



## Installation Guide

### SAP® CRM Client Groupware Integration 10.30

SAP CRM 2007

SAP CRM 7.0 (Including Enhancement Packages)

#### Target Audience

- Consultants
- Administrators

Public

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THE BEST-RUN BUSINESSES RUN SAP





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#### **Documentation in the SAP Service Marketplace**






You can find this documentation at the following Internet address:

**[service.sap.com/crm-inst](http://service.sap.com/crm-inst)**

## Typographic Conventions

Type Style	Represents
<i>Example Text</i>	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options. Cross-references to other documentation
Example text	Emphasized words or phrases in body text, titles of graphics and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, source code as well as names of installation, upgrade and database tools.
<b>Example text</b>	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<b>&lt;Example text&gt;</b>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as F2) or the ENTER key.

## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

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# 1 Introduction

Client-based groupware integration enables you to synchronize tasks, appointments, and contacts between Microsoft Outlook or IBM Lotus Notes and SAP CRM so that you can access from the groupware client all data that has been created in an SAP CRM application. Data can be transferred in both directions.

## 1.1 About this Document

This guide outlines the steps for installing the client groupware integration component. This component must be installed locally on a PC to enable synchronization of data. Installation is typically carried out by an administrator or IT support. Note the software requirements for installation (section [3.1 Software Prerequisites](#) of this document).

The guide also explains the configuration required after installation to activate groupware integration and tailor it to your company's requirements. Finally, troubleshooting information helps you to resolve problems that you may encounter while running the integration solution.

 The guide does not explain how to install the back-end system and the SAP CRM server. It assumes that these are already in place.

## 1.2 Further Information

For information about the functions supported by client-based groupware integration, see the SAP Library for SAP Customer Relationship Management in SAP Help Portal at <http://help.sap.com/crm-core> -> <choose a release> -> *Application Help* -> <choose a language> -> *Data Exchange and Mobile Technologies* -> *(CRM Integration Services)* -> *Groupware Integration* -> *Client-Based Groupware Integration*.

## 2 Preparation

Download the latest setup file for the client groupware integration component from the SAP Service Marketplace. Follow the steps outlined in section [5 Installation](#) of this document to start the installation process.



- Before you start using client-based groupware integration, make sure that you have completed configuration as described in section [9 Mandatory Post-Installation Steps](#) of this document.
- Business users can be allowed to install the component from the SAP CRM WebClient UI, on the *Personalization* page (by clicking *Install Synchronization Software*). In this case, the latest setup.exe and upgrade.exe files must be uploaded to the MIME repository and the required version setting must be changed, as mentioned in the release note for the patch. The users must also have administrator rights on their PC.



It is recommended to be on the latest version of Client groupware available on SAP Service Market place. 10.30 SP 03 is the latest available version; refer to SAP Note for [2086886](#) the download path.

## 3 Planning

### 3.1 Software Prerequisites

The software listed in the table below must be installed before you start installation of the client groupware integration component.

You require administrator rights to install the client groupware integration component. Business users do not require administrator rights since the software can be installed by a remote admin user. Administrator rights are only required for installation, not for using the software.

You require administrator rights to install the following software (see the table below for more information):

- Lotus Notes or Microsoft Office
- .NET Framework Runtime
  - 💡 VSTO add-ins do not work with .NET Framework client version for 4.0. You need to install the full version of .NET 4.0 before installing VSTO.
- Visual Studio Tools for Office Runtime (VSTO Runtime)
- Office Primary Interop Assembly (Office PIA) (only for Microsoft Outlook client)
- Script engine `ISScript9.msi`
  - 💡 You must download and install this prior to the installation of the client groupware integration component.

If you are not running the setup from the WebClient UI, the setup file must be available on the system as a local copy.

#### Supported operating systems are:

- Windows Client OS: XP (32 bit), Windows Vista (32 or 64 bit), Windows 7 (32 or 64 bit), Windows 8 (32 or 64 bit), Windows 8.1 (32 or 64 bit)
- Windows Server OS: Windows Server 2003 (32 or 64 bit), Windows Server 2008 (32 or 64 bit), Windows Server 2008 R2 (64 bit), Windows Server 2012 (64 bit), Windows Server 2012 R2 (64 bit)

💡 Support for Windows 8.1 (32 or 64 bit), Windows Server 2008 R2 (64 bit), Windows Server 2012 (64 bit) and Windows Server 2012 R2 (64 bit) is available from 10.30 SP 03 onwards

#### Supported Internet Explorer versions are:

- 32 bit IE: IE 6 to 11
- 64 bit IE: IE 9 to 11

💡 Support for 32 and 64 bit versions of IE 9, IE 10 and IE 11 is available from 10.30 SP 03 onwards (SAP Note [2087727](#))

Groupware Client and Version	.NET Framework Runtime Version	Visual Studio Tools for Office Runtime Version	Office Primary Interop Assembly Version
Microsoft Office 2003 32 bit	3.5 SP1 and higher	2005 SE	Office 2003 PIA
Microsoft Office 2007 32 bit	3.5 SP1 and higher	3.0	Office 2007 PIA
Microsoft Office 2010 32 bit or 64 bit	4.0 (full version) and higher	4.0	Office 2010 PIA
Microsoft Office 2013 32 bit or 64 bit	4.0 (full version) and higher	4.0	Office 2010 PIA
Lotus Notes (32 bit) 7.5, 8.0, 8.5, 9.0	3.5 SP1 and higher	Not Required	Not Required

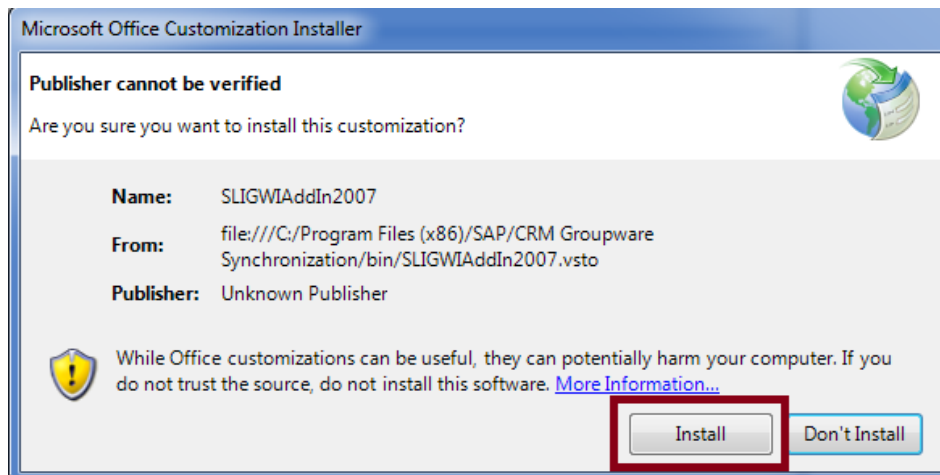



- Support for 64 bit version of Outlook 2010 and Outlook 2013 is available from 10.30 SP 03 onwards (SAP Note [2087726](#))
- Support for Microsoft Office 365 is available from 10.30 SP 02 onwards (SAP Note [1895186](#)), Office 365 should be configured with Microsoft Office 2010 SP1 client (should have latest updates provided by Microsoft Outlook 2010 SP1) or Microsoft Outlook 2013 client.
- Outlook 2013 client installed as part of Microsoft Office 365 Pro Plus is supported from 10.30 SP 03 onwards.
- Support for Lotus 9.0 is available from 10.30 SP 03 onwards (SAP Note [2087730](#))

## 4 Note


If you are using Microsoft Office 2007 and 2010 (not 2003), the following pop-up might appear in the following situations:

- When an administrator installs or upgrades the client groupware integration component in either manual or silent mode.
- When a user logs onto a machine and opens Microsoft Outlook, triggering loading of groupware add-in.




 If the popup appears, click *Install*.

## 5 Installation

 From 10.30 SP 03 onwards, there are 2 setup.exe files available in the Service Market place.


- For 32 bit version of Outlook, use the setup.exe available in 'Setup\_32bitOutlook\_Lotus' folder
- For 64 bit version of Outlook, use the setup.exe available in 'Setup\_64bitOutlook' folder
- For Lotus Notes, use the setup.exe available in 'Setup\_32bitOutlook\_Lotus' folder

1. On the WebClient UI *Home* page, click *Personalize* in the header area. In the *Groupware Integration* context area, click on *Install Synchronization Software*.
2. Select the default mail client.

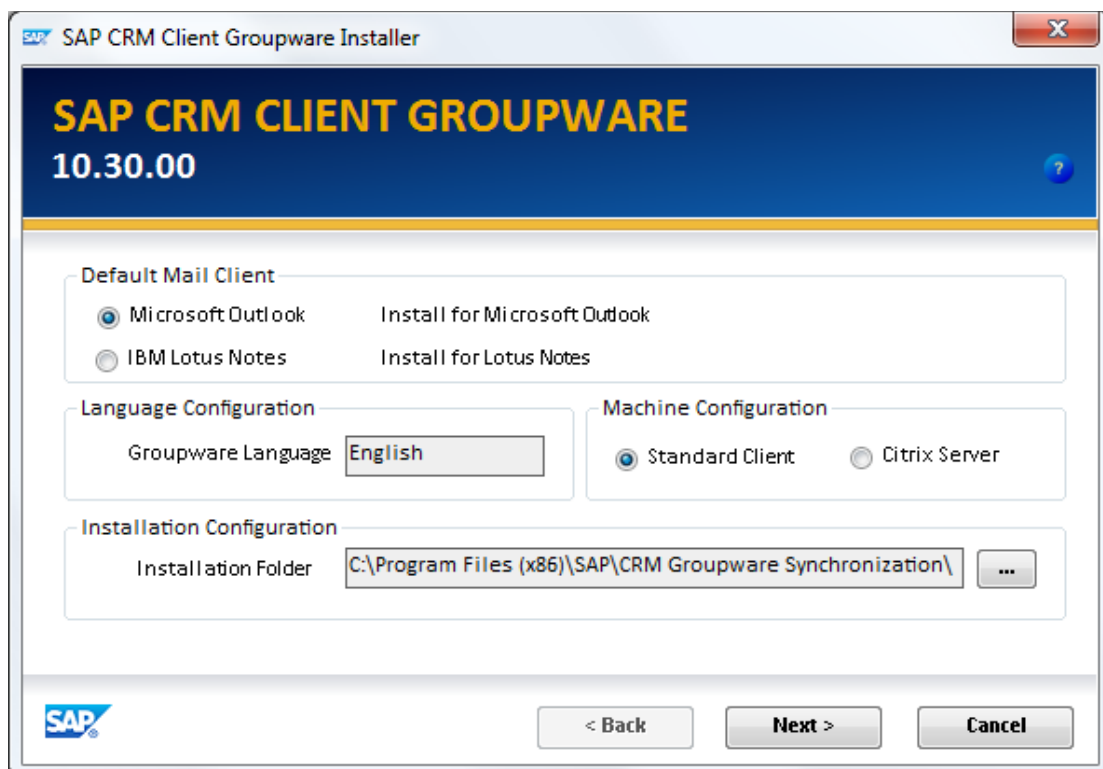
 When you install or upgrade the software, the language setting is automatically English. For business users, the user interface has the language selected for the groupware profile download.

3. Select the machine configuration.

As of version 10.29.01 of the integration component you have the option to install the component on a Citrix server.

 Auto synchronization is not supported with a Citrix server installation.

4. Select the installation folder.



5. Choose *Next >* to continue.

You see the following screen (Also in Citrix environment):

The screenshot shows the 'SAP CRM Client Groupware Installer' window. The title bar reads 'SAP CRM Client Groupware Installer'. The main content area has a blue header with 'SAP CRM CLIENT GROUPWARE' and '10.30.00'. Below the header, there is a section titled 'Automatic Download of Groupware Profile (optional): Enter the CRM server connection details to automatically download groupware profiles after the installation.' This section contains a sub-section 'CRM Server Logon Configuration' with the following fields: 'CRM Server', 'Port', 'Client', and 'Protocol' (set to 'https'). There is a 'Test Connection' button next to the 'Protocol' dropdown. Below this is a 'Rollout Configuration' section with an 'Ini path' field containing 'C:\GroupwareRollout.ini' and a 'Generate' button. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'.

If you want to automatically download the relevant groupware profile as part of the installation of the client groupware integration component, specify the SAP CRM application server details, port, client, and protocol under *CRM Server Logon Configuration*.

For more information about the automatic download, see section [Automatic Download of Groupware Profiles](#) of this document.

Automatic download is optional. You can still allow users to download the profile themselves. To do this, choose *Next>* to go to the next screen.



- If you enter connection details, you need fill all the fields.
- We recommend HTTPS protocol for security reasons and this is the default protocol setting. Port and protocol are dependent; if you select HTTPS, you need to specify the HTTPS port.
- You can also use this feature if you are doing silent install option. For more information, see section [7 Silent Installation & Upgrade](#) of this document.

Click *Test Connection* to verify the connection to SAP CRM.

### Roll Out by Configuration File

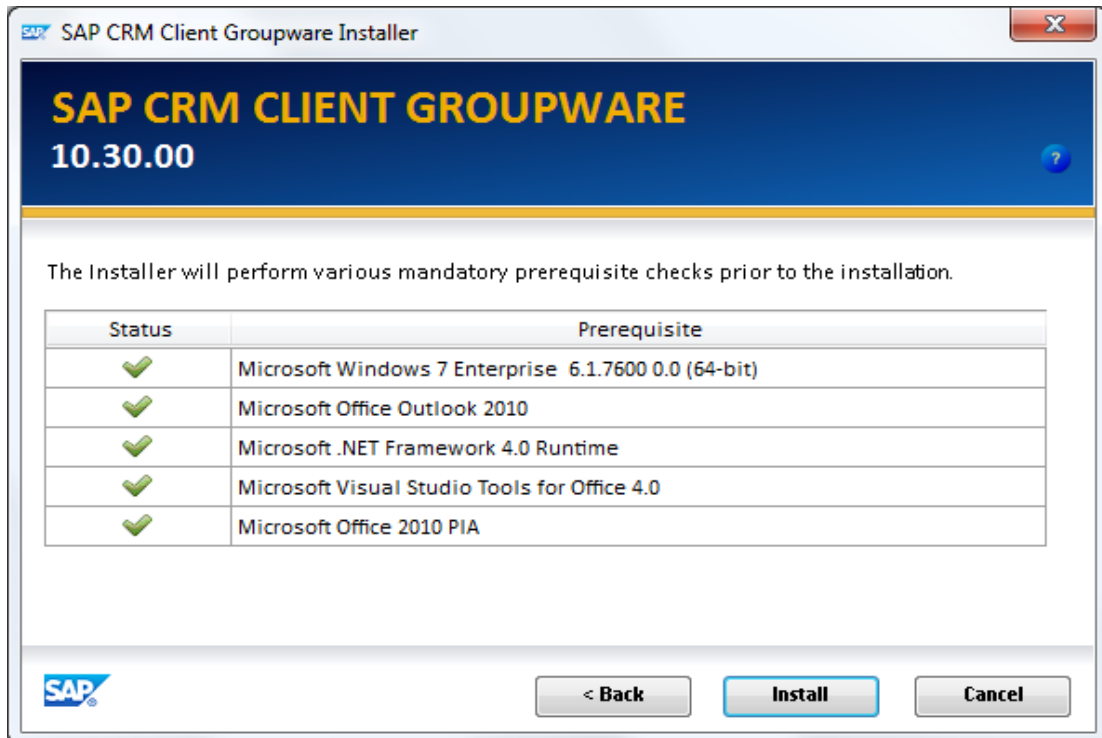
If you want to use configuration files to roll out settings to business users, specify the path for the configuration (.ini) file and click *Generate* to generate the file. For more information, see section [Rollout by Configuration File](#) of this document.



- You need administrator rights to use this feature.
- You can also use the generated ini file when you use the silent install option but cannot generate the ini file during silent installation. For more information, see section [7 Silent Installation & Upgrade](#) of this document.

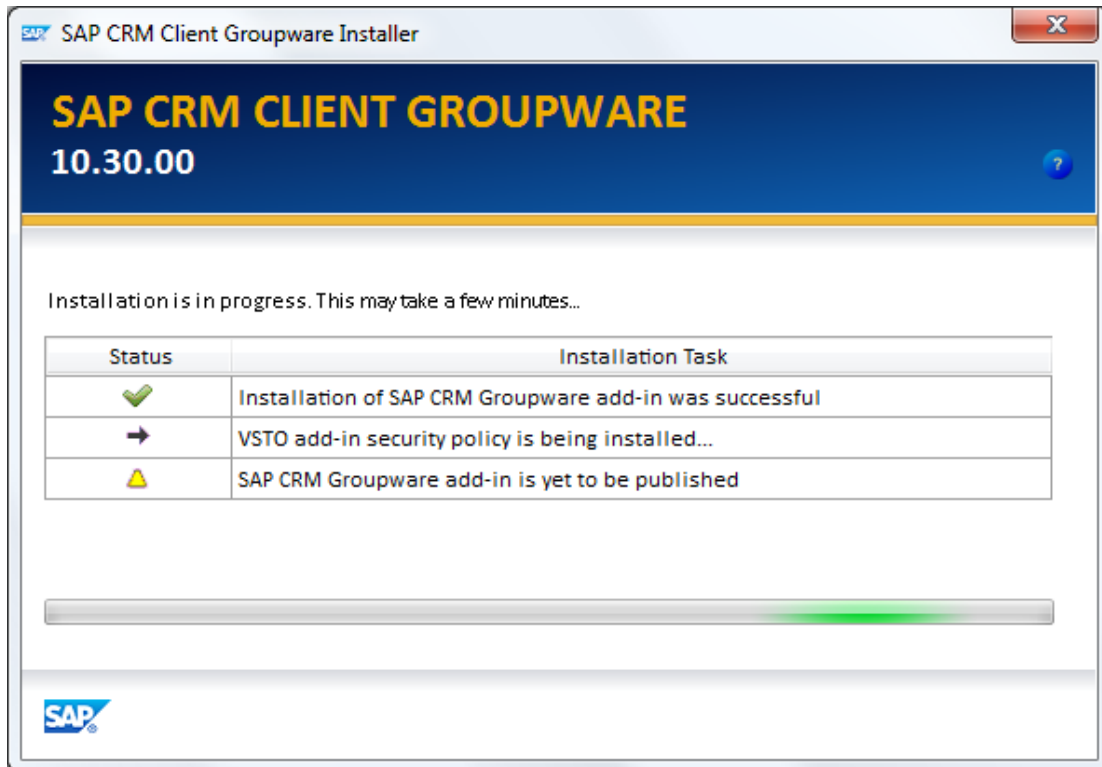
6. Choose *Next >* to continue.

A check runs to determine whether the required software has been installed, and the status is displayed, as shown in the example below.

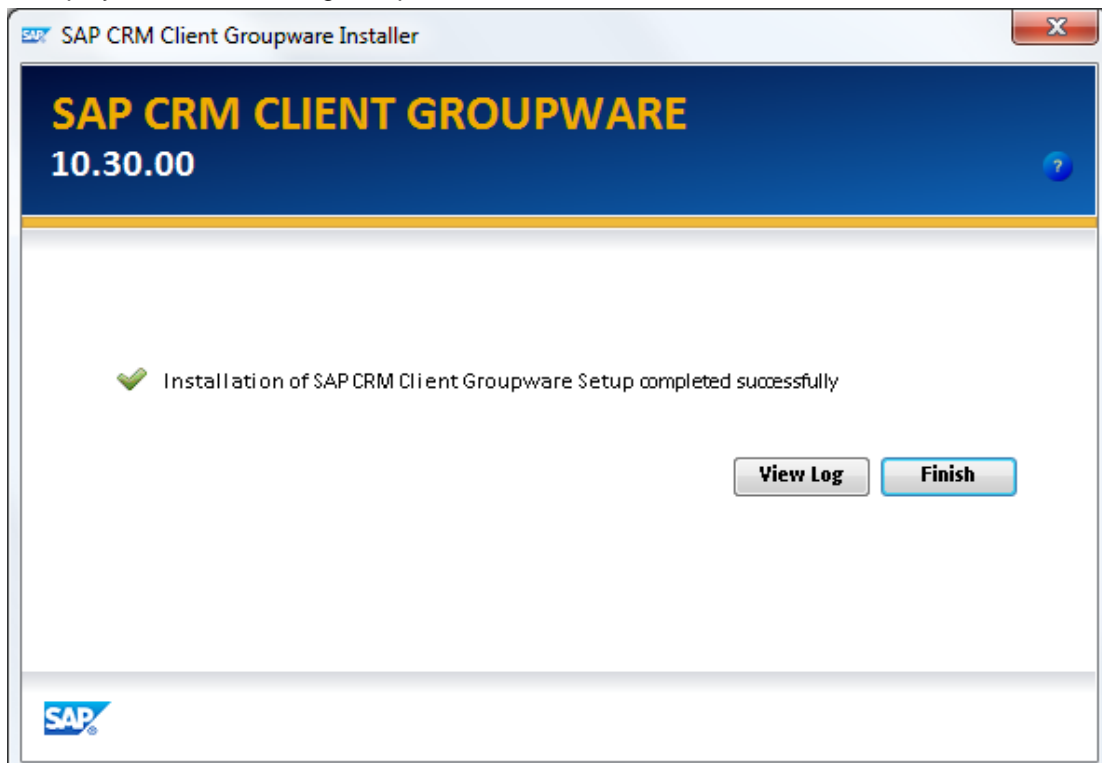


7. If the software requirements are fulfilled, or warnings only are displayed, click *Install* to continue with installation, otherwise click *Cancel* and arrange for the missing software to be installed.

If you clicked *Install*, the installation runs and the status is displayed, as shown in the example below.




8. Display the installation log if required.



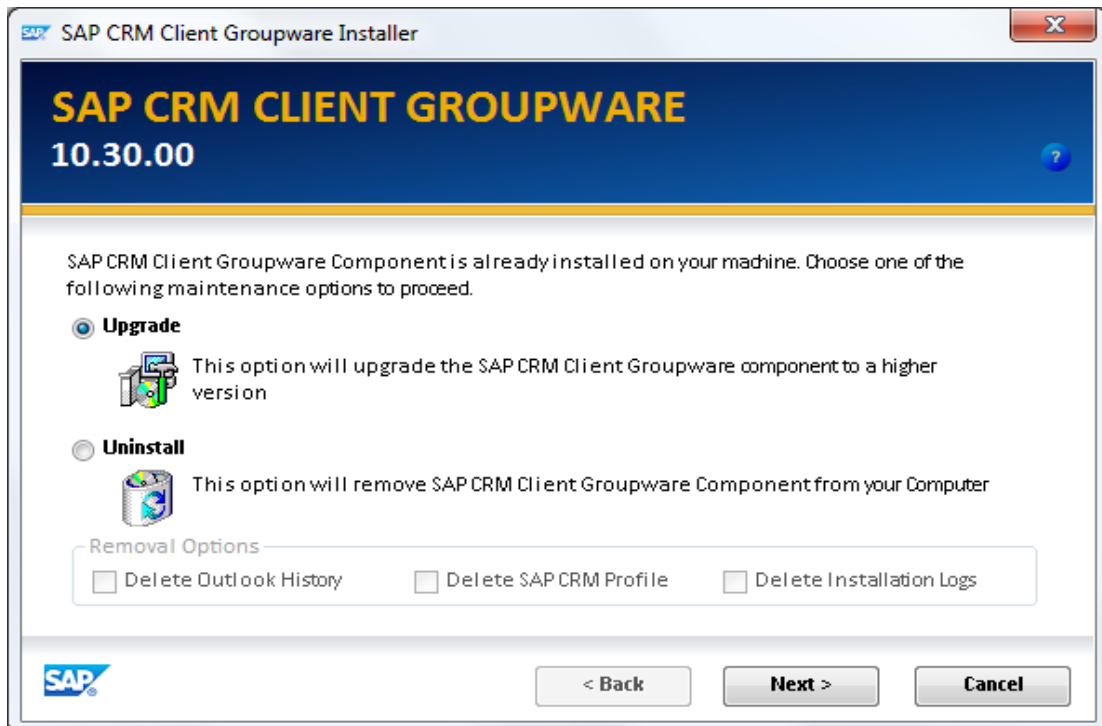
9. Click *Finish* to complete the installation.

## 6 Upgrade

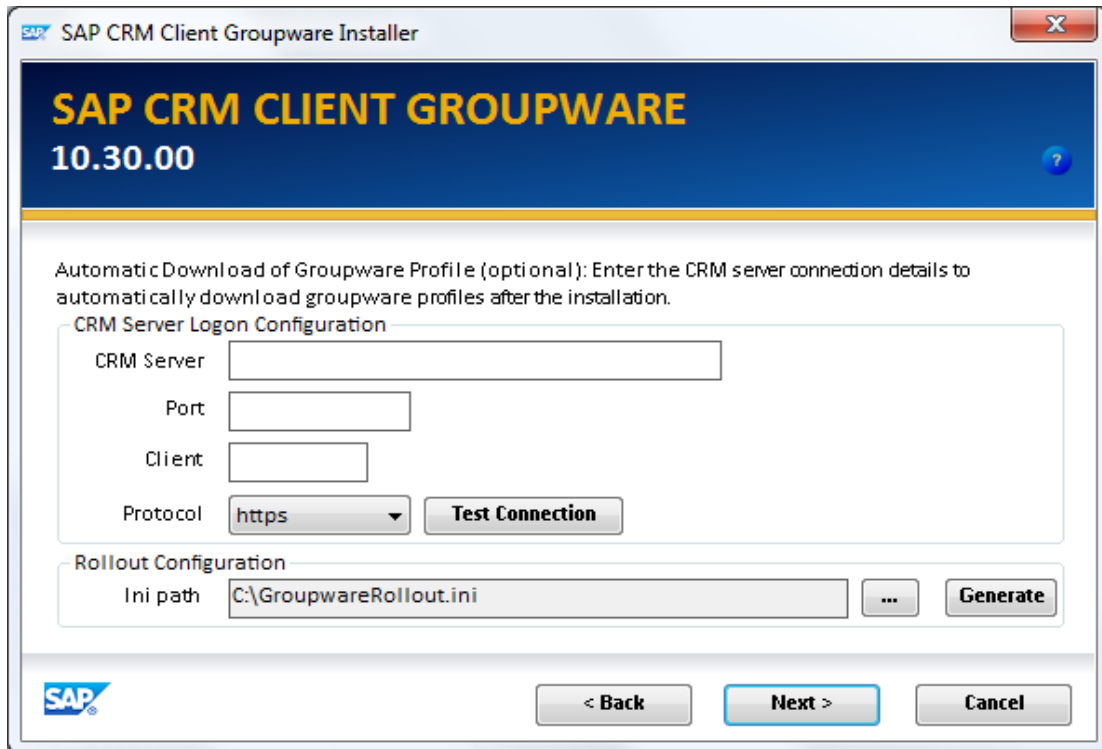
 From 10.30 SP 03 onwards, there are 2 setup.exe files available in the Service Market place.

- For 32 bit version of Outlook, use the setup.exe available in 'Setup\_32bitOutlook\_Lotus' folder
- For 64 bit version of Outlook, use the setup.exe available in 'Setup\_64bitOutlook' folder
- For Lotus Notes, use the setup.exe available in 'Setup\_32bitOutlook\_Lotus' folder

1. On the WebClient UI *Home* page, click *Personalize* in the header area. In the *Groupware Integration* context area, click on *Install Synchronization Software*.
2. Select *Upgrade*.

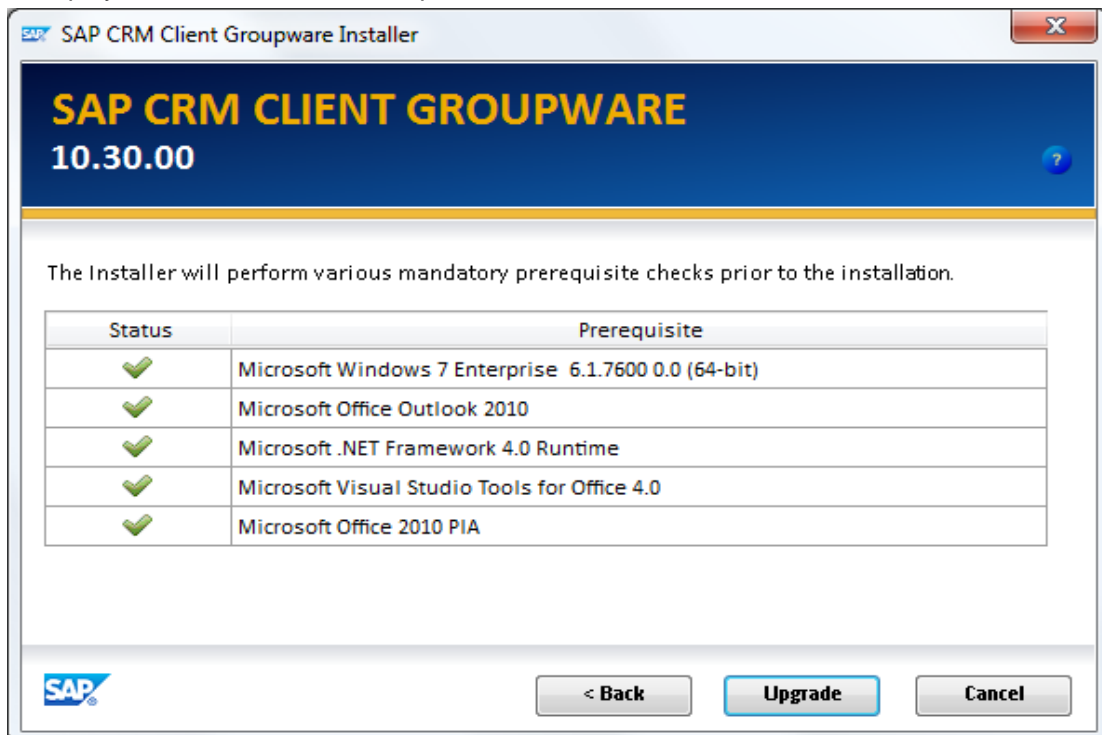


3. Click *Next >* to continue.  
If required, enter connection details for the automatic download of groupware profile.



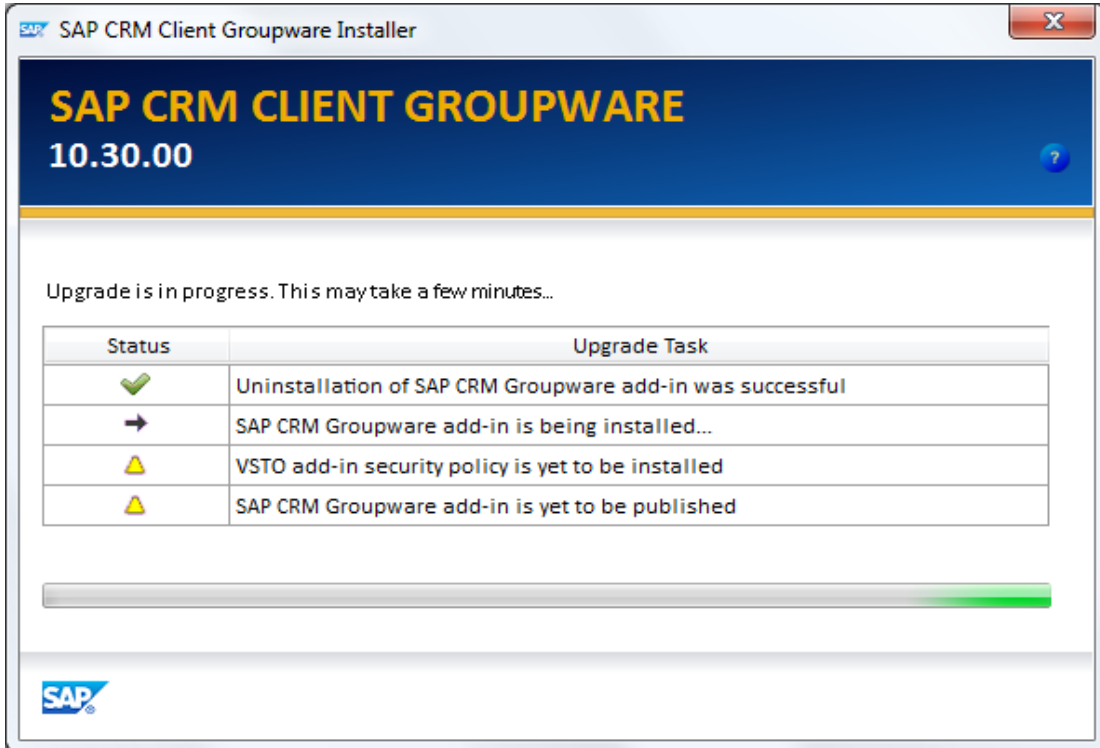
4. Click *Next >* to continue.

A check runs to determine whether the required software has been installed, and the status is displayed, as shown in the example below.

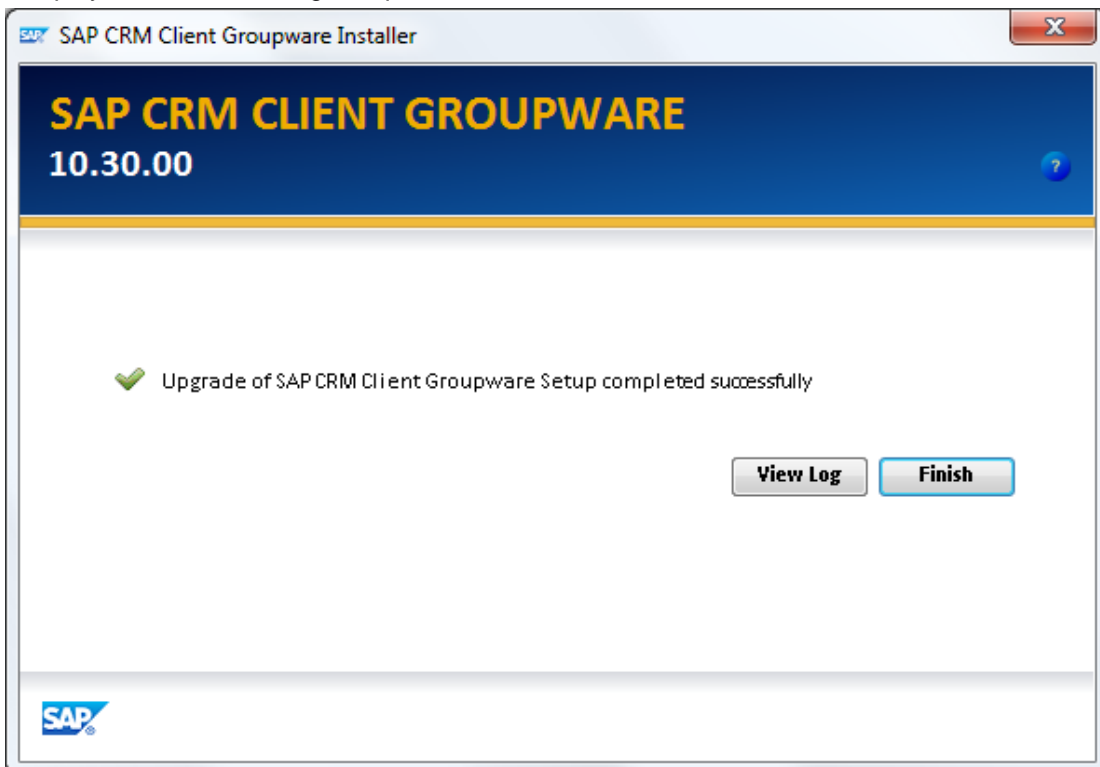


5. If the software requirements are fulfilled, or warnings only are displayed, click *Upgrade* to continue with upgrade, otherwise click *Cancel* and arrange for the missing software to be installed.

If you clicked *Upgrade*, the upgrade runs. The upgrade status is displayed as shown in the examples below.





6. Display the installation log if required.



7. Click *Finish* to complete the installation.

## 7 Silent Installation & Upgrade

 You require administrator rights to install/upgrade/uninstall the client groupware integration component.

 From 10.30 SP 03 onwards, there are 2 setup.exe files available in the Service Market place.

- For 32 bit version of Outlook, use the setup.exe available in 'Setup\_32bitOutlook\_Lotus' folder
- For 64 bit version of Outlook, use the setup.exe available in 'Setup\_64bitOutlook' folder
- For Lotus Notes, use the setup.exe available in 'Setup\_32bitOutlook\_Lotus' folder

Enter the commands described below in the Command Prompt to perform an installation, upgrade, or uninstallation in silent mode.

### Installation

```
Setup.exe /s /v" /qn MODE=INSTALL MAILCLIENT=MSOUTLOOK|LOTUSNOTES
MACHINECLIENT=STANDARD|CITRIX INSTALLDIR="C:\Program Files\SAP\CRM
Groupware Synchronization\""
```

Mandatory parameters for silent installation:

- MODE = INSTALL
- MAILCLIENT = MSOUTLOOK|LOTUSNOTES

Optional parameters for silent installation:

- INSTALLDIR = C:\Program Files\SAP\CRM Groupware Synchronization\
- MACHINECLIENT = STANDARD|CITRIX



- The value of the parameter `INSTALLDIR` can differ depending on your operating system.
- The parameter `MACHINECLIENT` is mandatory if you are using Citrix, in which case, the value of this parameter must be `CITRIX`.

### Upgrade

```
Setup.exe /s /v" /qn MODE=UPGRADE"
```

### Uninstallation

```
Setup.exe /s /v" /qn MODE=UNINSTALL"
```

Optional parameters for silent uninstallation:

- DELOLCACHE = TRUE|FALSE
- DELPROFILE = TRUE|FALSE
- DELINSTALLLOGS = TRUE|FALSE




The parameter `DELOLCACHE` is only relevant if Microsoft Outlook is the groupware client.

**Key:**

- /s** Run the installation in silent mode
- /v** Pass command-line options and values of public properties to the file `msiexec.exe`
- /qn** No user interface (silent installation)

## Automatic Download of Groupware Profiles

As of version 10.30 of the client groupware integration component, the relevant groupware profile can be downloaded automatically after the integration component is installed. Prior to this version, users needed to download the profile themselves from the SAP CRM WebClient UI. This is still an option with version 10.30.


 This feature can only be used during silent installation and not during upgrade.

You need to pass the following command line options in addition to the regular command line options listed above. If any of the following parameters are not provided during silent installation, installation continues without enabling this feature. In this case, users have to download the groupware profile themselves from the SAP CRM WebClient UI.

### CRMSERVER

Defines the application server being used from groupware client for synchronization and profile download

**CRMSERVER = xxxxxxxx.xxx.xxx.xxxx**

 **CRMSERVER = usai2q6d.wdf.sap.corp**

### CRMPROTOCOL

Defines the mode of communication with the SAP CRM server  
HTTPS protocol is recommended for security reasons.

**CRMPROTOCOL = https**

### CRMCLIENT


Defines the client with which to interact for exchanging data

**CRMCLIENT = 000**

### CRMPORT

Defines the port for HTTP or HTTPS communication

**CRMPORT = 44326**


 **Setup.exe /s /v" /qn MODE=INSTALL MAILCLIENT=MSOUTLOOK  
MACHINECLIENT=STANDARD CRMSERVER=usai2q6d.wdf.sap.corp  
CRMPORT=44326 CRMCLIENT=000 CRMPROTOCOL=https"**



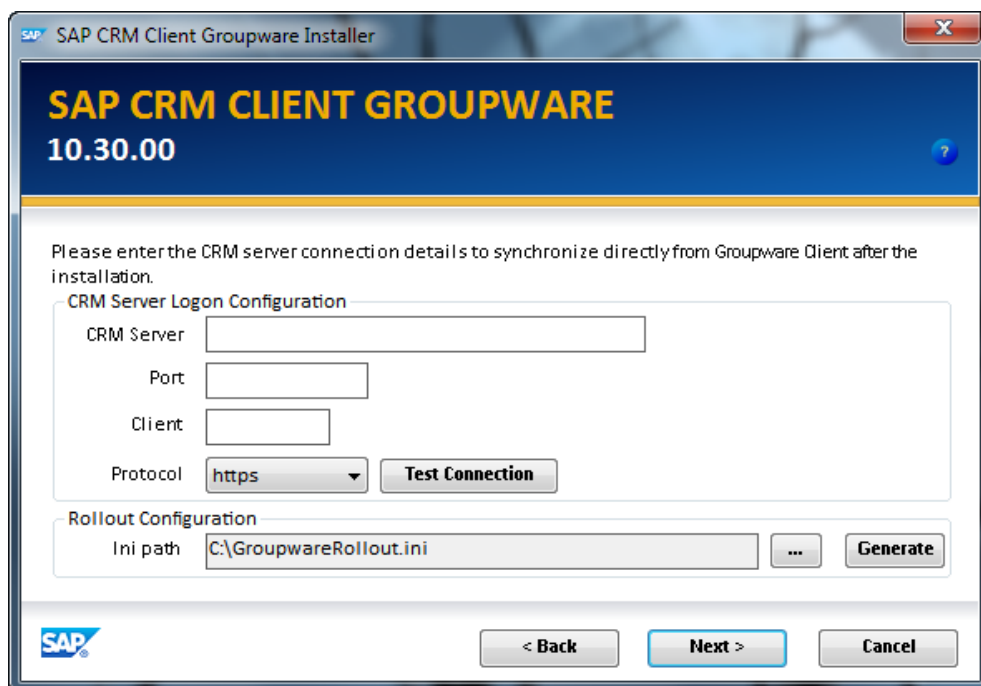
- The parameters can be used in any order.
- This feature can be enabled when you are upgrading from a lower version of the client groupware integration component.
- If you want to use the automatic download feature, you must pass all the parameters listed above.

## Rollout by Configuration File


Prior to version 10.30 of the client groupware integration component, you could only set the silent installation parameters manually, often resulting in errors. As of 10.30, you can generate a configuration file (`GroupwareRollout.ini`) that contains all the configuration parameters that you have set for installation, such as mail client, installation directory, connection details, and additional internal information. You can use this file to roll the software out to multiple clients.

 You can also generate or roll out configuration files in a Citrix environment.

When you start installation of the client groupware integration component with user interaction, the following screen appears after you have defined the installation parameters



You choose *Generate* to generate a configuration file in the specified file path.

 Ensure that you have administrative rights to do the installation / upgrade / uninstallation using the rollout feature.


The parameter for the installation/uninstallation/upgrade with the `.ini` file is:

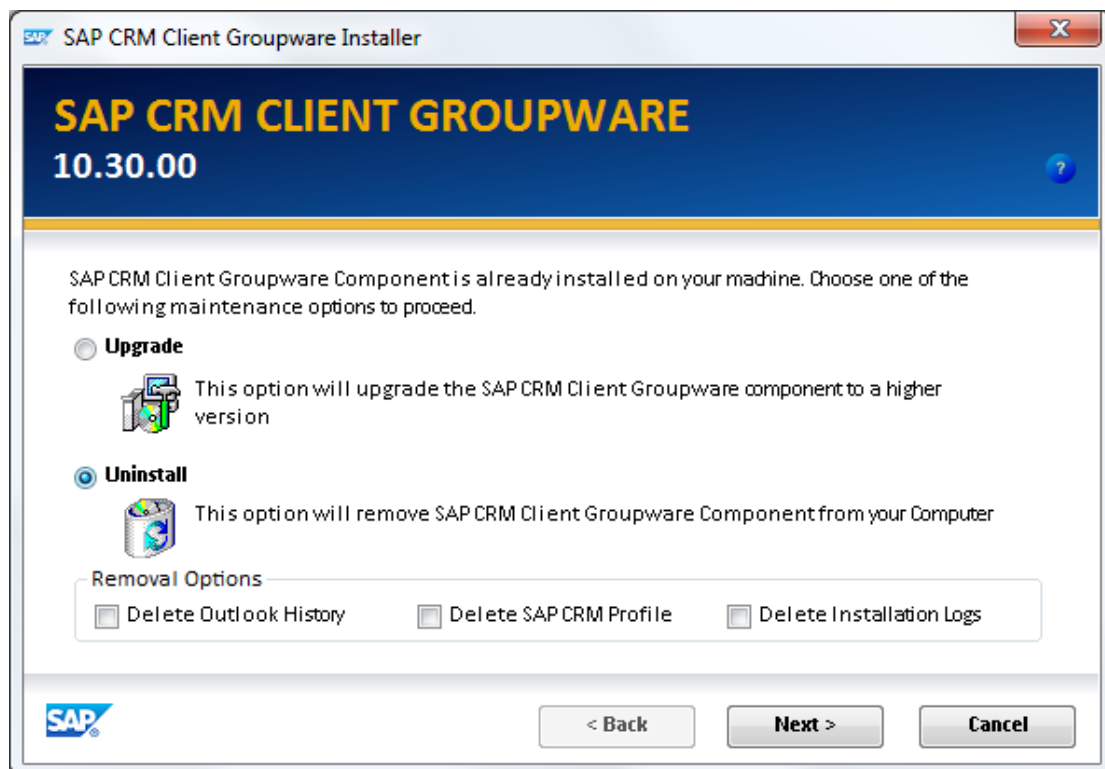
```
Setup.exe /s /v" /qn INIPATH="\"<PATH OF INI
FILE>\GroupwareRollout.ini\""
```

This installs/upgrades/uninstalls client groupware with the parameters that you have selected while generating the `.ini` file.

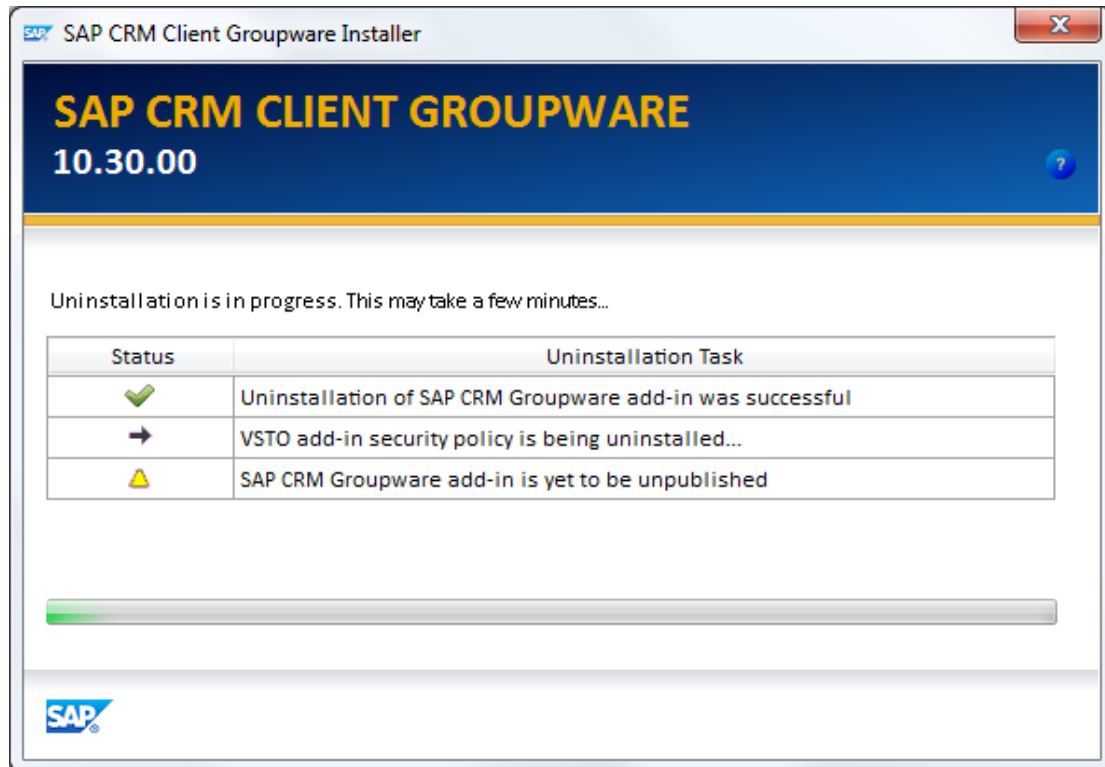
## 8 Uninstallation

1. Select *Uninstall* and indicate whether you want to delete the Microsoft Outlook history and/or the SAP CRM client profile from your local system.
  - **Delete Outlook History** (option only available for Microsoft Outlook)  
If you select this option, the `Extend.dat` file (an add-in cache for Microsoft Outlook) is deleted.
  - **Delete SAP CRM Profile**  
The SAP CRM groupware profile defines the synchronization settings for your client. If you select this option, the file `%userprofile%\Local Settings\Application Data\SAP AG\Client Groupware\GWIconfigData.xml` is deleted.
  - **Delete Installation Logs**  
If you select this option, the installation logs are deleted from the folder `%userprofile%\LocalSettings\Application Data\SAP AG\Client Groupware\InstallationLogs`.

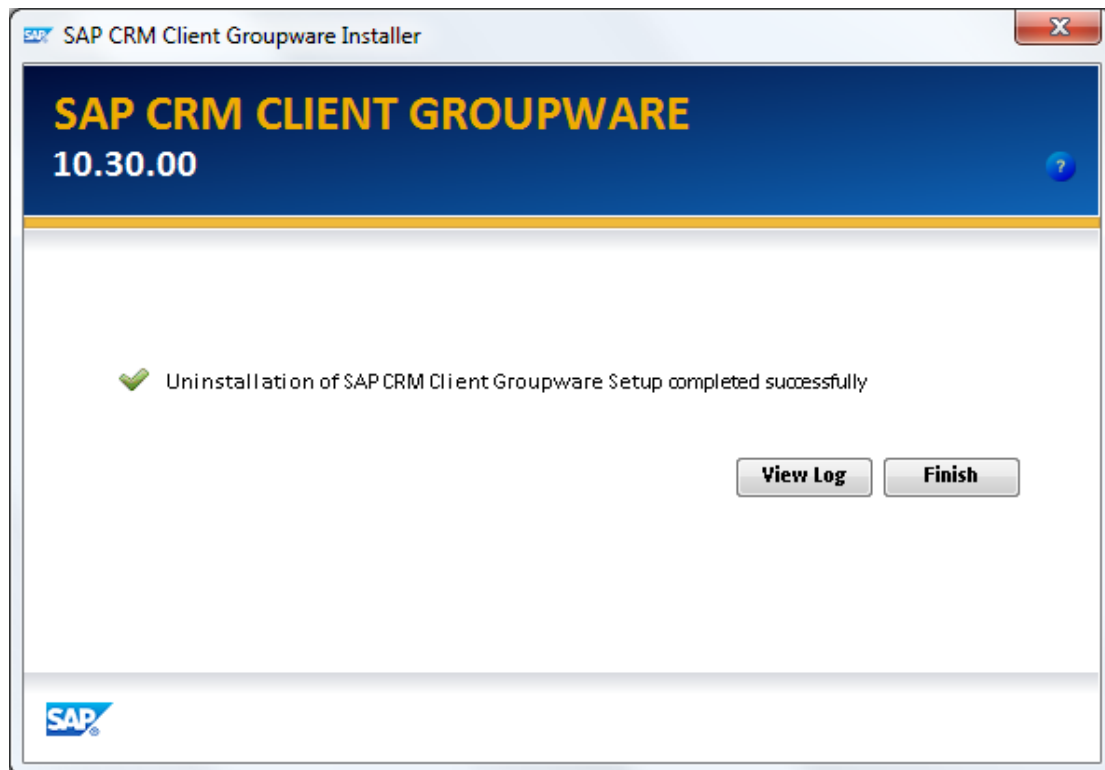
 The option *Delete Outlook History* is only available if Microsoft Outlook is the groupware client.



3. Click *Next >* to continue.  
The uninstallation status is displayed as shown in the examples below.



4. Display the uninstallation log if required.
5. Click *Finish* to complete the uninstallation.



## 9 Mandatory Post-Installation Steps

- Refer to the **NotesToApply** pdf that is available from the latest patch release info note and apply all the notes that are relevant for the SAP CRM and patch version that is being used.
- Run the GWIREPORT depending on the Client groupware version installed:
  - SAP Note [1862102](#) for 10.30 SP 01.
  - SAP Note [1997853](#) for 10.30 SP 02.
  - SAP Note [2086886](#) for 10.30 SP 03.
- Apply the Microsoft Office 2007 Hot fix Package KB976811 for the groupware add-in to work for all users.

## 10 Client Groupware 10.30 - Patches


Delivery of fixes for Client Groupware 10.30 release, are made available frequently by releasing patches. Patch can be uploaded to MIME and can be installed from CRM WebClient UI by applying the correction from the SAP Note [1722694](#) - Javascript changes to trigger patch from WEB UI screen. Patch can also be installed manually by running the Update.exe in administrator account.

Patch installation is also associated with versioning. Version of 10.30 SP 01 patch 07 is 10.30.01.07, & Version of 10.30 SP 02 patch 02 is 10.30.02.02 where

- 10.30 is the release version,
- 01 or 02 is the service pack number and
- 07 or 02 is the patch number.

Above mentioned version is changed according to the Service Pack or Patch release. *Required Version* value in the SE80 transaction should be updated accordingly. This information is mentioned in the SAP Notes

- [1924870](#) - Client Groupware 10.30 SP 01 Patch 07: Release Info.
- [1997853](#) - Client Groupware 10.30 SP 02 Patch 02: Release Info.

 Patch runs as an update so you will not be able to select or change any settings as you would have done during the setup installation.

### How to upload a patch?

First time upload of Patch to MIME repository:

1. Go to transaction SE80 and choose 'BSP Application'.
2. Search for 'CRMCOMP\_GW\_WC'.
3. Right click on MIME's folder and select 'Import MIME objects'.
4. In the pop-up choose the path to latest Update.exe file and upload the file.

For replacing the existing patch

- a. Go to transaction SE80 and choose 'BSP Application'.
- b. Search for 'CRMCOMP\_GW\_WC'.
- c. Go to the folder MIMEs and right click on the 'Update.exe'
- d. Choose the option 'Upload/Download' and then 'Upload and Replace'.
- e. In the pop-up choose the path to latest Update.exe file and upload the file.

### How to install a patch?

Client Groupware 10.30 is a prerequisite for installing a patch. On the CRM WebClient UI *Home* page, click *Personalize* in the header area. In the *Groupware Integration* context area, click on *Install Synchronization Software*.

1. If 10.30 setup is not installed:
  - a. First click will install the setup.
  - b. Second click will install the patch.
2. If 10.30 setup is installed but latest patch is not installed.
  - a. First click will trigger the installation of the latest patch.
3. If 10.30 setup latest and patch are already installed. The 'Synchronization' or 'Edit synchronization option' will work as expected.

4. If you try to install lower patch after installing latest patch, it will not get installed and a message is shown as given *'There is a higher version patch available. Installation will abort'*.

### **Availability of Patches**


Only latest patch will be available on Service Market Place. Every new patch is cumulative i.e., all the fixes part of the patch '(N-1)' will be part of patch '*N*'.

# 11 Configuration

You can make the settings described below before or after installation of the client groupware integration component.

## 11.1 Single Sign-On configuration

You can activate the single sign-on option by selecting the *Use Single Sign-On* checkbox in the *CRM Server* tab of *Synchronization Settings*.

 Single Sign-On configuration is optional if you are not using the Single Sign-On feature.

Enabling single sign-on,

1. Allows the users to log in once and gains access to all systems without being prompted to log in again at each of them.
2. Uses centralized authentication servers that all other applications and systems utilize for authentication purposes, and combines this with techniques to ensure that users do not actively have to enter their credentials more than once.

For more information about single sign-on certificate authentication, see section [Use X.509 Client Certificates](#).

### Prerequisites

You have activated or deactivated the single sign-on option availability to the user through the *Edit Synchronization Settings* window by making necessary settings in Customizing for SAP Customer Relationship Management by choosing *CRM Middleware and Related Components-> Create and Define Settings for Client Profiles*

#### You have ensured the system fulfills the following requirements:

- SAPCRYPTOLIB is installed.
- SSL is implemented.  
Check the settings in transaction SMICM by choosing *Goto->Parameters->Display* and navigating to the section *HTTPS (SSL) settings*.
- The public key of the key issuer is imported in SSL, server PSE.  
To do this, call transaction STRUSTSSO2, choose the node SSL Standard Server, right mouse click and choose Create. Upload the certificate issued by the certifying authority.
- The Internet Communication Manager (ICM) has requested the client certificates.  
Check this in transaction SMICM by choosing *Goto->Parameters->Display* and navigating to the section *HTTPS (SSL) settings*. The value for `verify_client` should be set to 1 as follows:  
(`icm/HTTPS/verify_client = 1`)
- User mapping is defined in the table VUSREXTID.
- You have a kernel 7.0; lower than PL125 or greater than 146 (see SAP Note [1140054](#)).

For more information about single sign-on certificate authentication, see SAP Library for SAP NetWeaver in SAP Help Portal at <http://help.sap.com/netweaver>. Search for “Using X.509 Client Certificates”.

Also Groupware profile customizing and synchronization settings.

## Activities

Enter the following information in the section *SAP CRM Logon Info* in the *CRM Server* tab of the *Edit Synchronization Settings* window

- Select the *Use Single Sign-On* checkbox
- *Server*: Enter the secure URL to the CRM server. For more information on how to obtain this data, see under *SAP CRM Logon Info* in the section *General* in Settings for Client-Based Groupware Integration.
- *Collect Certificate via*: You can specify the method to collect the certificate from the different options available in the dropdown list.
  1. Subject Name
  2. Issuer Name
  3. Windows Authentication
  4. Serial Number
  5. Browse From Path

Certificates will be collected from store using the selected *Collect Certificate via* option. After selecting the option, user has to maintain the *value* for selected option. The format for maintaining values for different options are given below.

### Subject Name

CN=USERNAME, O=SAP-AG, C=DE

### Issuer Name

CN=SSO\_CA, O=SAP-AG, C=DE

### Windows Authentication

On selecting this option, the value will be filled by default considering the windows user and domain names. The value will be in the format of,  
DOMAIN NAME\USER NAME

### Serial Number

The serial number will be stored in the certificate as shown below.


XX XX XX XX XX XX XX XX XX XX

Every 2 characters are separated by a SPACE. Remove SPACES and enter the value as shown below.

XXXXXXXXXXXXXXXXXXXX

### Browse From Path

Using this option, user can select certificate from any path. The certificate should be a valid one with .CER extension.

 If you do not want the single sign-on option, you can log in providing your *User ID* and *Password*, which are those that you use to log on to the CRM server

## 11.1.1 Further Information: Using X.509 Client Certificates

### Use

An X.509 client certificate is a digital "identification card" for use in the Internet, also known as a public-key certificate.

A user who accesses the SAP Web Application Server and presents a valid certificate is authenticated on the server using the SSL protocol. The information contained in the certificate is passed to the server and the user is logged on to the server based on this information. User authentication takes place in the underlying protocols and no user ID and password entries are necessary.

### Integration

#### Public-Key Infrastructure / Trust Center Services

Users need to receive their X.509 client certificates as part of a public-key infrastructure (PKI). The role of the PKI is to verify the identity of certificate owners and to issue, validate, renew, and revoke certificates. If you use X.509 client certificates for authentication, then you need access to a PKI. You can either establish your own PKI or you can rely on a Trust Center for these tasks.

#### Using SSL for Client Authentication

When using X.509 client certificates, users are authenticated on the SAP Web Application Server using the SSL protocol. Therefore, HTTPS connections are necessary for the communication between the users' Web browsers and the SAP Web Application Server.


### Prerequisites

- Users possess valid X.509 client certificates and have imported them into their Web browsers.
- The SAP Web Application Server is configured to support HTTPS connections and SSL. The user's identification, the Distinguished Name, that is specified in his or her certificate must map to a valid user ID on the SAP Web Application Server

### Features

- Strong authentication is provided using the SSL protocol and PKI technology.
- Users can also produce digital signatures using the client certificates. There, higher levels of trust and non-repudiation for business transactions are also possible.
- Passwords are no longer used for authentication purposes.
- Users can also use their certificates for access to other intranet or Internet services.

## Activities

1. The user accesses a service on the SAP Web Application Server.  
 The corresponding URL must use HTTPS.
2. The SAP Web Application Server uses the SSL protocol to authenticate the user based on the information contained in the certificate.
3. If the authentication was successful, the server searches for a valid SAP System ID that corresponds to the user's Distinguished Name in the certificate.

## Result

If the SSL authentication was successful and the user can be mapped to a SAP System user ID, then the user is logged on to the system. No user ID or password entries are necessary.

If however, the system cannot correctly map the user ID, or the SSL authentication failed, then the system checks for a logon ticket. If no ticket exists, then the system prompts the user for user ID and password using the HTTP basic authentication prompt.

### 11.1.2 Support for SAP logon tickets

Single Sign-On (SSO) is a specialized form of authentication that enables a user to authenticate once and gain access to the resources of multiple software systems. Client Groupware Synchronization solution currently support X-509 digital certificates for single sign-on. This section explains the usage of SAP Login ticket as single sign-on for Client Groupware CRM synchronization solution.

#### Prerequisites

- The SAP System has release 4.0B or higher. Logon tickets are not supported in releases lower than 4.0B.
- For SAP Systems with Release less than 6.20, the portal plug-in that corresponds to the portal release must be installed in the SAP System. SAP Systems based on SAP Net Weaver Application Server (AS) 6.20 or higher do not require the plug-in.
- The required kernel patches have been applied to SAP systems prior to Release 4.6C. For more information, see the section on implementing new kernels for the AS in SAP Note [177895](#). Note that after applying the kernel patches, you may need to patch the operating system of the SAP system so that the new kernel works.
- Users must have the same user IDs in all SAP Systems that are accessed with SSO with logon tickets. If the SAP user IDs are different to the portal user IDs, you must define a SAP reference system.
- The SAP Security Library (*SAPSECULIB*) is installed on all of the system's application servers.
- You have configured the portal server for SSO with logon tickets.

### SAP Logon Tickets Overview

SAP Logon Tickets represent user credentials in SAP system. When enabled, users can access multiple SAP applications and services through SAPGUI and web browsers without further username and password inputs from the user. SAP Logon Tickets can also be a

vehicle for enabling single sign-on across SAP boundaries; in some cases, logon tickets can be used to authenticate into 3rd party applications such as Microsoft-based web applications.

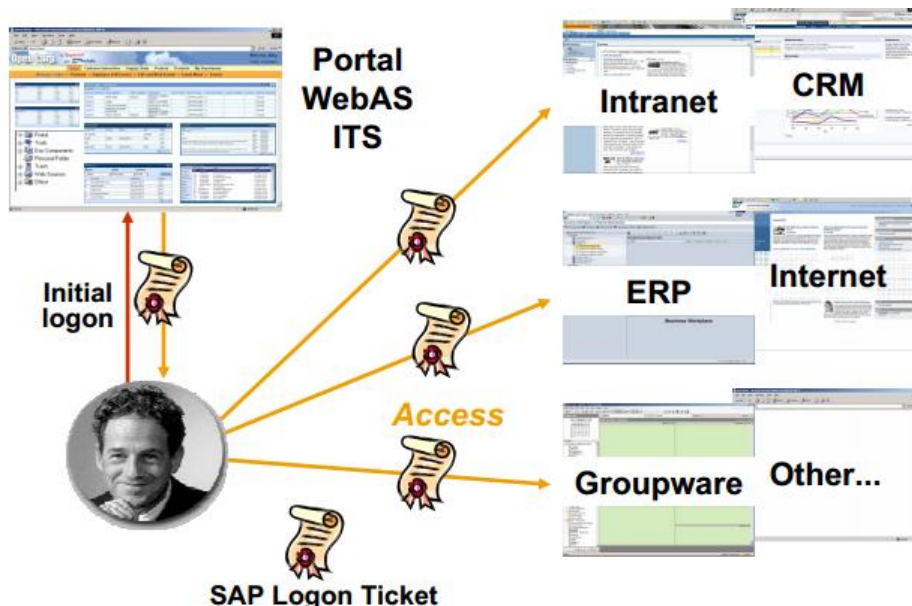


Figure 1: SAP Logon Ticket – Single Sign-on Process

Logon tickets contain information about the authenticated user. They do not contain any passwords. Specifically, logon tickets contain the following items:

- Portal user ID and one mapped user ID for external applications
- Authentication scheme
- Validity period
- Information identifying the issuing system
- Digital signature

When using logon tickets, one system must be the ticket-issuing system. This can either be the portal or another SAP system. We recommend using the portal as the ticket-issuing system, since the portal should be a user's single point of access to all applications. The receiving SAP System should only accept logon tickets issued from their designated portal server and verify the portal's server digital signature.

### 11.1.2.1 SAP Logon Tickets for Client Groupware

10.30 SP 01 – Patch 06 Release onwards, Client Groupware would provide the support for one of the standard feature of single sign-on authentication i.e. SAP Logon Tickets. The following is working mechanism of client groupware with SAP Logon Ticket authentication. This method is very useful for the customers if they already have the single point of administration for centrally managed users across SAP and Non SAP systems.

- You need Configure Single Sign-on options for groupware Synchronization SICF service. Log on to CRM Application Server using SAPGUI, Go to SICF transaction and search for the groupware synchronization service CRM\_ACT\_GWSYNC as shown below:

**Maintain Services**

Filter for Calling ICF Hierarchy

Hierarchy Type	SERVICE
Virtual Host	
Service Path	
Service Name	CRM_ACT_GWSYNC
Reference Service	
Description	
Language	English

- Having searched for SICF Groupware service, the following screen will be displayed and

Virtuelle Hosts / Services	Documentation	Referenz Service
▼ default_host	VIRTUAL DEFAULT HOST	
▼ sap	SAP NAMESPACE; SAP IS OBLIGED NOT T...	
▼ crm	CRM SERVICES	
• crm_act_gwsync	CRM - Groupware Client Synchronization	

- Double click on crm\_act\_gwsync entry, will open the service properties page. Go to Error Pages and Logon Errors, the following screen is displayed.

Service Data | Logon Data | Handler List | **Error Pages** | Administration

**Logon Errors** | Appl. Errors | Logoff Page | Not Accessible

Explicit Response Time Documentation

Explicit Response Page Header

Alias \_\_\_\_\_

Header Page \_\_\_\_\_

Explicit Response Page Body

Alias \_\_\_\_\_

Body Page \_\_\_\_\_

Redirect to URL Status 2

Redirect

<https://portal-cds-dev.telekom.de/irj/servlet/prt/portal/prtroot/wsredirect.c>

W/o Form Fields     Form Fields (Text Form)

Form Fields (Base64)

System Logon Configuration


Now Configure the Redirect to URL option to any SAP user authentication URL as highlighted above.

Please note that Redirect URL must be an end point URL without any further redirections.

- Introduced a new Groupware Profile Parameter SSOAUTHURL which actually contains Portal URL.

It is an end point service URL which provides the user authentication and issues a SAP Logon Ticket as a base64 encoded cookie (MYSAPSSO2). The default value of this profile parameter is usually left blank. Groupware administrator must have to define this property set to SSO URL to enable the SAP Logon Ticket authentication for Client Groupware.

- If SSOAUTHURL parameter defined by the groupware administrator, Client Groupware first places a HTTP Request to SSOAUTHURL. Thus, login dialog will be prompted by the Central Authentication System (usually SAP NW Portal) for the end user to enter his portal credentials. Portal system issues a SAP Logon ticket in the form of cookie after successful authentication.
- Client Groupware extracts the cookie from the previous request sent to portal and sends it to SAP CRM Application Server for accessing the Groupware functionality.
- MYSAPSSO2 cookie will be stored temporarily in client groupware and Subsequent Requests to CRM Application server will be placed with MYSAPSSO2 cookie. This process will be repeated if the MYSAPSSO2 cookie is not valid or expired.

 In order to enable this feature Groupware Profile needs to be downloaded from CRM WebClient UI for the very first time. This step is mandatory in order to download the SSOAUTHURL parameter information to outlook client.

## References

- SAP Note [1859352](#), Support for SAP logon tickets in Client groupware
- SAP Note [701205](#) (EP6.0: Single Sign-On using SAP Logon Tickets)
- SAP Note [654982](#) (URL requirements due to Internet standards)
- SAP Help Portal for [Single Sign-On](#)
- SAP Help Portal for [Portal and SAP Logon Ticket Configuration](#)

## 11.2 Backend Customizing and System Settings

### Backend Customizing (Groupware Integration)

- **Make generic Customizing settings for groupware integration**

You do this in Customizing for *Customer Relationship Management*, under *CRM Middleware and Related Components* -> *Client-Based Groupware Integration* -> *Settings for Client-Based Synchronization*.

- **Define groupware profiles**

Groupware profiles determine the synchronization settings that are valid for a set of business users, based on their SAP CRM business role, the country assigned in their business partner master data, and the language that they select for profile download.

You define profiles in SAP GUI transaction `GWIPROFILE` (you can also find this transaction in Customizing for *Customer Relationship Management*, under *CRM Middleware and Related Components* -> *Client-Based Groupware Integration* -> *Create and Define Settings for Client Profiles*).

You use the checkbox *Modifiable in Client* to determine whether the business user can change the settings in the synchronization settings on the groupware client or in the SAP CRM WebClient UI.

Each profile must be assigned to a business role (the country and language fields can be left blank). The combination of business role, country, and language must be unique.

For a list of currently available parameters, see section [10.3 Parameters for Groupware Profiles](#) of this document.

### Backend Customizing (General)

- **Check the defined date profiles (which influence time zone handling for all-day appointments)**

You do this in Customizing for *Customer Relationship Management*, under *Basic Functions* -> *Date Management* -> *Define Date Profile*.

You assign date profiles to transaction types in the same section, in the activity *Assign Date Profile to Transaction Type*.

For more information, see SAP Library for client-based groupware integration, section *Appointment Synchronization*.

- **Specify the possible titles that can be entered for contacts in the groupware client**

You do this in Customizing for *Cross-Application Components*, under *SAP Business Partner* -> *Business Partner* -> *Basic Settings*-> *Forms of Address*-> *Maintain Forms of Address*.

Without this customizing there will be inconsistency in the title synchronization for contacts.

- **Make the settings described in SAP Note [1567865](#)**

In client based groupware integration, if a new contact or a new account (by maintaining company name and business related data without assigning an account using *Relate to SAP CRM in Microsoft Outlook*) is created in the mail client, on synchronization, the newly created contact or account does not have data origin or source of creation maintained. Apply this SAP Note to identify a contact that was created in the Groupware Client.

## User-Related Settings

- **Ensure that CRM users are assigned to a business partner of the type *Employee***  
You do this in organizational management (transaction PPOMA\_CRM or BP).
- **Ensure that CRM users have an association with a valid CRM business role**  
You do this in organizational management (transaction PPOMA\_CRM). The role must have one of the following profile types:  
*No Classification*  
*IC WebClient Business Role*  
*CRM WebClient Business Role*
- **Optional: Assign a business role to users for determination of a groupware profile**  
You need to do this if multiple roles are assigned to a user in the organizational model, to ensure that the correct groupware profile is determined for groupware integration. Otherwise the system would determine the first role assigned to the user, which may not be correct.  
You define which role is used for the profile determination in SAP GUI transaction SU01. On the *Parameters* tab, enter the parameter CRM\_GWI\_PROFILE with the parameter value set as the **business role** to which profile applies (not the name of the profile).

## Other Settings

- **(Optional) Enable load balancing using the SAP Web Dispatcher**  
Client-based groupware integration can be configured with SAP Web Dispatcher for load balancing of Web requests. It also acts as a software Web switch in a SAP system with several SAP NetWeaver Application Servers for Web applications. It lies between the Internet and the SAP system in the DMZ (demilitarized zone). It is the entry point for HTTP(S) requests into the SAP system, which consists of one or more Web application servers. The SAP Web Dispatcher can reject or accept HTTP connections. When it accepts a connection, it balances the load to ensure an even distribution across the servers.  
To enable load balancing for client-based groupware integration, make the following settings:
  1. In transaction se80, go to the BSP applications CRMCMP\_GW\_WC and CRM\_CALENDAR and open the view GWIntegration.htm (the BSP view page for client-based groupware integration).  
Options and Sync Java script functions are used when the client groupware features are invoked from the SAP CRM WebClient UI. The variable my\_url is defined in these functions and usually points to the SAP CRM application server determined by the SAP function create\_url.
  2. Change my\_url so that it points to the SAP Web Dispatcher. To change the value of the my\_url parameter, modify the BSP script. Use the following URL format for the my\_url parameter:

```
<<Service Protocol>>://<<Webdispatcher Host:Webdispatcher
Port>>/sap/crm/crm_act_gwsync?sap-client=<<Client Number for
CRM Application>>
```



```
http://VM537801.bwi40g.vzbi.caas:80/sap/crm/crm_act_gwsync?sap-client=300
```

Enter the host name and port number of the SAP Web Dispatcher (instead of the host name and port number of the specific SAP CRM application server) for the groupware profile parameter `CRMServer` (Customizing for *Customer Relationship Management*, under *CRM Middleware and Related Components -> Client-Based Groupware Integration -> Create and Define Settings for Client Profiles*).



The client number of the SAP CRM application server is still required for the parameter `CRMClient`.

- **(Optional) Customize search criteria for *Relate to SAP CRM* assignments**

Business users can use the *Relate to SAP CRM* add-in to assign CRM accounts, CRM contacts, and CRM reference transactions to items. To assign an entity, business users perform a search. SAP provides a standard set of search criteria. If you want to add further search criteria (in addition to the standard fields provided by SAP), you need to do the following:

1. Add the field to the standard search criteria in the XML file for search parameters.

The standard search criteria are defined in the file `SearchParams.xml`, which is delivered with the client based groupware integration component and stored in the following path:

```
%GWIROOTDIR%\Framework\Controls\Groupware\Forms
```

This file defines the search fields that appear in the (dropdown) list of supported search criteria for different kinds of search.



For an account search using the criterion *Country*, the file contains the following line under the `Account` tag:

```
<SearchParam Name="Country" MappingTag="Country"
LanguageID="IDS_Custom_Country" />
```

The following table explains the elements in the above line:

Element	Function
Name	Name of the custom search field.
Mapping Tag	Technical name of the search field as required by the BAPI calls. For example, <i>Email</i> is mapped to the mapping tag <code>IV_EMAIL</code> , which is an input to the <code>BUPA_SEARCH</code> function. The mapping tag is not required for the custom search field's functionality; however, you need to enter a dummy value to preserve the format of the line.
LanguageID	Language identifier used for the retrieval of the localization text

2. Add labels for the custom fields in the localization files of the required languages.

Localization (`.loc`) files are delivered with the client based groupware integration component and stored in the following path:

```
%GWIROOTDIR%\Framework\Controls\Groupware\Localization.
```

The language ID and its corresponding text should be added to the English localization file mandatorily and also to other relevant language localization files.

For example, if your business users use Japanese and German languages, you need to add the language text to Japanese, German and English localization files. (`Groupware_JA.loc`, `Groupware_DE.loc`, `Groupware_EN.loc`).

3. Implement a Business Add-In (BAI) to add the search criteria (also as columns in the search results list).

You can find this BAI in Customizing for *Customer Relationship Management*, under *CRM Middleware and Related Components -> Client-Based Groupware Integration -> Business Add-Ins -> BAI: Definition of Search Parameters for Relate to SAP CRM*.

You can also use this BAI to influence the set of the search results by adding or deleting result items.

## 11.3 Settings for Client PCs

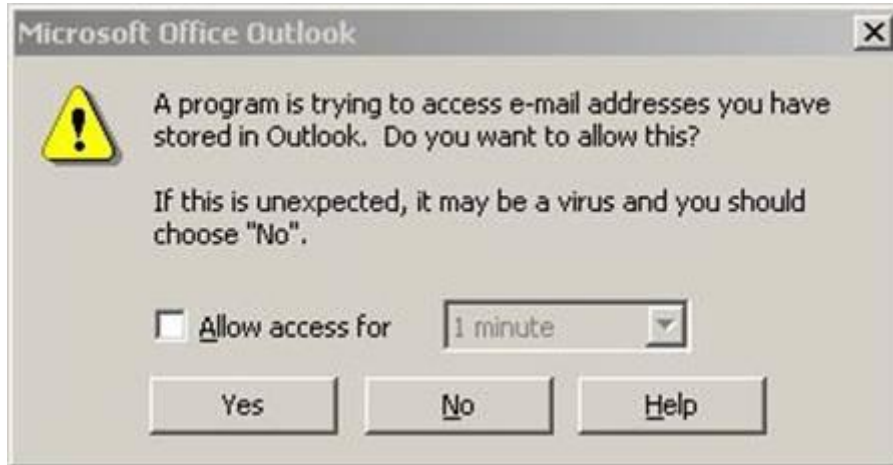
- Add the SAP CRM server site name to the trusted sites list in the Internet browser as follows:
  1. Open the Internet Explorer.
  2. Choose *Tools -> Internet Options -> Security* and in the *Trusted Sites* screen area, choose *Sites*.
  3. In the *Add this website to the zone* field, enter the SAP CRM server website and choose *Add*.
  4. Choose *Close* to close the window and apply the settings.

You may get a warning that you are changing security settings. In this case, choose *Yes* to close the window, and then *OK* in the Internet Options window. Close all browser windows and restart the Internet Explorer.
- Enable cached exchange mode in Microsoft Outlook as follows:
  1. In Microsoft Outlook, go to the account settings.
    - In Microsoft Outlook 2003/2007 choose *Tools -> Account Settings...*
    - In Microsoft Outlook 2010 choose *File -> Info -> Account Settings -> Account Settings...*
  2. On the *E-mail* tab, select the Microsoft Exchange server and choose *Change...*
  3. In the Microsoft Exchange settings, select the *Use Cached Exchange Mode* checkbox.
  4. Choose *Next -> Finish* to complete the setting.
- If you are working over a VPN connection, make sure you have the following Microsoft Outlook settings:
  - *Download Full Items*
  - *On Slow Connections Only Download Headers*
- If multiple roles are assigned to you in the organizational model, assign a business role to your user for determination of a groupware profile (if this has not already been done by administrator).

This ensures that the correct groupware profile is determined for groupware integration. Otherwise the system determines the first role assigned to you, which may not be correct. You assign the role as follows:

  1. In the SAP CRM system (SAP GUI), choose *System -> User Profile -> Own Data*.
  2. On the *Parameters* tab, create the parameter `CRM_GWI_PROFILE` with the parameter value set as the business role to be assigned to the user.
- (Only applicable if no connection details have been entered during installation by the administrator):

Before you start working with groupware integration, click *Edit Synchronization Settings* on the *Personalize* page of the SAP CRM WebClient UI to download your groupware profile.
- Proceed as described below to avoid the following security warning being displayed to business users using Microsoft Outlook:



### Microsoft Outlook 2003

1. Follow the steps in SAP Note [1405333](#).
2. If the popup still appears, the groupware integration add-in must be defined as a trusted add-in on each client PC, on the *Trusted Code* tab of the Microsoft Outlook Security template. For more information, refer to the support area of the Microsoft Office Web site (search for Microsoft Office Security template settings for Office 2003).

### Microsoft Outlook 2007

1. In Microsoft Outlook, choose *Tools -> Trust Center -> Programmatic Access* and check the antivirus status.
2. If the status is *Invalid*, select the option *Never warn me about suspicious activity*.

### Microsoft Outlook 2010

1. In Microsoft Outlook, choose *File -> Options -> Trust Center* and click *Trust Center Settings*.
2. Choose *Programmatic Access* and check the antivirus status.
3. If the status is *Invalid*, select the option *Never warn me about suspicious activity*.

## 11.4 User specific Add-in changes in Citrix


This section is relevant only if you are working on a Citrix environment and you do not want the Client Groupware add-in loaded to the Outlook of all the users working on this Citrix machine. Only few users work on Client groupware and you want the add-in available only for those users.


Follow the steps given below to enable the add-in only for specific users on the Citrix environment:


- Install Client Groupware on the Citrix machine
- After successful installation, open the registry
- Navigate to registry key
  - In case of 32 bit Outlook,  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Office\Outlook\Addins
  - In case of 64 bit Outlook,  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Office\Outlook\Addins
- Check for the Groupware addin entry
  - SLIGWIAddIn2003 in case of Outlook 2003
  - SLIGWIAddIn2007 in case of Outlook 2007
  - SLIGWIAddIn2010 in case of Outlook 2010
  - SLIGWIAddIn2010 in case of Outlook 2013
- Take a backup of the Groupware addin SLIGWIAddInXXXX and delete the key from that registry path
- Open the registry backup file with notepad for edit, you will find the below line.
  - In case of 32 bit Outlook,  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Office\Outlook\Addins\SLIGWIAddInXXXX
  - In case of 64 bit Outlook,  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Office\Outlook\Addins\SLIGWIAddInXXXX
- Replace the following and save the file
  - In case of 32 bit Outlook, “HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node” with “HKEY\_CURRENT\_USER\SOFTWARE”
  - In case of 64 bit Outlook, “HKEY\_LOCAL\_MACHINE\SOFTWARE” with “HKEY\_CURRENT\_USER\SOFTWARE”
- Run this registry file during the startup of users who will work with “Client groupware” solutions.
- Client Groupware Add-in will be loaded in the Outlook only for these users.

## 11.5 Parameters for Groupware Profiles


You use the checkbox *Modifiable in Client* to determine whether the business user can change the settings in the synchronization settings on the groupware client or in the SAP CRM WebClient UI.

Property	Possible Values (Explanation)	Corresponding Synchronization Setting
AccountSearchResults	CITY/CONTACT ID/CONTACT NAME/COUNTRY/EMPLOYEE ID/EMPLOYEE RESPONSIBLE/FAX NUMBER/HOUSE NUMBER/POSTAL CODE/REGION/STREET/TELEPHONE NUMBER/ Press F4 to select the values that you require.	<i>Search Results</i> panel -> <i>Account Search Result</i>
AddressDelimiter	Determines the separation of the house number and street name.	None
	<blank> : On upload, the house number and street name are split into the <i>House No.</i> and <i>Street</i> fields in SAP CRM. On download, a space is inserted between the house number and street name.	
	, (comma) : On upload, the house number and street are concatenated in the <i>Street</i> field in SAP CRM. On download, a comma is inserted between the house number and street name.	
	For more information, see the SAP Library, section <i>Address Delimiter and Address Grouping for Contacts</i> .	
ALL	<b>True:</b> Show the <i>Conflicts/Confirmations</i> window if an item is created, modified, or deleted.	<i>Confirmation and Conflicts</i> panel -> <i>Show Confirmation Window For -&gt; All</i> checkbox
	<b>False:</b> Do not show <i>Conflicts/Confirmations</i> window if an item is created, modified, or deleted.	
	AlwaysShowConflict is replaced with the parameter "ALL" and the value maintained is copied to Parameter "ALL".   As of version 10.29.01 of the Client Groupware Integration Component, this parameter replaces the parameter "AlwaysShowConflict". If you are upgrading to version 10.29.01, you need to run the report attached to SAP Note <a href="#">1689421</a> , which copies the value for the parameter "AlwaysShowConflict" to the parameter "ALL".	

ApptAttachment	<p><b>Appointments with Attachment:</b> Synchronize attachments for appointments.</p>	<p><i>Synchronization panel -&gt; Sync Options -&gt; Attachments checkbox for Appointments</i></p>
	<p><b>Without Attachment:</b> Do not synchronize attachments for appointments.</p>	
	<p> To enable synchronization of appointment attachments you also need to enable appointment synchronization (parameter "ApptSyncEnable").</p>	
ApptColor	<p>Determines the color that you want to use in Microsoft Outlook for appointments synchronized from SAP CRM. You enable use of colors in the parameter "UseColors".</p>	None
	No color assigned = 0	
	Red = 1	
	Orange = 2	
	Peach = 3	
	Yellow = 4	
	Green = 5	
	Teal = 6	
	Olive = 7	
	Blue = 8	
	Purple = 9	
	Maroon = 10	
	Steel = 11	
	Dark Steel = 12	
	Gray = 13	
	Dark Gray = 14	
	Black = 15	
	Dark Red = 16	
	Dark Orange = 17	
	Dark Peach = 18	
	Dark Yellow = 19	
	Dark Green = 20	
	Dark Teal = 21	
	Dark Olive = 22	
	Dark Blue = 23	
Dark Purple = 24		
Dark Maroon = 25		

ApptSyncEnable	<b>True:</b> Synchronize appointments.	<i>Synchronization panel - Sync Options -&gt; Select checkbox</i>
	<b>False:</b> Do not synchronize appointments.	
AssignedAccountPriority	Determines the flow of account data when a user assigns an account to an item, using the <i>Relate to SAP CRM</i> add-in (not relevant for Lotus Notes).	None
	<b>0:</b> Always overwrite data in Microsoft Outlook with data from SAP CRM.	
	<b>1:</b> Outlook has priority (overwrite only blank fields in Microsoft Outlook).	
	<b>2:</b> CRM has priority (do not overwrite fields in Microsoft Outlook if they are blank in SAP CRM).	
	For more information, see the SAP Library, section <i>Assigned Account Priority</i> .	
AutoSyncAtLogonDelay	Determines the delay in seconds after which the automatic synchronization should be triggered once the user logs on. Applicable only if the parameter "LogonSyncEnable" is set to <b>1</b> .	None
AutoSyncConflictOption	Determines the action if a conflict occurs during automatic synchronization.	<i>Auto Synchronization panel -&gt; Additional Settings -&gt; checkbox Use confirmation and conflict settings configured for manual synchronization</i>
	<b>0:</b> Do not use manual settings  <b>1:</b> Use manual settings	
BatchSize	<p>Maximum number of items to be synchronized in a single request. This is used to avoid timeout errors during synchronization of large numbers of contacts/activities.</p> <p> If the value for "BatchSize" is set as 10 and there are 15 contacts, 22 appointments and 5 tasks to be synchronized, when synchronization is triggered the request for contact synchronization will go in 2 batches, for appointments in 3 batches, and for tasks in a single batch.</p>	None
CertificateOrIssuerName	Certificate information that is used to filter the certificate from the certificate store when single sign-on is enabled.	<i>CRM Server panel -&gt; Single Sign On Details -&gt; Certificate/Issuer/Path Name</i>

Change	<p><b>True:</b> Show changed appointments, tasks, and contacts in the <i>Conflicts/Confirmations</i> window.</p>	<p><i>Conflicts and Confirmations</i> panel -&gt; <i>Show Confirmation Window For -&gt; Modification</i> checkbox</p>
	<p><b>False:</b> Do not show changed appointments, tasks, and contacts in the <i>Conflicts/Confirmations</i> window; trigger the default synchronization action.</p>	
CollectCertificateBy	<p>Determines how single sign-on certificates are collected from the certificate store</p>	<p><i>CRM Server</i> panel -&gt; <i>Single Sign On Details - &gt; Collect Certificate via</i></p>
	<p><b>SubjectName:</b> The <i>SubjectName</i> value in the <i>Details</i> tab of the certificate is considered for single sign-on.</p>	
	<p><b>IssuerName:</b> The <i>IssuerName</i> value in the <i>Details</i> tab of the certificate is considered for single sign-on.</p>	
	<p><b>WindowsAuthentication:</b> The Microsoft Windows user name with which you are logged into the system is considered for single sign-on.</p>	
	<p><b>SerialNumber:</b> The <i>SerialNumber</i> value in the <i>Details</i> tab of the certificate is considered for single sign-on.</p>	
	<p><b>BrowseFromPath:</b> The browsed path for the certificate is considered for single sign-on.</p>	
Conflict	<p>Determines the required action to be taken during synchronization when an item is changed in both SAP CRM and the groupware client.</p>	<p><i>Conflicts and Confirmations</i> panel -&gt; <i>Conflict Resolution Options</i></p>
	<p><b>GW has Priority:</b> The SAP CRM item will be overwritten by changes made to the item in the groupware client.</p>	
	<p><b>SAP CRM has Priority:</b> The groupware client item will be overwritten by changes made to the item in SAP CRM.</p>	
	<p><b>Open Conflict Resolution:</b> The <i>Conflicts/Confirmations</i> window appears and the business user decides which version of the item has precedence.</p>	
	<p>The values that you can select depend on your setting for the parameter "OnConflict" as follows:</p> <ul style="list-style-type: none"> <li>• If "OnConflict" = "True", all the options can be selected.</li> <li>• If "OnConflict" = "False", GW has Priority and SAP CRM has Priority can be selected.</li> </ul>	

	<ul style="list-style-type: none"> <li>If "Conflict" = "Open Conflict Resolution" and "OnConflict" = "False", run the report attached to SAP Note <a href="#">1689421</a> to set the value of Conflict to "SAP CRM has Priority" as a default value.</li> </ul> <p>You can define separate priorities for automatic synchronization with the parameter "ConflictAutoSync".</p>	
ConflictAutoSync	The resulting action in case of conflict during automatic synchronization. If the parameter "AutoSyncConflictOption" is set to <b>0</b> , this setting takes effect.	<i>Auto Synchronization panel -&gt; Additional Settings -&gt; Define the system behavior for conflicts between SAP CRM and groupware</i>
	<b>SAP CRM has Priority:</b> The groupware client item will be overwritten by changes made to the item in SAP CRM.	
	<b>GW has Priority:</b> The SAP CRM item will be overwritten by changes made to the item in the groupware client.	
ContactAttachment	<b>Contact with Attachment:</b> Synchronize attachments for contacts.	<i>Synchronization panel -&gt; Sync Options -&gt; Attachments checkbox for Contacts</i>
	<b>Without Attachment:</b> Do not synchronize attachments for contacts.	
	 To enable synchronization of contact attachments you also need to enable contact synchronization (parameter "ContactSyncEnable").	
ContactSearchResults	EMPLOYEE NAME/EMPLOYEE RESPONSIBLE/MOBILE NUMBER/PHONE/WORK FAX/ Press F4 to select the values that you require.	<i>Search Results panel -&gt; Contact Search Result</i>
ContactSyncEnable	<b>True:</b> Synchronize contacts.	<i>Synchronization panel -&gt; Sync Options -&gt; Select checkbox</i>
	<b>False:</b> Do not synchronize contacts.	
CreateNew	<b>True:</b> Show new appointments, tasks, and contacts in the <i>Conflicts/Confirmations</i> window.	<i>Conflicts and Confirmations panel -&gt; Show Confirmation Window For -&gt; Creation checkbox</i>
	<b>False:</b> Do not show new appointments, tasks, and contacts in the <i>Conflicts/Confirmations</i> window; trigger the default synchronization action.	
CRMClient	The SAP CRM server client number.	<i>CRM Server panel -&gt; Client field</i>
CRMServer	The SAP CRM server for an active profile (this is a concatenated string of <server_name>:<port number>).	<i>CRM Server panel -&gt; Server and Port fields</i>

	<p><b>Steps to find these details:</b> Transaction <i>smicm</i> -&gt; menu option <i>GoTo</i> -&gt; <i>parameters</i> -&gt; <i>Display</i></p> <p>server_name is the host_name_full parameter in the Misc section and port number is the PORT number for HTTPS protocol in the Services section</p>	
DefaultEndDate	Default end date for appointments and tasks. This parameter takes precedence over the parameters "To" and "NextDays".	Synchronization panel -> Appointment/Task Synchronization Settings -> End Date field
	Enter the date in the format <b>MM/DD/YYYY</b> (month/date/year).	
DefaultStartDate	Default start date for appointments and tasks. This parameter takes precedence over the parameters "From" and "LastDays".	Synchronization panel -> Appointment/Task Synchronization Settings -> Start Date field
	Enter the date in the format <b>MM/DD/YYYY</b> (month/date/year).	
Delete	<b>True:</b> Show deleted appointments, tasks, and contacts in the <i>Conflicts/Confirmations</i> window.	Conflicts and Confirmations panel -> Show Confirmation Window For -> Deletion checkbox
	<b>False:</b> Do not show deleted appointments, tasks, and contacts in the <i>Conflicts/Confirmations</i> window; trigger the default synchronization action.	
DISABLE_RELATETOC RM_ACCOUNT	Only if the direction of synchronization is set as <b>CRM to Outlook</b>	None
	<b>TRUE</b> = Disable Accounts assignment/unassignment from GW Client, Relate to CRM	
	<b>FALSE</b> = Enable Accounts assignment/unassignment from GW Client, Relate to CRM	
DISABLE_RELATETOC RM_CONTACT	Only if the direction of synchronization is set as <b>CRM to Outlook</b>	None
	<b>TRUE</b> = Disable Contacts assignment/unassignment from GW Client, Relate to CRM	
	<b>FALSE</b> = Enable Accounts assignment/unassignment from GW Client, Relate to CRM	
DISABLE_RELATETOC RM_REFDCOS	Only if the direction of synchronization is set as <b>CRM to Outlook</b>	None
	<b>TRUE</b> = Disable Reference Documents assignment/unassignment from GW Client, Relate to CRM	
	<b>FALSE</b> = Enable Accounts assignment / unassignment from GW Client, Relate to CRM	

DownloadContactsFrom CRM	<b>Owned Contact:</b> Download contacts from SAP CRM for which the user logged-on is employee responsible.	Synchronization panel -> <i>Contact Person Synchronization Settings</i> -> checkboxes <i>Download from CRM: Owned Contacts</i> and <i>Download from CRM: Contacts for Accounts Where User Belongs to Account Team</i>
	<b>Contacts of Account:</b> Download SAP CRM contacts that are assigned to accounts for which the user logged-on is employee responsible.	
	<b>Both:</b> Download contacts from SAP CRM for which both of the above apply.	
EnableAutoSync	<b>True:</b> Enable automatic synchronization.	Auto Synchronization panel -> <i>Enable Automatic Synchronization</i> checkbox
	<b>False:</b> Disable automatic synchronization.	
EnableItemLevelCheck	<b>1:</b> Check modified items in Microsoft Outlook for content changes (field-level check).	None
	<b>0:</b> Do not check for changes on field level.	
	For more information, see the SAP Library, section <i>Check for Changes on Field Level</i> .	
EnableLog	<b>1:</b> Log files are created for synchronization.	Advanced panel -> checkbox <i>Enable Logging</i>
	<b>0:</b> No log files are created.	
EnableSSOAuthentication	<b>True:</b> Enable single sign-on.	CRM Logon Details panel -> checkbox <i>Use Single Sign-On</i>
	<b>False:</b> Disable single sign-on.	
ExtensionSeparator	Defines the character used to separate an extension from a phone number in Microsoft Outlook. The following values are supported:	None
	'-' (hyphen)	
	x	
	For more information, see the SAP Library, section <i>Phone Number Formats for Contacts</i> .	
From	<b>Days:</b> The synchronization timeframe for the past is defined in days.	None
	<b>Weeks:</b> The synchronization timeframe for the past is defined in weeks.	
	<b>Months:</b> The synchronization timeframe for the past is defined in months.	
	This setting relates to the parameter "LastDays".	

GWIServiceProtocol	The following values are supported:	None
	<b>HTTP</b>	
	<b>HTTPS</b> (recommended for security reasons)	
	To add this parameter run the report attached to SAP Note <a href="#">1689421</a> .	
HelpLink	<p>Any shared link or a Web link                      Default value: Standard SAP Application Help for Client-Based Groupware Integration.</p> <p> Make sure the end user has the necessary rights to access this Web site or shared link.</p>	<p>You create a link to documentation that is displayed when a user select the <i>Help</i> option in the SAP CRM menu in Microsoft Outlook.</p> <p>If you do not enter a value, the standard SAP application help is displayed, based on the SAP CRM release to which the groupware is connected.</p>
IdleInterval	Number of minute's idle state (at least 5 minutes) after which automatic synchronization takes place, if active.	<i>Auto Synchronization</i> panel -> <i>Schedule Automatic Synchronization</i> -> setting <i>When the computer has been idle for</i>
LanguageModifiable	<b>0</b> : The language of the UI for groupware integration is not modifiable	<i>CRM Server</i> panel -> <i>CRM Groupware Client Details</i> -> <i>Language</i> selection field
	<b>1</b> : The language is modifiable	
LastDays	The number of days/weeks/months (depending on the value of the parameter "From") in the past for which appointments and tasks are synchronized.	None
LogonSyncEnable	<b>1</b> : Automatic synchronization runs whenever the user logs on to the system.	<i>Auto Synchronization</i> panel -> <i>Schedule Automatic Synchronization</i> -> checkbox <i>Perform first synchronization at logon</i>
	<b>0</b> : Automatic synchronization does not run when the user logs on.	

NextDays	The number of days/weeks/months (depending on the value of the parameter "To") in the future for which appointments and tasks are synchronized.	None
OnConflict	<b>True:</b> Display the <i>Conflicts/Confirmations</i> window for items that have been modified in both SAP CRM and the groupware client.	<i>Confirmation and Conflicts</i> panel -> <i>Conflict Resolution Options</i> -> checkbox <i>Show Conflict Resolution Window</i> .
	<b>False:</b> Do not display the <i>Conflicts/Confirmations</i> window.	
PrivateHandlingCRM	<b>Ignore:</b> Do not synchronize private appointments or tasks from SAP CRM to groupware.	<i>Advanced</i> panel -> <i>Handling of New Private Appointments/Tasks</i> -> checkbox <i>Created in SAP CRM</i>
	<b>Synchronize:</b> Synchronize private appointments or tasks from SAP CRM to groupware.	
	<b>Sync Private as Normal:</b> Private appointments/tasks are synchronized to groupware as normal appointments/tasks.	
	<b>Sync Private Frame Only:</b> Only the basic information is synchronized.	
PrivateHandlingGroupware	<b>Ignore:</b> Do not synchronize private appointments or tasks from groupware to SAP CRM.	<i>Advanced</i> panel -> <i>Handling of New Private Appointments/Tasks</i> -> checkbox <i>Created in Outlook\Lotus Client</i>
	<b>Synchronize:</b> Synchronize private appointments or tasks from groupware to SAP CRM.	
	<b>Sync Private as Normal:</b> Private appointments/tasks are synchronized to SAP CRM as normal appointments/tasks.	
	<b>Sync Private Frame Only:</b> Only the basic information is synchronized.	
ReferenceDocSearchResults	DISTRIBUTIONCHANNEL/EMPLOYEE RESPONSIBLE/EMPLOYEE RESPONSIBLE NAME/ORGANIZATIONAL UNIT/SALES ORGANISATION/ Press F4 to select the values that you require.	<i>Search Results</i> panel -> <i>Reference transaction Search Result</i>
Reminder	Number of minutes in advance that reminders appear for appointments synchronized from SAP CRM to Microsoft Outlook.	<i>Synchronization</i> panel -> <i>Appointment/Task Synchronization Settings</i> -> <i>Reminder</i>
SecondsTolerance	An item is considered modified if the last modified time changes. The last modified time of a synchronizable item can change in SAP CRM without a user	None

	<p>making any changes to the content of the item. This can happen due to a number of activities in the SAP CRM system, such as partner determination, attachment of factsheets to appointments, and saving.</p> <p>To ensure that only items that have actually been changed by a user are considered modified, the “SecondsTolerance” value should be greater than the delay in the update of the last modified time resulting from the activities mentioned above.</p> <p>If the delay in the save of an item takes more than 20 seconds, then increase this value greater than the delay.</p> <p>If the delay in the save of an item takes less than 20 seconds, then decrease this value and set it to a value slightly greater than the delay.</p>	
ShowErrorMessage	<p><b>True:</b> Display details of any synchronization errors in a separate window during automatic synchronization.</p> <p><b>False:</b> Do not display errors during automatic synchronization.</p>	None
ShowSyncResult	<p><b>True:</b> Display the success or failure message during auto synchronization.</p> <p><b>False:</b> Do not display the success or failure message during auto synchronization.</p>	<p><i>Auto Synchronization panel -&gt; Additional Settings -&gt; Checkbox Notify me when synchronization is completed</i></p>
<a href="#">SSOAUTHURL</a>	<p>Value of the parameter is the <b>Portal URL</b>. It is an end point service URL which provides the user authentication and issues a SAP Logon Ticket as a base64 encoded cookie (MYSAPSSO2). The default value of this profile parameter is usually left blank. Groupware administrator must have to define this property set to SSO URL to enable the SAP Logon Ticket authentication for Client Groupware.</p>	None
SyncAtComputerIdle	<p><b>True:</b> Automatic synchronization takes place when the computer is in idle state for the specified period of time (defined in the parameter “IdleInterval”).</p> <p><b>False:</b> No automatic synchronization takes place when the computer is idle.</p>	<p><i>Auto Synchronization panel -&gt; Schedule Automatic Synchronization -&gt; checkbox When the computer has been idle for</i></p>

SyncAtInterval	<b>True:</b> Automatic synchronization takes place at the predefined interval (as defined for the parameters "SyncInterval" and "SyncIntervalUnit").	<i>Auto Synchronization panel -&gt; Schedule Automatic Synchronization -&gt; checkbox Start synchronization every</i>
	<b>False:</b> Automatic synchronization does not happen at intervals.	
SyncDirecAppointment	<b>CRM to GW:</b> Appointments are only synchronized from SAP CRM to groupware.	<i>Synchronization panel -&gt; Sync Item -&gt; Sync Direction field for Appointments</i>
	<b>GW to CRM:</b> Appointments are only synchronized from groupware to SAP CRM.	
	<b>Both:</b> Appointments are synchronized in both directions.	
SyncDirecContact	<b>CRM to GW:</b> Contacts are only synchronized from SAP CRM to groupware.	<i>Synchronization panel -&gt; Sync Item -&gt; Sync Direction field for Contacts</i>
	<b>GW to CRM:</b> Contacts are only synchronized from groupware to SAP CRM.	
	<b>Both:</b> Contacts are synchronized in both directions.	
SyncDirecTask	<b>CRM to GW:</b> Tasks are only synchronized from SAP CRM to groupware.	<i>Synchronization panel -&gt; Sync Item -&gt; Sync Direction field for Tasks</i>
	<b>GW to CRM:</b> Tasks are only synchronized from groupware to SAP CRM.	
	<b>Both:</b> Tasks are synchronized in both directions.	
SyncInterval	The numeric value for the definition of the synchronization frequency (frequency must be at least 10 minutes).	<i>Auto Synchronization panel -&gt; Schedule Automatic Synchronization -&gt; setting Start synchronization every</i>
SyncIntervalUnit	<b>Minutes</b> or <b>Hours:</b> The time unit for the definition of the synchronization frequency.	<i>Auto Synchronization panel -&gt; Schedule Automatic Synchronization -&gt; setting Start synchronization every</i>
SyncOnDays	The days of the week on which synchronization should take place. Press F4 to select the values that you require.	<i>Auto Synchronization panel -&gt; Specify the Days for Synchronization</i>

TaskAttachment	<b>Task with Attachment:</b> Synchronize attachments for tasks.	<i>Synchronization panel -&gt; Sync Options -&gt; Attachments checkbox for Tasks</i>
	<b>Without Attachment:</b> Do not synchronize attachments for tasks.	
	To enable synchronization of task attachments you also need to enable task synchronization (parameter "TaskSyncEnable").	
TaskSyncEnable	<b>True:</b> Synchronize tasks.	<i>Synchronization panel -&gt; Sync Options -&gt; Select checkbox</i>
	<b>False:</b> Do not synchronize tasks.	
To	<b>Days:</b> The synchronization timeframe for the future is defined in days.	None
	<b>Weeks:</b> The synchronization timeframe for the future is defined in weeks.	
	<b>Months:</b> The synchronization timeframe for the future is defined in months.	
	This setting relates to the parameter "NextDays".	
UseColors	Relevant for Microsoft Outlook 2007 and 2010	None
	<b>0:</b> Disable use of colors for appointments in Microsoft Outlook	
	<b>1:</b> Enable use of colors for appointments in Microsoft Outlook	
	You specify the colors in parameter "ApptColor".	

## 12 Troubleshooting

This section provides explanations and possible solutions to problems that may arise before and after installation, and during use of groupware integration.

Customizing for client-based groupware integration is located in the SAP CRM system in transaction SPRO, under *Customer Relationship Management*, under *CRM Middleware and Related Components* -> *Client-Based Groupware Integration*.

### Post-Installation

**After successful installation of the client groupware integration component, when a user clicks *Synchronize* or *Edit Synchronization Settings* in the WebClient UI, a popup is displayed to install it again.**

This problem can be solved in one of the following ways:

- Make the trusted sites settings described in the section [10.2 Settings for Business Users](#) in this document.
- If you have enhanced the UI components `CRMCOMP_GW_WC` or `CRM_CALENDAR`, you need to make the corrections described in the following SAP Notes manually in the enhanced BSP applications:
  - SAP CRM 2007: [1540852](#), [1548675](#), and [1562571](#)
  - SAP CRM 7.0: [1508007](#) and [1562571](#)
  - Enhancement package 1 for SAP CRM 7.0: [1550084](#) and [1562571](#)
- Implement SAP Notes [1610326](#) and [1623008](#) to use the parameter `GWIPROFILELANGUAGE` correctly. The parameter is set in SAP Customizing for client-based groupware integration (activity *Settings for Client-Based Synchronization*).

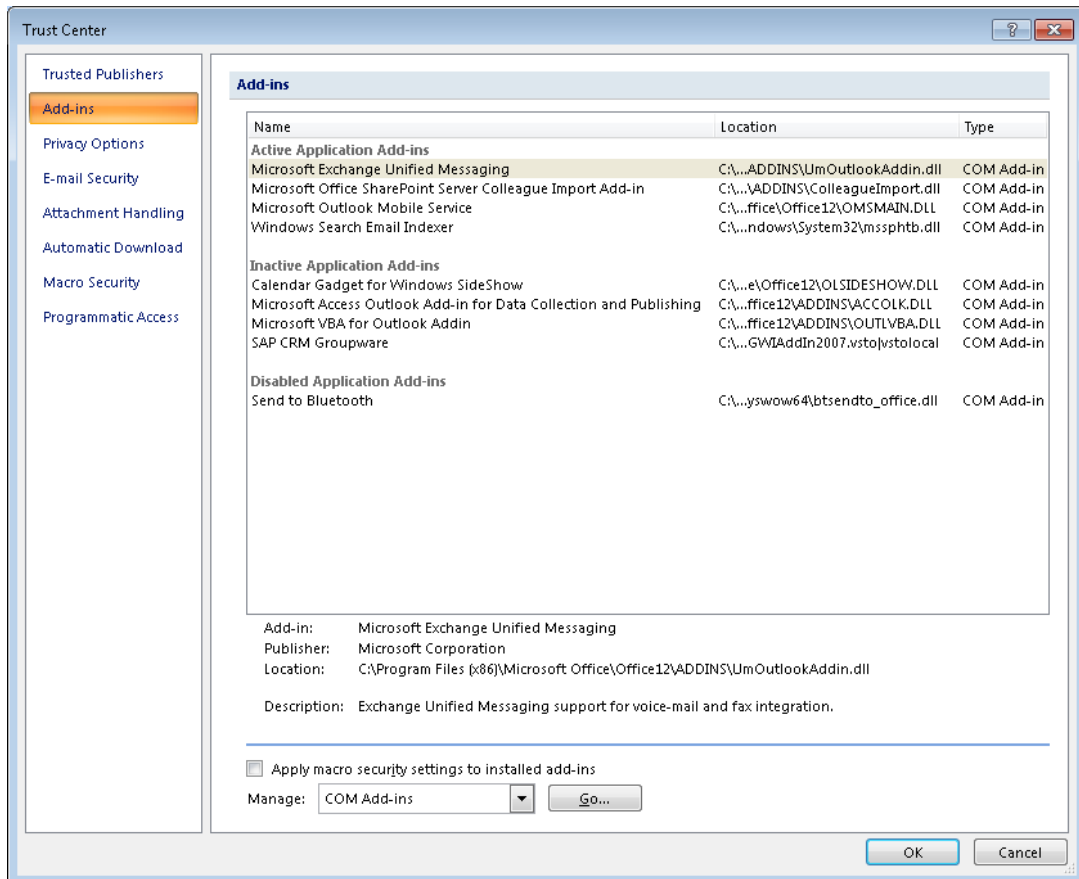
**The SAP CRM add-in is not loaded in Microsoft Outlook after successful installation.**

If the add-in installation was successful, the `LoadBehavior` value is 3 in the registry path `HKEY_LOCAL_MACHINE\Software\Microsoft\Office\Outlook\Addins\SLIGWIAddIn2007` (or `SLIGWIAddIn2003` or `SLIGWIAddIn2010` depending on the version of Microsoft Outlook). If the value is not 3, set it to 3.

If the add-in does not load after setting the `LoadBehavior` value in the registry, proceed as follows:

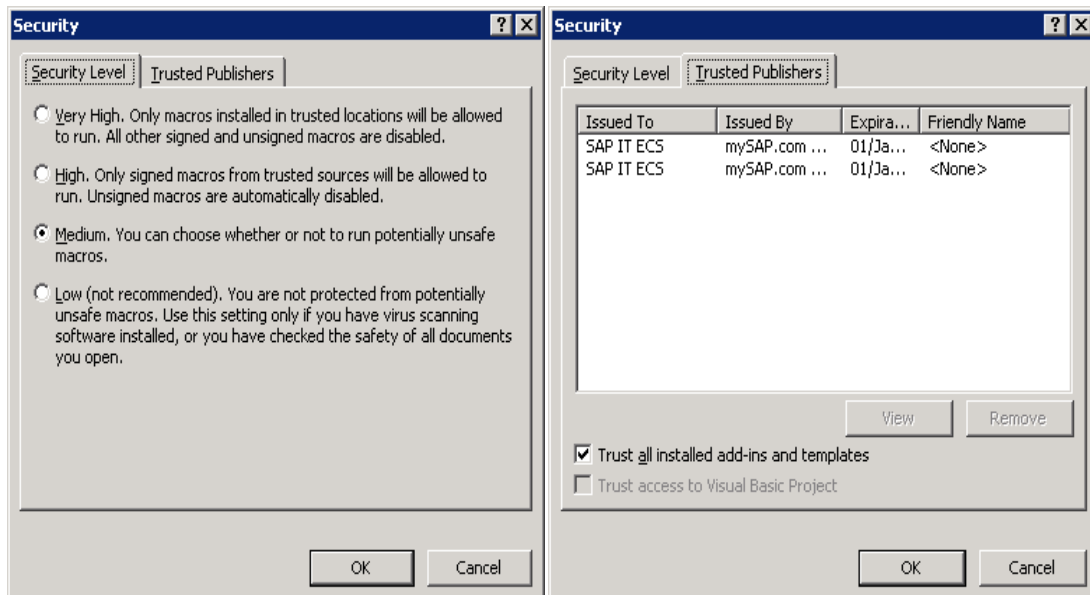
#### Microsoft Outlook 2007 and 2010

In Microsoft Outlook, choose *Tools* -> *Trust Center* -> *Add-ins*. Error-free add-ins appear under *Active Application Add-ins*. Disabled add-ins appears under *Inactive Application Add-ins*. In the *Manage* field at the bottom of this window, select *COM Add-ins* to see the load behavior of all COM add-ins. Usually, the checkbox for the add-in is selected and its load behavior is *Loaded at Startup*. If this is not the case, the appropriate message is displayed. For example; if the VSTO runtime encounters a problem loading the add-in, the message "Load Behavior: Not Loaded. A runtime error occurred during the loading of the COM Add-in" appears, take necessary steps as per the displayed message.



**Microsoft Outlook 2003**

In Microsoft Outlook, choose *Tools ->Macro -> Security*. A window appears with the tab pages *Security Level* and *Trusted Publishers*. The security level should always be medium. On the *Trusted Publishers* tab page, the checkbox *Trust all installed add-ins and templates* should be selected.




If an add-in causes a Microsoft Office application to close unexpectedly, the add-in is forcibly disabled. To re-enable the add-in, follow the instructions on re-enabling disabled add-ins in

the Microsoft Developer Network (msdn). In addition, check that there is no entry for the add-in under the following registry key

HKEY\_CURRENT\_USER\Software\Microsoft\Office\12.0\Outlook\Resiliency\DisabledItems (replace 12.0 with 11.0 for Microsoft Office 2003 and with 14.0 for Microsoft Office 2010).

#### **The SAP CRM add-in is not loaded in Microsoft Outlook 2007 even after successful installation.**

This issue occurs if the original version of Microsoft Outlook 2007 (version 12.0.4518.1014) is installed. This version by design does not support the VSTO add-ins registered under HKEY\_LOCAL\_MACHINE key, to resolve this issue apply the Microsoft hot fix package available in article 976477.

 You must have the 2007 Microsoft Office suite Service Pack 1 or 2007 Microsoft Office suite Service Pack 2 installed to apply this hot fix package.

#### **The SAP CRM add-in is not loaded in Microsoft Outlook 2010 even after successful installation.**

If the client version of .NET Framework 4.0 is installed, the prerequisite check during installation is successful, however the add-in is not loaded to Microsoft Outlook. To resolve this issue, install the full version of .NET Framework 4.0. You need to reinstall the client groupware integration component afterwards.


### **Groupware Profile / Synchronization Settings**

#### **When *Options* is clicked in the SAP CRM menu in Microsoft Outlook, a message *SAP CRM Profile is not available* is displayed in the empty settings screen**

Always download the profile the first time from the SAP CRM WebClient UI if CRM settings were not provided during installation.

#### **Some of the synchronization settings are not editable in the groupware client.**

There should be a profile created in the transaction `GWIPROFILE` with the CRM business role of the logged-in CRM user, and for this profile the checkbox *Modifiable in Client* should be selected for those fields that need to be edited in the client.

	Property	Modifiable in Client	Description
	SyncOnDays	<input type="checkbox"/>	All days of a week
	SyncIntervalUnit	<input checked="" type="checkbox"/>	Synchronization inte
	SyncInterval	<input checked="" type="checkbox"/>	Synchronization inte
	SyncAtInterval	<input checked="" type="checkbox"/>	Start synchronization

The parameters for which this checkbox is selected are editable in the groupware client. The profile also needs to be activated.

#### **The groupware profile is downloaded from the SAP CRM server that was specified during installation, although a different system was specified subsequently in the synchronization settings.**

If the profile was downloaded from the SAP CRM WebClient UI of a different SAP CRM system or if the SAP CRM system details are changed in the synchronization settings, this information is stored in the profile XML file. However, if this XML file is deleted from the user profile folder, the profile is downloaded from the SAP CRM server specified during installation.

**The groupware profile SAP\_DEFAULT is not available in a SAP CRM 2007 system.**

Implement SAP Note [1564703](#) to add the SAP\_DEFAULT profile.

**Role determination for the user during groupware profile download is incorrect when there are multiple roles assigned to the user.**

The user profile parameter CRM\_GWI\_PROFILE resolves this issue. Implement SAP Note [1554739](#). The value of this parameter should be a business role (not the name of the groupware profile, which is entered in the transaction *GWIPROFILE*).

**The language of the groupware integration component was changed in the synchronization settings; however the language of the SAP CRM add-in menu options does not change in Microsoft Outlook.**

Close and restart Microsoft Outlook.

**Not all Microsoft Outlook folders are visible in the synchronization settings.**

A Microsoft Outlook folder can have many subfolders. The synchronization settings window (*Synchronization* pane) only displays up to 2 levels of subfolder.

**Example:** A user has following folder hierarchy in her mail box:

```
Mailbox – User1
  Default Calendar
    Groupware Subfolder 1
      Groupware Subfolder 2
        Groupware Subfolder 3
```

Only Default Calendar, Groupware Subfolder 1, and Groupware Subfolder 2 are displayed in the *Folder* dropdown list for appointments.

## Synchronization: General

**A scheduled task created by a non-admin user for auto synchronization is not visible on an XP machine.**

When auto synchronization is enabled, a scheduled task is created for that user in the path 'C:\Windows\Tasks' on an XP machine. For non-admin users, scheduled tasks for auto synchronization are created in the same path but are not visible to the user. Nevertheless synchronization works as per the task scheduled by the non-admin user. This scheduled task can only be viewed by an admin user.

**The SAP CRM add-in disappears from Microsoft Outlook 2003 when synchronization is triggered either from the SAP CRM WebClient UI or from desktop while Microsoft Outlook is closed.**

The add-in disappears due to an incorrect version of Visual Studio Tools for Office (VSTO) 2005 SE Runtime (version 8.0.50727.816). This version of VSTO runtime disables all VSTO add-ins when Microsoft Outlook is accessed by the groupware integration component. To resolve this issue, uninstall the existing VSTO 2005 SE and install the 8.0.50727.940 version of VSTO 2005 SE. You do not need to reinstall the client groupware integration component.

**The error 'Desired folder cannot be fetched by Lotus Notes / no default folder found in Lotus Notes' occurs during synchronization of SAP CRM items to the Lotus Notes client.**

You cannot define synchronization folders for appointments, contacts, and tasks as default folders in the synchronization settings screen. Enter the following values:

For appointments:      Select "\$Calendar" / "\$Meetings" from the list of possible entries.  
For tasks:                Select "\$ToDo" from the list of possible entries.  
For contacts:             Select "My Contacts" for Lotus Notes 8.5 (select "Contacts" for Lotus Notes 8.0 and below) Note that the selection for contacts is dependent on the Lotus Notes installation language.

**Appointments, tasks and contacts are synchronized to Microsoft Outlook but the category "SAP CRM" is missing in these items.**

Check whether the category 'SAP CRM' is listed in the master category list in Microsoft Outlook. If it is not, add it to the master category list. Also implement SAP Note [1560254](#). If it has already been implemented, then re-implement it.

**Items synchronized from SAP CRM to Microsoft Outlook 2003 are not always recognized as having the category "SAP CRM".**

After installing the client groupware integration component on a machine with Microsoft Outlook 2003, you need to add the category "SAP CRM" to the master category list in Microsoft Outlook, otherwise SAP CRM items will not be recognized for synchronization.

**Appointments, tasks and contacts are not synchronized if only their attachments are modified.**

Only changes to the item itself are recognized as modifications that are relevant for synchronization. To ensure synchronization, you need to also modify the item to which the attachment is attached.

### **Synchronization: Activities (Appointments and Tasks)**

**The *Calendar Maintenance* checkbox (SAP GUI) is selected in activities and hence they are not displayed in the WebClient UI calendar. However, these appointments are synchronized to Microsoft Outlook without taking this setting into account.**

In order to take the *Calendar Maintenance* setting into account for groupware synchronization, implement SAP Note [1560254](#).

**SAP CRM activities with the transaction type defined as the default transaction type for client-based groupware integration are not considered for synchronization even when the user is assigned as the responsible employee.**

The category assigned to the default transaction type (parameters DEFAULT\_APPT\_PROC\_TYPE and DEFAULT\_TASK\_PROC\_TYPE) in SAP Customizing for client-based groupware integration (activity *Settings for Client-Based Synchronization*) must have the class type *Appointment / Task*.

You assign categories in SAP CRM Customizing under *Customer Relationship Management -> Transactions -> Settings for Activities -> Maintain categories, Goals and Priorities -> Assign Categories to Transaction Types*. You can check the class type of categories in the same section, in the activity *Maintain Categories*.

**Appointments for which the user is an attendee are downloaded from SAP CRM but cannot be modified in the groupware client and synchronized back to SAP CRM.**

Attendees of a SAP CRM appointment can only download it from SAP CRM but the modifications made to this appointment in the attendee's groupware client are not considered for synchronization as the user is only an attendee and not the owner of the appointment. However, any modifications made to this appointment in SAP CRM are downloaded to the user's groupware client.

**All-day appointments created in SAP CRM do not reflect the SAP CRM WebClient UI time zone settings.**

For all-day appointments, the groupware integration component considers the system time zone of the groupware client and creates an appointment in the same time zone in SAP CRM, irrespective of the time zone set for the user in SAP CRM or the SAP CRM WebClient UI.

**All the business partners in the *Parties Involved* assignment block of a SAP CRM appointment are displayed as attendees in the appointment body when downloaded to the groupware client.**

Only the business partners with the partner function category 0005 (*Employee*), 0007 (*Contact Person*), and 0008 (*Person Responsible*) should be displayed as attendees in the appointment body. Implement the correction instructions in SAP Note [1659847](#).

**In the groupware client, the address format of a contact or account in the business information section of an appointment or task is not the same as the address format of the default country of the user.**

The address format displayed in the business information in the groupware client is not dependent on the default country assigned to the user. The following standard address format is used in the groupware client and is displayed in all cases:

<HouseNumber>, <Street>  
<City>, <Region>  
<Country>-<Postal code>

**In a Microsoft Outlook task, when a user clicks *Assign Task*, the *Relate to SAP CRM* area disappears from the task and does not appear again if they click *Cancel Assignment*.**

This happens due to technical restrictions. If you save the task, close it, and reopen it the *Relate to SAP CRM* area appears again.

**Modifications to the address or communication details of an account or contact that is assigned to an activity are not reflected in the *Business Information* section of that item in the groupware client.**

In this case, the business information is only updated if the activity is modified and synchronized.

**Synchronization fails with an error message “Appointment/task contains some non-standard characters which are not readable”.**

This error occurs if parameter values are not entered correctly in Customizing for *Customer Relationship Management*, under *CRM Middleware and Related Components -> Client-Based Groupware Integration -> Settings for Client-Based Synchronization*. A typo in the parameter value may result in this error. Refer to the documentation for the Customizing activity for the correct parameter values.

Example: The value of the parameter `ACTIVITYUSERFIELDS` is entered as `ACCOUNT | ACCOUNTADDRSS` instead of `ACCOUNTADDRESS`.

**Appointments that were public and changed to private are not considered for synchronization.**

In Microsoft Outlook, public appointments that are made private by right clicking on the appointment in the calendar are not considered for synchronization. To ensure synchronization, change public appointments to private by opening them and clicking the *Private* button.

**Appointments that are rescheduled by dragging and dropping are not considered for synchronization.**

Appointments that are dragged and dropped to another date or another time slot on the same day in the Microsoft Outlook calendar are not considered for synchronization. To ensure synchronization, change the date by opening the appointment and changing the date setting.

**The Transaction Type field in the Relate to SAP CRM reference transaction search screen does not contain the appropriate transaction types.**

The possible entries for the Transaction Type field are the values defined in the object reference profile that is assigned to the transaction type that is set in SAP CRM Customizing for the parameter `DEFAULT_APPT_PROC_TYPE` or `DEFAULT_TASK_PROC_TYPE` (activity *Settings for Client-Based Synchronization*).

You can check which object reference profile is assigned to the transaction type in SAP CRM Customizing under *Customer Relationship Management -> Transactions -> Basic Settings -> Define Transaction Types* (field Obj. Ref. Profile).

You can check the definition of the object reference profile under *Customer Relationship Management -> Transactions -> Basic Settings -> Define Object Reference Profile*.

## Synchronization: Contacts and Accounts

**After un-assigning the e-mail address in a Microsoft Outlook contact, the *Display As* field still contains the mail address.**

If a Microsoft Outlook contact has an email address, this information is also shown in the *Display As* field of the contact along with the contact name. Due to technical restrictions, if a user assigns an account to this contact, and the account has no email address, the email address field is cleared but not the *Display As* field.

**The title of a contact is not always synchronized correctly.**

Enter the valid forms of address that can be synchronized from the groupware client to SAP CRM in SAP CRM Customizing under *Cross-Application Components -> SAP Business Partner -> Business Partner -> Basic Settings -> Forms of Address -> Maintain Forms of Address*.

**In a contact, the content of the *Company* field were modified but this modification is cancelled during synchronization.**

The account name cannot be modified in SAP CRM by changing the *Company* field of the contact in the groupware client. The previous value of the *Company* field is reinstated during synchronization.

**Information about the origin/source of contacts or accounts is missing in SAP CRM when they are created in the groupware client as a result of synchronization.**

Implement the correction instructions and make the Customizing settings described in SAP Note [1567865](#).

**Contacts created in the groupware client appear for deletion on the next synchronization.**


The parameter value for `REL_NAME_WRITE_MY_CONTACTS` (in SAP CRM Customizing for client-based groupware integration, activity *Settings for Client-Based Synchronization*) must have only one relationship category that is entered for the parameter `REL_NAME_MY_CONTACTS`.

**When a business address of a contact is modified in the groupware client an additional address is created for the associated account in SAP CRM.**

In Customizing for client-based groupware integration, set parameter `BLOCK_ACNT_ADDR_NEW_<business role>` (in SAP Customizing for client-based groupware integration, activity *Settings for Client-Based Synchronization*) so that users with the business role are not allowed to create new addresses for the SAP CRM account through the groupware client.

**Non-modified contacts appear in the *Conflicts/Confirmations* window. There is a difference in the country of this contact and hence the *Country* field is highlighted in the difference viewer of this contact.**

Ensure that the country names in Microsoft Outlook Contact (selected from the dropdown) and the long text of a country entered in SAP CRM are identical. You define the country names in SAP CRM Customizing under *SAP NetWeaver -> General Settings -> Set Countries -> Specify Countries in mySAP Systems (CRM, SRM, SCM,...)*. The name field of the country should match with the value available for that country in Microsoft Outlook Contacts.

 The long text for US (United States) should be entered as **USA**; otherwise the contact reappears for synchronization without any modification.

**After synchronization of contacts to Microsoft Outlook, the ISD code is not recognized and is appended as a prefix to the phone number.**

After installation of Microsoft Outlook, enter the location in the *Phone and Modem* section of the control panel. Otherwise the assigned country is not recognized and the ISD code gets appended after every synchronization.

### Synchronization: Notes

**Junk characters appear in the *Notes* section in the SAP CRM WebClient UI when synchronized from Microsoft Outlook.**

Implement SAP Note [1553711](#) to solve this issue.

**Data in rich text format in the *Notes* section of an item is not synchronized correctly.**

Data in rich text format, such as hyperlinks, cannot be synchronized correctly. Only enter plain text in the *Notes* section.

**Plain text notes entered in SAP CRM activities or contacts are not downloaded to the groupware client.**

The text type set in SAP CRM Customizing for the parameters `DEFAULT_APPT_TEXTTYPE`, `DEFAULT_CONT_TEXTTYPE`, or `DEFAULT_TASK_TEXTTYPE` (activity *Settings for Client-Based Synchronization*) must match the text type of the notes entered in the corresponding SAP CRM activity or contact. Notes are only downloaded to the groupware client if these text types match.

## 13 Appendix: Customizing Documentation

The latest version of the Customizing documentation is available with the latest support package of your SAP CRM system. This documentation is here for your reference.



### 13.1 Settings for Client-Based Synchronization

In this activity, you can define values for a variety of properties that control synchronization in a client groupware integration scenario.

**Caution: Invalid property values can lead to synchronization failure.**

You can define the following properties:

- **DEFAULT\_APPT\_PROC\_TYPE** (mandatory setting)  
The default transaction type in SAP CRM for appointments created in the groupware client with category 'SAP CRM'.
- **DEFAULT\_APPT\_TEXTTYPE** (mandatory setting)  
During download of appointments, texts of the text type specified here (*Notes* assignment block of the appointment in SAP CRM) are downloaded to the body of the appointment in the groupware client. Similarly, during upload, the notes maintained in the body of the appointment in the groupware client are created as notes in SAP CRM with this text type.
- **DEFAULT\_CONT\_TEXTTYPE** (mandatory setting)  
During download of contacts, texts of the text type specified here (*Notes* assignment block of the contact in SAP CRM) are downloaded to the contact in the groupware client. Similarly, during upload, the notes maintained in the contact in the groupware client are created as notes in SAP CRM with this text type.
- **DEFAULT\_TASK\_CANCELLED**  
The default status in SAP CRM for tasks with the status **Deferred** in the groupware client.
- **DEFAULT\_TASK\_COMPLETED**  
The default status in SAP CRM for tasks with the status **Completed** in the groupware client.
- **DEFAULT\_TASK\_INPROCESS**  
The default status in SAP CRM for tasks with the status **In Process** in the groupware client.
- **DEFAULT\_TASK\_OPEN**  
The default status in SAP CRM for tasks with the status **Not Started** in the groupware client.
- **DEFAULT\_TASK\_PROC\_TYPE** (mandatory setting)  
The default transaction type in SAP CRM for tasks created in the groupware client with category 'SAP CRM'.
- **DEFAULT\_TASK\_TEXTTYPE** (mandatory setting)  
During download of tasks, texts of the text type specified here (*Notes* assignment block of the task in SAP CRM) are downloaded to the body of the task in the groupware client. Similarly, during upload, the notes maintained in the body of the task in the groupware client are created as notes in SAP CRM with this text type.
- **MAX\_SEARCH\_HITS\_ACCOUNT** (mandatory setting)  
The maximum number of accounts that are displayed in the search results when a user searches for an account to assign to an item.
- **MAX\_SEARCH\_HITS\_CONTACT** (mandatory setting)  
The maximum number of contacts that are displayed in the search results when a user searches for a contact to assign to an item.
- **MAX\_SEARCH\_HITS\_EMPLOYEE** (obsolete - do not use)

- MAX\_SEARCH\_HITS\_REFDOC (mandatory setting)  
The maximum number of transactions that are displayed in the search results when a user searches for a reference transaction to assign to an item.
- REL\_NAME\_MY\_CONTACTS (mandatory setting)  
All contacts in SAP CRM to which the groupware user (CRM business partner) is assigned with **at least one** of these relationship categories are synchronized to the groupware client.  
 As of version 10.30 of the client groupware integration component, you can enter multiple values separated by a vertical bar (|).
- REL\_NAME\_MY\_ACCOUNTS (mandatory setting)  
All contacts for all accounts in SAP CRM to which the groupware user (CRM business partner) is assigned with **at least one** of these relationship categories are synchronized to the groupware client when the option *Download from CRM: Contacts for Accounts Where User Belongs to Account Team* is selected in the synchronization settings (*Synchronization* pane: *Contact Person Synchronization Settings*).  
 As of version 10.30 of the client groupware integration component, you can enter multiple values separated by a vertical bar (|).

The following parameters are not visible, but you can enter them as required:

#### Priority Mapping for Activities (from Groupware Client to CRM)

'Name' of the Priority (numerical values) which is maintained in Customizing under *Customer Relationship Management -> Transactions -> Settings for Activities -> Maintain categories, Goals and Priorities -> Maintain Priorities of Dates*, is considered while mapping the priority of the activity from groupware client to CRM.

Priority (Numerical Value) should be maintained in Customizing under *Customer Relationship Management -> CRM Middleware and Related Components -> Client-based Groupware Integration -> Settings for Client-based Synchronization* for the following SPRO settings if any customizing is required w.r.t Priority mapping for Activities.

- DEFAULT\_ACT\_PRIO\_HIGH
- DEFAULT\_ACT\_PRIO\_MEDIUM
- DEFAULT\_ACT\_PRIO\_LOW

#### Example:

Customizing under *Customer Relationship Management -> Transactions -> Settings for Activities -> Maintain categories, Goals and Priorities -> Maintain Priorities of Dates*

Priority	Name
1	Very High
3	High
5	Medium
9	Low

Customizing under *Customer Relationship Management -> CRM Middleware and Related Components -> Client-based Groupware Integration -> Settings for Client-based Synchronization*

SPRO Parameter	Value
DEFAULT_ACT_PRIO_HIGH	3
DEFAULT_ACT_PRIO_MEDIUM	5
DEFAULT_ACT_PRIO_LOW	9


When a High Priority Activity is synchronized from Groupware client to CRM, priority mapping is verified at the SPRO settings (maintained above) and mapped to CRM accordingly. In this case, High priority activity from groupware client will be synchronized as high priority to CRM.

### Parameters for Business Information of Activities in Groupware mail client

- ACTIVITYUSERFIELDS

Determines on a high level which information is shown in the *Business Information* pane of the appointment/task in Microsoft Outlook 2007 or Microsoft Outlook 2010 and in the notes section of the appointment/task in Microsoft Outlook 2003 or Lotus Notes. You can enter one or more of the following values for the parameter:

- ACCOUNT (to display the account name)
- ACCOUNTADDRESS (to display the account address)
- CONTACTPERSON (to display the contact person)
- ATTENDEES (to display attendees)
- REFDOC (to display reference transactions)

 Enter multiple values separated by a vertical bar ( | ). The order in which you enter values does not influence the sequence in which this information is displayed in the *Business Information* pane.

Example: **ACCOUNT|ACCOUNTADDRESS|CONTACTPERSON|ATTENDEES|REFDOC**

This note applies to all parameters that relate to the *Business Information* pane.

- ACCOUNTUSERFIELDDDATA

You can use one or more of the following values for the parameter:

- NAME1 (WebClient UI: **Account -> General Data -> Name1**)
- NAME2 (WebClient UI: **Account -> General Data -> Name2**)

- ACCOUNTADDRESSUSERFIELDDDATA

You can use one or more of the following values for the parameter:

- TEL1\_NUMBR (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> Phone**)
- HOUSE\_NO (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> House Number**)
- STREET (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> Street**)
- STR\_SUPPL1 (SAP GUI transaction **BP: Account -> Address -> Name -> Street2**)
- STR\_SUPPL2 (SAP GUI transaction **BP: Account -> Address -> Name -> Street3**)
- STR\_SUPPL3 (SAP GUI transaction **BP: Account -> Address -> Name -> Street4**)
- CITY (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> City**)
- REGION (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> State**)
- COUNTRYPREFIX (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> Country prefix**)
- POSTL\_COD1 (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> Zip Code**)

- COUNTRYNAME (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> Country (name)**)
- HOMEPAGE (WebClient UI: **Appointment/Task -> Parties Involved -> Function: Activity Partner -> Website**)
- CONTACTPERSONUSERFIELDATA
 

You can use one or more of the following values for the parameter:

  - FULLNAME (WebClient UI: **Contact -> First Name and Last Name**)
  - FUNCTIONNAME (WebClient UI: **Contact -> Work -> Function**)
  - DEPARTMENTNAME (WebClient UI: **Contact -> Work -> Department**)
  - TEL1\_NUMBR (WebClient UI: **Appointment/Task -> Parties Involved -> Phone**)
  - MOB\_NUMBER (WebClient UI: **Contact -> Work -> Mobile**)
  - C\_EMAIL (WebClient UI: **Appointment/Task -> Parties Involved -> E-Mail**)
- ATTENDEESUSERFIELDATA
 

You can use the following value for the parameter:

FULLNAME (WebClient UI: **Contact/Attendee -> General Data -> First Name and Last Name**)
- OPPORTUNITYUSERFIELDATA
 

You can use one or more of the following values for the parameter:

  - DESCRIPTION (WebClient UI: **Opportunity -> General Data -> Description**)
  - TYPE (WebClient UI: **Opportunity -> Classification -> Opportunity Group**)
  - STARTDATE (WebClient UI: **Opportunity -> Dates -> Start Date**)
  - EXPECT\_END (WebClient UI: **Opportunity -> Dates -> Closing Date**)
  - PHASE (WebClient UI: **Opportunity -> Sales Cycle -> Sales Stage**)
  - IMPORTANCE (WebClient UI: **Opportunity -> Classification -> Priority**)
- CAMPAIGNUSERFIELDATA
 






You can use one or more of the following values for the parameter:

  - DESCRIPTION (WebClient UI: **Campaign -> General Data -> Description**)
  - CAMPAIGN\_TYPE (WebClient UI: **Campaign -> General Data -> Type**)
  - PLANSTART (WebClient UI: **Campaign -> Dates -> Planned Start**)
  - PLANFINISH (WebClient UI: **Campaign -> Dates -> Planned End**)
  - RESPONSIBLE\_NAME (WebClient UI: **Campaign -> General Data -> Employee Responsible**)
- PREVIOUSACTIVITYUSERFIELDATA
 


You can use one or more of the following values for the parameter:

  - SUBJECT (WebClient UI: **Appointment/Task -> General Data -> Description**)
  - CLASSIFICATION (WebClient UI: **Appointment/Task -> References-> Private**)
  - DATE\_TO (WebClient UI: **Appointment/Task -> General Data -> End Date**)
  - TIME\_TO (WebClient UI: **Appointment/Task -> General Data -> End Time**)
  - DATE\_FROM (WebClient UI: **Appointment/Task -> General Data -> Start Date**)
  - TIME\_FROM (WebClient UI: **Appointment/Task -> General Data -> Start Time**)

## Other Parameters

- **REL\_NAME\_WRITE\_MY\_CONTACTS** (as of version 10.30 of the client groupware integration component)  
All contacts created in the groupware client are synchronized to SAP CRM with the groupware user (CRM business partner) assigned with the relationship category that you specify for this parameter.  
 You can only enter one relationship category and this must be one of the ones entered for the parameter REL\_NAME\_MY\_CONTACTS. If you do not enter a value for this parameter, the first value entered for the parameter REL\_NAME\_MY\_CONTACTS is used.
- **REL\_NAME\_WRITE\_MY\_ACCOUNTS** (as of version 10.30 of the client groupware integration component)  
All accounts created during synchronization of contacts from the groupware client are created in SAP CRM with the groupware user (CRM business partner) assigned with the relationship category that you specify for this parameter.  
 You can only enter one relationship category and this must be one of the ones entered for the parameter REL\_NAME\_MY\_ACCOUNTS. If you do not enter a value for this parameter, the first value entered for the parameter REL\_NAME\_MY\_ACCOUNTS is used.
- **GWIPROFILELANGUAGE**  
Determines the possible languages that can be selected by the end user for the interface of the client groupware integration component (add-in in Microsoft Outlook, synchronization menu and synchronization settings). The language setting is also relevant for the determination of a groupware profile for a business user.  
The following values are supported:
  - 0 - All the languages supported for the client groupware integration component are displayed in the language pop up for language settings and profile download. This is the default value set by SAP.
  - 1 - The language of the SAP CRM WebClient UI logon is displayed.
  - 2 - All languages installed for the SAP CRM system are displayed. These languages are derived from table T002. To use this parameter you must also implement SAP Note [1610326](#).
- **DATAORIGINTYPE** (optional)  
The origin type that shows the data origin of new contacts and accounts that are created in SAP CRM as a result of synchronization from the groupware client.  
 To use this parameter you must also implement SAP Note [1567865](#).
- **SUPPRESSCONTACTNOTES**  
By default, when a Contact is synchronized between a Groupware Client and CRM, Notes section is also synchronized. If you want to suppress the synchronization of Notes between a Groupware Client and CRM, then add this parameter with a value '1'.  
  
When SUPPRESSCONTACTNOTES = '1', synchronization of Contact Notes will be ignored in both the directions. For any other value, or the absence of this parameter will synchronize the contact notes in both the directions.  
 To use this parameter you must also implement SAP Note [1735676](#).
- **SUPPRESSCONTACTHOMEADDRESS** (as of version 10.30 SP 02 Patch 2 of the client groupware integration component)  
By default, when a Contact is synchronized between a Groupware Client and CRM, Home address of the Contact is also synchronized. If you want to suppress the synchronization of the Contact's Home address from CRM to Outlook when in the edit synchronization settings screen the direction of the synchronization for Contact is maintained as CRM to Outlook, then add this parameter with a value '1'.

When SUPPRESSCONTACTHOMEADDRESS = '1', synchronization of Contact Home Address will be ignored from CRM to Outlook direction. For any other value, or the absence of this parameter will synchronize the contact's home address.

 To use this parameter you must also implement SAP Note [1951078](#).

### Blocking Parameters

- BLOCK\_CONT\_NEW\_<BUSINESS ROLE>\*  
Enter **X** to block the creation of new contacts in SAP CRM on synchronizing from the groupware client.
- BLOCK\_ACNT\_NEW\_<BUSINESS ROLE>\*  
Enter **X** to block the creation of new accounts (and thereby block the creation of new addresses for existing accounts) in SAP CRM on synchronizing from the groupware client.
- BLOCK\_ACNT\_ADDR\_NEW\_<BUSINESS ROLE>\*  
Enter **X** to block the creation of a new address for an existing account in SAP CRM on synchronizing from the groupware client.
- BLOCK\_CONT\_WO\_ACNT\_RELN\_<BUSINESS ROLE>\* used with BLOCK\_ACNT\_NEW\_<BUSINESS ROLE>\*  
Enter **X** to block the synchronization of contacts created in the groupware client without an account assignment.

\* Replace <BUSINESS ROLE> with the business role to which the setting applies.

### Requirements

If you want to change the default values of the parameters, bear in mind the following:

- **Default transaction type for new appointments and tasks:** The new value must be defined in the Customizing under *Customer Relationship Management -> Transactions -> Basic Settings -> Define Transaction Types*.
- **Default text type for appointment notes, task notes, and contact notes:** The new value must be defined in Customizing under *Customer Relationship Management -> Basic Functions -> Text Management -> Define Text Determination Procedure*.  
Choose the following:
  - For appointment notes: CRM\_ORDERH with text determination procedure ACT00001 (*Business Activities*)
  - For task notes: CRM\_ORDERH with text determination procedure ACT00002 (*Task*)
  - For contact notes: BUT000
- **Relationship category for determining relevant contacts/accounts for an employee responsible:** The new value must be defined in Customizing for *Cross-Application Components* under *SAP Business Partner -> Business Partner Relationships -> Basic Settings -> Properties of Business Partner Relationship Categories*.

## 13.2 Create and Define Settings for Client Profiles

In this Customizing activity, the system administrator can define groupware profiles that determine the synchronization settings that are valid for a set of users, based on their SAP CRM business role, country, and language. Groupware profiles determine whether each setting is a default setting only or can be changed by the business user. Users can access the synchronization settings in their groupware client or the SAP CRM WebClient UI.



- Only one profile can be defined for each combination of business role, language, and country.
- If no profile is available for a particular country-language combination, the SAP\_DEFAULT profile is used.
- To access supported property values, choose *Optimize Width* in the context menu for the *Property Value* column. A drop-down list of possible entries is provided for most fields.

For more information about groupware profiles, synchronization settings, and other topics, see SAP Library for SAP Customer Relationship Management. See SAP Help Portal at <http://help.sap.com/crm-core> -> <Choose a release> -> *Application Help* -> *Data Exchange and Mobile Technologies* -> *CRM Integration Services* -> *Groupware Integration* -> *Client-Based Groupware Integration*.

You can find explanations of the client profile parameters in section [10.3 Parameters for Groupware Profiles](#) of this document.


### Activities

- Check the predefined values and modify them if required.
- Enter any new default values that are required.
- Allow or prevent users to modify the default values/settings in the synchronization settings.  
You do this by selecting/deselecting the *Modifiable in Client* checkbox.
- Activate **profiles**  
New profiles are **inactive** by default and their status is red in the *Profile Definition* window. To activate profiles for synchronization, choose *Activate* (matchstick icon). Note that when you edit a profile it becomes inactive.  
Each time you activate or deactivate a profile, a new profile version is created by increments of 0.1. On every synchronization, it checks for the latest profile version to use.
- Assign profiles to users  
You assign profiles to users in transaction SU01. On the Parameters tab, enter the following in a new row:
  - CRM\_GWI\_PROFILE as the parameter
  - The business role for which you want to download the profile as the parameter value

## 13.3 BAdI: Replication of Activities between SAP CRM and Groupware

This Business Add-In (BAdI) is used in the CRM-BTX-BF (*Basic Functions for Business Transactions*) component, for client-based groupware integration. You can use this BAdI to change the activity data that is replicated between SAP CRM and the groupware client (Microsoft Outlook or Lotus Notes).

Activities in the form of appointments and tasks are replicated between SAP CRM and Groupware using client based groupware solution. You can use this BAdI to control/Modify the flow of Activity data between CRM server and Groupware.

 The communication between CRM server and client Groupware happens through XML via web service calls. To read or write data to CRM server a request is posted by groupware and the service running on CRM server processes the request and sends back the response in a XML to the client systems for further processing.

**BAdI Name:** CRM\_GWI\_ACTIVITY\_REQUEST

**Interface:** IF\_BADI\_CRM\_GWI\_ACTIVITY\_REQ

**BAdI methods:**

[MODIFY\\_ACTIVITY\\_REQ](#)

[DELETE\\_ACTIVITY\\_REQ](#)

[MODIFY\\_ACTIVITY\\_REPLY\\_REQ](#)

### Standard settings

For more information about the standard settings (filters, single or multiple uses), see the *Enh. Spot Element Definitions* tab in the BAdI Builder (transaction SE18).

No active BAdI implementation is delivered in the standard system and no fallback class is executed.

### Method MODIFY\_ACTIVITY\_REQ

You can use this method to perform some special operations before activity data sent from Groupware is persisted on CRM Server.

The BAdI is called in the class method CL\_CRM\_XML\_GW\_SYNC->SET\_WRITE\_REQ\_DATA before activity creation or change.

The complete data is passed to the BAdI which includes reference of request XML, Header details, Date, Partner, Status, Text and Document flow of the Activity as sent from client Groupware.

### Parameters

#### Import Parameters

- **iv\_node:** Contains current reference of the request XML.
- **iv\_timezone:** Time zone in which the appointment is created.
- **it\_category:** Category list sent from groupware.

#### Changing Parameters

- **cs\_header:** CRM Activity Header Data in Create Mode
- **cs\_header\_x:** X Flag table for Header Data
- **ct\_date, ct\_date\_x:** Date Table for External Data Exchange and X Flag table

- **ct\_partner, ct\_partner\_x:** Partner Table for External Data Exchange and X Flag table
- **ct\_status, ct\_status\_x:** Status Table for External Data Exchange and X Flag table
- **ct\_text, ct\_text\_x:** Text Table for External Data Exchange and X Flag table
- **ct\_document\_flow:** Object references for document flow.
- **ct\_input\_fields:** BAPI Table with Input Fields



#### Case 1:

In standard there is no way to set the appointment category when created from Groupware; instead default category assigned to the transaction type is used. Transaction type is read from the SPRO parameters for client Groupware maintained against the parameter 'Default\_Appt\_proc\_type' for appointments and 'Default\_Task\_proc\_type' for tasks. For more information please refer to IMG documentation for client groupware.

**Requirement** - To read the category sent from client Groupware apart from the category SAP CRM and assign it to CRM activity.

**Solution:** The BAdI method call passes category list in the parameter it\_category, using this we can set the category for activity being created by modifying the parameter cs\_header.

#### Case 2:

Read the data from the XML node directly for further processing in the BADI.

Following code snippet explains how to read Categories from the XML node directly, the BAdI call passes the xml node in the parameter iv\_node.

```
lv_node_list = iv_node->get_children( ).
WHILE lv_index < lv_node_list->get_length( ).
  lv_child = lv_node_list->get_item( lv_index ).
  lv_name = lv_child->get_name( ).
  lv_value = lv_child->get_value( ).
  CASE lv_name.
    WHEN 'CATEGORY'.
<...>
  ENDCASE.
  lv_index = lv_index + 1.
ENDWHILE.
```

### Method DELETE\_ACTIVITY\_REQ

You can use this method call to block or control activity deletion from Groupware.

The method is called in the class method CL\_CRM\_XML\_GW\_SYNC->GET\_WRITE\_REQ\_DATA before activity delete.

### Parameters

#### Import Parameters

- **iv\_guid:** GUID of the activity to be deleted.

#### Exporting Parameters

- **ev\_guid:** GUID of the activity to be deleted
- **et\_return:** Return parameter with error details if any.



In standard the deletion of an appointment from groupware by a CRM user who is not the owner of the appointment will remove the user from the partner list, if the CRM user is the owner of the appointment then the activity is completely removed from the CRM server. The activity type of task will be removed completely from CRM server on deletion from groupware after sync whether it is performed by the owner of the task or any other attendee. The above flow of complete deletion of activity from CRM server can be controlled using this BAdI method call.

**Requirement:** Only users with certain authorization rights are allowed to delete the activity from Groupware.

**Solution:** Implement this BAdI method call to check the authorization rights for the current logged on CRM user based on which the deletion is allowed or an error message will be returned.

If <Logic to check the authorization rights for the given user>

<Delete the activity>

else

    ls\_return-type = 'E'

    ls\_return-id = <message class name>

    ls\_return-number = <message number>

    Message 'Message text' INTO ls\_return-Message

    Message 'Message text' INTO ls\_return-Message\_v1

    Append ls\_return to lt\_return

## Method MODIFY\_ACTIVITY\_REPLY\_REQ

You can use this method to modify the reply XML activity data sent from SAP CRM to the groupware client.

The method is called in the class method CL\_CRM\_XML\_GW\_SYNC->SET\_REPLY\_DATA\_ITEM.

## Parameters

### Import Parameters

- **it\_act\_keys:** GUID of the activity data being sent to groupware
- **is\_head:** CRM Activity Header Data
- **is\_header:** Header and Administrative Data for CRM Activity
- **it\_partner:** Partner's involved in the activity.
- **lt\_date:** Date structure of the activity
- **lt\_text:** transaction texts of the activity
- **lt\_listofrel:** Relationship Between Two BOR Objects A and B
- **lv\_status:** object status
- **lv\_language:** Groupware language as passed from client
- **lv\_task\_flag:** Flag set if the activity sent is of type task
- **lt\_documents:** ID Table of Documents Assigned to a CRM Transaction
- **ls\_filter:** filter criteria of the activity as passed from groupware

### Exporting Parameters

- **ev\_node:** Node containing reference to return xml



**Requirement:** To set additional category for the appointment in groupware apart from SAP CRM based on the category of the activity


Following code snippet can be used to write category in the response XML be sent to client groupware for further processing.

```
lv_node_list = cv_node->get_children( ).
    WHILE lv_index < lv_node_list->get_length( ).
        lv_child = lv_node_list->get_item( lv_index ).
        lv_name = lv_child->get_name( ).
        TRANSLATE lv_name TO UPPER CASE.
        CASE lv_name.
            WHEN 'STARTDATE'.
                lv_value_new = lv_startdate.
                lv_rval = lv_child->set_value( lv_value_new ).
            WHEN 'CATEGORY'.
                <...>
            ENDCASE.
            lv_index = lv_index + 1
        ENDWHILE
```

## 13.4 BAdI: Replication of Contacts between SAP CRM and Groupware

This Business Add-In (BAdI) is used in the CRM-BTX-BF (*Basic Functions for Business Transactions*) component for client-based groupware integration.

Owned Contacts or Contacts belonging to Account team are replicated between SAP CRM client groupware. You can use this BAdI to perform various checks. For example, you can check the consistency of the data, the existence of required entry fields, or compliance with check tables. If a check returns a negative result, you can decide whether only an information message is logged or whether the data record is not transferred at all.

 The communication between CRM server and client Groupware happens through XML via web service calls. To read or write data to CRM server a request is posted by groupware and the service running on CRM server processes the request and sends back the response in a XML to the client systems for further processing.

**BAdI Name:** CRM\_GWI\_CONTACT\_REQUEST

**Interface:** IF\_BADI\_CRM\_GWI\_CONTACT\_REQ

**BAdI methods:**

[CREATE CONTACT FIELD CHECK](#)

[DELETE CONTACT REQ](#)

### Standard settings

For more information about the standard settings (filters, single or multiple uses), see the *Enh. Spot Element Definitions* tab in the BAdI Builder (transaction SE18).

No active BAdI implementation is delivered in the standard system and no fallback class is executed.

### Method CREATE\_CONTACT\_FIELD\_CHECK

You can use this method to change or validate the contact data and generate an error message in case of an erroneous entry. For example, you can use it to check the consistency of data, the existence of required entry fields, or compliance with check tables.

The BAdI is called in the class method CL\_CRM\_XML\_GW\_SYNC->IF\_CONTACTS~CREATE\_CONTACT before contact creation.

### Parameters

#### Import Parameters

- **ir\_node:** Contains reference to the node XML which possess contact data
- **iv\_language:** Groupware language

#### Export Parameters

- **cv\_group:** Business Partner Grouping
- **cs\_data:** General BP Data, Independent of Business Partner Category
- **cs\_data\_person:** BAPI Structure for Personal Data of contact person
- **ct\_return:** structure to hold error status



**Requirement:** Contacts sent from groupware for creation should have first name and last name mandatorily filled, otherwise the contact creation is blocked and an error message saying mandatory check failed is returned to groupware client.

**Solution:** If cs\_data\_person-first\_name or cs\_data\_person-last\_name is initial.

<<Logic to fill ct\_return with the error details since the mandatory check failed, If there is an entry in ct\_return then the contact creation is blocked>>

```
ls_return-type = 'E'
```

```
ls_return-id = <message class name>
```

```
ls_return-number = <message number>
```

```
Message 'Message text(mandatory check failed)' INTO ls_return-Message
```

```
Message 'Message text(mandatory check failed)' INTO ls_return-Message_v1
```

```
Append ls_return to ct_return
```

```
Endif.
```

## Method DELETE\_CONTACT\_REQ

You can use this method to block contact deletion in CRM for the delete contact request from Microsoft Outlook. For example, you can use it to block archiving of a contact in SAP CRM when a contact is deleted based on authorization check.

The BAdI is called in the class method CL\_CRM\_XML\_GW\_SYNC->IF\_CONTACTS~DELETE\_CONTACT before contact archive.

## Parameters

### Import Parameters

- **Iv\_guid:** GUID of the contact to be archived

### Export Parameters

- **ct\_return:** structure to hold error status



**Requirement:** Block archiving contact from groupware based on authorization check.

In standard on deletion of a contact from Groupware client will archive the contact in CRM server after sync.

**Solution:**

If <Logic to check the authorization rights for the given user> = False

```
ls_return-type = 'E'
```

```
ls_return-id = <message class name>
```

```
ls_return-number = <message number>
```

```
Message 'Message text' INTO ls_return-Message
```

```
Message 'Message text' INTO ls_return-Message_v1
```

```
Append ls_return to lt_return
```

```
Endif.
```

Return appropriate message to inform that the user is not authorized to delete the contact from groupware

## 13.5 BAdI: Definition of Search Parameters for Relate to SAP CRM

This Business Add-In (BADI) is used in the CRM-BTX-BF (*Basic Functions for Business Transactions*) component, for client-based groupware integration (with Microsoft Outlook only).


Using the *Relate to SAP CRM* function in the groupware client, business users can search as follows:

- For **appointments and tasks (activities)**: search for and assign accounts, contacts, and reference transactions
- For **contacts**: search for and assign accounts

In the standard system, the search is performed for a predefined set of parameters (fields). You can use this BAdI to add search parameters and filter the result set. With this BAdI, the structure CRMT\_GWSYNC\_CUSTOM\_FIELDS can be filled with custom fields and values that are further processed in the groupware client and shown in the search results list.

After the BAdI is called, the results set is filtered based on the maximum number of search results, as defined in the Customizing activity [Settings for Client-Based Synchronization](#) in the following parameters:

- MAX\_SEARCH\_HITS\_ACCOUNT
- MAX\_SEARCH\_HITS\_CONTACT
- MAX\_SEARCH\_HITS\_REFDOC

 In the BAdI implementation you need to provide language-specific labels for the custom fields, based on language selected in the synchronization settings in the user's client.

### Default Settings

For more information about the standard settings (filters, single or multiple uses), see the *Enh. Spot Element Definitions* tab in the BAdI Builder (transaction SE18).

No active BAdI implementation is delivered in the standard system and no fallback class is executed.



See the BAdI method documentation below for examples.

### See also

BAdI method documentation:

[GET\\_CUSTOM\\_ACCOUNT\\_FIELDS](#)

[GET\\_CUSTOM\\_CONTACT\\_FIELDS](#)

[GET\\_CUSTOM\\_REFDOC\\_FIELDS](#)

### Method GET\_CUSTOM\_ACCOUNT\_FIELDS

You can use this method to enhance the search results for the account search (*Relate to SAP CRM* function) from appointments or tasks (activities) and contacts.

This method is called in the following places after the retrieval of partners to an internal table of type BU\_PARTNER\_INFO\_T.

- IF\_ACCOUNTS~SEARCH\_ACCOUNTS - Search of accounts for activities (appointments/tasks)
- IF\_ACCOUNTS~SEARCH\_ACCOUNT\_DETAILS - Search of accounts for contacts.

## Parameters

### Import Parameters

- IS\_ACTIVITY\_SEARCH: Determines if the account search takes place is for activities/contacts. "True" means that the search is triggered for activities.
- IV\_LANGU: Language selected for groupware integration in user's client
- IV\_SEARCH\_COLL: Collection of search parameters and values as sent in the request from the groupware client, for example, search parameter *City* and value *Bangalore*.
- IV\_ASSIGNED\_CONTACT: Assigned contact for the activity.

### Changing Parameters

ET\_SEARCH\_RESULT: Result set of partners based filtered based on search collection IV\_SEARCH\_COLL.

### Export Parameters

ET\_CUSTOM\_FIELDS: Collection of extra fields filled in the table of type CRMT\_GWSYNC\_CUSTOM\_FIELDS for all the partners from ET\_SEARCH\_RESULT.



You want to add an extra column *District* in the search result set and filter the result set based on the role. For instance you use *Relate to SAP CRM* to search using for accounts based on *Name1* as **abc** and *City* as **Bangalore**. The parameter IV\_SEARCH\_COLL collects these search parameters and values. The search result returns 20 partners in ET\_SEARCH\_RESULT. Filtering by role is not supported in the standard delivery; however, the BAdI call can filter the changing parameter ET\_SEARCH\_RESULT by reading the role for each partner.

To include the column *District* in the search results, you can fill the internal table of type CRMT\_GWSYNC\_CUSTOM\_FIELDS for partners from ET\_SEARCH\_RESULT as follows:

```
DATA: lt_custom_fields TYPE CRMT_GWSYNC_CUSTOM_FIELDS,
      iv_param_node TYPE PARAM_NODE,
      ls_param_node TYPE WRITE_PARAM_NODE,
      ls_search_result LIKE LINE OF et_search_result.
```

Loop at et\_search\_result into ls\_search\_result.

```
    lt_custom_fields-iv_project_guid = ls_search_result-partner_guid.
    iv_param_node-name_node = 'District'.
    iv_param_node-value_node = 'A'.
    Append iv_param_node into ls_param_node.
    iv_param_node-name_node = 'Totalcount'.
    lv_param_node-value_node = 234
    Append iv_param_node into ls_param_node.
    lt_custom_fields-lv_param_node = ls_param_node.
    Append lt_custom_fields to et_custom_fields.
    Clear lt_custom_fields, ls_param_node, iv_param_node.
```

End Loop.

\*\* To filter based on Role.

Loop at et\_search\_result into ls\_search\_result.

```
    If <Condition>. **Condition to check for role
        Delete ls_search_result from et_search_result.
    Endif.
```

## Method GET\_CUSTOM\_CONTACT\_FIELDS

You can use this method to enhance the search results for the contact search (*Relate to SAP CRM* function) from appointments or tasks (activities).

This method is called at IF\_CONTACTS~SEARCH\_CONTACT\_DETAILS after the retrieval of partners to an internal table type BU\_PARTNER\_INFO\_T. If an account has already been assigned using *Relate to SAP CRM*, the search is restricted to contacts assigned to the account.

### Parameters

#### Import Parameters

- IV\_LANGU: Language selected for groupware integration in user's client
- IV\_ASSIGNED\_ACCOUNT: Assigned account for the activity
- IV\_SEARCH\_COLL: Collection of search parameters and values as sent in the request from the groupware client, for example, search parameter *City* and value *Bangalore*.

#### Changing Parameters

ET\_SEARCH\_RESULT: Result set of partners based filtered based on search collection IV\_SEARCH\_COLL.

#### Export Parameters

ET\_CUSTOM\_FIELDS: Collection of extra fields filled in the table of type CRMT\_GWSYNC\_CUSTOM\_FIELDS for all the partners from ET\_SEARCH\_RESULT

 See [GET\\_CUSTOM\\_ACCOUNT\\_FIELDS](#).

## Method GET\_CUSTOM\_REFDOC\_FIELDS

You can use this method to enhance the search results for the reference transactions search (*Relate to SAP CRM* function) from appointments or tasks (activities).

You can search for different reference transaction types, based on the object reference profile assigned to the transaction type for the activities and tasks that are synchronized with the groupware client.

This method is called at

IF\_ACTIVITYCRM\_ACCESS~SEARCH\_REFDOC\_REQUESTED\_DATA after the retrieval of reference transactions based on search criteria.

If an account or contact has already been assigned to an activity, the search is restricted to the reference transactions assigned to the account or contact.

### Parameters

#### Import Parameters

- IV\_LANGU: Language selected for groupware integration in user's client
- IV\_REFDOCTYPE: Reference transaction type
- IV\_ASSIGNED\_ACCOUNT: Assigned account for the activity
- IV\_ASSIGNED\_CONTACT: Assigned contact for the activity
- IV\_SEARCH\_COLL: Collection of search parameters and values as sent in the request from the groupware client
- LS\_MKT\_PARTNER: Marketing header details \*
- LS\_TEXTS: Project planning short text details \*

- LS\_PARTNERS : Transfer table for partners to partner processing
- LS\_ORGMAN: Work table for organization details

### Changing Parameters

- IV\_ATTRIBUTES: Table of GUIDs for campaign management or trade promotion \*
- LS\_ORDERADM\_H: General header data for business transaction

### Export Parameters

ET\_CUSTOM\_FIELDS: Collection of extra fields filled in the table of type  
CRMT\_GWSYNC\_CUSTOM\_FIELDS for all the partners from ET\_SEARCH\_RESULT



- In the BAdI call, parameters marked with an asterisk (\*) are only passed for transactions with the leading transaction category *Marketing Project Campaign* (BUS2010020) or *Marketing Project Trade Promotion* (BUS2010030). For other reference transaction types, LS\_ORDERADM\_H, LS\_PARTNERS, and LS\_ORGMAN are passed in the BAdI call.
- Along with the header details, other details such as the assigned partners, text, or organization details are passed for the reference transactions and can be used in the BAdI implementation.



You want to include the planned start date and end date as custom fields for campaigns, and filter activities, based on certain conditions.

```
DATA: lt_custom_fields TYPE CRMT_GWSYNC_CUSTOM_FIELDS,
      iv_param_node TYPE PARAM_NODE,
      ls_param_node TYPE WRITE_PARAM_NODE,
      lv_attributes LIKE LINE OF iv_attributes,
      lt_orderadm_h LIKE LINE OF ls_orderadm_h.
```

\*\* To include start date and End Date for Campaign

If iv\_refdoctype = 'BUS2010020'

Loop at iv\_attributes into lv\_attributes.

\*\*Logic to determine planned start date and End date for Campaign which is placed into

\*\*iv\_start\_date and iv\_end\_date given lv\_attributes-guid.

```
    lt_custom_fields-lv_mktproj_key = lv_attributes-guid.
```

```
    iv_param_node-name_node = 'Start_Date'.
```

```
    iv_param_node-value_node = iv_start_date.
```

```
    Append iv_param_node to ls_param_node.
```

```
    iv_param_node-name_node = 'End_Date'.
```

```
    iv_param_node-value_node = iv_end_date.
```

```
    Append iv_param_node to ls_param_node.
```

```
    lt_custom_fields-lv_param_node = ls_param_node.
```

```
    Append lt_custom_fields to et_custom_fields.
```

End Loop.

Clear lt\_custom\_fields, iv\_param\_node, ls\_param\_node.

End If

\*\*To filter activities based on certain condition

If iv\_refdoctype = 'BUS2010125'.

Loop at ls\_orderadm\_h into lt\_orderadm\_h.

```
If <Condition>.
  Delete lt_orderadm_h from ls_orderadm_h.
End If.
End Loop.
End If.
```