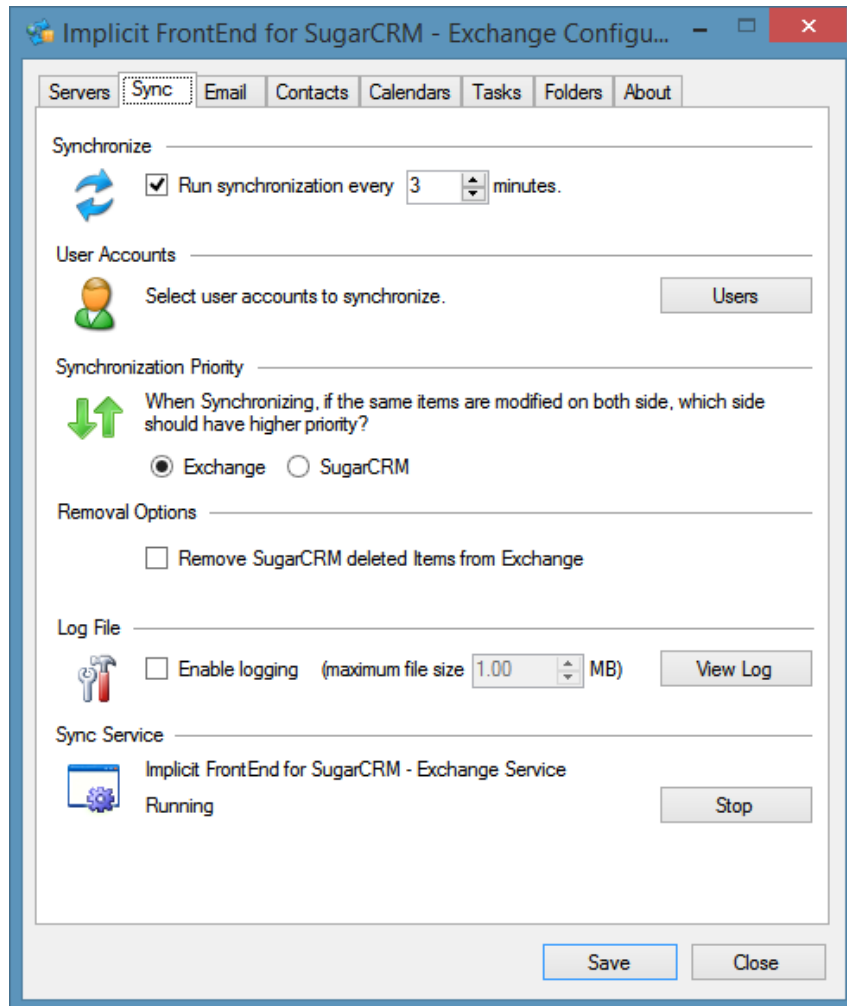


Fig. 11 – Sync Tab

The configurable parameters include:

- **Run synchronization every N minutes** - The checkbox turns on/off the actual synchronization. Un-checking the checkbox will put Sync Gateway on hold.
- **User Accounts** – See section 3.4
- **Synchronization priority** – Select which entity should have priority in case a conflict is detected and the same item has modified on both Exchange and SugarCRM.
- **Removal option** – Check the boxes if you allow deleted items on Exchange to be removed from CRM and vice versa.
- **Log file** – Should be used for troubleshooting purposes
- **Stop/Start service** – You may stop and start Implicit Synchronization system service from within the configuration tool.

### 3.4 Configuring User Accounts

Click the button to select which user mailboxes will take part in the synchronization:

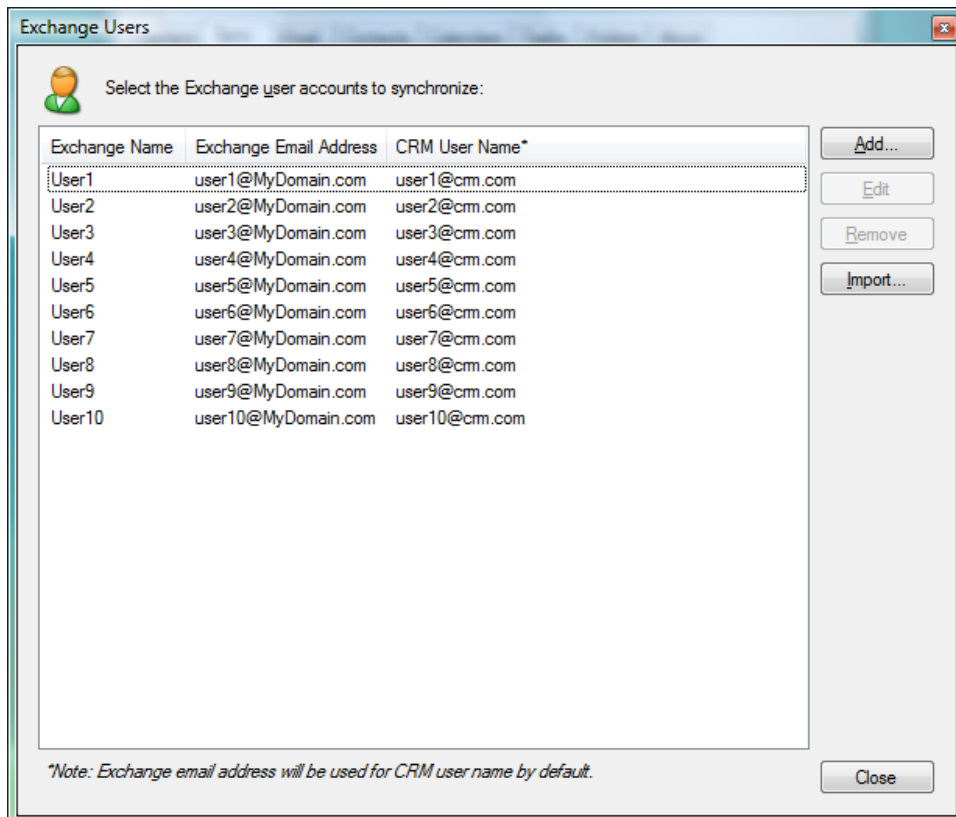


Fig. 12 – User Accounts

To select user accounts, click “Add” to manually select user from Active Directory user list or “Import” to import users from a CSV file.

Each user account is composed of:

- Exchange Mailbox Name
- SMTP Email Address
- CRM user ID

To add user accounts click “Add”:

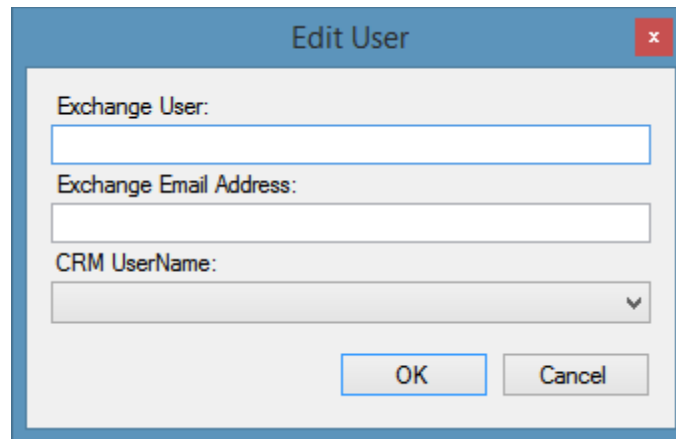


Fig. 13 –Add / Edit User

You can also import user list from a CSV file. Each line in the CSV should be formatted as follows:

```
<Exchange Mailbox Name1>,<Exchange Email Address1>,<SugarCRM User ID1>  
<Exchange Mailbox Name2>,<Exchange Email Address2>,<SugarCRM User ID2>  
<Exchange Mailbox Name3>,<Exchange Email Address3>,<SugarCRM User ID3>
```

**Note:** When you add users, each Exchange mailbox that you add will consume one user license. When you remove Exchange mailbox you will free one user license per mailbox.

### 3.5 Configuring Email Upload

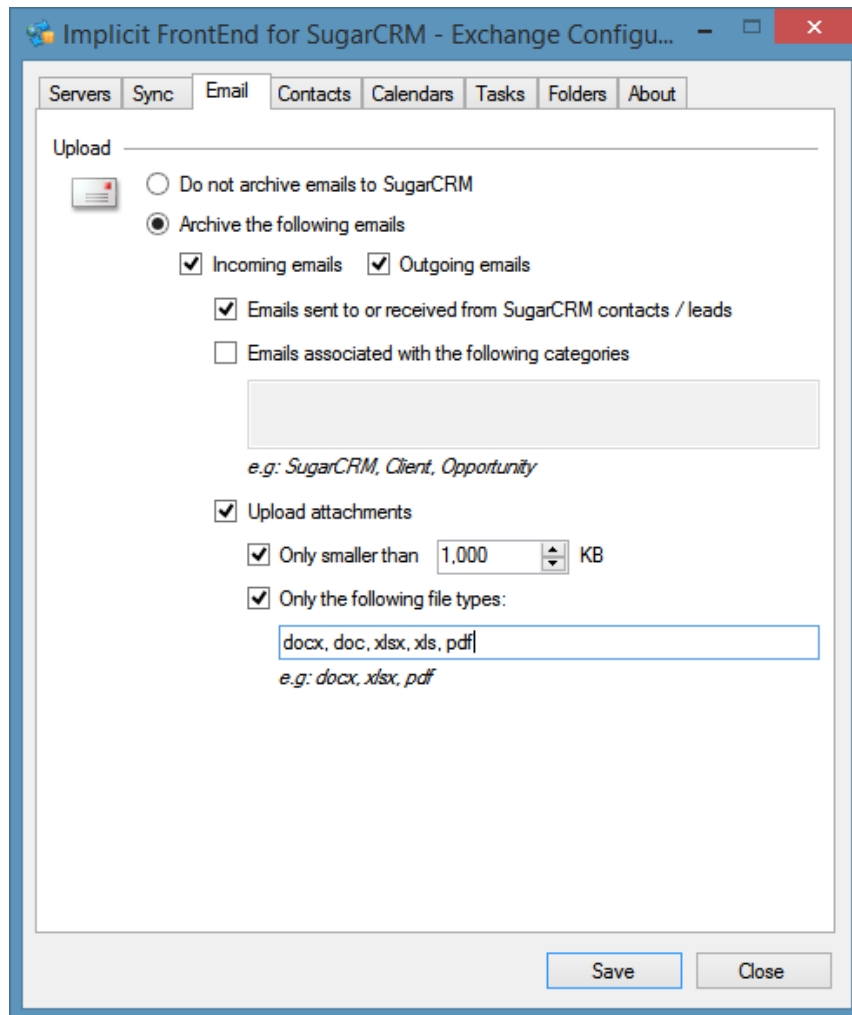


Fig. 14 – Email Upload Options

You may configure which emails should be uploaded:

- **Upload / Do not upload email to SugarCRM** – Turn on/off email upload functionality
- **Incoming Email** - Turn on email upload of incoming email
- **Outgoing Email** - Turn on email upload of outgoing email
- **Emails associated with Exchange Master Category List** – Specify a list of global categories to be used for marking emails for upload (see section 2.4)
- **Emails sent to or received from SugarCRM contacts or leads** – Select this option to automatically archive any emails received or sent to SugarCRM contacts or leads.
- **Message body Format** - Send Message body as Text or HTML
- **Upload Attachments** – Turn on attachments upload



- **Attachments Size** – Upload only attachments that are smaller than a specified size limit
- **Attachments Type** - Upload attachments of certain file types only (comma delimited list of file extensions)

### 3.6 Configuring Contacts Synchronization

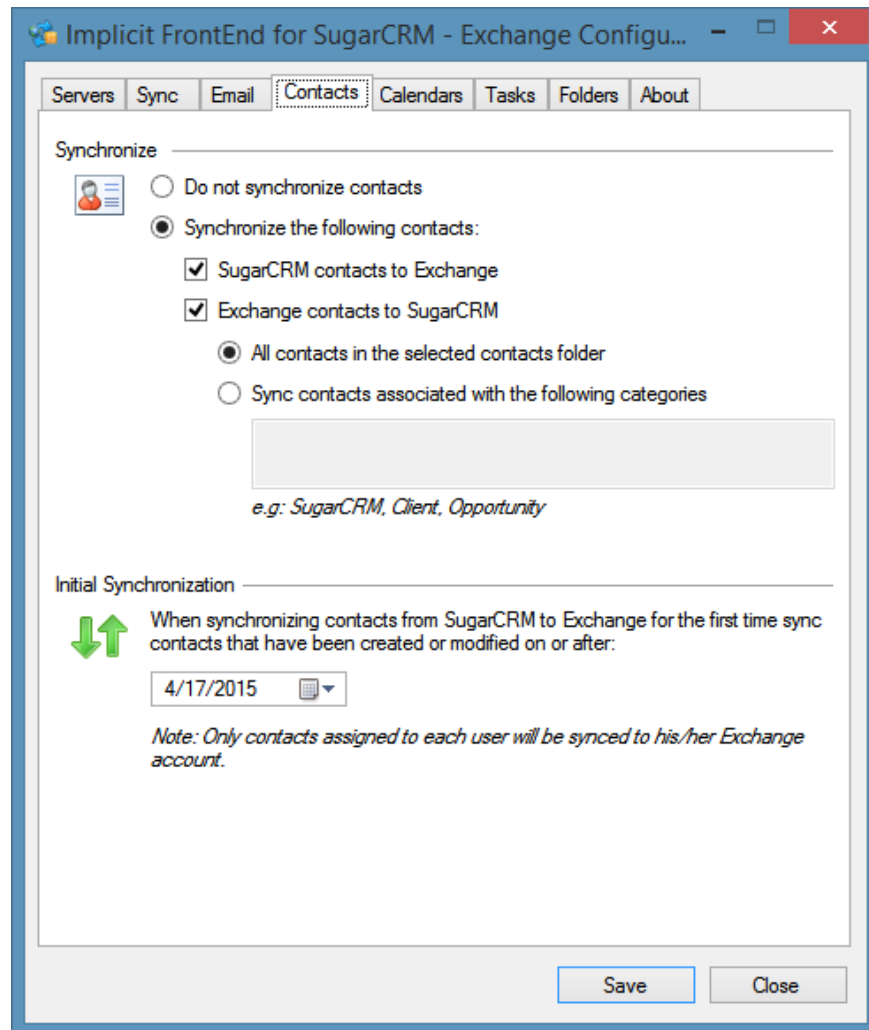


Fig. 15 – Contacts Synchronization Options

You may configure which contacts should be synchronized:

- **Synchronize / Do not synchronize contacts** – Turn on/off contacts synchronization
- **SugarCRM Contacts to Exchange** – Synchronize contacts from CRM to Exchange
- **Exchange Contacts to SugarCRM** – Synchronize contacts from Exchange to CRM
- **All Contacts in the contacts folder** - Synchronize all contacts in the selected Exchange folder (The folder is specified on the Folders tab)

- **Contacts associated with Exchange Master Category List** – Specify a list of global categories to be used for marking contacts for synchronization (see section 2.4)

You may also select which contacts should be synchronized from SugarCRM to Exchange upon the initial synchronization cycle. Only contacts that have been created or modified after the specified date will be synced.

### 3.7 Configuring Calendars Synchronization

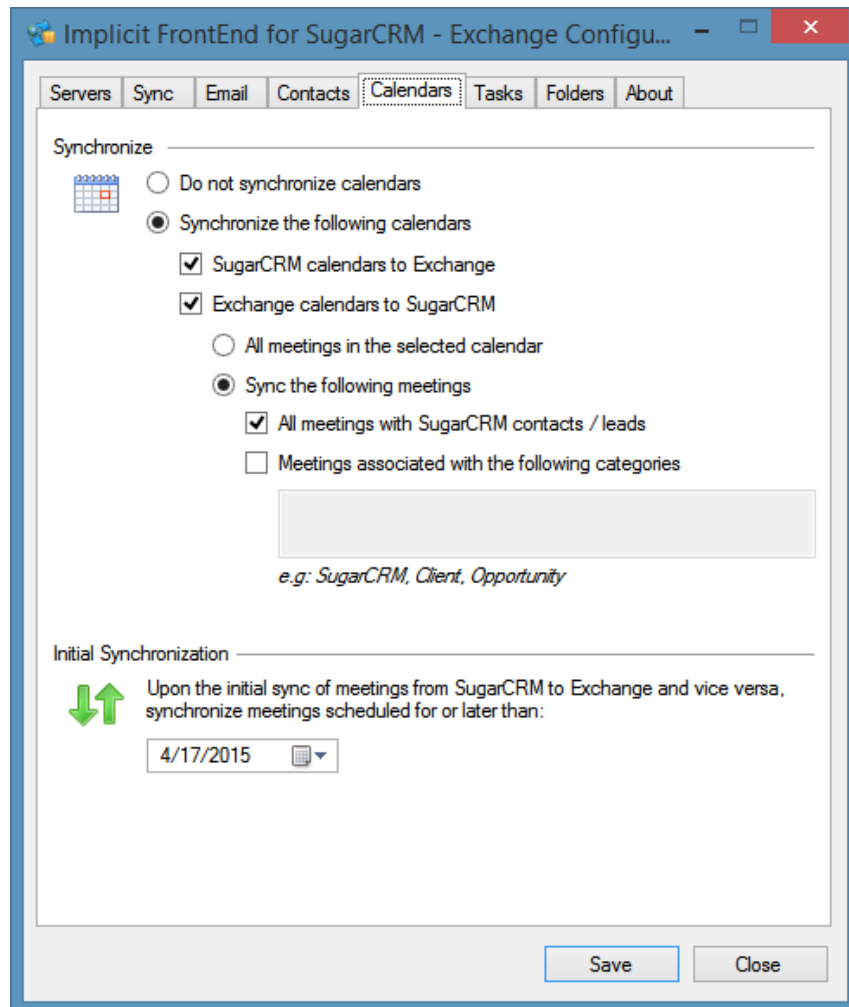


Fig. 16 – Calendars Synchronization Options

You may configure which appointments/meetings should be synchronized:

- **Synchronize / Do not synchronize calendars** – Turn on/off calendars synchronization
- **SugarCRM calendars to Exchange** – Synchronize calendars from SugarCRM to Exchange
- **Exchange calendars to SugarCRM** – Synchronize calendars from Exchange to SugarCRM
- **All appointments/meetings in the calendar** - Synchronize all calendar events in the selected Exchange calendar (The folder is specified on the Folders tab)
- **Appointments/meetings associated with Exchange Master Category List** – Specify a list of global categories to be used for marking calendar events for synchronization (see section 2.4)
- **All meetings associated with SugarCRM contacts / leads** – Select this option to synchronize meetings with SugarCRM contacts /leads as attendees

### 3.8 Configuring Tasks Synchronization

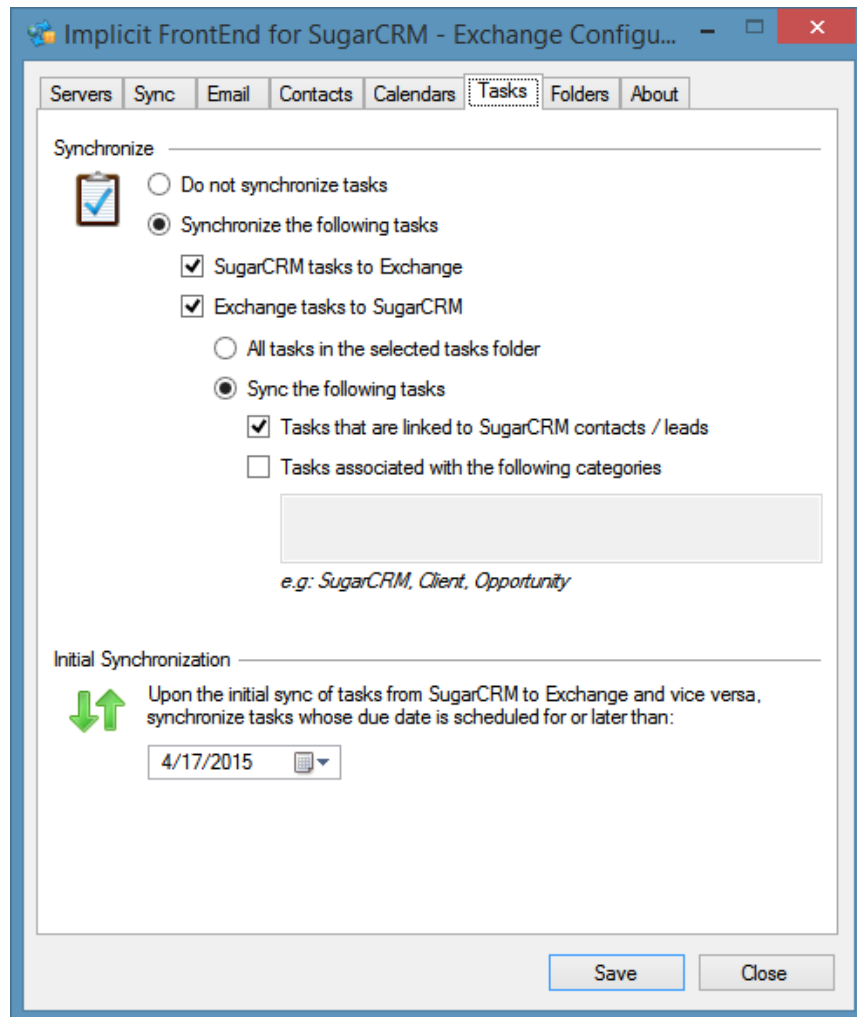


Fig. 17 – Tasks Synchronization Options

You may configure which tasks should be synchronized:

- **Synchronize / Do not synchronize tasks** – Turn on/off tasks synchronization
- **SugarCRM tasks to Exchange** – Synchronize tasks from SugarCRM to Exchange
- **Exchange tasks to SugarCRM** – Synchronize tasks from Exchange to SugarCRM
- **All tasks in the folder** - Synchronize all tasks in the selected Exchange folder (The folder is specified on the Folders tab)
- **Tasks associated with Exchange Master Category List** – Specify a list of global categories to be used for marking tasks for synchronization (see section 2.4)
- **Tasks linked to SugarCRM contacts / leads** - Select this option to synchronize tasks which are associated in Outlook with SugarCRM contacts /leads

### 3.9 Configuring Folders

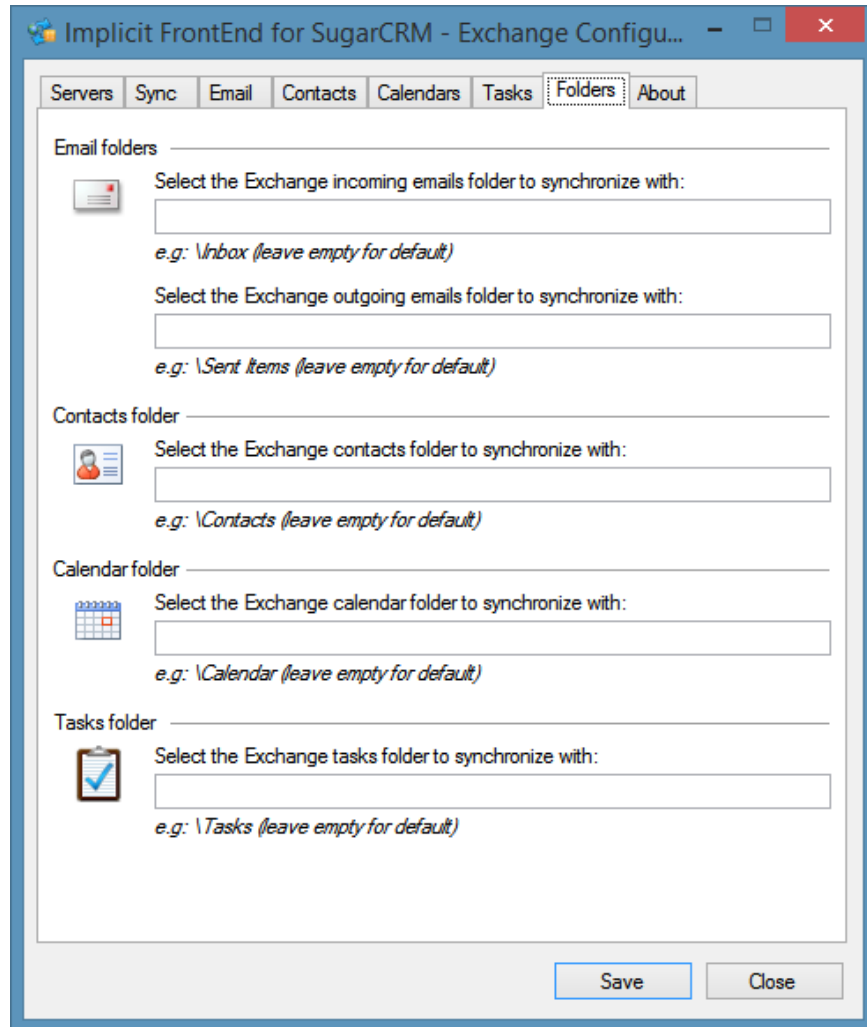


Fig. 18 – Configuring Exchange Folders

This tab allows you to specify the path for each type of folder under the Exchange mailbox. This is useful if you're not synchronizing to the native Exchange mailbox folders: *Inbox*, *Sent Items*, *Contacts*, *Calendar* and *Tasks*. Otherwise leave them empty.