

Assistance Software

# Documentation

Microsoft Dynamics CRM-Assistance PSO connector

Version 1.1

**For Windows 2003 / XP / Vista**

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## Introduction

This is the manual for the connector between Assistance PSO for Microsoft Dynamics® and Microsoft Dynamics CRM 4.0. This connector links Microsoft CRM 4.0 to Assistance PSO for the entities Account, Contact, Projects (and possibly Employees). Linking Microsoft CRM 4.0 to Assistance PSO (via the CRM-PSO connector) means that MS CRM becomes leading for the input, maintenance and administration of Accounts and Contacts in PSO. PSO continues to be leading with respect to the Projects and the input, maintenance and administration of those projects.

In addition, MS CRM provides functionalities for Leads, Sales opportunities, Marketing and Services. MS CRM furthermore offers a powerful Workflow tool, allowing for an activity-oriented working method. The link to PSO relates only to Accounts, Contacts and Projects.

This user manual describes the connection between MS CRM and Assistance PSO on the basis of the following common entities:

- Accounts
- Contacts
- Projects

A number of things must be installed and set/activated for the connection between CRM and PSO to become operational.

1. Install MS CRM 4.0 and Assistance PSO for Microsoft Dynamics® (these procedures are not discussed in this manual)
2. Install CRM\_PSO connector (CRM replicator) (this procedure is not discussed in this manual)
3. Install the standard CRM templates for PSO (in MS CRM) as developed for CRM/PSO by Assistance Software (in as far as these were not installed with the installation of MS CRM 4.0, which is the case if the customer already works with MS CRM and adds Assistance PSO later).
4. Update/upload Accounts, Contacts and Projects from PSO into CRM (assuming these entities were already present in PSO or are converted/entered into PSO first).
5. Adjust Settings and Privileges in PSO to the connection with CRM.
6. Close up PSO (reading rights) in terms of administration and maintenance of Accounts and Contacts.
7. Make CRM leading for the administration and maintenance of Accounts and Contacts.
8. ...

## Reading in templates (crm templates for pso)

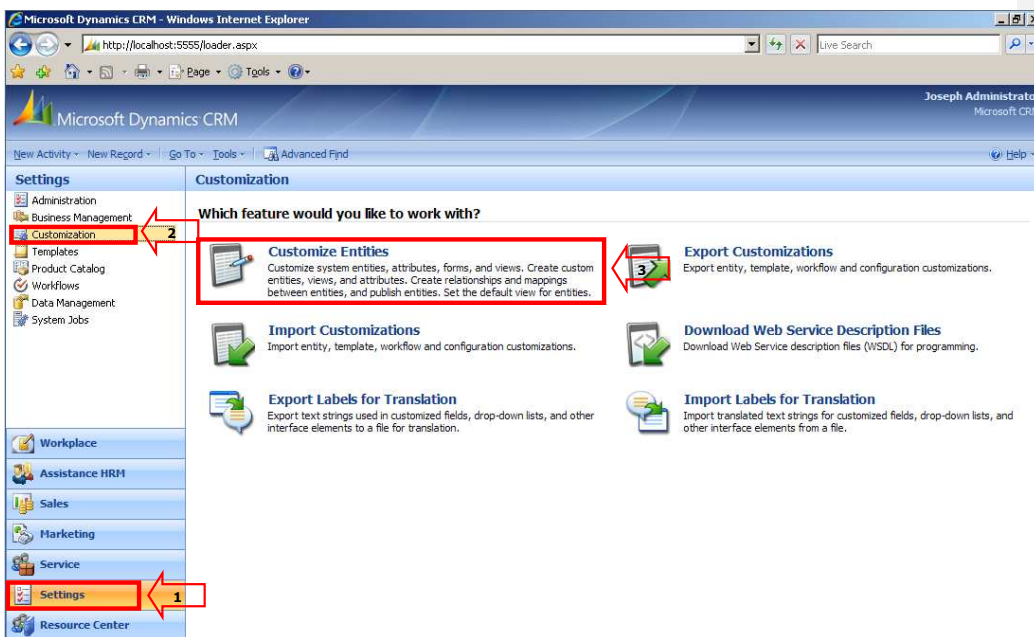
When bought from Assistance Software, MS CRM will on installation automatically install/read in the standard CRM templates for PSO. These are templates for MS CRM with standard configurations for fields/features that have been specially developed and configured for connection with PSO. These are templates for accounts, contacts and the projects extension (and possibly sales opportunities). If a customer already works with MS CRM, installing the standard CRM templates for PSO may be considered a separate procedure. This procedure is as such:

Reading the file "AS CRM Customizations.zip" into Microsoft Dynamics CRM 4.0.

**Reading this file into the system means the existing CRM configuration in terms of accounts, contacts, projects and possibly sales opportunities, including any customer-specific adjustments, will be overwritten!** If a customer already works with MS CRM, it is therefore recommended that reading in these templates is done in a separate test environment.

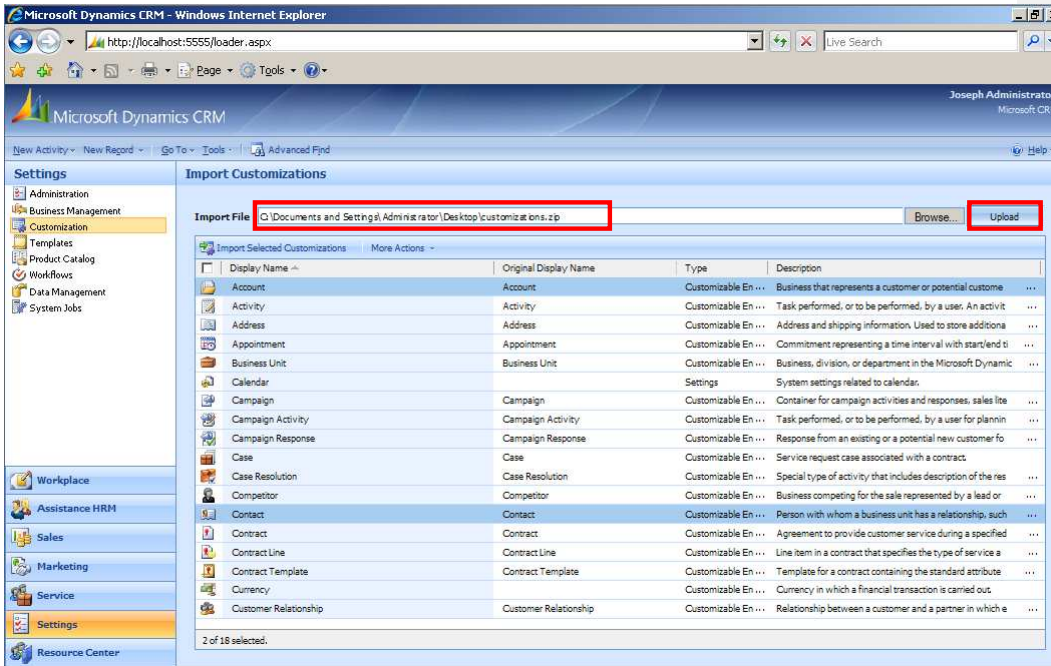
***MIND!*** These Customisations (Entities) are only suited for the Dutch or UK versions of Microsoft Dynamics CRM 4.0.

> Start Microsoft Dynamics CRM 4.0 and go to the Tab 'Settings'. Click 'Customisations'. Now select 'Import customisations'. See the example below:

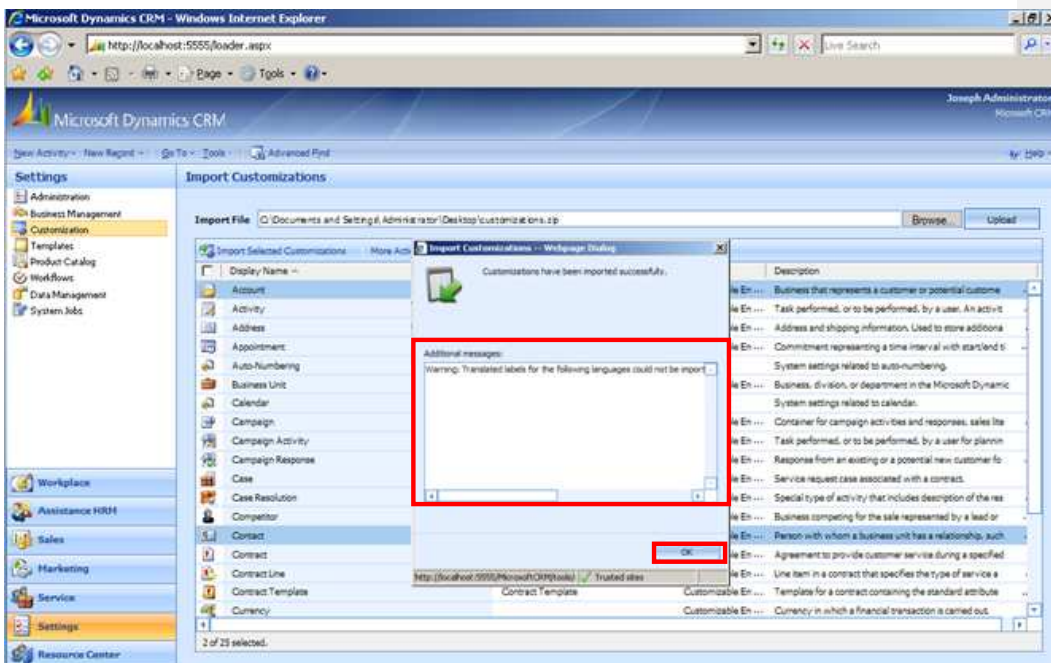


Go to 'Browse' and select the file "AS CRM Customizations.zip". (It is recommended that you place the file 'AS CRM Customizations.zip' on the desktop or in the C:\\*.\* root). Use Ctrl to preferably select these entities only: 'Account', 'Contact', 'Project' and 'Sales opportunity'. Now click 'upload'.

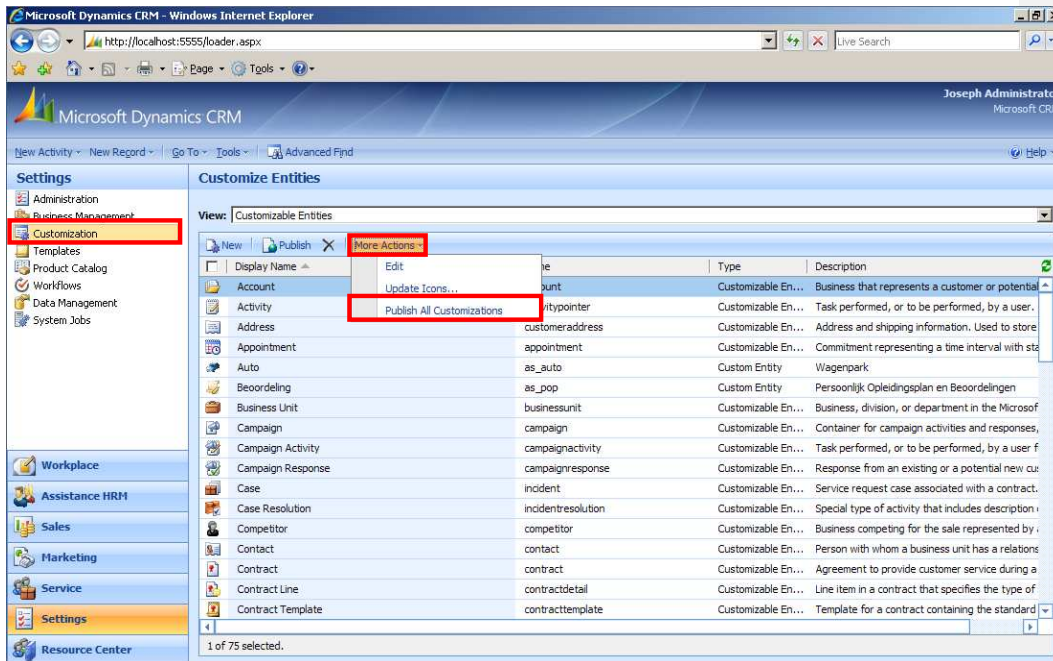
See the example below:



The message below will appear when the customizations have been successfully imported. (If you receive a different message than 'the customizations have been imported' or another additional message than 'None', please contact Assistance Software: +31 (0)35 750 3538.)



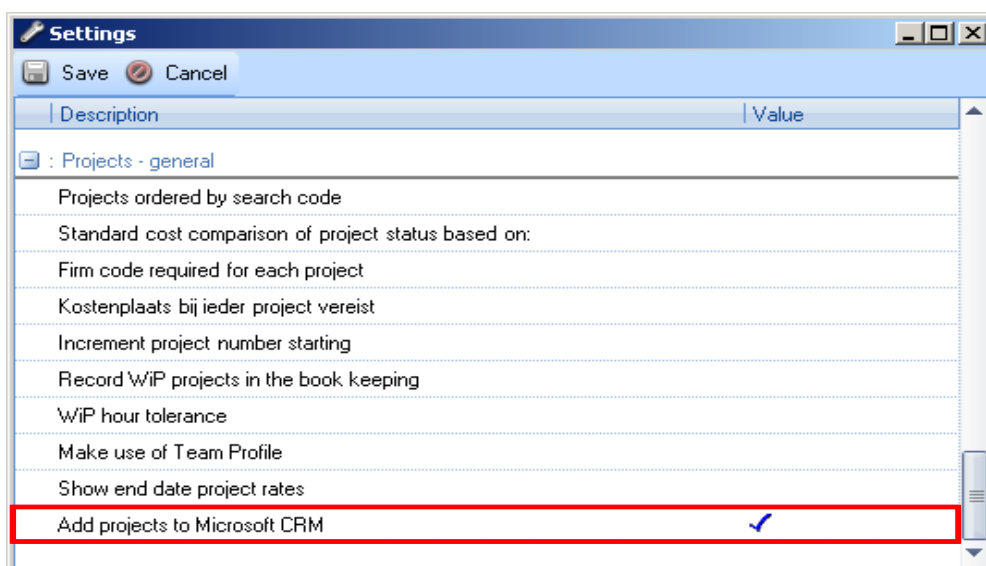
Once all customizations have been successfully imported, go to Tab 'Customizations' and click 'customize entities'. Click 'more actions' and 'publish all customizations' in order to activate all the imported entities. After this, the 'form' screens will be adjusted according to "Screen prints CRM 4.0 Account- contacts- opportunities- en projectenkaart.docx".



## Settings & privileges

There is a setting in the General System Settings of PSO (System administration > Settings > General Settings) called 'Transfer projects into Microsoft CRM' specially for the link between MS CRM and Assistance PSO. As soon as this setting is activated, certain project data from Assistance PSO is also included in the Project extension of Microsoft Dynamics CRM. Project data for projects from Assistance PSO for Microsoft Dynamics are then mentioned/shown under the information of the client (account) that is linked to the project in Microsoft Dynamics CRM.

This option need only be activated if there is a connection between Assistance PSO for Microsoft Dynamics and Microsoft Dynamics CRM. This connection is called the CRM\_PSO connector (CRM replicator). Activating this option is furthermore only useful when the CRM templates for PSO have been read into Microsoft CRM, so the necessary Project extension has been read in and made available.



In the Privileges (System administration > Security > Privileges) the connection between PSO and CRM is associated with a certain role-dependent privilege. The privilege 'Microsoft Dynamics CRM connector' (under General) gives the person who is assigned this privilege in Assistance PSO a link to the corresponding information in MS CRM. To reach this information, click the tab 'Microsoft CRM' on the Project form, the Account form or the Employee form. The user who is assigned this privilege can see this option (the 'Microsoft CRM' tab) within the entities Projects, Account and Employee in Assistance PSO. A 'Microsoft™ CRM data' link becomes visible on the PSO contacts form. Clicking this opens the contacts form in CRM.

Please make sure to set the privilege 'Accounts' (under Accounts) to Read Only, so no changes can be implemented and no new accounts or contacts can be entered into Assistance PSO; this information can then only be entered or edited in MS CRM. There is a separate privilege to ensure that financial details, on the financial tab, can still be entered/edited.

**Roles** Administrator

Employees Roles Role rights Reports

Description	Add	Read	Edit	Delete
Accounts	○	●	○	○
Accounts (debtors financial)	●	●	●	●
Accounts (creditors financial)	●	●	●	●
Mailing lists	●	●	●	●
Batch export to Outlook	●	●	●	●
Bookkeeping				
Costs				
Document management				
Employees				
General				
Microsoft CRM connector	●	●	●	●
Microsoft Sharepoint connector	●	●	●	●

Key

○ None   ● User   ● Proj Mngr   ● Proj. Officer   ● Department   ● Firm   ● All

## Transferring entities from pso to crm

Presuming that the customer already works with Assistance PSO 2007, and as such Accounts and Contacts have already been entered into PSO and Projects are already present in the project administration, these entities and corresponding linked data can be transferred (imported) once only to MS CRM.

In this case, the Accounts are the first entities to be transferred to MS CRM (additional selections can be made in the WHERE section). After the Accounts, the Contacts are transferred to MS CRM (additional selections can be made in the WHERE section).

This is done as follows (run):

```
PSO to CRM.exe: //CRM import from CSV > test > again if necessary > export//
```

It may take up to a minute before the actual export procedure starts *after* you click the EXPORT button.

Once started, our experience is that the speed averages about 100 records a minute.

The project export procedure checks all projects in PSO and carries out either an insert or an update. Please mind that the project entity in CRM must always be called: 'new\_project'. New Project must always contain at least the following fields:

- new\_name
- new\_projectnummer
- new\_accountnaamid
- new\_status
- new\_soort

## Description of the connection

The text below details the various parts, entities and fields that are linked between the two applications.

When the connector between CRM and PSO has been installed and made operational, it will work on a real-time basis, i.e. the files, records and linked fields are replicated/synchronised as soon as they are edited or updated. For accounts and contacts, this is done in real time from CRM to PSO, for projects it is done in real time from PSO to CRM.

The connector between CRM and PSO includes a standard configuration for linked fields, which are replicated and updated between CRM and PSO. In terms of Accounts and Contacts, CRM is leading for the replication and updating towards PSO. This means Account records and Contacts records are transferred from CRM to PSO. The underlying fields from CRM are then recorded or updated in PSO (deviations or updates at field level in PSO are overwritten with values in/from CRM with every update). The only fields within Accounts and Contacts that are transferred back from PSO into CRM are the Account numbers of the Accounts and Contacts (see below). In terms of Projects, PSO is leading: when updating project information, only a number of general project fields (Project name, Project number, Account name, Type and Status) are replicated from PSO to the Project extension in CRM. In CRM this leads to an output screen with general project information per project, which is linked to the corresponding account (client).

## Accounts & Contacts

For Accounts and Contacts, the CRM\_PSO connector provides a certain standard configuration for features/fields that are replicated from the Account form and/or the Contact form, from CRM to PSO. This means that both the CRM database and the PSO database contain an accounts file and a contacts file, within which the fields that are to be replicated are identical to one another. This is because the connector has linked a standard configuration to fields/features of the account form and the contact form in CRM to the account form and contact form in PSO, which is replicated to PSO from CRM. CRM will always be leading in this, and adjustments in CRM will cause automatic adjustments in PSO. Adjustments in PSO itself are periodically overwritten with values from CRM, in as far as the fields/features in question are covered by the CRM\_PSO connector.

The CRM application is leading for Accounts (customers) and Contacts. Accounts are the companies. Contacts are either the contacts at those companies or private individuals. Accounts and Contacts are managed in CRM: they are only created, maintained, edited and possibly deleted in the Account database and/or Contact database in CRM. Accounts and Contacts in CRM are automatically transferred to PSO. This applies both to new accounts and contacts that are added in CRM and to updates of existing accounts and contacts in CRM. This information is transferred to PSO automatically and in the background via the CRM\_PSO interface.

When new Accounts and Contacts are transferred from CRM to PSO, PSO will automatically generate a unique number for each Account and Contact according to the principle of automatic sequential numbering. This Account number or Contact number is automatically added to the new Account record or Contact record in PSO. These numbers are furthermore linked back to the corresponding records in CRM, thus rendering the account and contact numbers visible in CRM as well.

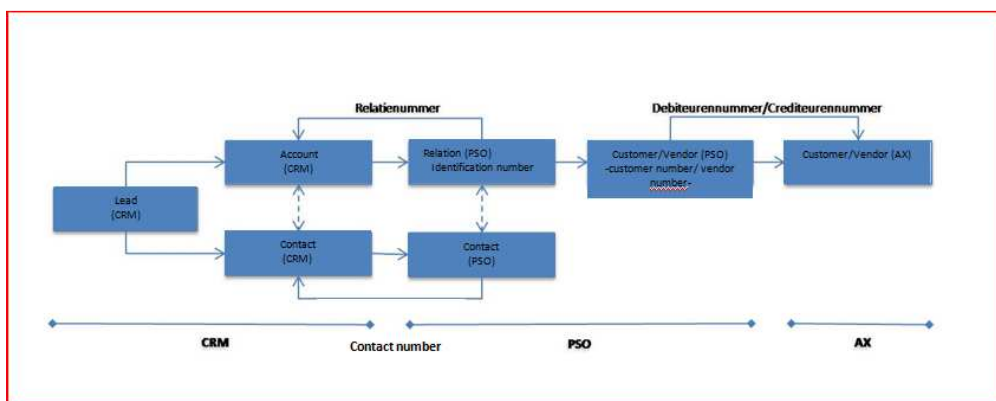
Accounts/Contacts can also be deleted in CRM. The corresponding records are then deleted in PSO and AX only if the Account, Debtor/Creditor or Contact is not linked to any projects, invoices or transactions. It is therefore advisable that Accounts/Contacts be not deleted but set to 'not active' in CRM. This automatically sets them to not active in PSO as well.

CRM allows for multiple Contacts to be linked to a single Account. These links are retained in PSO when Accounts and Contacts are transferred from CRM to PSO.

This done, PSO has an option for indicating per Account whether it is a Debtor or a Creditor, or both. This must be done if the Account is to be selected as a client for a project and/or to be sent a customer invoice (Debtor), and/or if a purchase invoice is to be entered for the Account (Creditor). Every Account can also be made into a

Debtor and/or Creditor in PSO by checking the appropriate box. These boxes can be found on the Financial tab of the Account form in PSO and can only be checked by authorised users. This privilege can be set in PSO's Security settings (Privileges > Accounts – financial data). Accounts and Customers/Vendors are further set to Read Only (privileges) in PSO and AX; Accounts can then only be managed and added in CRM. An Account can be expanded into a Debtor and/or a Creditor in PSO (this is the only customer management task done in PSO). Contacts are managed and created in CRM and set to Read Only (privileges) in PSO. Contacts do not (ever) transfer to AX from CRM/PSO.

When an Account in PSO is made a Debtor and/or Creditor, PSO automatically generates a Debtor or Creditor number (via automatic sequential numbering) in addition to the existing Account number. If your system works with Microsoft Dynamics AX Finance in addition to MS CRM, Debtors and Creditors (including corresponding numbers) are automatically transferred to AX. This is done via the PSO\_AX Connector, which can be manually activated or kept running in the background as a service (batch job). The Account number is not entered into AX. Likewise, any contacts that might be linked to the account are not transferred to AX either, as AX does not use contacts. Debtor and Creditor numbers are not linked back to CRM. An account in PSO with both the Debtor and the Creditor tags is created both as a debtor and as a creditor in AX (2 records).



Accounts and Contacts can be set to 'not active' in CRM (via: Actions > Deactivate Account/Contact). This causes the status of the Account or Contact to become 'not active' in MS CRM. When this is done in CRM, the connector causes the account in question to also be set to 'not active' in PSO. The field 'not active' (checkbox) on the account form or contact form in PSO is then automatically activated (checked: √). An account set to 'not active' can no longer be selected in CRM or PSO. Should the inactive account in PSO be set back to active, this value will be overwritten with the value in CRM with every update as long as the Account in CRM is still set to 'not active'. In other words, active and inactive accounts can only be managed and maintained in CRM.

The tables below show the linked fields between MS CRM and Assistance PSO with respect to the entities Accounts and Contacts.

### Accounts (linked fields)

Field name in CRM	CRM>PSO CRM<PSO	Field name in PSO	Field name in CRM	CRM>PSO CRM<PSO	Field name in PSO
<i>in CRM: Accounts &gt; Information &gt; General (tab)</i>			<i>in PSO: Accounts &gt; Account (details) &gt; Account (tab)</i>		
Account name	>	Name	Private person	>	Private individual
Search code	>	Search code	Type	>	Type
PSO account number	<	Account number*	Status	>	Status
Telephone number	>	Telephone	Department	>	Department
E-mail	>	E-mail address	Fax	>	Fax
Address + house number	>	Appointment address	Website	>	Internet site
Postal code	>	Postal code	City/town	>	City/town
PO box no.	>	Postal address	Country	>	Country
Postal code	>	Postal code	City/town	>	City/town
Actions: Deactivate account	>	Not active (√)	Country	>	Country

**Opmerking [a1]:** Please verify the translations for the terms in CRM in both tables as we do not have a CRM terminology list at our disposal.

\* After a new account has been saved in CRM, the account number (ACCOUNT\_NO) for the account in question is generated in PSO (as soon an update takes place between CRM and PSO via the replicator: i.e. in real time). This number is directly reported back to CRM from PSO. It will appear in the field PSO account number (accountnumber) in CRM.

**Opmerking [a2]:** Did this have to be translated or is RELATIE\_NR a code string? Please check this.

### Contacts (linked fields)

Field name in CRM	CRM>PSO CRM<PSO	Field name in PSO	Field name in CRM	CRM>PSO CRM<PSO	Field name in PSO
<i>in CRM: Contacts &gt; Information &gt; General (tab)</i>			<i>in PSO: Contacts &gt; Contact (details)</i>		
Customer	>	Account / not visible	Type of contact	>	Contact or Employer in PSO
Initials	>	Initials	Salutation	>	Salutation
First name	>	First name	Titles front	>	Title
Prefix	>	Prefix	Suffix	>	Suffix
Surname	>	Surname	Position on business card	>	Job title
Gender	>	Gender	Department	>	Department
PSO contact number	<	Account number*	Telephone (home)	>	Telephone
Telephone (work)	>	Telephone	Mobile telephone (home)	>	Mobile
Mobile telephone (work)	>	Mobile	E-mail (home)	>	E-mail address
E-mail (work)	>	E-mail address	Actions: Deactivate contact	>	Not active (√)
Fax	>	Fax			
Street + house number	>	Address			
Postal code	>	Postal code			
City/town	>	Town			

**Opmerking [a3]:** Is this a piece of code or simply the English translation minus the necessary space? Please verify. If the latter, we suppose it could be deleted.

\* After a new contact has been saved in CRM, the account number (Rel\_Numm) for the contact in question is generated in PSO (as soon an update takes place between CRM and PSO via the replicator: i.e. in real time). This number is directly reported back to CRM from PSO. It will appear in the field PSO contact number (employeeid) in CRM. The contact's account number is not visible on the contacts form in PSO (it may be in the contacts overview via fields selection).

In the field 'type of contact', enter whether the newly entered contact is a 'Contact' or an 'Employee'. This selection can **not** be changed at a later date. Selecting 'Contact' means the contact is entered as a 'Contact' in PSO. Selecting 'Employee' means the contact is entered as an 'Employee' in PSO.

Please mind: the account numbers for contacts and the account numbers for accounts each have their own sequence of numbers and are both automatically numbered (according to standard automatic sequential numbering: highest previous number plus one).

## Projects

CRM includes a 'Projects' entity via an extension. This extension is used to transfer a limited amount of project data from the general project form in PSO to CRM for every individual project in PSO. The following fields from projects in PSO are linked to the Projects entity in CRM:

- Project number
- Project name
- Account number
- Project status
- Project type

This transfer is effected automatically whenever a new project is saved in PSO.

The table below shows the linked fields between PSO and CRM with respect to the Projects entity:

### **Projects (linked fields)**

Field name in CRM	CRM>PSO CRM<PSO	Field name in PSO	Field name in CRM	CRM>PSO CRM<PSO	Field name in PSO
<i>CRM: Projects</i>			<i>PSO: Projects &gt; Project (details) &gt; General (tab)</i>		
Project name	<	Description	Project number	<	Project number
Account name	<	Client	Status	<	Status
Type	<	Project type			

To reach the Project extension in CRM, click on the tab 'Microsoft CRM' on the Project form (Projects – details) in Assistance PSO.

This procedure is as such:

