mscrm-addons.com
AutoMerge for MS CRM 2011

AutoMerge for MS CRM 2011

Version 5.0

Users Guide
(Use of AutoMerge for MS CRM 2011)

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1 Intro

AutoMerge provides the possibility to create and print documents automatically triggered from a workflow or dialog. After the document is created, it can be attached to emails and letters as well.

Main Features:

- **CreateDocument**
  Enables the creation of Word-documents with data from MS CRM. It's capable to resolve any relations and works with custom entities as well as with standard CRM entities. Therefore, AutoMerge provides the opportunity to automatically create e.g. quotes, invoices, etc. including data from related records like "other contacts", accounts, products, etc.

- **Attach to Email/Letter**
  With this functionality the generated document can be attached to emails and letters.

- **PrintOut**
  AutoMerge also provides the possibility to print out the created document.

- **DeleteDocument**
  Delete an existing document from the "MSCRM-ADDONS.com User/Temp Settings" entity.

- **SendEmail**
  Gives you the ability to send an existing email.

This documentation aims to describe the main settings, including step-by-step descriptions about how to use all benefits provided by AutoMerge.

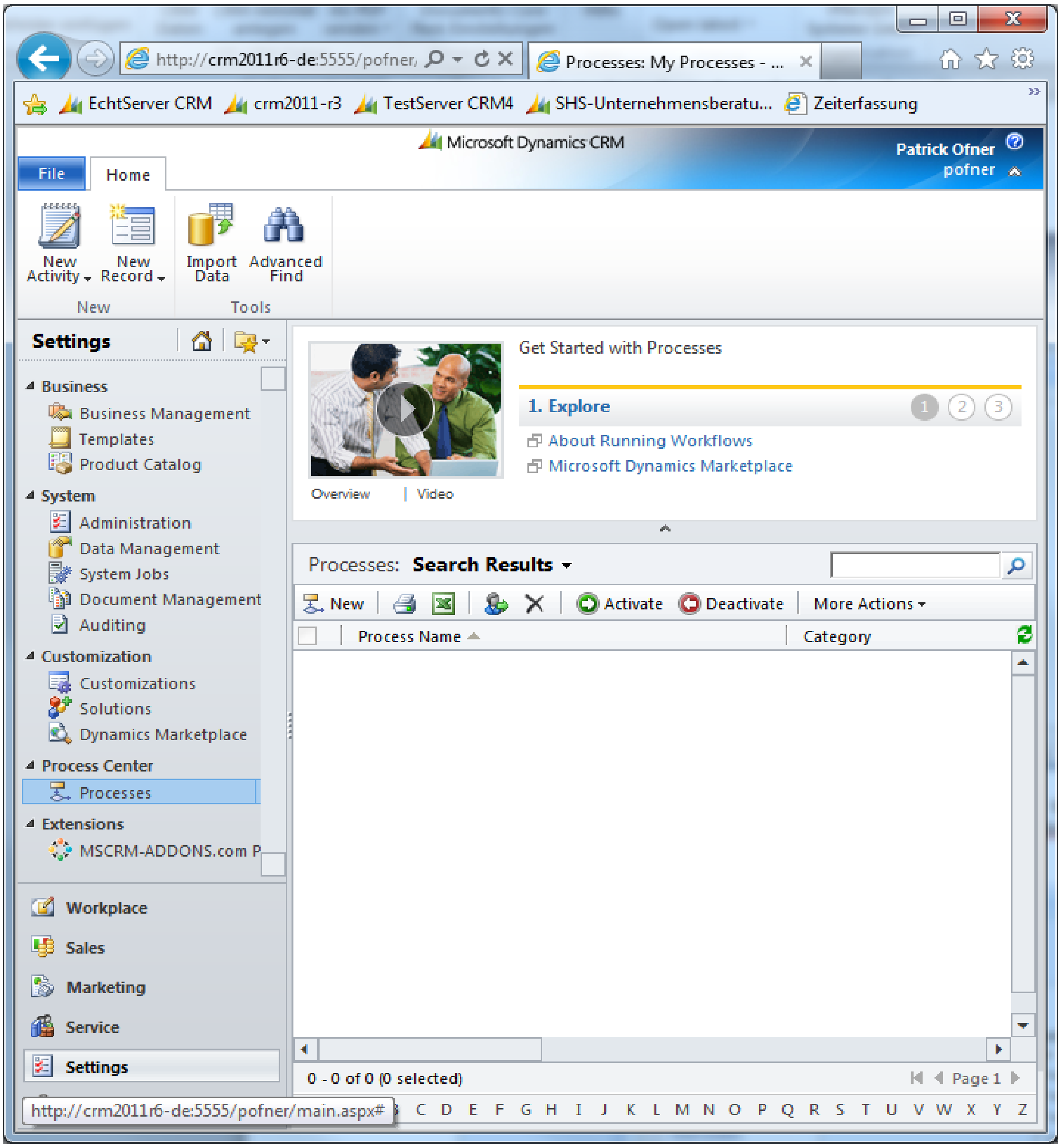
2 Use of the AutoMerge functionality

For using the AutoMerge functionality, there is no client software necessary. It can be accessed directly within CRM from workflows and dialogs.
The following descriptions show where the AutoMerge functionality can be found and which requests are available.

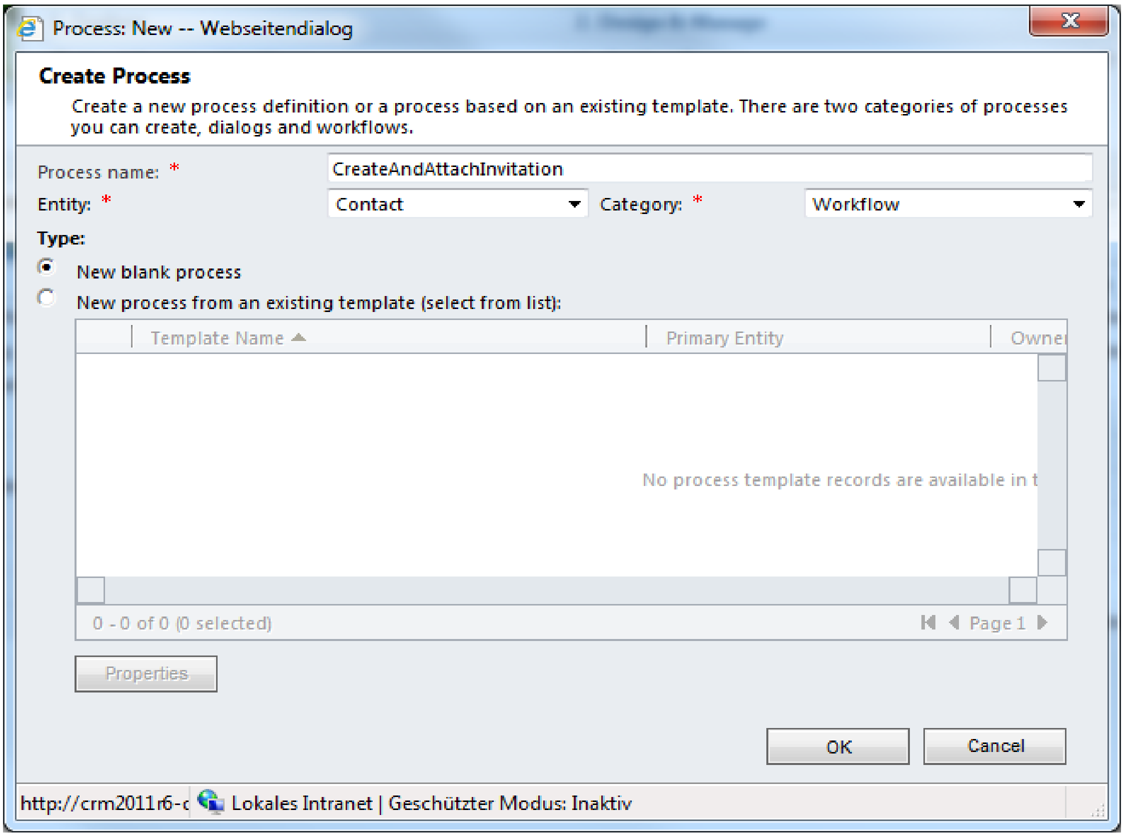
There are two possibilities to set up AutoMerge (On-Premise or CRM Online). While AutoMerge On-Premise works as a Plugin in CRM, AutoMerge for CRM Online needs a service (see AutoMerge InstallationGuide for MS CRM 2011). To create workflows for On-Premise read chapter 2.1 and for CRM online chapter 2.2 of this user guide.

2.1 Workflow (on Premise)

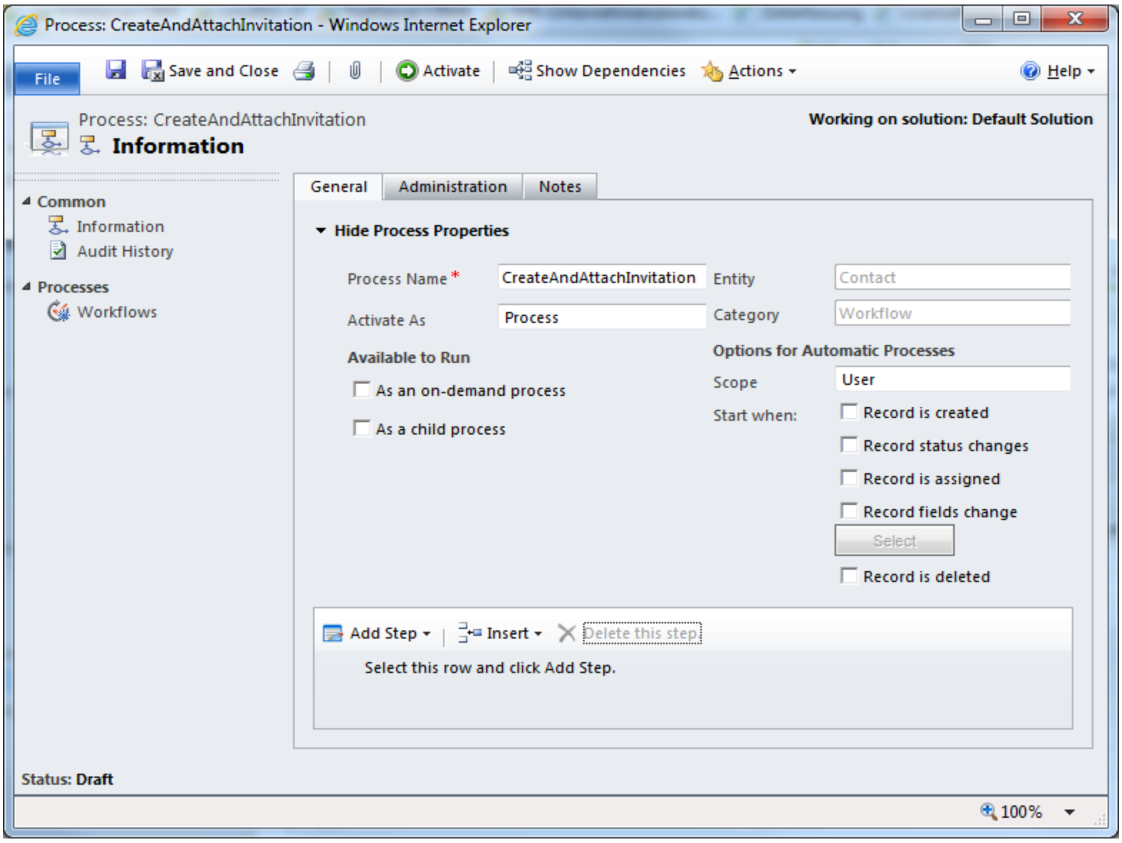
This section shows how the AutoMerge functionality can be used when starting from a workflow (this works only for On-Premise version).
Open Settings -> Processes within CRM.



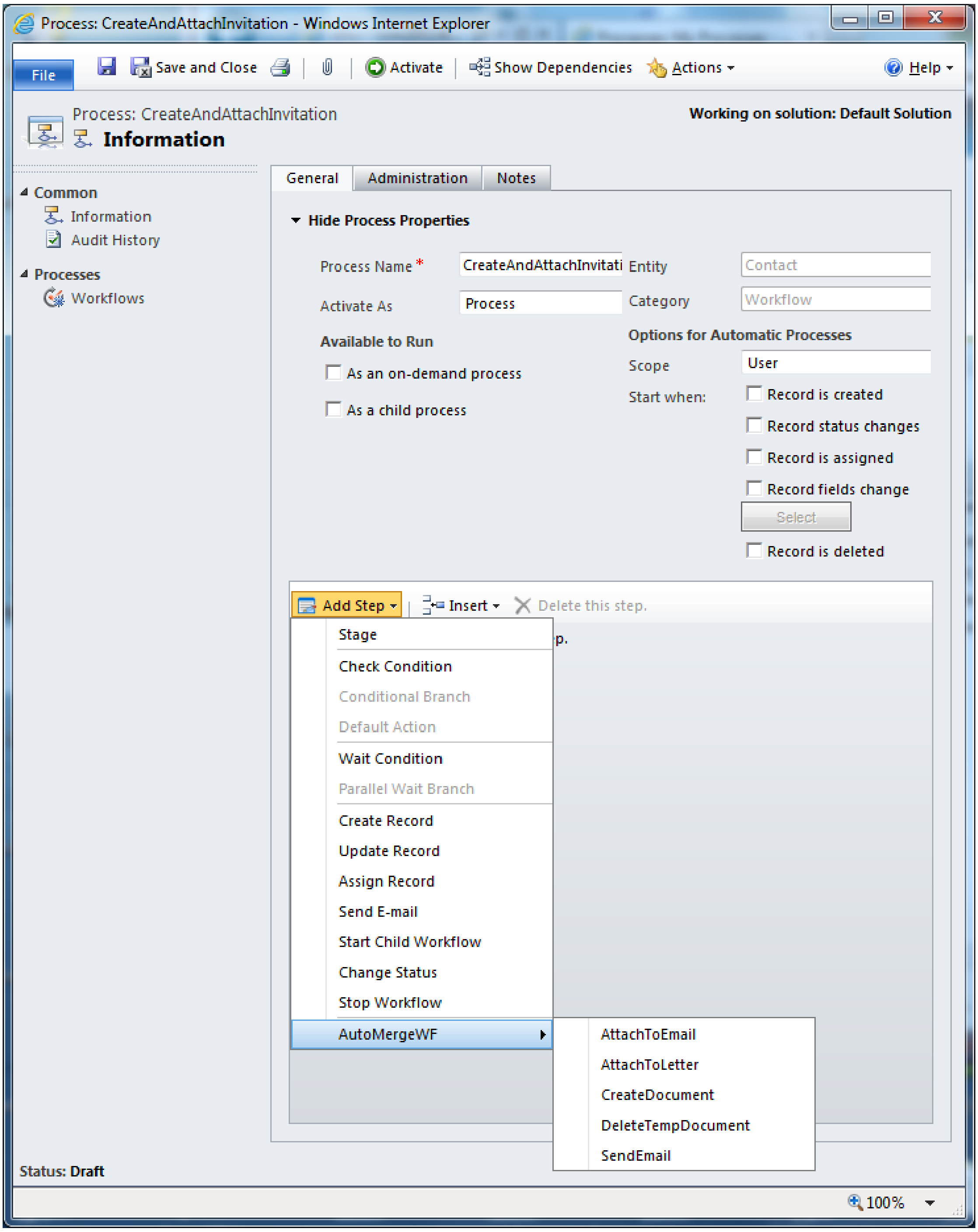
Hit [New] to create a process.



Type in a name for the new process, define the starting entity and select “Workflow” in the drop down box. For starting with a new workflow, select “New blank process”.
Hit [OK] to proceed.
Then, the standard workflow configuration window will appear.



Use it to create your own workflow. If you would like to use the AutoMerge functionality, go to “Add Step” -> “AutoMergeWF”.

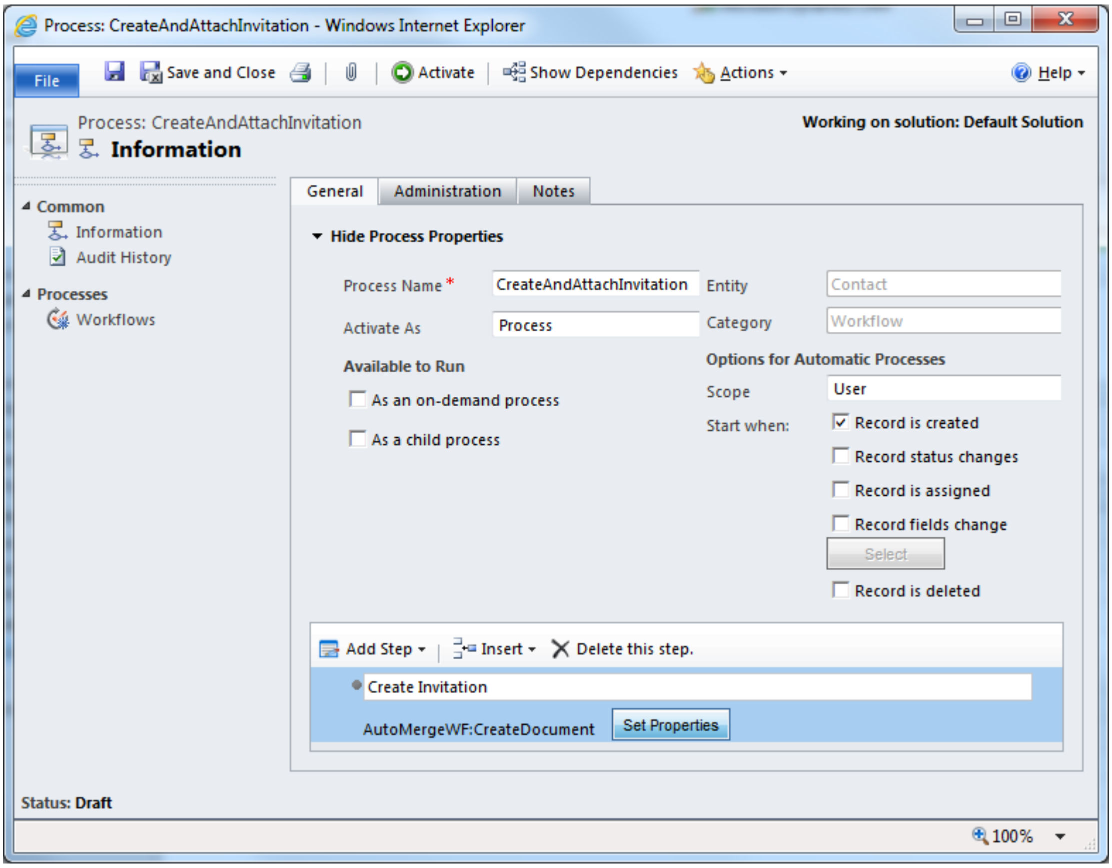


Here you can see all five available AutoMerge steps. The handling of these is like the handling of standard workflow steps:

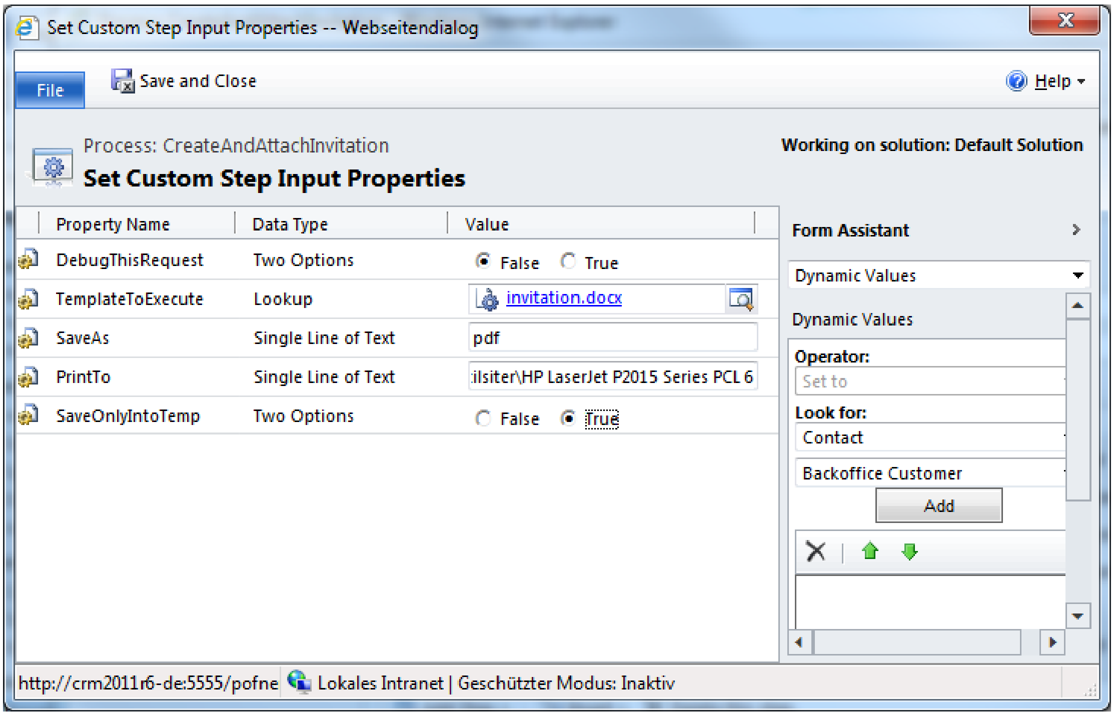
- CreateDocument
- AttachToEmail
- AttachToLetter
- DeleteTempDocument
- SendEmail

2.1.1 CreateDocument

Select this option to create a new document based on a template.



First, give your new step a meaningful name.
Then hit [Set Properties] to define the settings:



The "CreateDocument" functionality provides the following properties:

2.1.1.1 DebugThisRequest

If this box is set to "True" the AutoMerge Plugin will write debug information while the creation of the template. This is only required if this part of the process doesn't work correctly. Due to the fact that it will slow down the whole process, we recommend setting it to "False" in normal cases.

2.1.1.2 TemplateToExecute

Use this lookup-field to select a template. It will be the base of your generated document. You have the choice between all templates stored in the "DocumentsCorePack Templates" entity in CRM. Please note that the selected template must be compatible with the entity of this workflow. That means if you create for example a workflow for the entity "contact", the starting entity of the selected template has to be "contact" as well. Please also keep in mind that **only ".docx" templates will work** with AutoMerge.

2.1.1.3 SaveAs

Here you have the possibility to define the data type of the created document. The following file extensions are available. The left column shows the text you have to type in and the left one the file extension of result document.

You have to type in	File extension
text	.txt
png	.png
jpeg	.jpg
html	.html
epub	.epub
doc	.doc
docx	.docx
bmp	.bmp
pdf	.pdf

If you leave this field empty, ".docx" will be taken as default type.

2.1.1.4 PrintTo

This field gives you the possibility to define the path of a network printer. If AutoMerge can find an available printer by following this path, the document will be printed out after the creation.

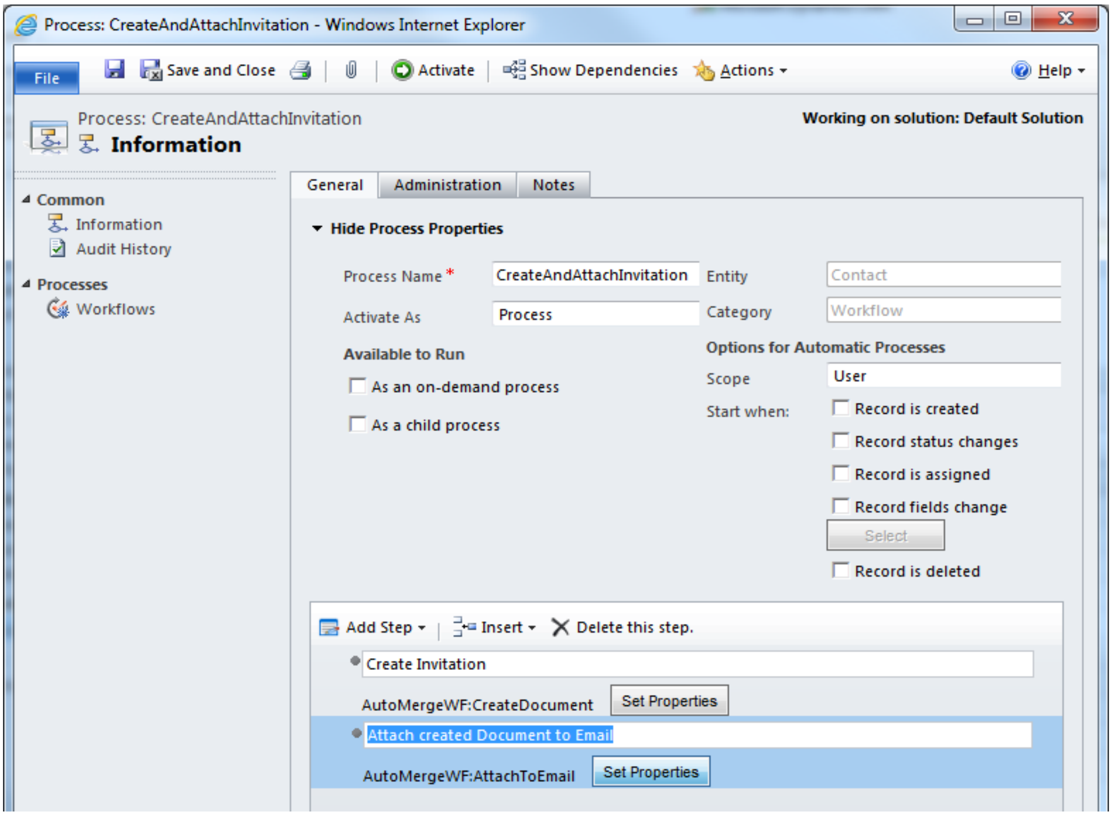
2.1.1.5 SaveOnlyIntoTemp

If this option box is set to "True" the generated document will only be stored in the "MSCRM-ADDONS.com User/Temp Settings" of CRM. If it is set to "False" the document will be stored in a file share or SharePoint additionally, depending on the adjustment of the DocumentsCorePack Server.

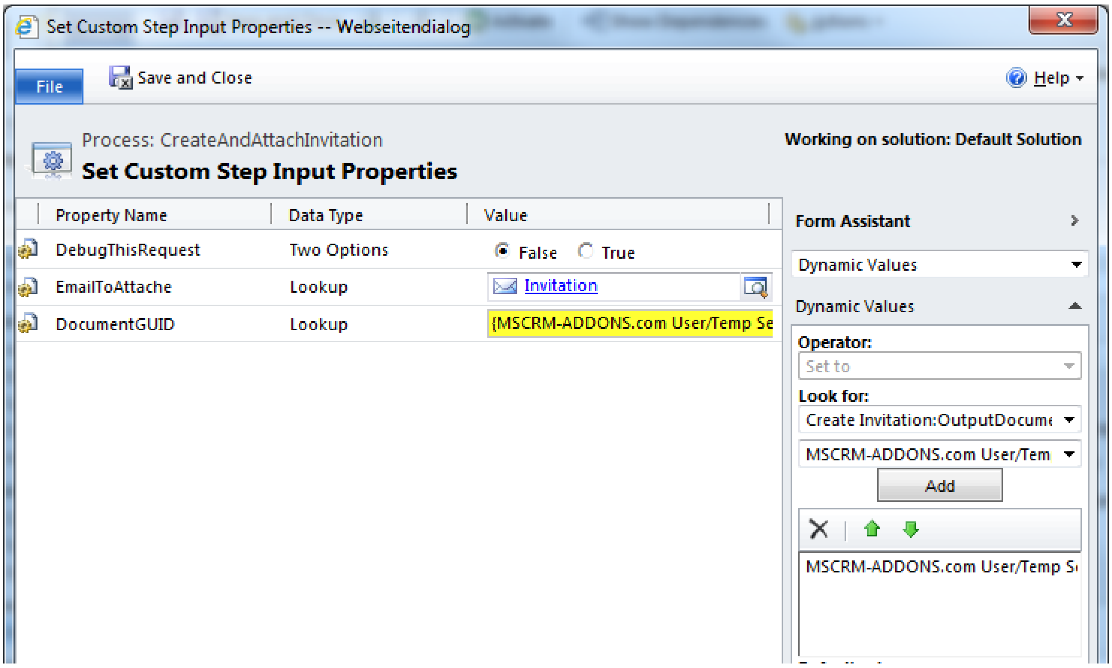
2.1.2 AttachToEmail

Select this option to attach a created document to an existing email. This step is often used in combination with the "SendEmail"-step described later.

Important: If the file type of the generated document you want to be attached is "html", its content will be copied into the email body. If it is any other file type, the generated document will be added as attachment to the email.



First, give your new step a meaningful name.
Then hit [Set Properties] to define the settings:



The “AttachToEmail” functionality provides the following properties:

2.1.2.1 DebugThisRequest

If this box is set to “True” the AutoMerge Plugin will write debug information while executing this request. This is only required if this part of the process doesn’t work correctly. Due to the fact that it will slow down the whole process, we recommend setting it to “False” in normal cases.

2.1.2.2 EmailToAttach

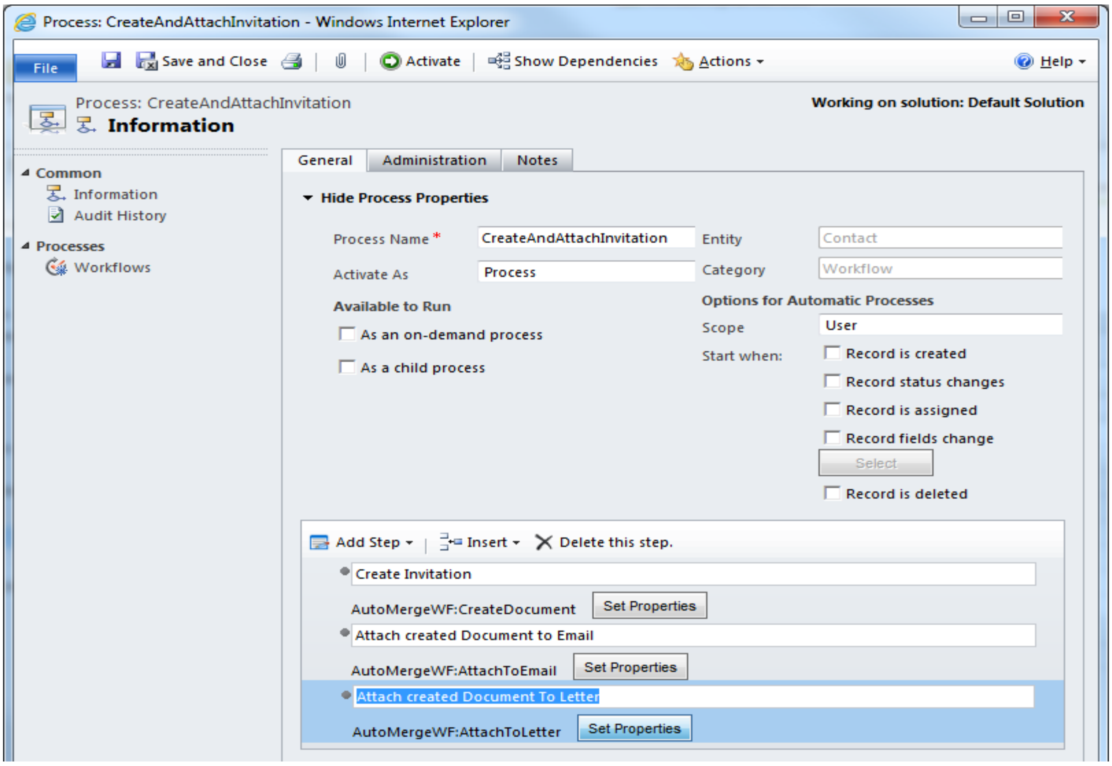
This lookup can be used to define the email to which the created document should be attached.
You have the possibility to select an existing email, but you can also refer to one in this workflow earlier created email as well.

2.1.2.3 DocumentGUID

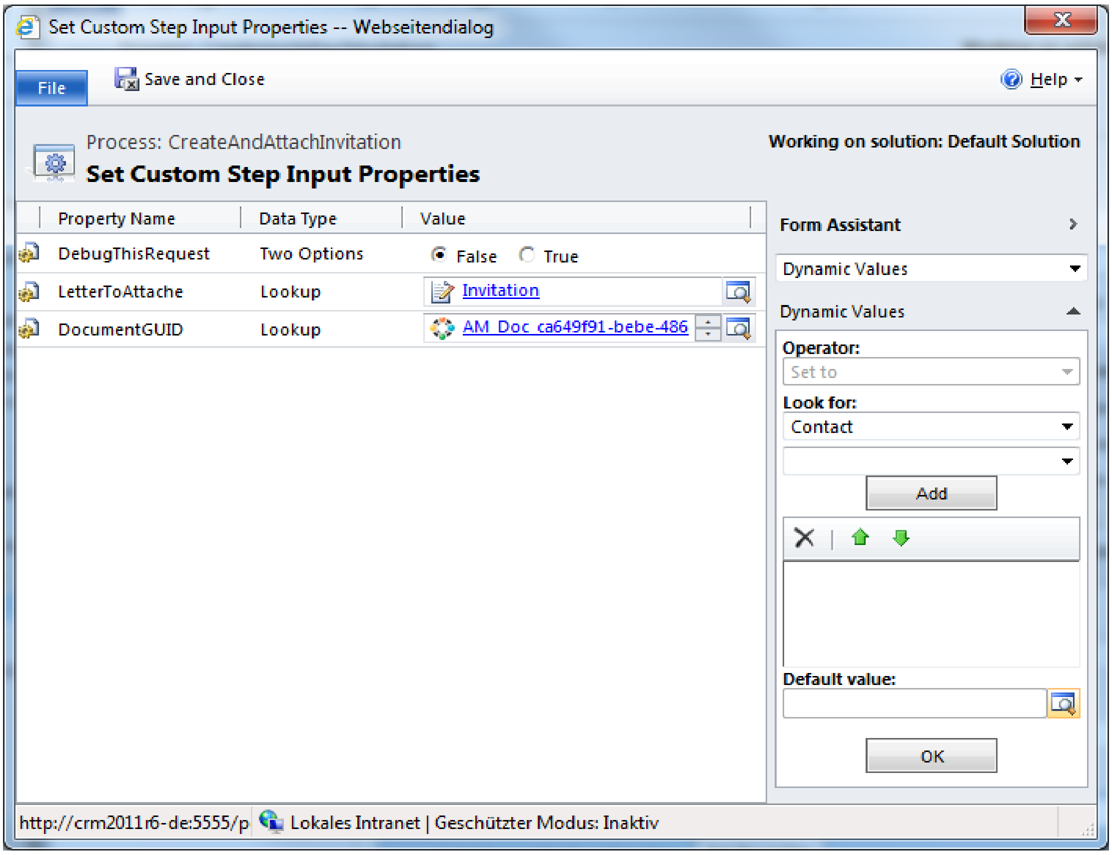
This lookup provides the possibility to select the document which should be attached. The handling of this property is similar to the above one. You can select an existing document by clicking on the lookup button and you can also use a document created in this workflow before.

2.1.3 AttachToLetter

Select this option to attach a created document to an existing letter.



First, give your new step a meaningful name.
Then hit [Set Properties] to define the settings:



The "AttachToLetter" functionality provides the following properties:

2.1.3.1 DebugThisRequest

If this box is set to "True" the AutoMerge Plugin will write debug information while executing this request. This is only required if this part of the process doesn't work correctly. Due to the fact that it will slow down the whole process, we recommend setting it to "False" in normal cases.

2.1.3.2 LetterToAttach

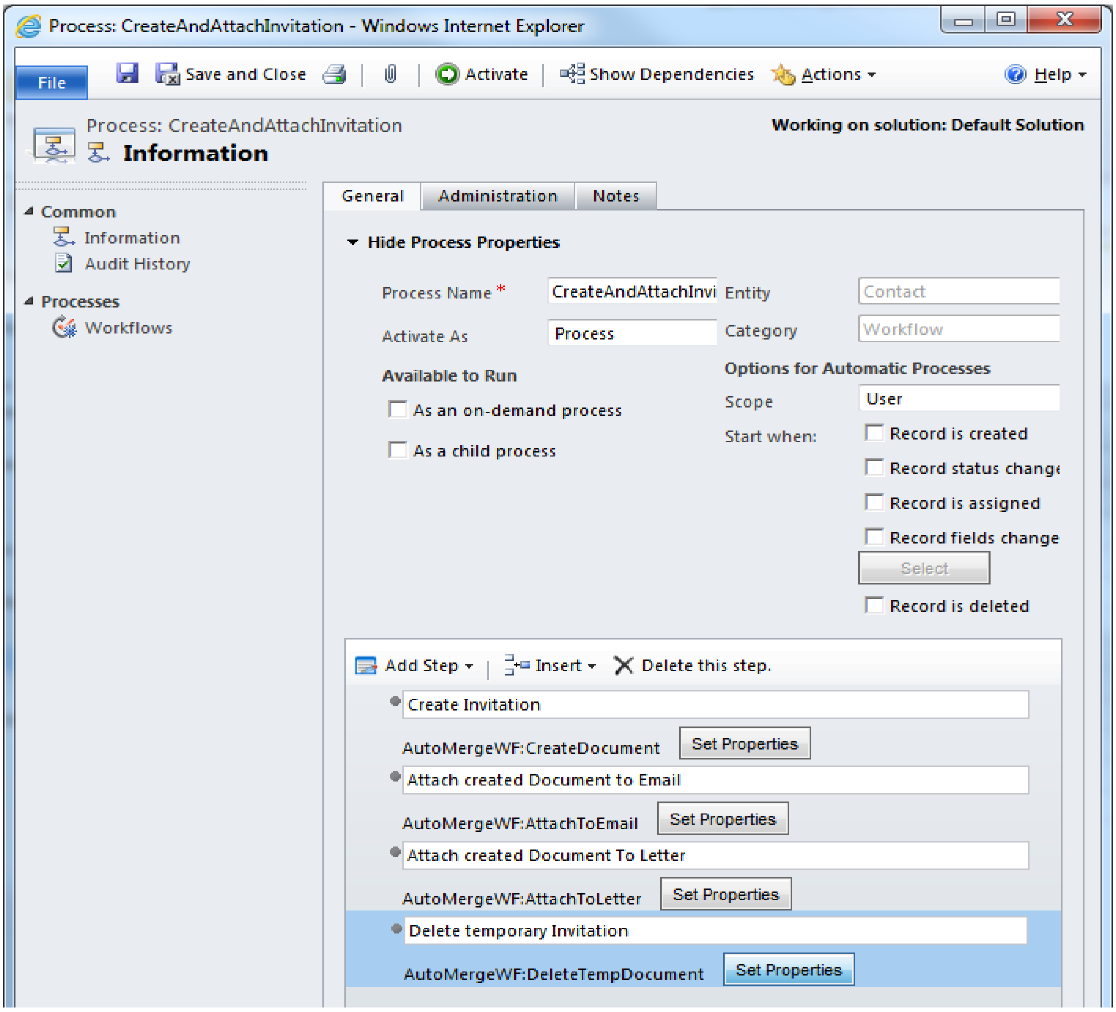
This lookup can be used to define the letter to which the created document should be attached.
You have the possibility to select an existing letter, but you can refer to one in this workflow earlier created letter as well.

2.1.3.3 DocumentGUID

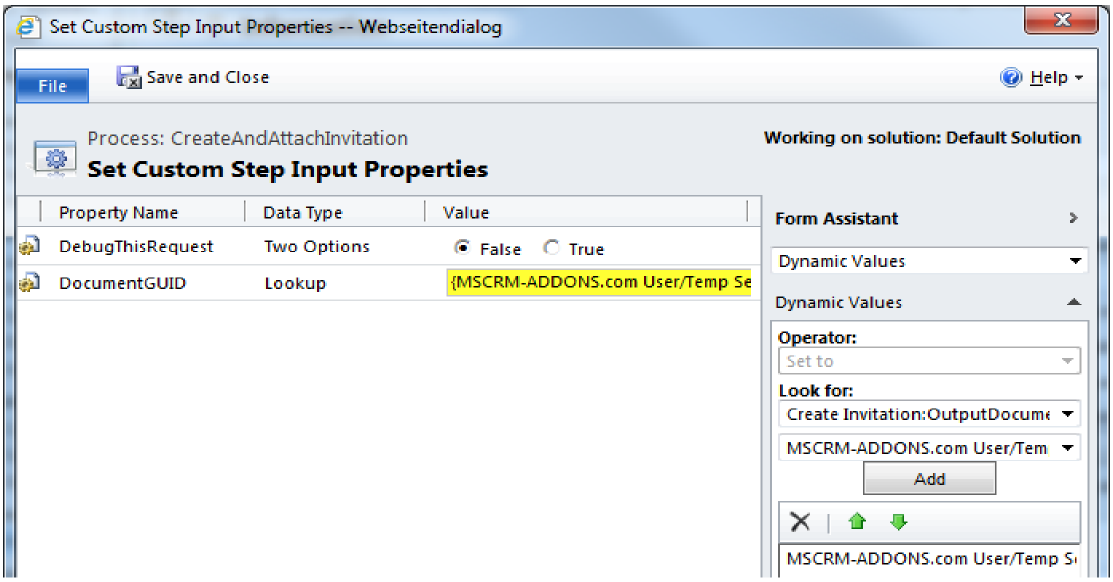
This lookup provides the possibility to select the document which should be attached. The handling of this property is similar to the above one. You can select an existing document by clicking on the lookup button and you can also use a document created in this workflow before.

2.1.4 DeleteTempDocument

Select this option to delete an existing document from the "MSCRM-ADDONS.com User/Temp Settings" entity.



First, give your new step a meaningful name.
Then hit [Set Properties] to define the settings:



The "DeleteTempDocument" functionality provides the following properties:

2.1.4.1 DebugThisRequest

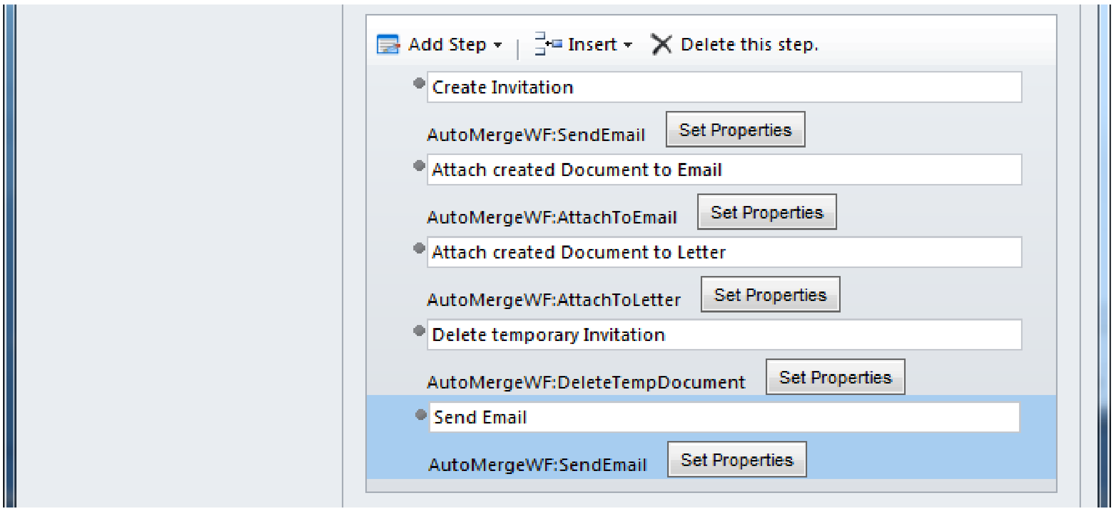
If this box is set to "True" the AutoMerge Plugin will write debug information while executing this request. This is only required if this part of the process doesn't work correctly. Due to the fact that it will slow down the whole process, we recommend setting it to "False" in normal cases.

2.1.4.2 DocumentGUID

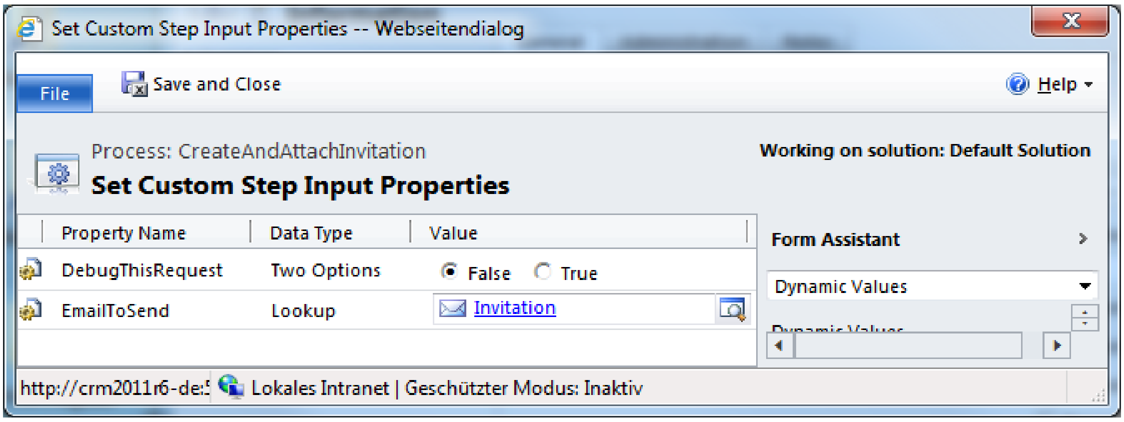
This lookup provides the possibility to select the document which should be removed. You can select an existing document by clicking on the lookup button and you can also use a document created in this workflow before.

2.1.5 SendEmail

Use this step to send an existing email.



First, give your new step a meaningful name.
Then hit [Set Properties] to define the settings.



The "SendEmail" functionality provides the following properties:

2.1.5.1 DebugThisRequest

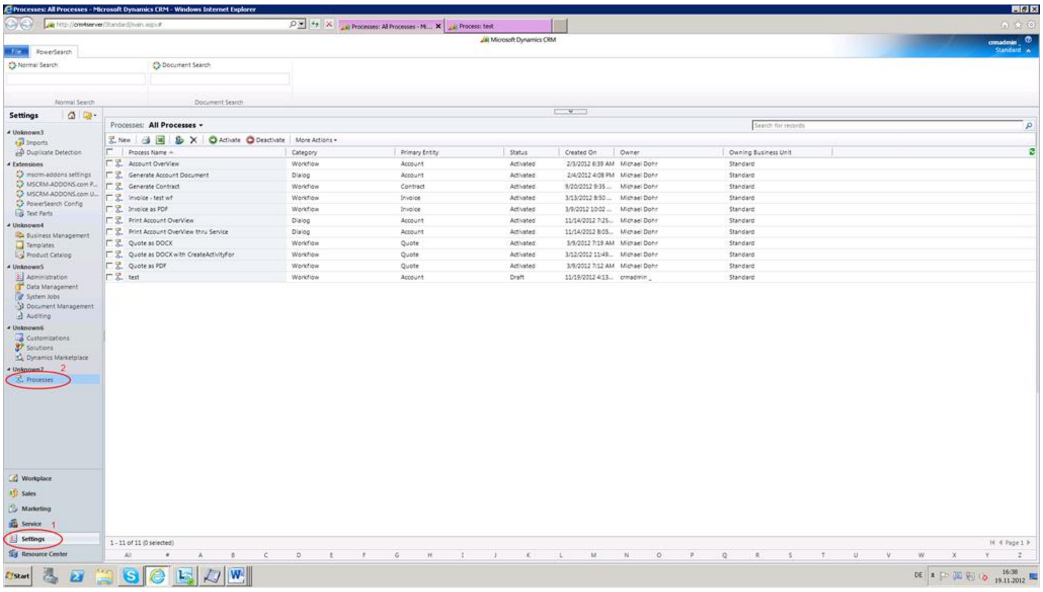
If this box is set to "True" the AutoMerge Plugin will write debug information while executing this request. This is only required if this part of the process doesn't work correctly. Due to the fact that it will slow down the whole process, we recommend setting it to "False" in normal cases.

2.1.5.2 EmailToSend

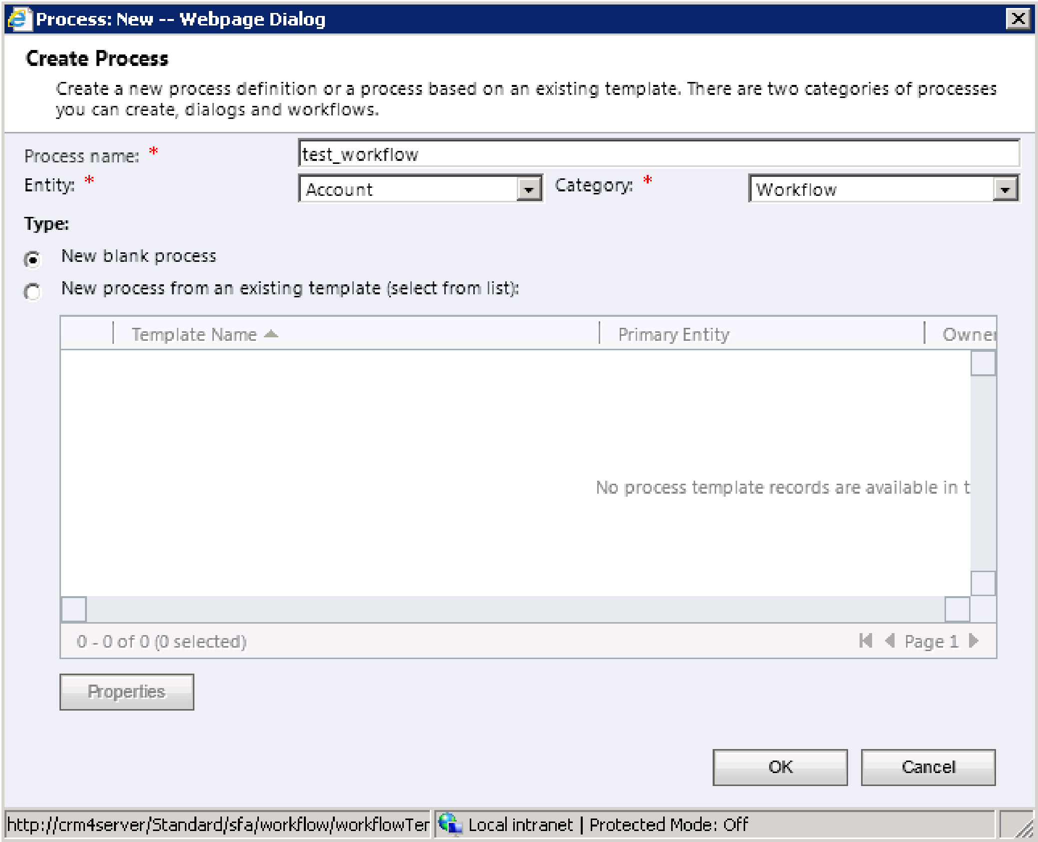
This lookup field can be used to define the email which should be sent.
You have the possibility to select an existing email, but you can refer to one in this workflow earlier created email by using the "Form Assistant" as well.

2.2 Workflow (CRM Online)

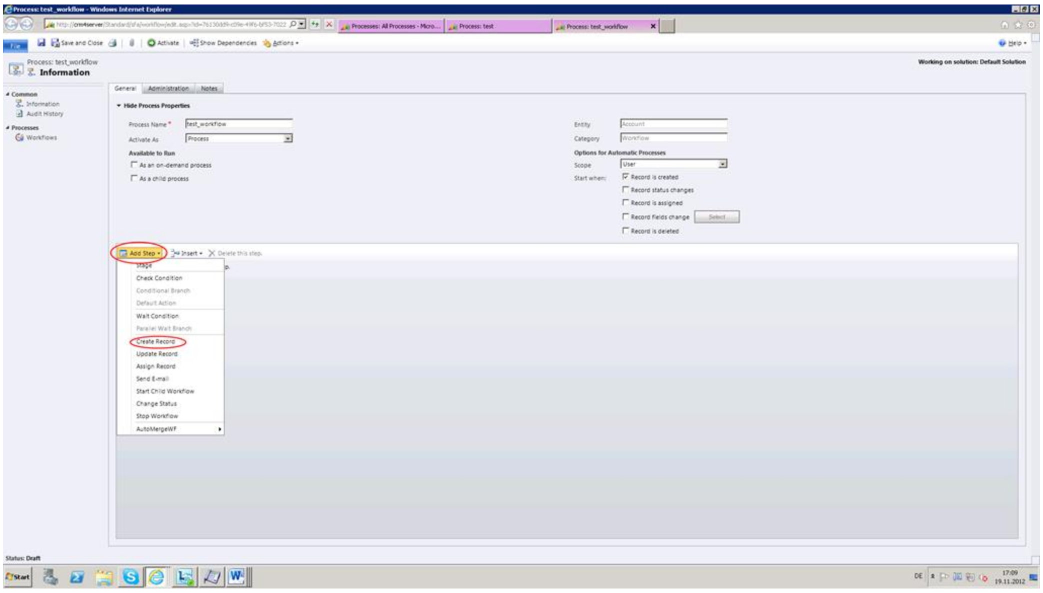
First of all, start in the settings of your CRM system (see screenshot ellipse 1) and click on 'Processes' in the sitemap (see screenshot ellipse 2).



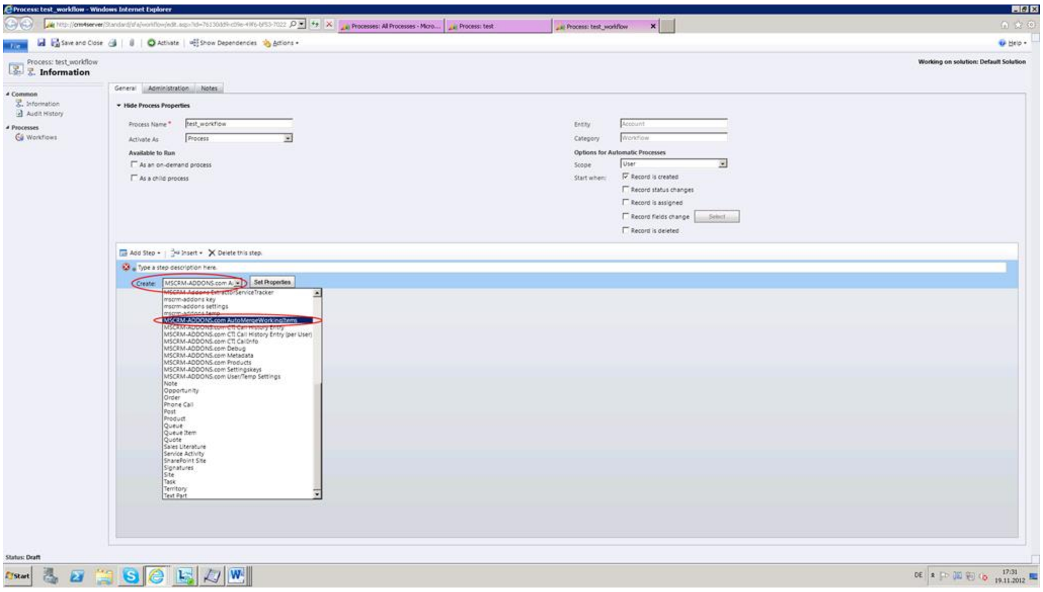
Then click on 'New' to create a new workflow. A webpage dialog pops up (see next screenshot). Type in a name, determine an entity and choose 'Workflow' as the process category. Afterwards, click on 'OK'.



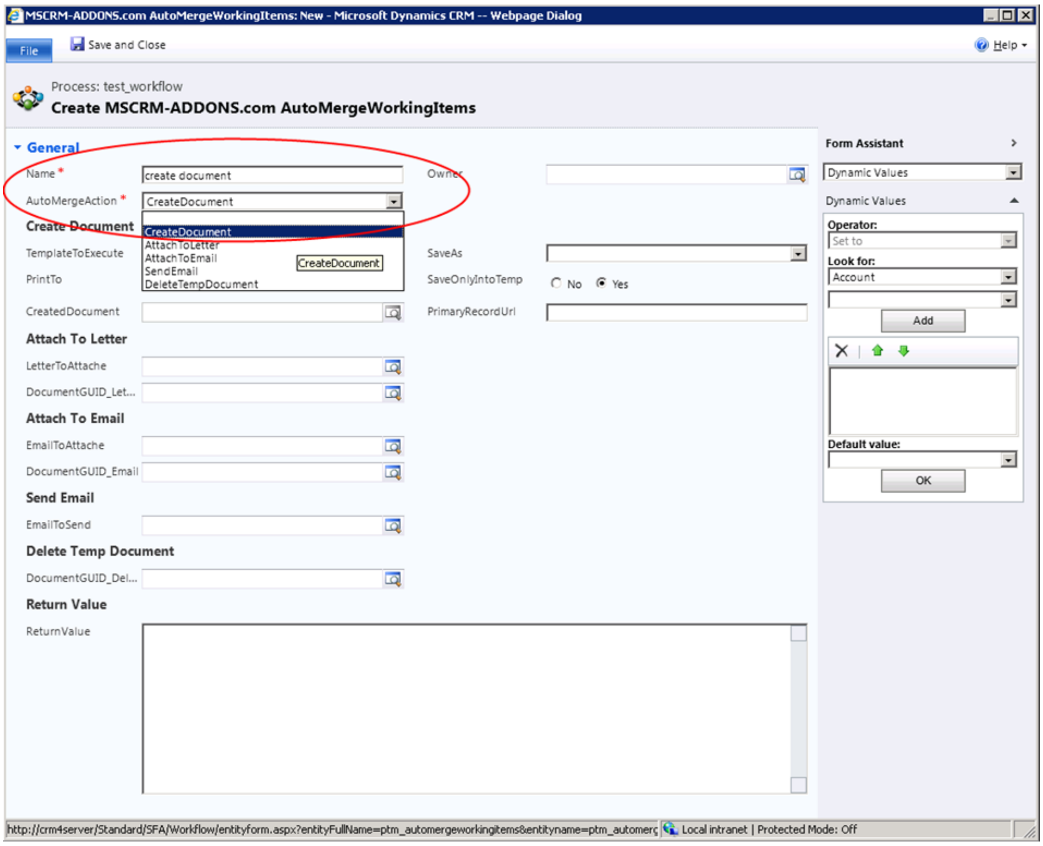
After clicking on 'OK', you will see the following window. Start to define and add the steps you would like to have in your workflow. If you would like to e.g. create the document as a first step of your workflow, click on the 'Add Step'-drop-down menu and select 'Create Record'. (see screenshot below)



Now, the first step is added to your workflow. Type in a description of the step, e.g. create document. Afterwards, open the drop-down menu within this first step, select 'MSCRM-ADDONS.com AutoMergeWorkingItems' and click on 'Set Properties'. (see next screenshot)



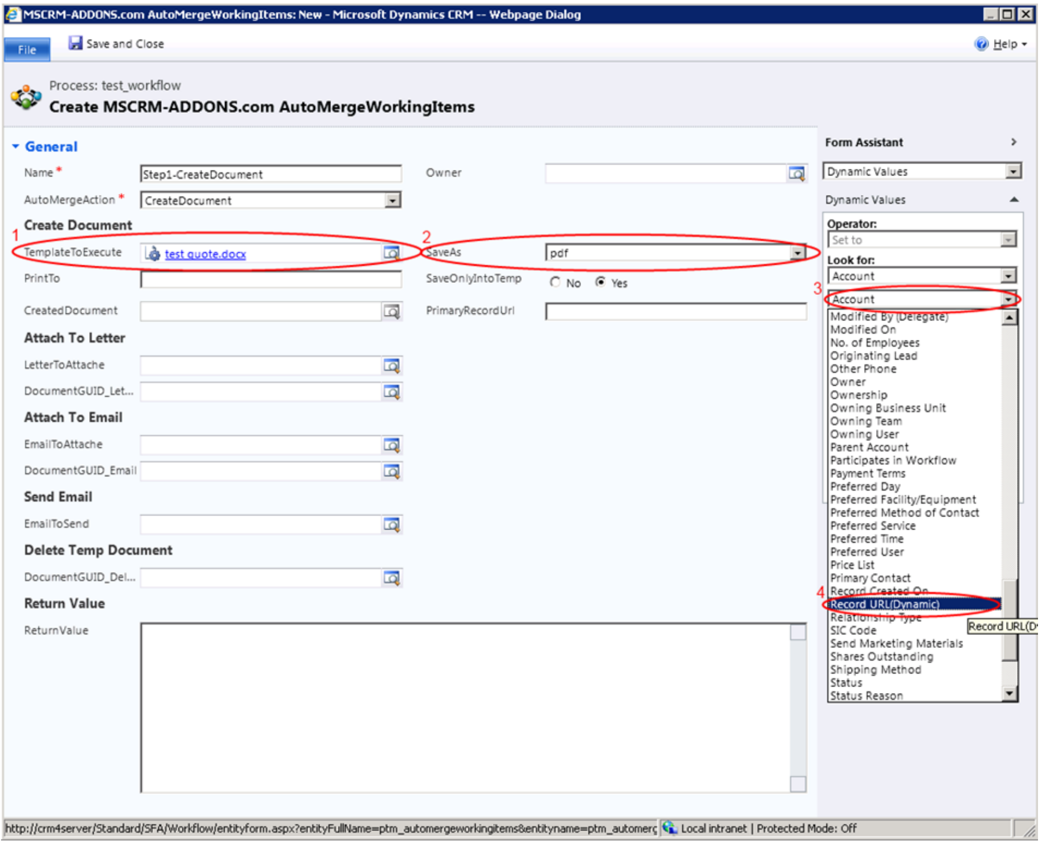
The following window will open to configure the first step of your workflow. (see screenshot below) Type in a name and define the AutoMerge-action. In our example, we select the action 'CreateDocument'.

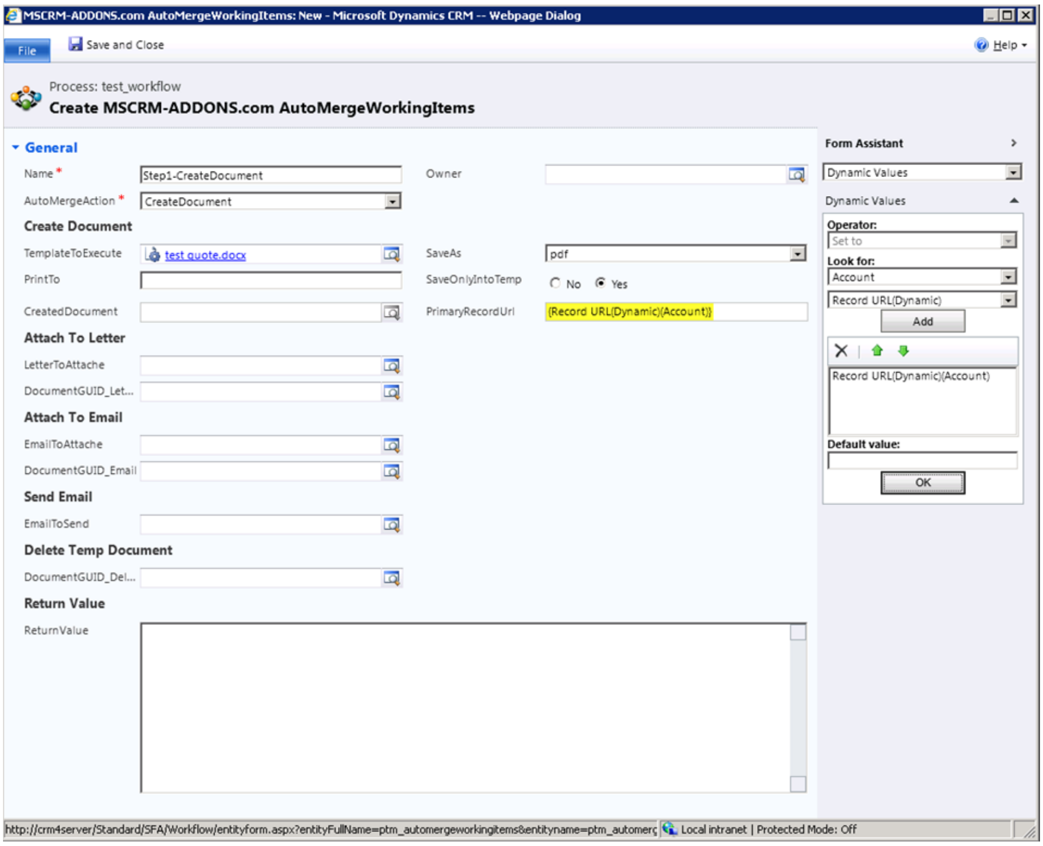


After that, choose the template to be used within the workflow (see next screenshot ellipse 1) and the file format the document should be saved as (see next screenshot ellipse 2).

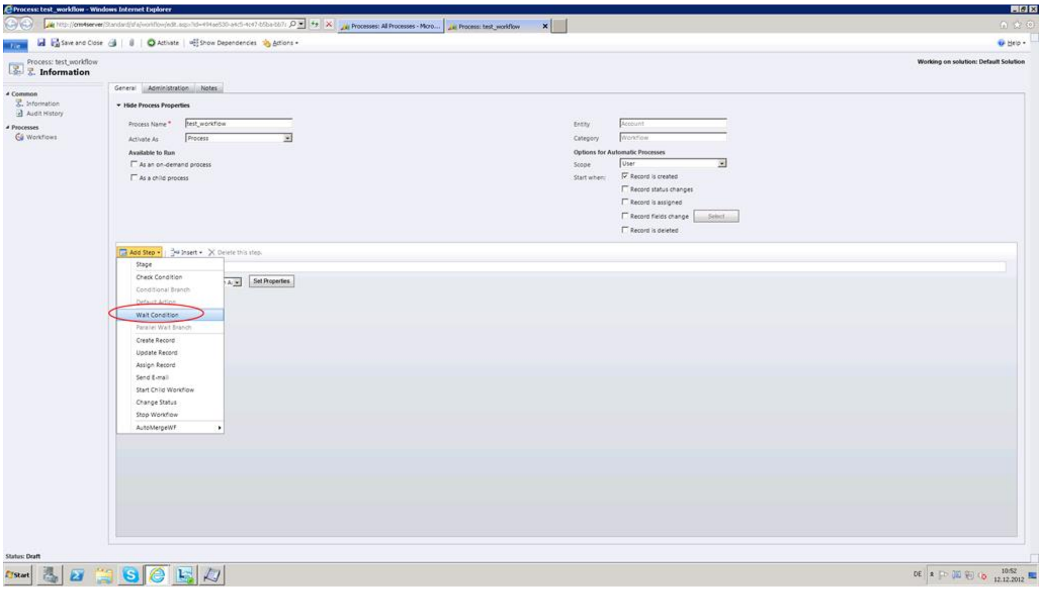
Furthermore, it is very important to insert the 'PrimaryRecordUrl'. For that, set the cursor in the 'PrimaryRecordUrl'-field and go to the 'Look for'-area within the form assistant on the right side. Select 'Record URL(Dynamics)' from the second drop-down-menu (see next screenshot, ellipse 3 and 4), click on 'Add' and then on 'OK'. After that, the

'PrimaryRecordUrl'-field is filled out automatically. (see next screenshot, colored in yellow) Click on 'Save and Close'.

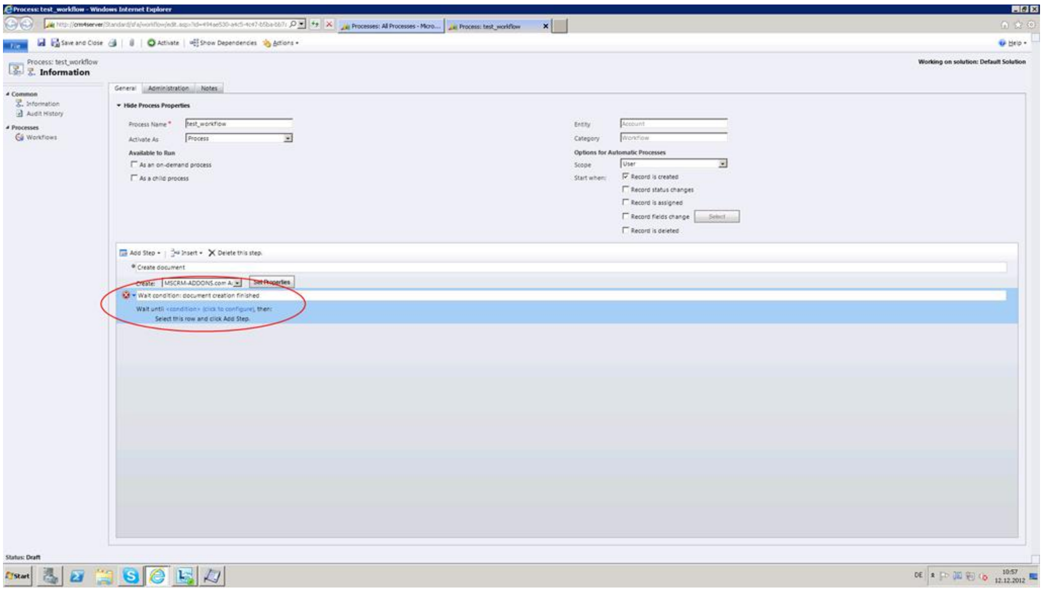




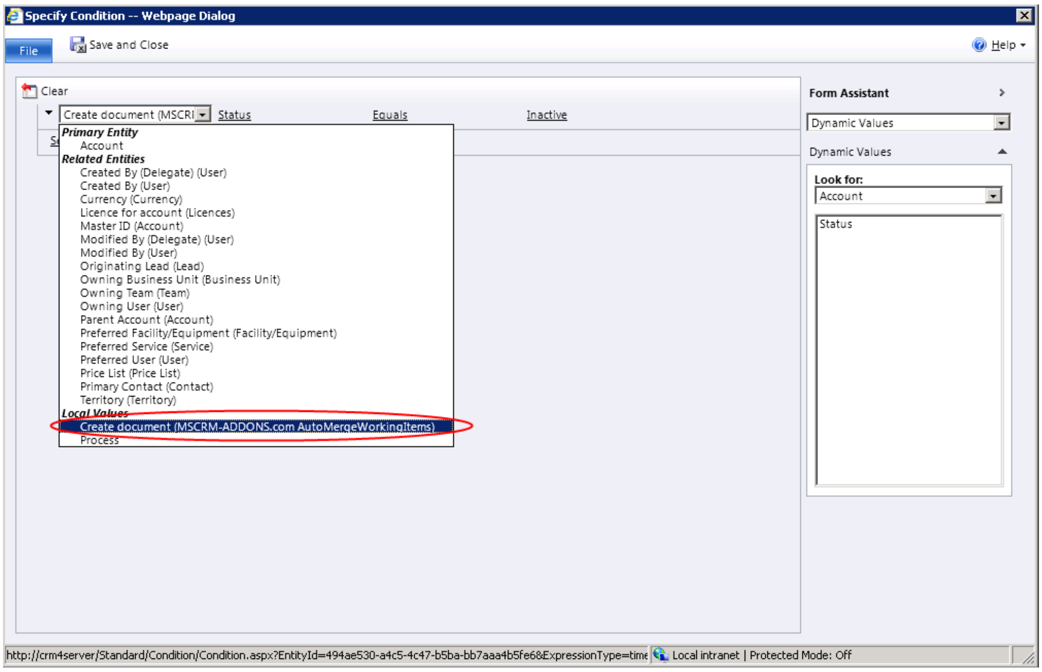
The first step of your workflow is now added and fully configured. In case you want to stop your workflow at this point, you can click on 'Save and Close' and finish here. In case you want to add further steps to your workflow, define a condition to be fulfilled before adding further steps. For example, if you want to create a letter-activity with the previously generated document as an attachment, you need to make sure that the document creation is completed before attaching the document to the letter activity. To do so, open the 'Add-Step' drop-down menu again and select 'Wait Condition'. (see screenshot below, red ellipse)

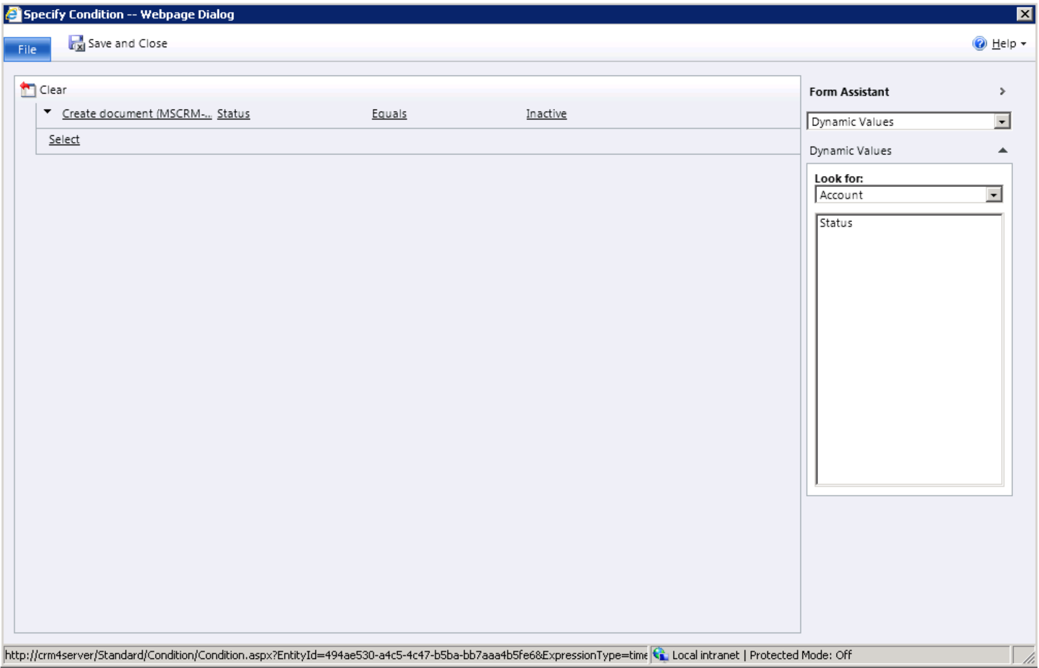


The step is added to the workflow. Type in a step description and click on '<condition> (click to configure)'. (see screenshot below)

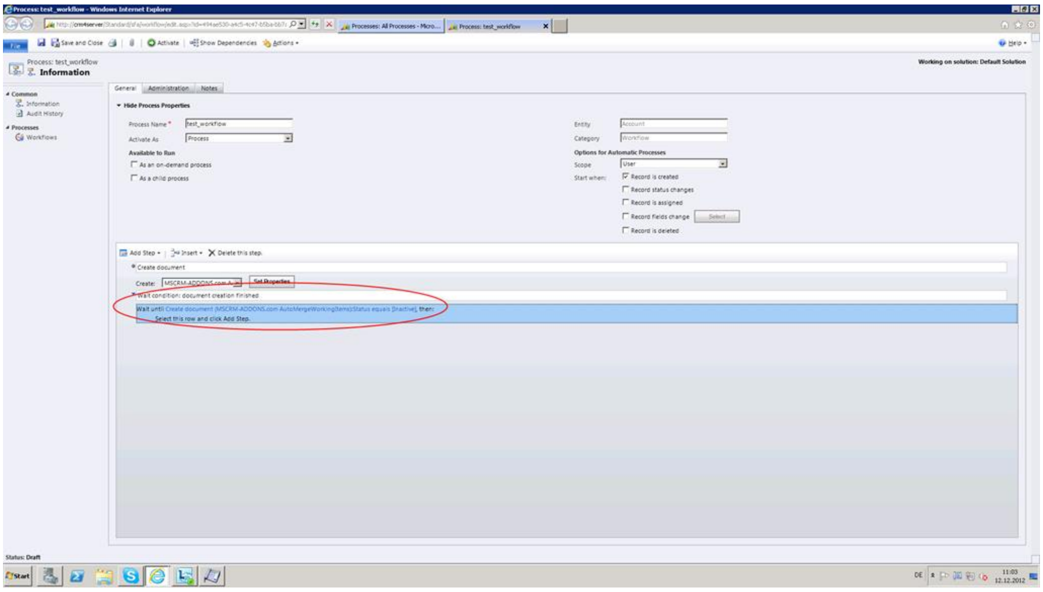


After that, a window pops up. In this window, you can define the condition to be fulfilled for workflow proceeding. In our case, we select 'Create document (MSCRM-ADDONS.com AutoMergeWorkingItems)' from the first drop-down menu, 'Status' from the second drop-down menu, 'Equals' from the third drop-down menu and 'Inactive' from the fourth drop-down menu. (see next screenshots). Click on save and close. Now, you have determined that step 2 of your workflow (in our example to attach the created document to a letter-activity) will only be executed if the first step, namely the document generation, has finished successfully.

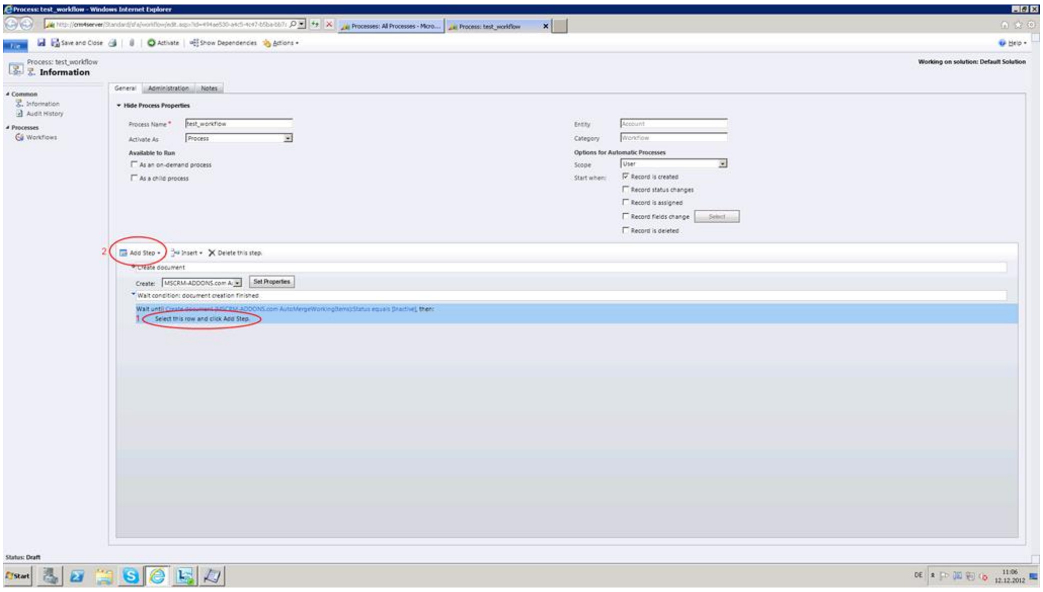




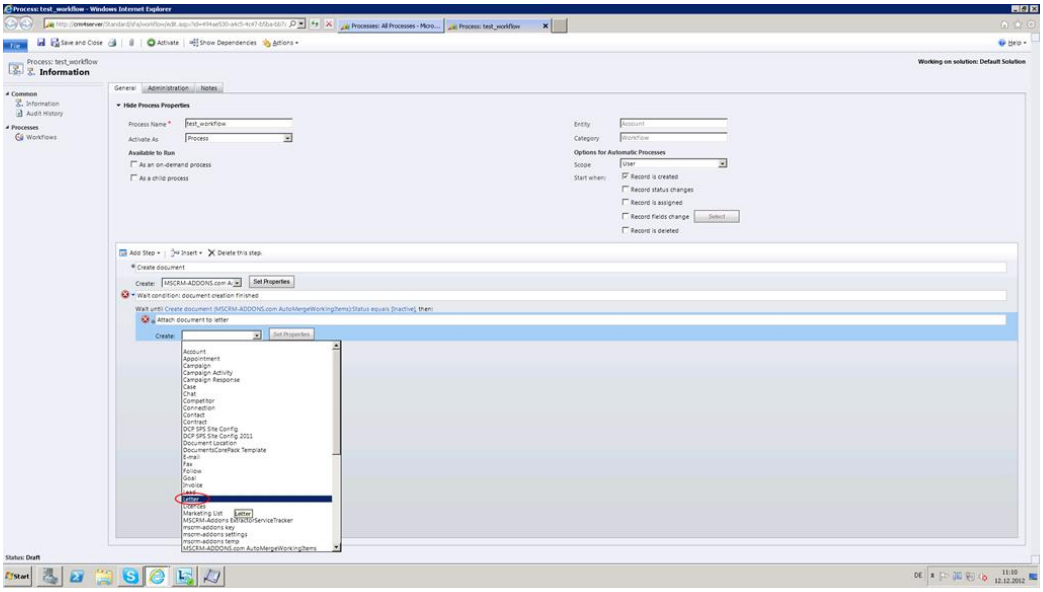
Afterwards, your workflow configuration will look like in the following screenshot.



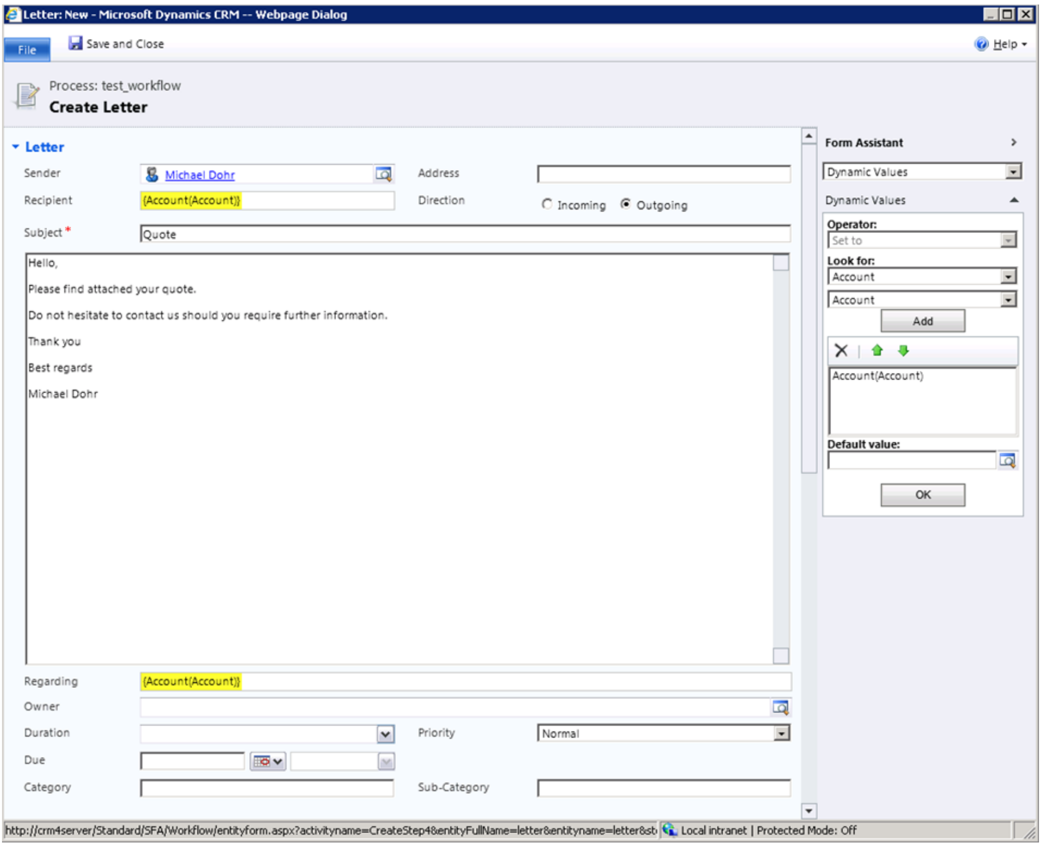
To add another step, e.g. to create a letter-activity, click on ‘Select this row and click Add Step’ (see screenshot ellipse 1) and afterwards on ‘Add Step’. (see screenshot, ellipse 2)



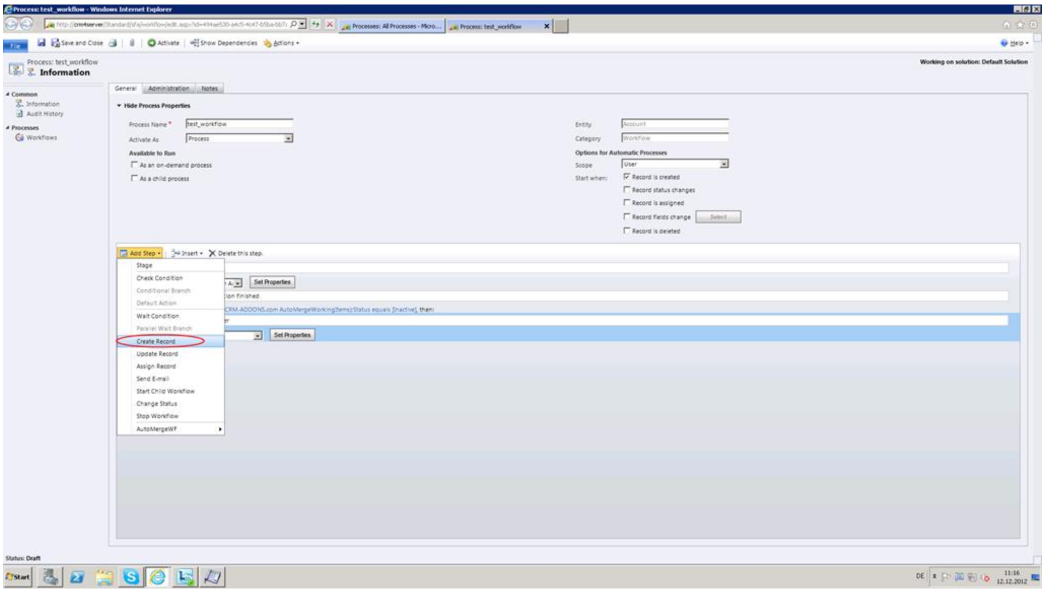
Then, select ‘Create Record’ from the drop-down menu. The new step is now added to your workflow and ready for configuration. Type in a step description (e.g. Attach document to letter), open the drop-down menu within this second step and select ‘Letter’. (see next screenshot)



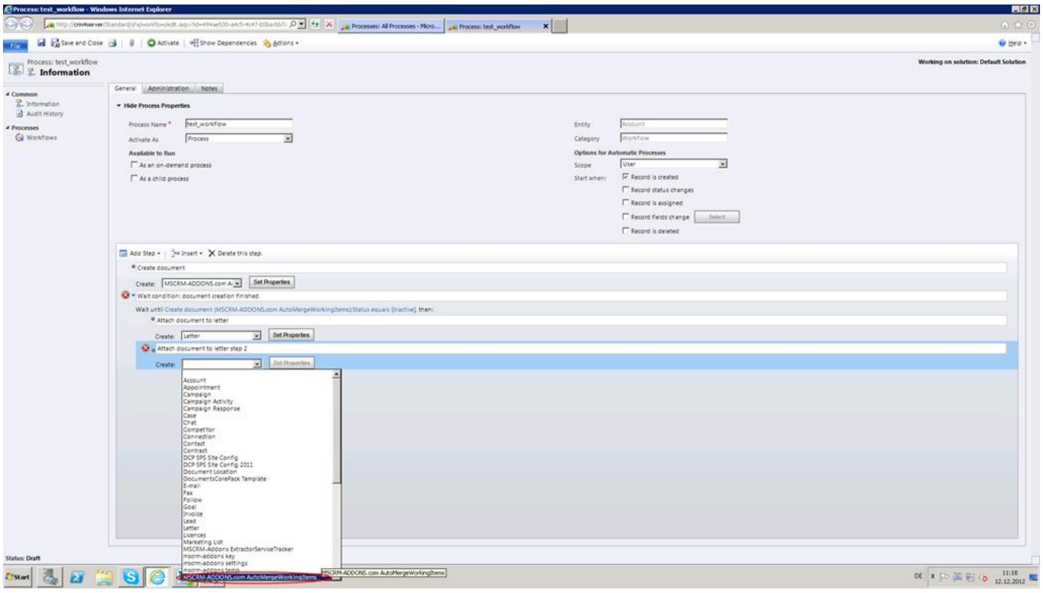
Afterwards, click on ‘Set Properties’ and a letter-activity-window will open. (see screenshot below) Within this window, define a sender, a subject and type in your letter-text. Then, set the cursor in the ‘Recipient’-field to define the recipient. To do so, go to the ‘Look for’-area within the form assistant on the right side. Select ‘Account’ in both drop-down-menus, click on ‘Add’ and then on ‘OK’. Now the ‘Recipient’-field is filled out correctly (see screenshot below, colored in yellow).



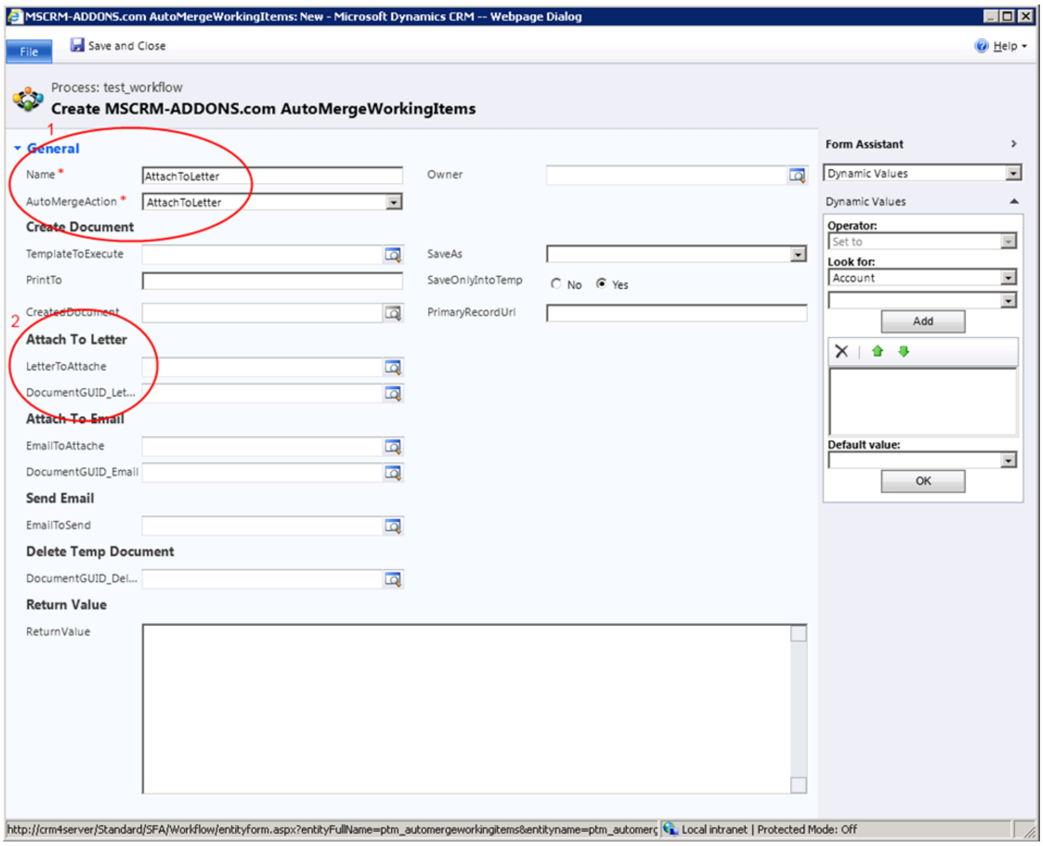
Click on ‘Save and Close’. Now you are back in the general workflow-window again and you can see the added and completely configured letter-activity. In a next step, you have to define that the previously created document should be added to this letter-activity. For that, click on ‘Add Step’ and select ‘Create Record’ from the drop-down menu. (see next screenshot)



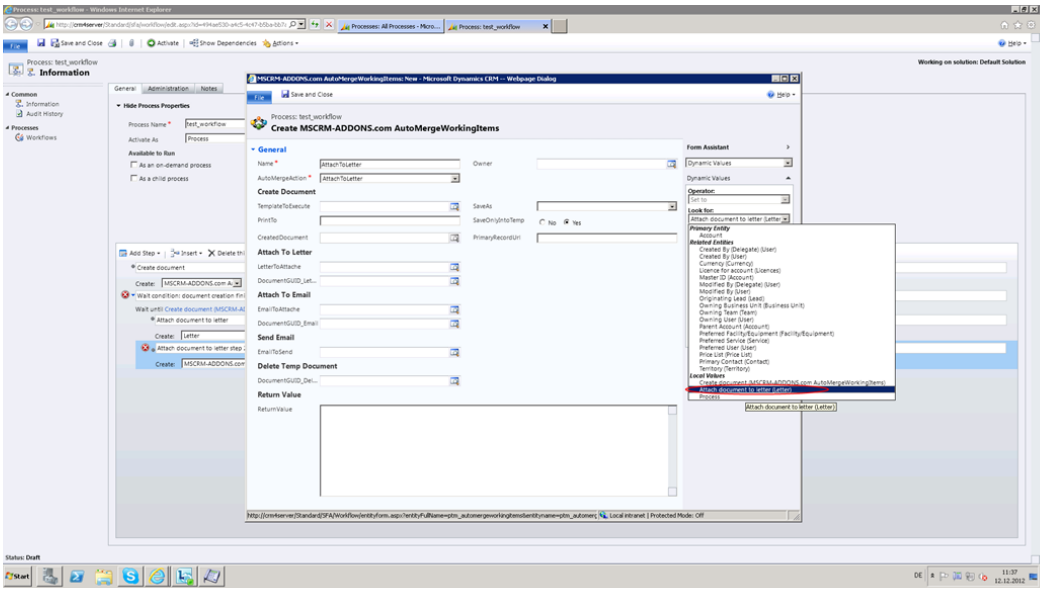
Type in a step description and open the drop-down menu within this step. Select 'MSCRM-ADDONS.com AutoMergeWorkingItems'. (see screenshot below) Then, click on 'Set Properties'.



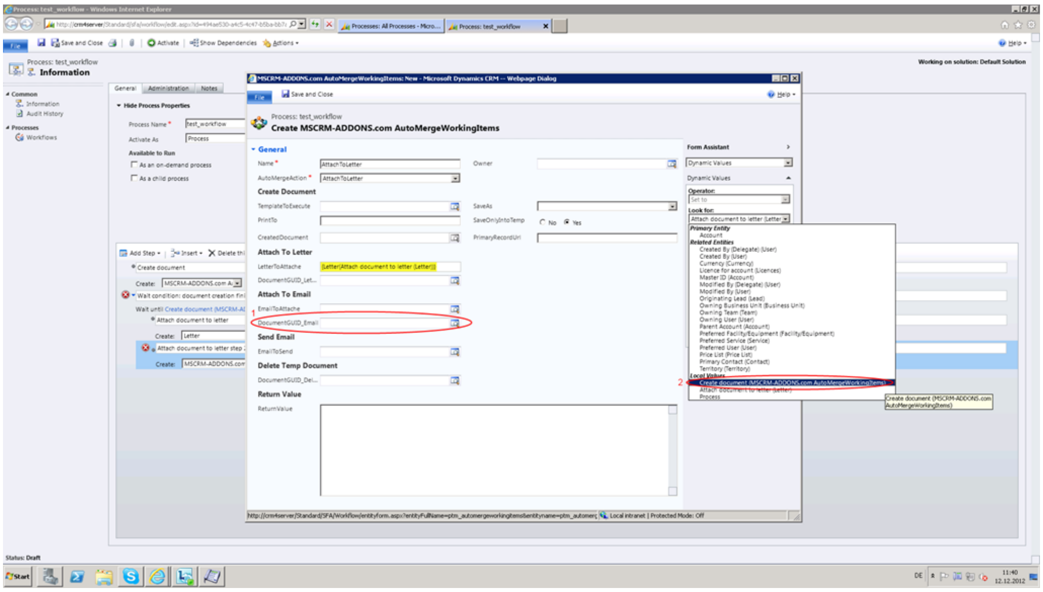
A window will pop up to configure the 'AttachToLetter'-workflow-step. Put a name and define the AutoMerge action (in this example choose 'AttachToLetter', see screenshot, ellipse 1) Within the 'Attach to Letter'-section, determine the letter-activity to which the created document should be attached to (see screenshot 'LetterToAttach-field, ellipse 2) and the document which should be attached (see screenshot 'DocumentGUID_Letter'-field, ellipse 2).



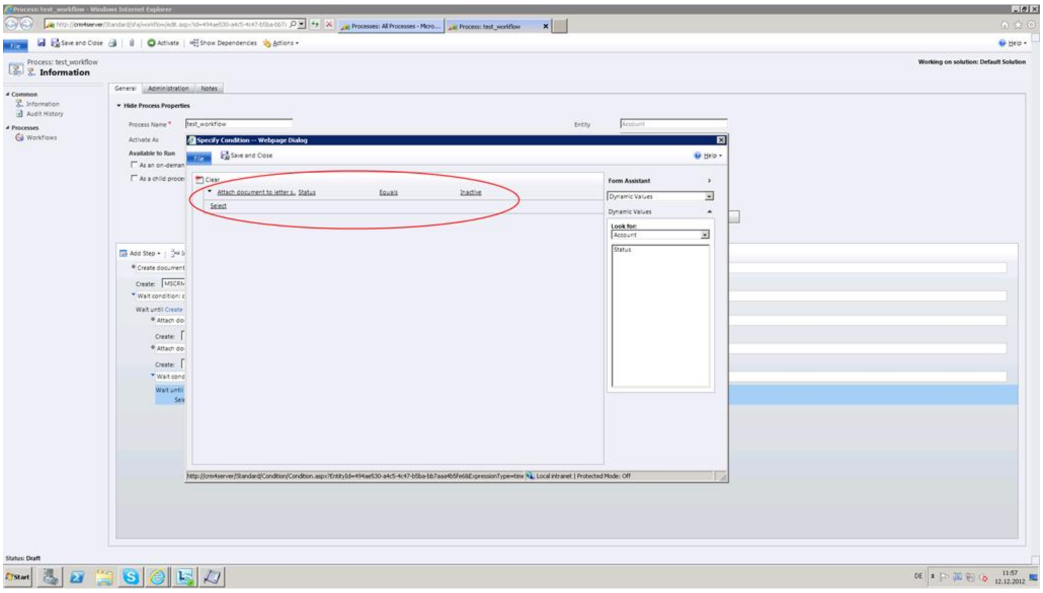
For determining the letter-activity the document should be attached to, set the cursor in the 'LetterToAttach'-filed in the 'Attach To Letter'-area (see screenshot, ellipse 1) and select the correct letter-activity from the drop-down menu in the 'Look For'-area within the form assistant on the right side. (see screenshot, ellipse 2). After that, click on 'Add' and 'OK'.



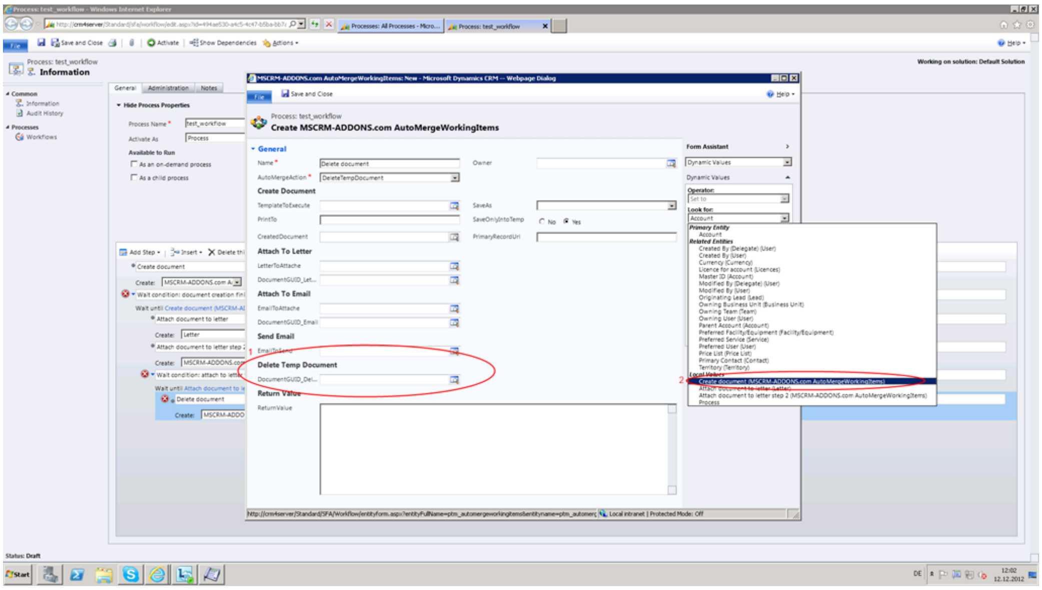
To determine the document to be attached, set the cursor in the 'DocumentGUID_Letter'-field (see screenshot, ellipse 1) and select the correct document from the drop-down box in the 'Look For'-area within the form assistant on the right side. (see screenshot, ellipse 2) Click on 'Add' and 'OK'.



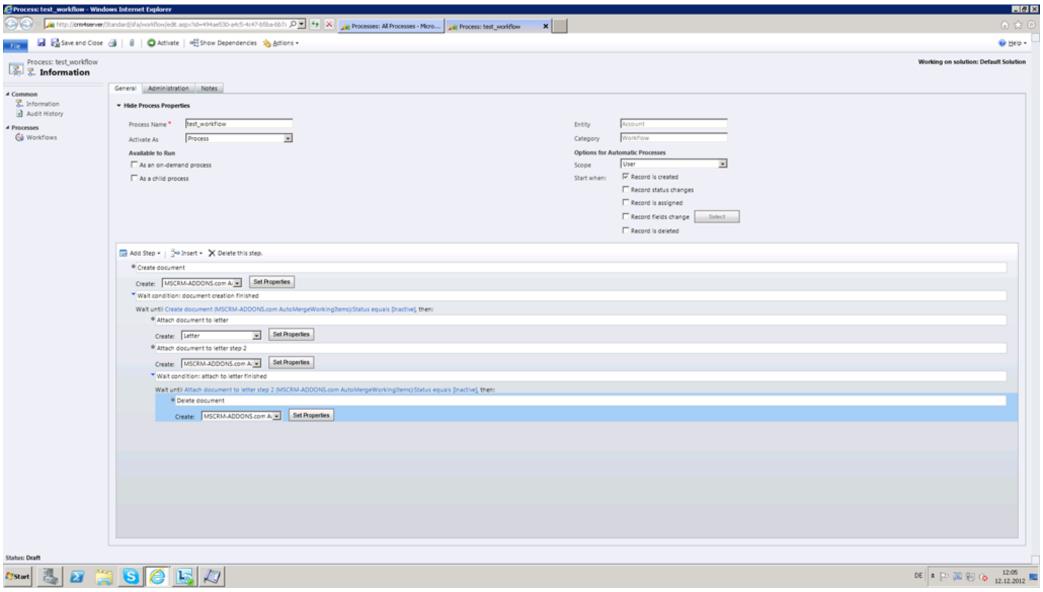
You have now completed the configuration of this step. Click on save and close. In case you want to stop your workflow at this point, you can click on 'save and close' within the general workflow-configuration-window and finish here. In case you want to add further steps to your workflow, you have to define a condition to be fulfilled before you add further workflow-steps. In that case, open the 'Add-Step' drop-down menu again and select 'Wait Condition'. Click on '<condition> (click to configure)' and a window will pop up. In this window, define which condition has to be fulfilled for further workflow proceeding. In our example, we want the workflow to proceed when the created document has been attached to the letter-activity. In our case, we select 'Attach document to letter step 2 (MSCRM-ADDONS.com AutoMergeWorkingItems)' from the first drop-down menu, 'Status' from the second drop-down menu, 'Equals' from the third drop-down menu and 'Inactive' from the fourth drop-down menu. (see next screenshots). Click on 'Save and Close'.



Now you can add another workflow-step. In our example, we want the document to be deleted after it has been attached to the letter-activity. To do so, click on 'Select this row and click' and open the 'Add Step'-drop-down menu. Select 'Create Record'. Afterwards, type in a step-description, choose 'MSCRM-ADDONS.com AutoMergeWorkingItems' from the drop-down box within the step and click on 'Set Properties'. A window will pop up in which you can determine that the created document should be deleted after it has been attached to the letter-activity. For that, put a name and an AutoMerge activity (in our example 'DeleteTempDocument'). Afterwards, click in the 'DocumentGUID_Delete'-field within the 'Delete Temp Document'-area (see screenshot, ellipse 1) and select the document to be deleted from the drop-down box in the 'Look For'-area within the form assistant. (see screenshot, ellipse 2)

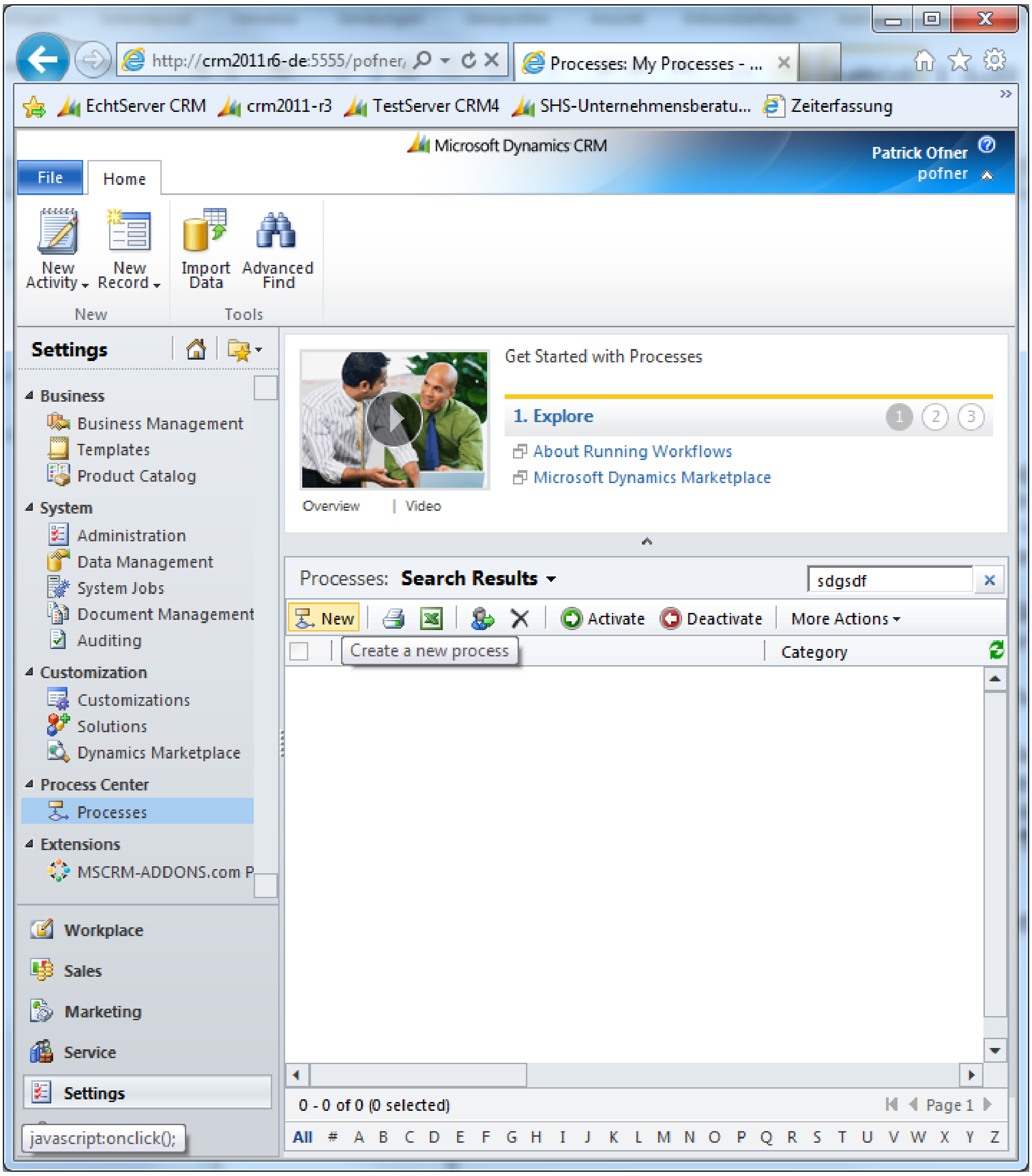


Click on 'Save and Close'. After that, you have finished your workflow configuration and you can click on 'Save and Close'.

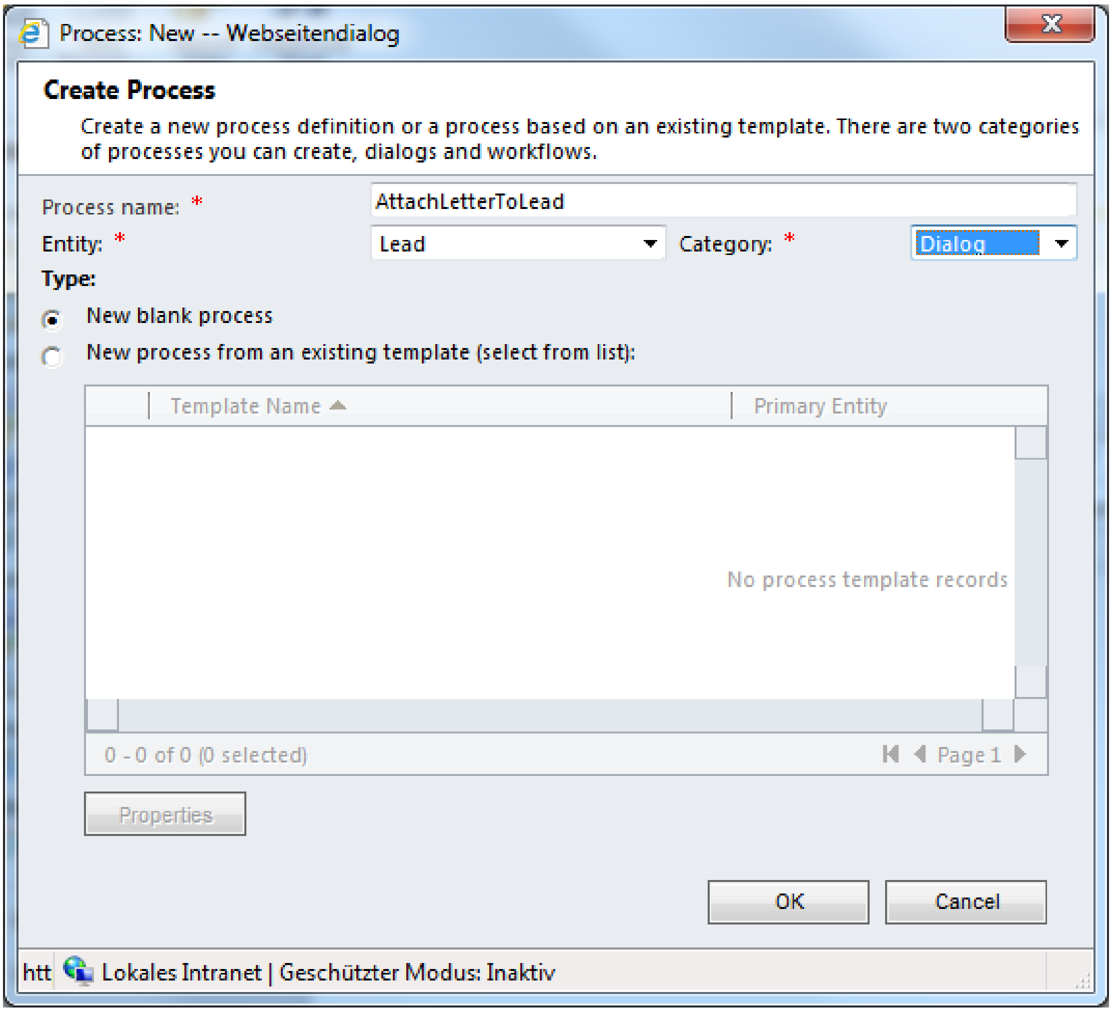


2.3 Dialog

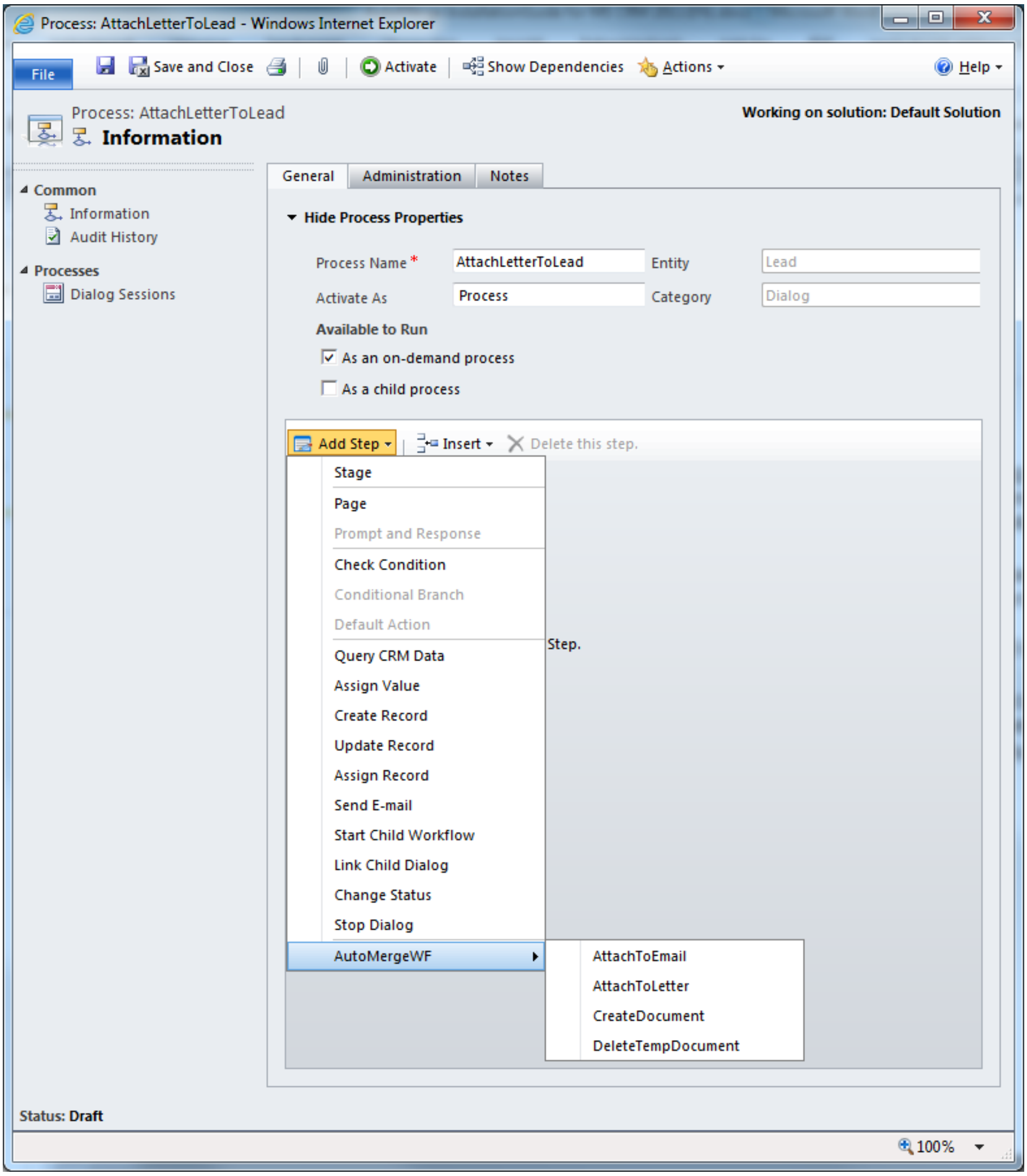
From a dialog you can use the same AutoMerge steps as from a workflow. This chapter shows how you can access these functionalities.
Within CRM open Settings -> Processes



The next step is to create a new dialog. This works nearly the same way as creating a new workflow.
Hit [New] as shown in the screenshot. Thereupon the following window will appear:



Type in a name of the new dialog, define the starting entity and select “Dialog” in the drop down box. To start with a new dialog, select “New blank process”.
Hit [OK] to proceed.
Then the dialog configuration window will appear.



Here you can see that the AutoMerge add-in provides the same steps for dialogs.

Due to the fact that these work totally the same way as for workflows, they aren't described once again in this section. Please see chapter: "*2.2.1 CreateDocument*" downwards for more information regarding the steps.

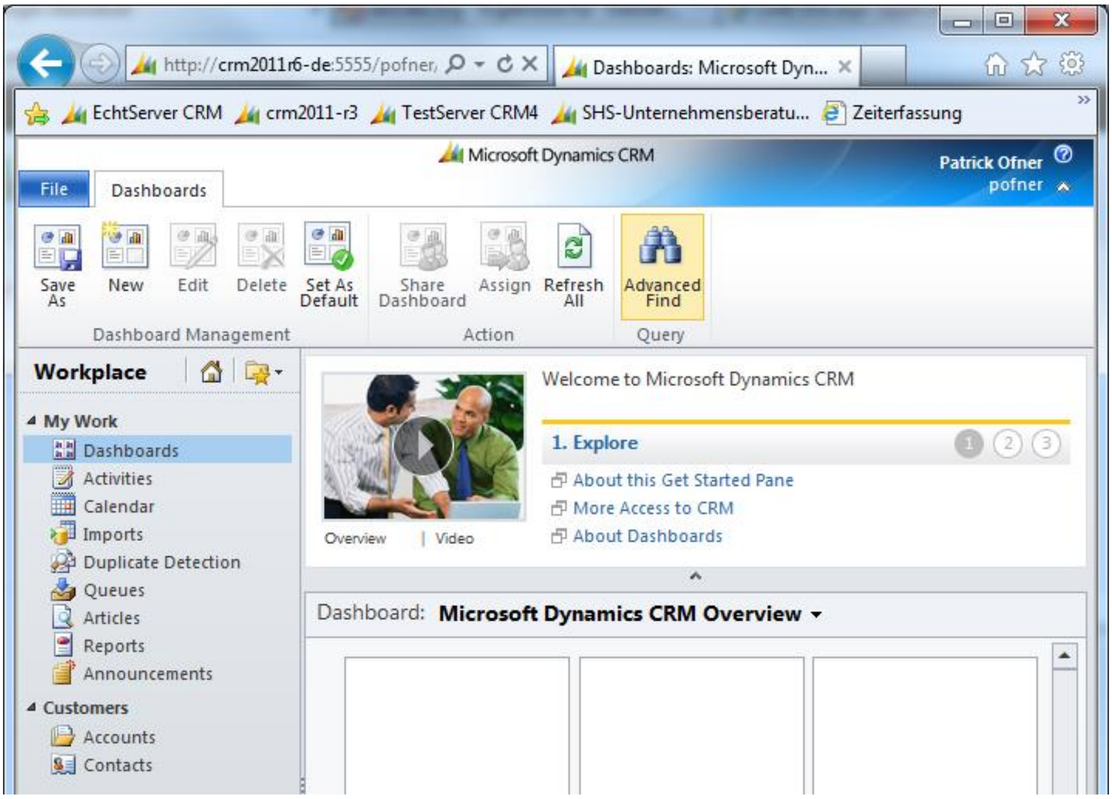
3 Temporary Document

Every time when you create a new document by using the "CreateDocument" step it will be stored in the "MSCRM-ADDONS.com User/Temp Settings".

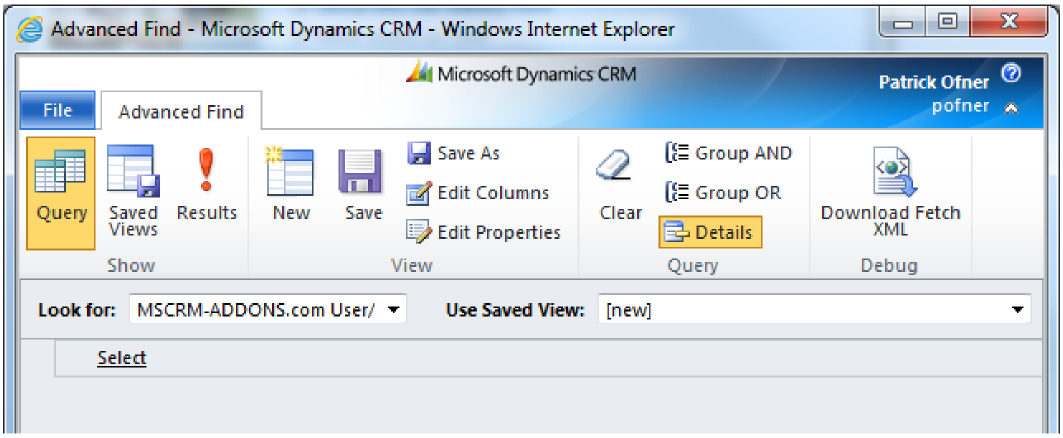
The normal way is to save it on the SharePoint as well or attached it to an activity and to delete it at the end of the process by using "DeleteTempDocument" step.

But especially for developing your process it could be very helpful not to delete it automatically (e.g. if you want to continue working with this temp document). How this can be done is described underneath:

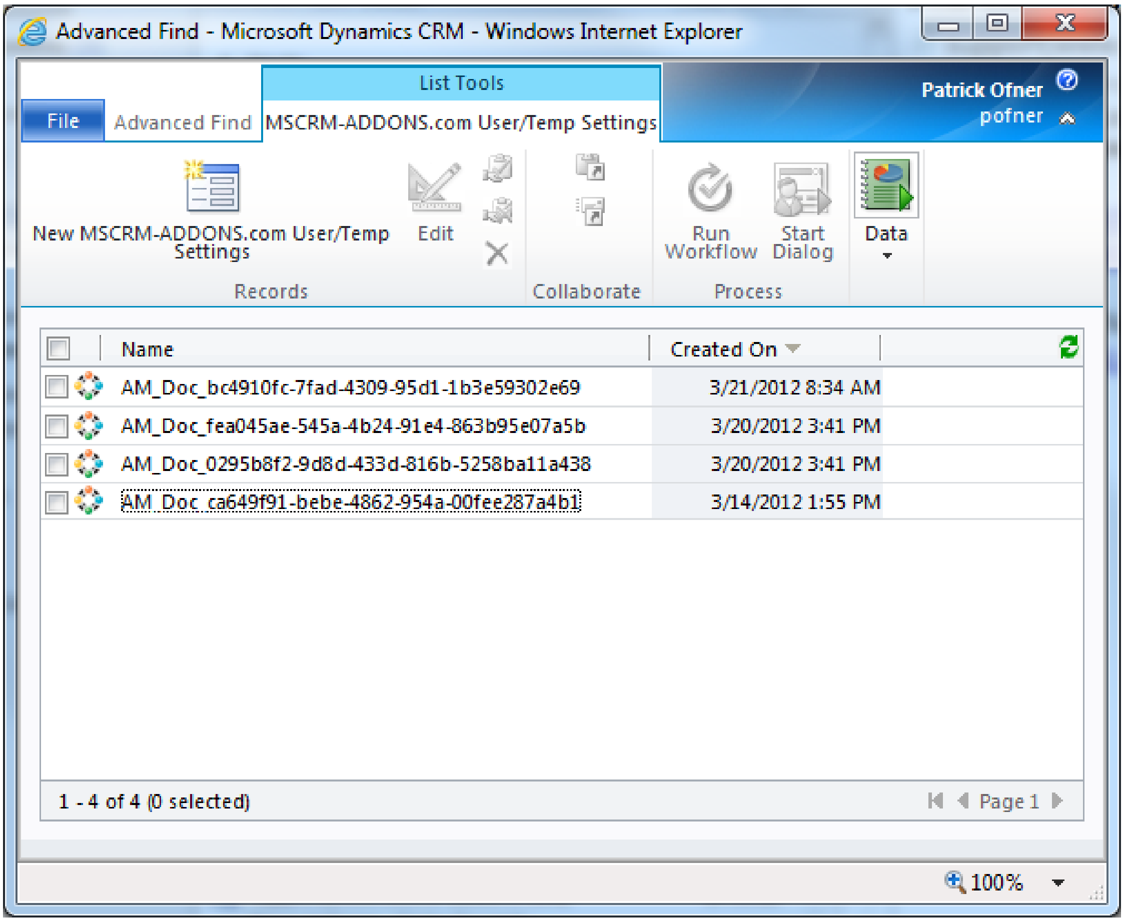
Within CRM hit [Advanced Find]



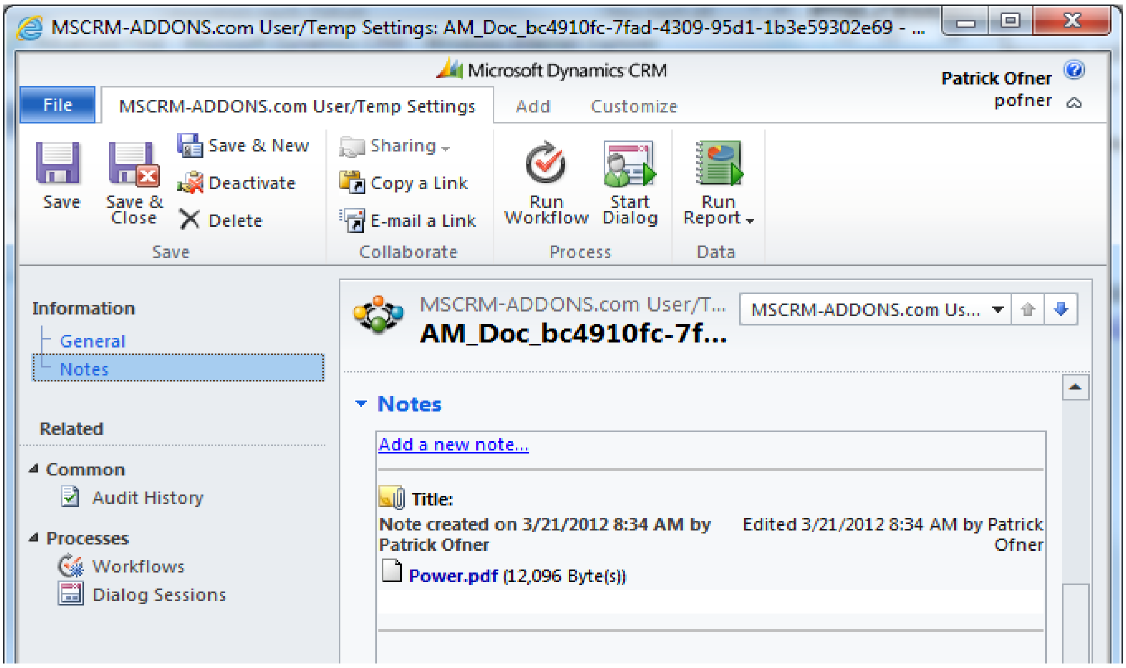
Then the following window will open:



In the „Look for" box select the „MSCRM-ADDONS.com User/Temp Settings" entity. To receive all stored settings only hit [Results].



To ensure that every record name is unique, AutoMerge stores them by using the following structure: "AM_Doc_" + a new Guid.
If you want to have a look at the generated document directly, douple click on the record and navigate to the "Notes"-section.



There you can see the generated document attached.
Its name is taken from the "Document Name"-setting of the template. If the name is not defined, the default structure ("AM_Doc_" + a new Guid) will be taken.

In this example the generated document is of the type ".pdf" This was defined in the "SaveAs" property of the "CreateDocument"-step.

To open the document click on it and your web browser will provide you different ways to achieve this.

4 DCP Client / Templates

For generating documents using AutoMerge you need **.docx templates** as a base.

This section is dealing with templates. It describes what the necessary steps to create them.

To be able to create or modify templates the DocumentsCorePack Client is required. It can be downloaded from our website by using the following link: DocumentsCorePack.

Before you install the DCP Client we recommend reading the "Install Guide", especially chapter 6 "Installing the client component". The whole guide can be found here: Installing DocumentsCorePack.

At this point, the foundation stone for working with templates is laid. The following link will direct you to the DocumentsCorePack User Guide. Chapter 2 "DocumentsCorePack Templates" will walk you through the steps for creating templates.
Please keep in mind that only .docx (Office Open XML) templates are compatible with AutoMerge.
Here is the link to the user guide: DocumentsCorePack User Guide

5 How to filter linked entities during the merge process

It is possible to filter the linked entities of a 1:N and a N:N relationship during the merge process based on their IDs.
This works in combination with DocumentsCorePack and AutoMerge but only with "docx"-templates.

To achieve this, you have to create a new record of the "MSCRM-ADDONS.com User/Temp Settings" entity containing a filter.

Name
Use the "Name"-field to define for which user, entity type and record ID the filter should be used.

- **Structure:** AMPreFilter|<<ID of the user who should use the filter>>|<<the logical name of the starting entity of the template>>|<<ID of the record (of template starting entity) for which the filter should be used>>|<<logical name of the linked entity which should be filtered>>|
- **Example:** AMPreFilter|{DC9B80F8-C781-46D8-9FD6-A3B610836975}|account|{7b069E5412-84F6-E111-977B-00155DC8AE09}|contact|

Value
Use the "Value"-field to define the IDs of the linked records which should be shown in the template.

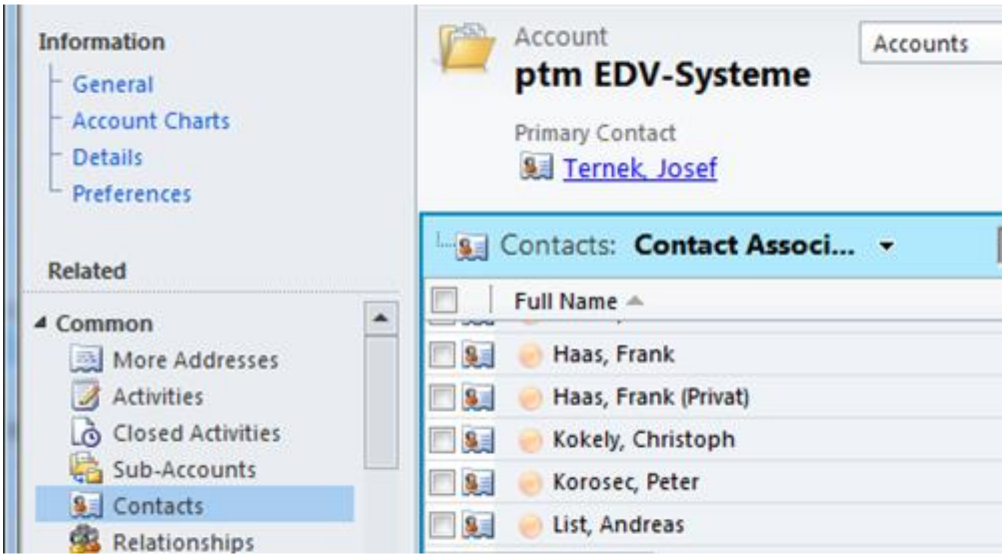
- **Structure:**
  <filter>
  <entity><<logical name of the linked entity which should be filtered>></entity>
  <values>
  <value><<ID of linked record which should be shown>></value>
  <value><<ID of linked record which should be shown>></value>
  …….
  </values>
  </filter>

- **Example:**
  <filter>
  <entity>contact</entity>
  <values>
  <value>{12E5214A-88BF-E111-A7C1-00155DC8AE09}</value>
  <value>{12E5214A-88BF-E111-A7C1-00155DC8AE09}</value>
  </values>
  </filter>

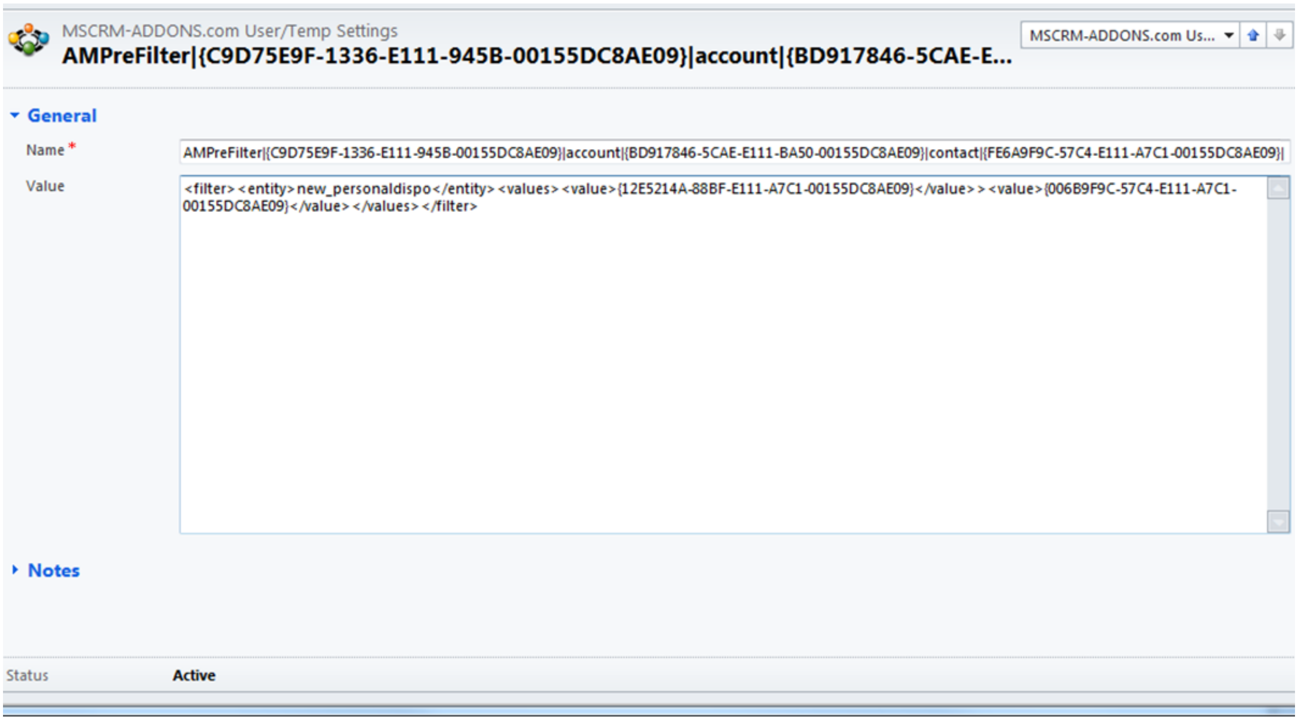
Important: The IDs must be in upper case and must contain brackets.

During each merge process of "docx"-templates, the DocumentsCorePack Client or the AutoMerge add-on looks for a suitable filter.
If such a filter is found, only linked records with a matching ID will be shown. The filter gets deleted afterwards.
Otherwise, the usual merge process remains unchanged.

Example
Here you can see an account named "ptm EDV-Systeme". It has several related contacts.



By using the following filter, only contacts which match the GUIDs in the filter will be shown in the result document. The defined user-GUID and the user running must match as well.



6 How to print documents with AutoMerge (depreciated)

There is a complete new Printing Solution in place since version 5.38.
We made a separate document for the new Printing Solution.
Please download the AutoMerge Printing Guide from our homepage.

This chapter explains how to print documents with AutoMerge. It deals with the prerequisites, namely to install and add a printer before using it with AutoMerge, the specific settings for plug-in-based printing and the procedure of service-based printing.

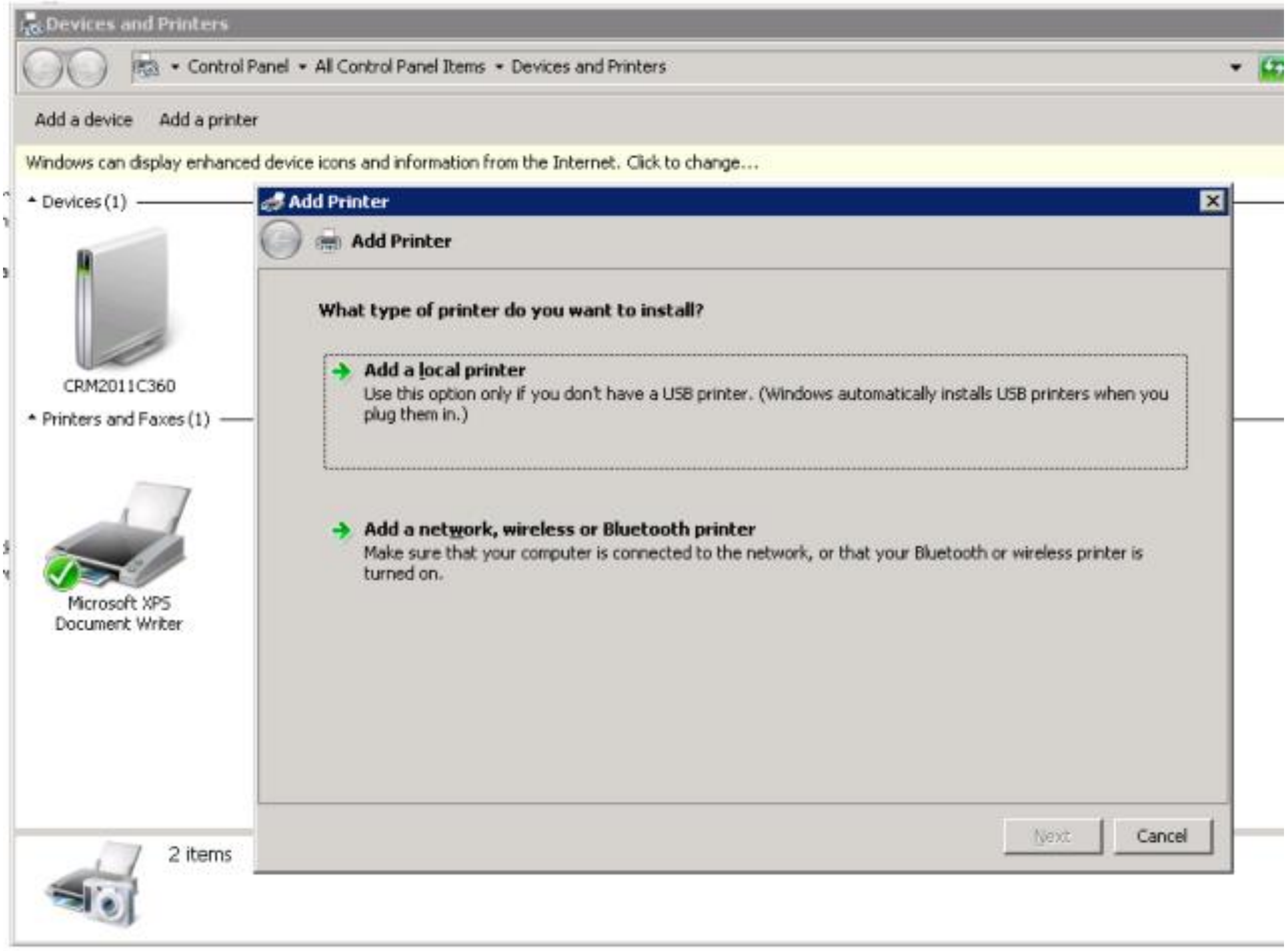
6.1 How to install and add a printer before using it with AutoMerge

With AutoMerge for MS Dynamics CRM 2011 On-Premise/Online, you are able to print the dynamically generated document automatically to a specific printer.

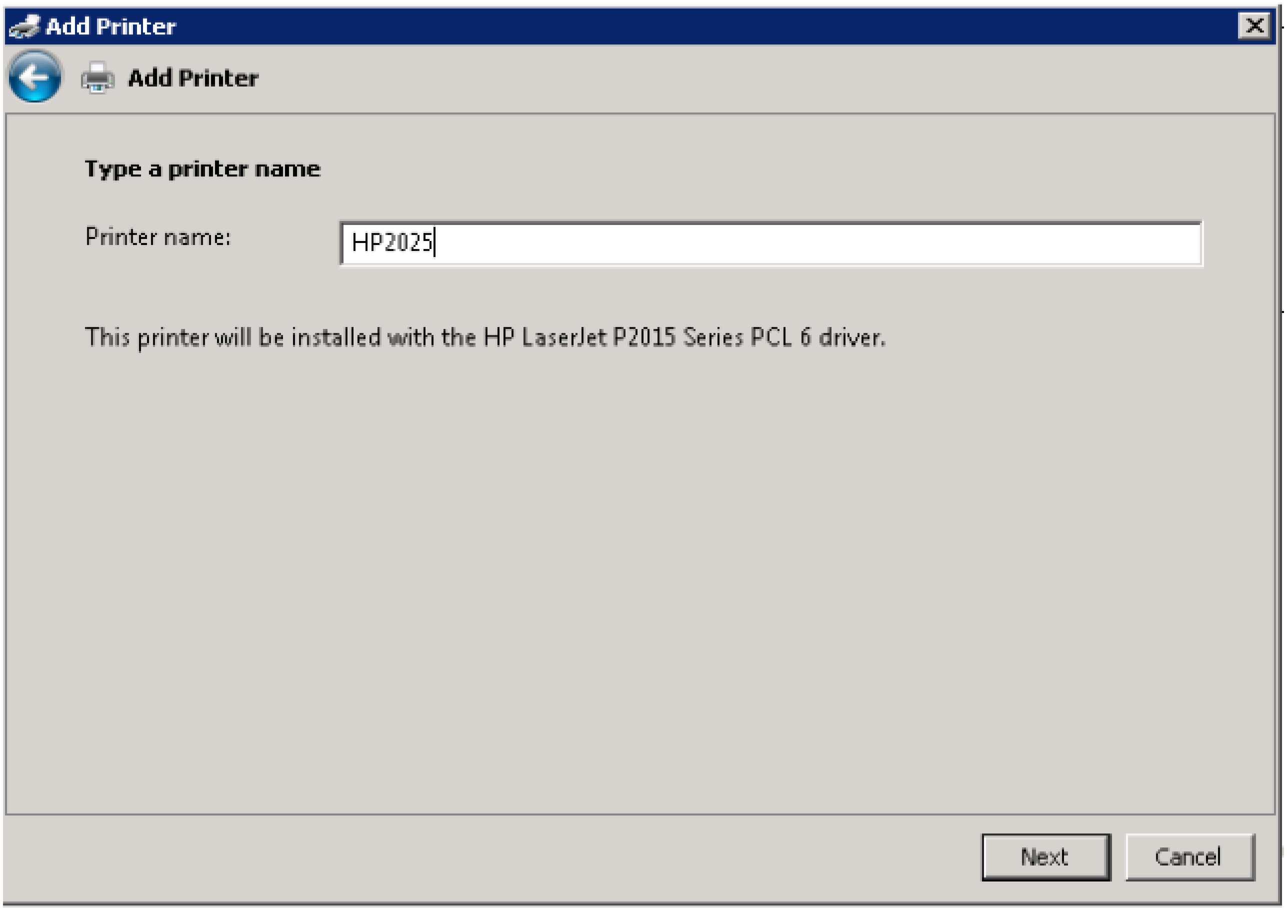
Before you can start to use this functionality, there are several things to do. Because AutoMerge runs as service with a service user, you have to install the printer as described in the steps below to ensure that the service user has access.

How to install a printer which is visible for services:

Go to the Control Panel -> Devices and Printers
Click on "Add a printer"
It is very important to select "Add a local printer" (see screenshot below)



Step through the rest of the wizard and create a new port.
Type in a simple name for the printer without using spaces. This makes it easier for you to retype the printer name in the different workflows of AutoMerge. (see screenshot below)



At the end, please try to print a test-page to see if it is working correctly.

6.2 Specific settings for plug-in based printing

With AutoMerge for Microsoft Dynamics CRM 2011 On-Premise/Online, you are able to print the dynamically generated document automatically to a specific printer. Sometimes, the printer settings regarding trays, duplex, size, etc. are not applied if you define them using a specifc user account, because the service runs under different user accounts. In order to avoid this, AutoMerge offers you the possibility to define specific printing options in the workflow itself.

The table below lists all special settings which you can define for the printer in the workflow. To make use of them, you just have to add the options you need when entering the printer name in the workflow-configuration. Of course you can also combine settings, like in the following example:

HP2025|copycount=2|tray=3

NOTE: The settings listed below are valid for plug-in based printing processes only. Settings for service-based printing processes when using AutoMerge will follow soon. (Please click here to get details about service-based printing when using AutoMerge.)

AVAILABLE SETTINGS FOR PLUG-IN BASED PRINTING PROCESSES WITH AUTOMERGE		
Name	Possible values	Description
mediasize	a3 a3rotated a4 a4rotated a5 a5rotated a6 a6rotated	If you have a specific mediasize you can use this setting. eg.: HP2025|mediasize=a4
copycount	1-999	Define how many copies you want to have. eg.: HP2025|copycount=4
duplex	onsided twosidedlongedge twosidedshortedge	For printers which are able to print twosided you can use this option.
outputcolor	grayscale color monochrome	Define the color using this setting.
tray	1-99	Each tray has a number and the first tray is normally auto select. In most cases, you have to try the different numbers to find out which number refers to which tray. e.g.: HP2025|tray=2

6.3 Service-based printing with AutoMerge

AutoMerge now offers a service-based printing option which is available additionally to the already known plugin-based printing-option. The additional option is available within AutoMerge for MS Dynamics CRM 2011 v5.30 and higher and is based on a service which is running in the background.

This sub-chapter covers the following essential topics:

- Creation of a service for printing documents
- Adding the service-based printing step to a workflow
- Exception 1: Adding the service-based printing step to already existing workflows
- Exception 2: Adding the service-based printing step to workflows including a 'Delete Document'-step

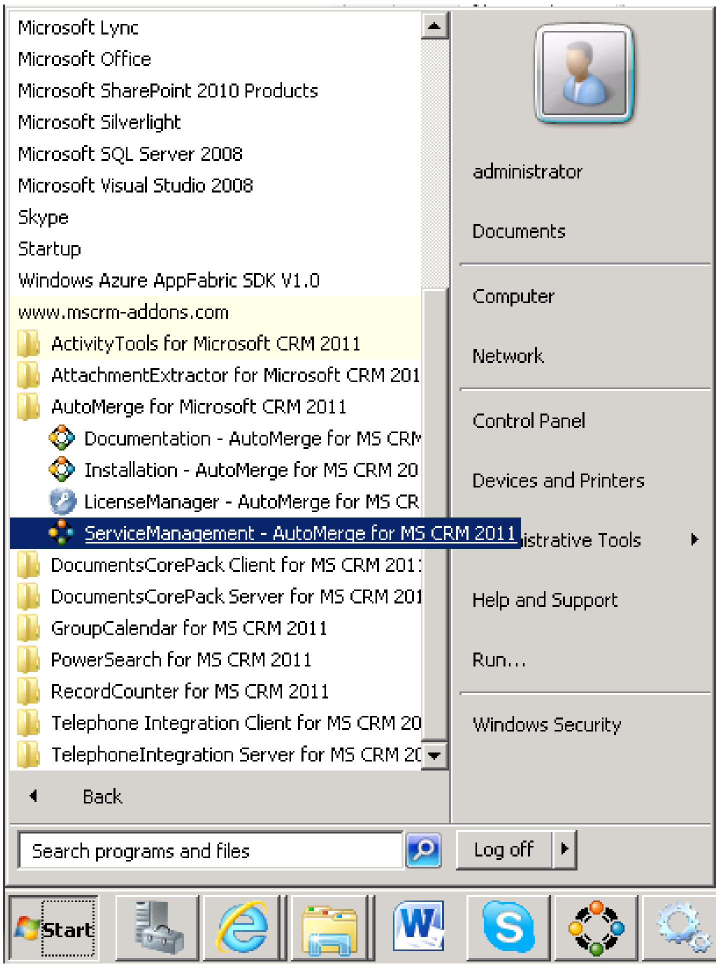
Before you continue reading, please make sure that you installed AutoMerge v5.30 or higher. After that, please proceed as described in the sections below.

NOTE: If you already run a service for printing documents (as this is quite usual when using AutoMerge with CRM Online), you can skip the first section of this article and can continue reading in the 'How to add the service-based printing step to a workflow'-section further down.

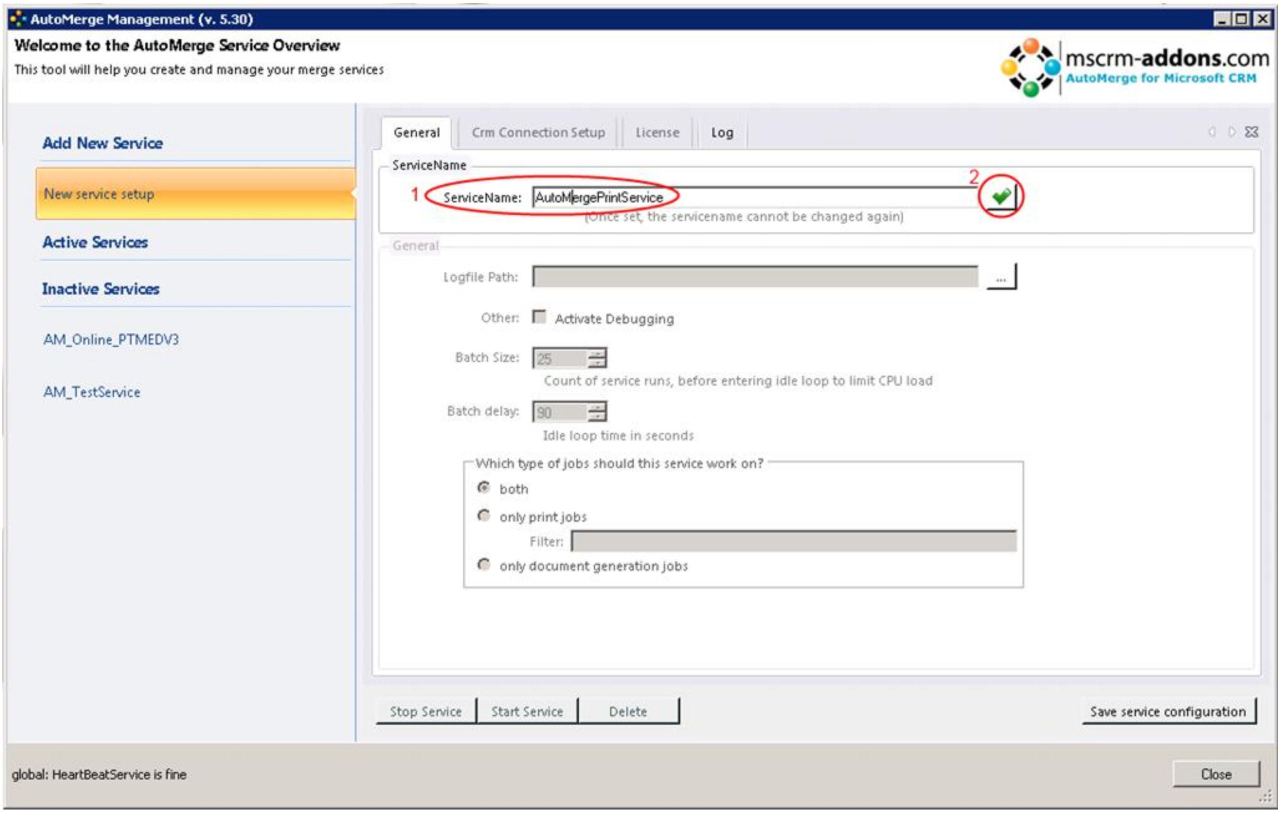
How to create and configure a service for printing documents using AutoMerge for MS Dynamics CRM 2011

Before you are able to add the service-based printing to a workflow, you need to configure and start a service. To do so, please follow the steps below:

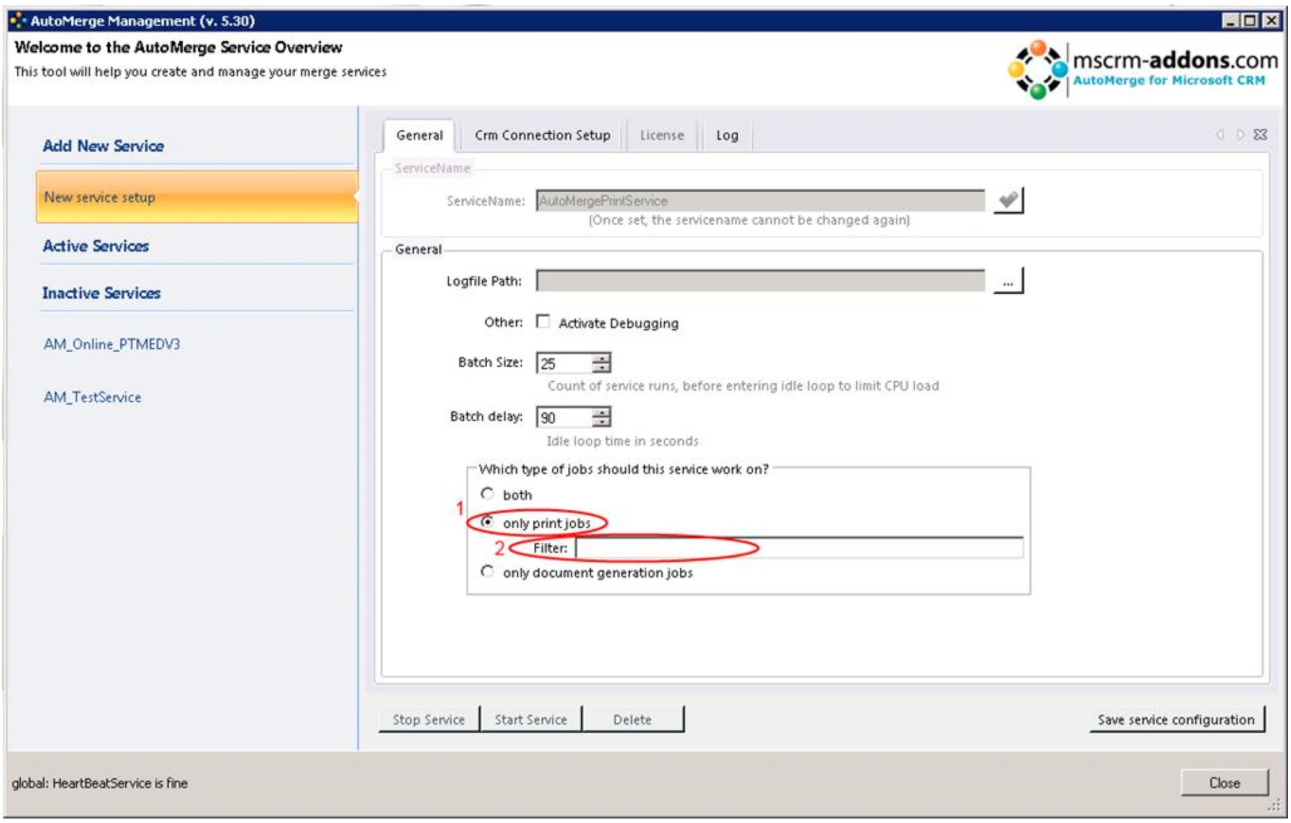
1. Start the AutoMerge ServiceManagement from within the Windows start menu. (see screenshot below)



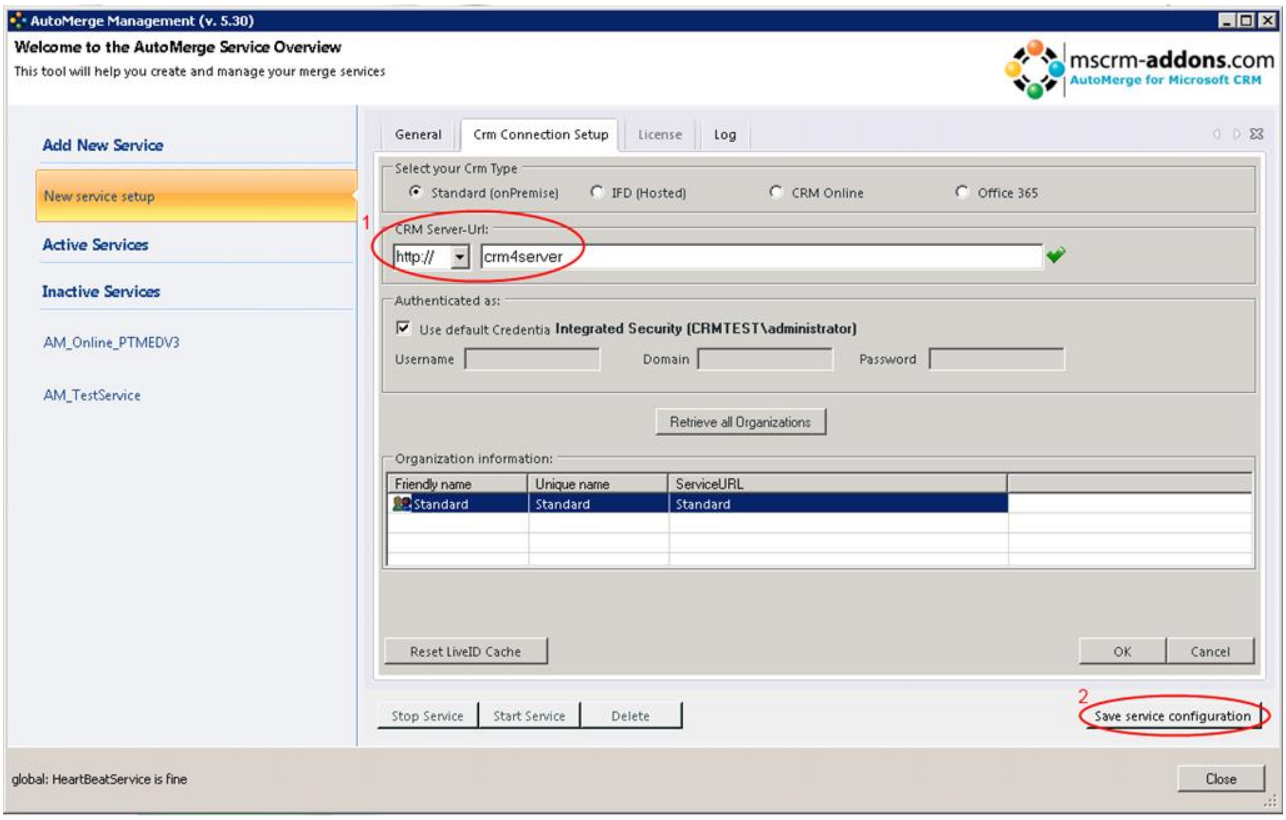
2. Here you can create a new service. Type in a name of the service (see screenshot, ellipse 1) and click on the green tick (see screenshot, ellipse 2).



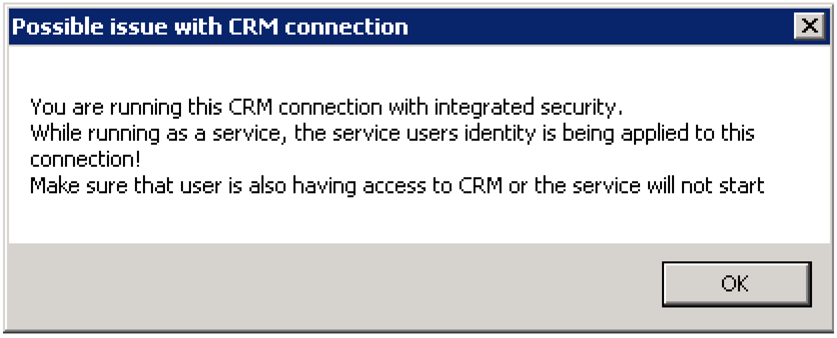
3. After that, you have to define which type of jobs the service should work on. Select 'only print jobs' (see next screenshot, ellipse 1). Furthermore, you have the possibility to set a filter for the printer to be used. (see next screenshot, ellipse 2) Setting this filter is essential e.g. in the following case: If you have offices in Austria and the US, you can type in the name of the printer located at your site (e.g. at your Austrian office) in order to avoid that your documents are printed by the printer located at the other site (e.g. at your American office).



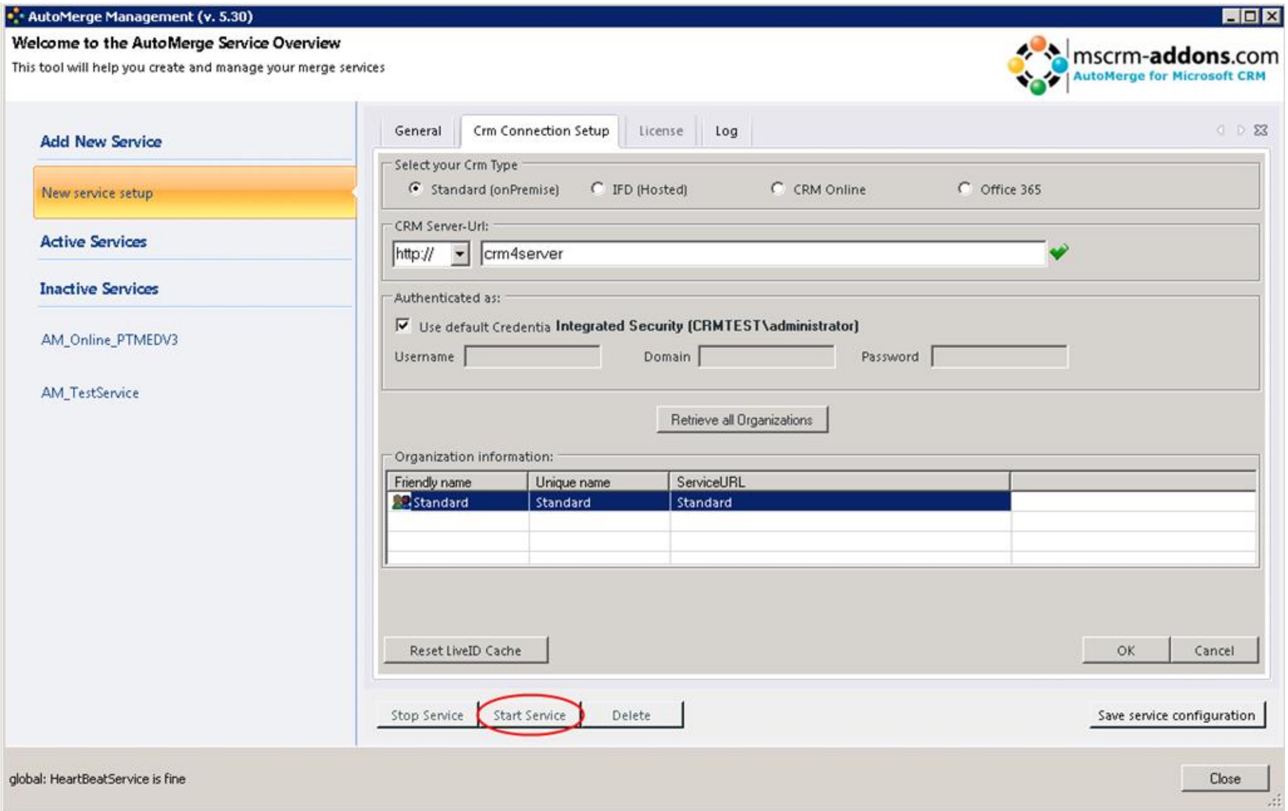
4. Then, switch to the 'CRM Connection Setup'-tab and type in the CRM Server-URL (see screenshot below, ellipse 1). After that, click on 'Save service configuration' (see screenshot below, ellipse 2).



In case the following message box is popping up, click on 'OK'. (see screenshot below)



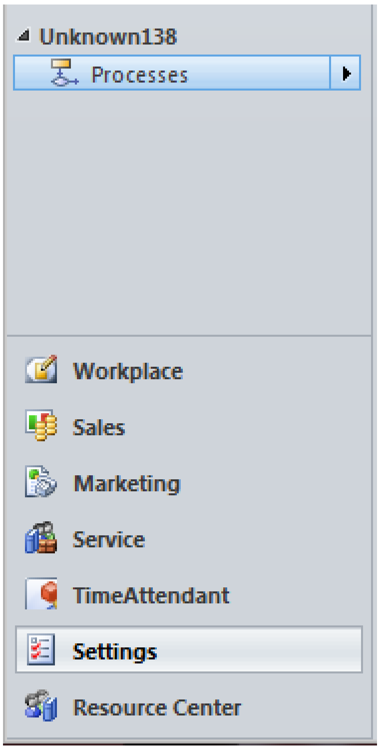
5. Afterwards, click on 'Start Service' and the service starts to run in the background (see screenshot below)



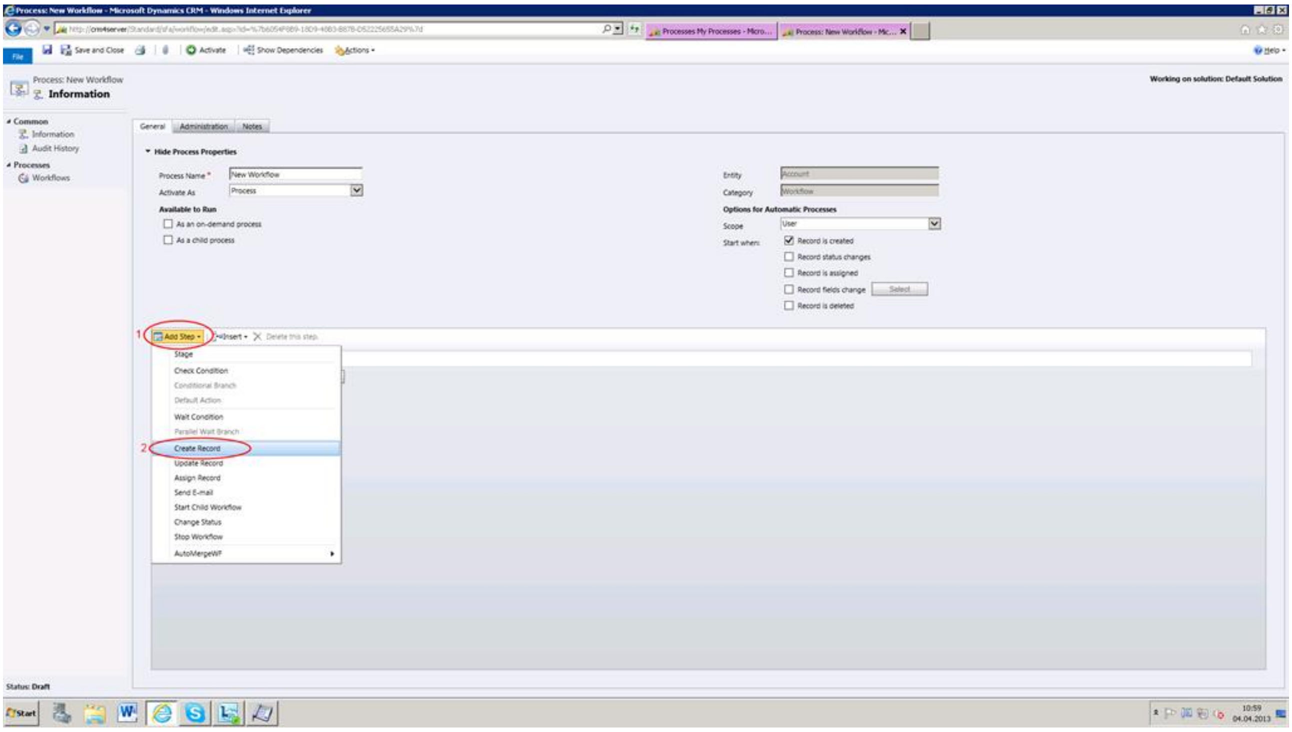
After having configured and started the service for printing, you can start to configure a workflow including the service-based printing option. In the example below, we will highlight how to appropriately add this 'Print to'-step.

How to add the service-based printing step to a workflow

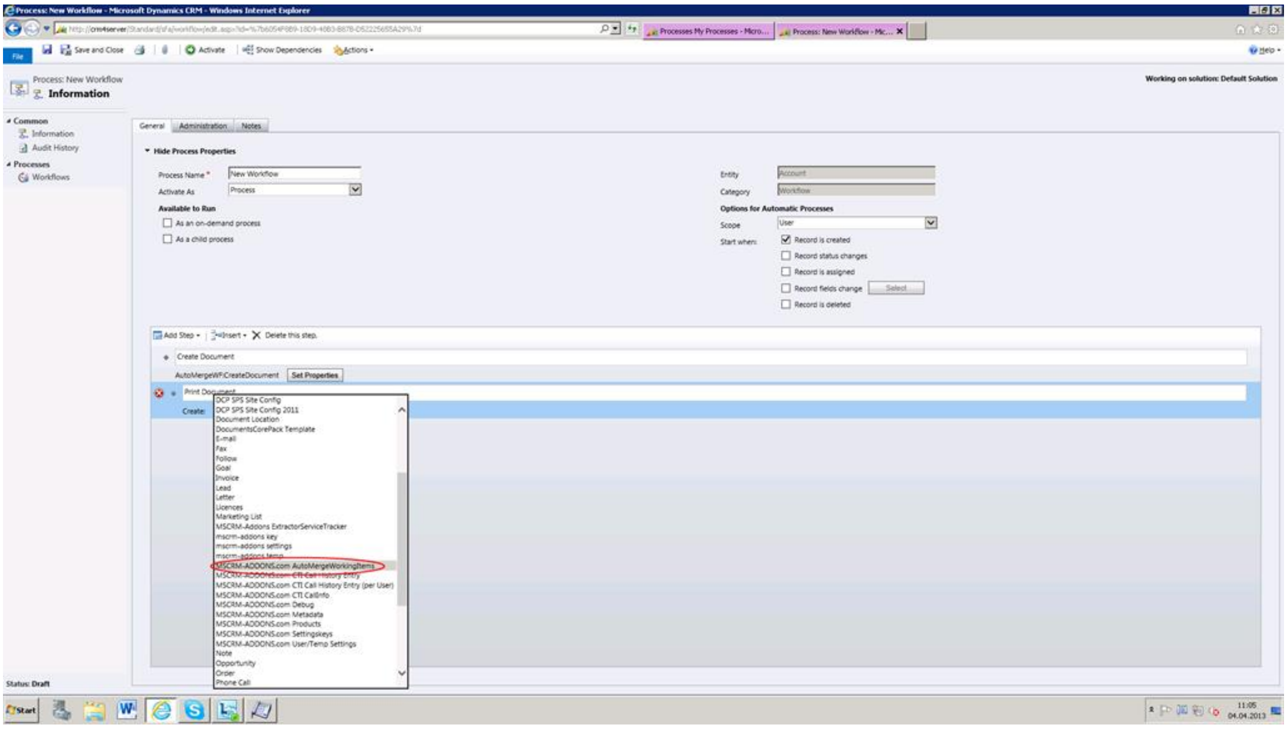
1. Start your CRM. Go to the 'Processes' within the 'Settings'-area . Here, you have the possibility to create a new workflow.



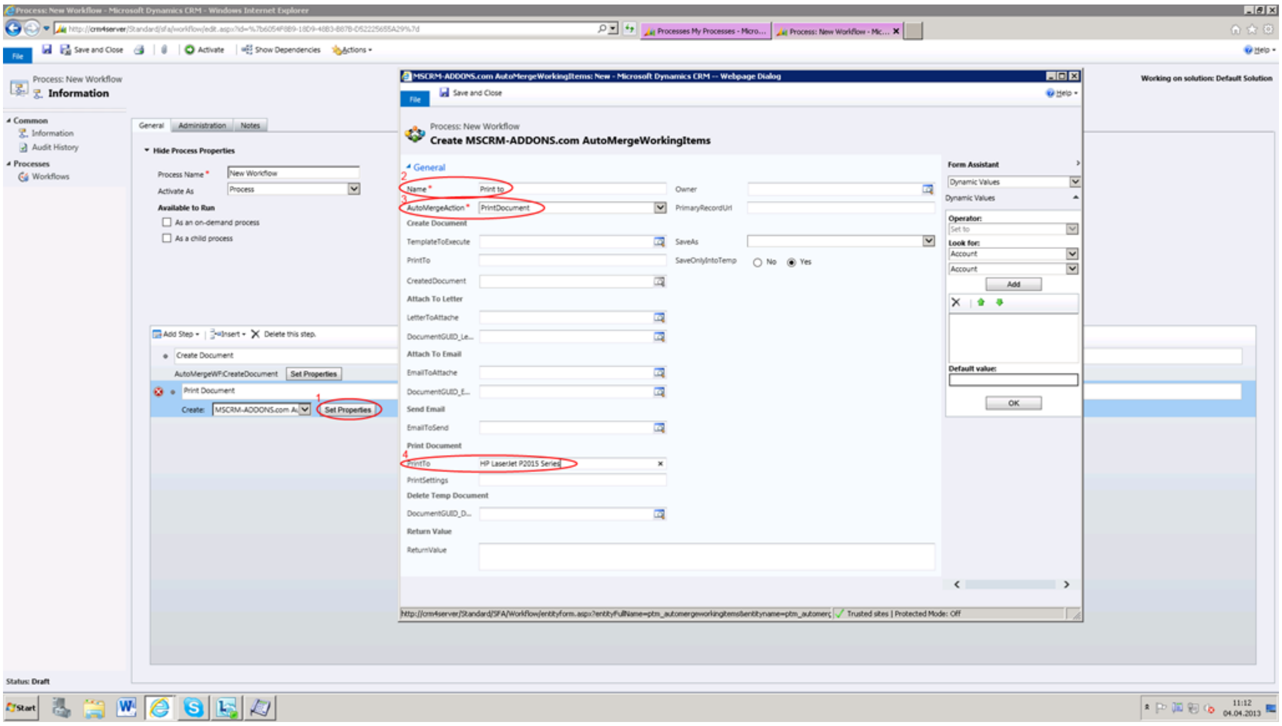
2. Start to create a workflow and to add the ‘CreateDocument’-step. If you would like to add the service-based printing step afterwards, click on ‘Add Step’ (see screenshot, ellipse 1) and chose ‘Create Record’ from the drop down menu (see screenshot below, ellipse 2).



3. Then, open the drop-down menu within the newly added step and chose ‘MSCRM-ADDONS.com AutoMergeWorkingItems’ (see next screenshot).

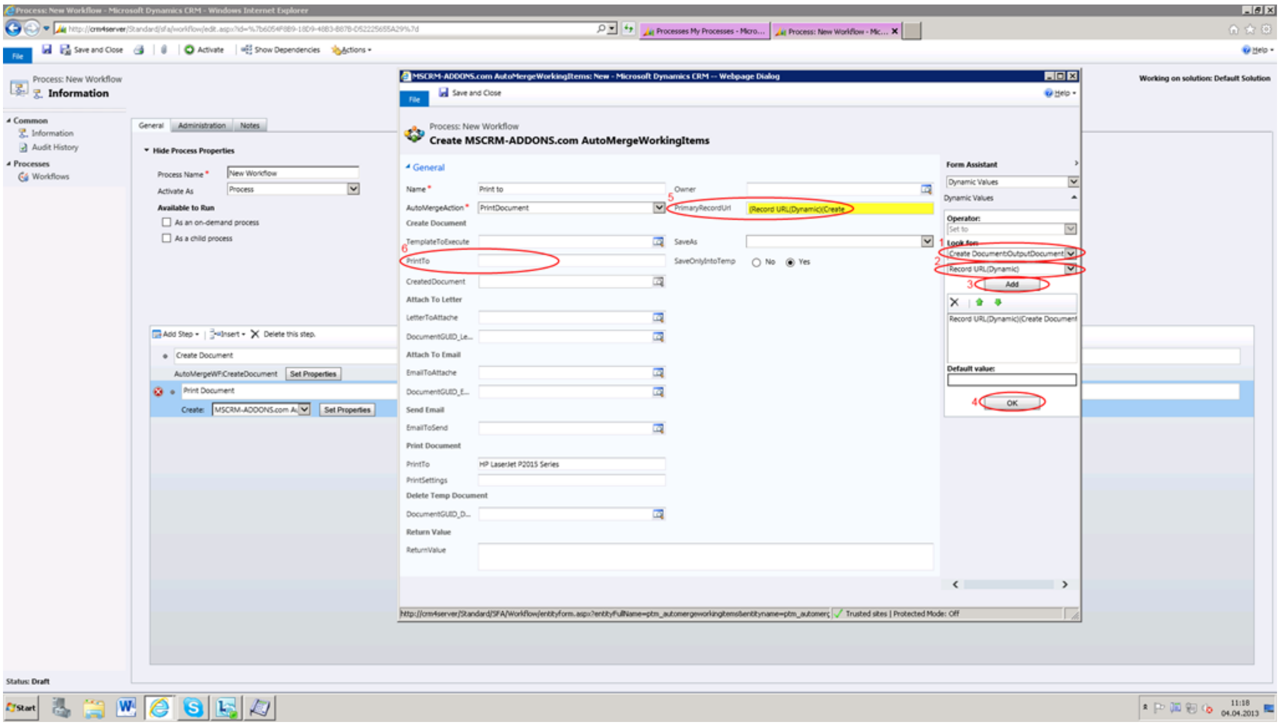


4. Afterwards, click on ‘Set Properties’ (see screenshot, ellipse 1). A new window opens. Within this window, you can continue to appropriately configure the newly added step. Type in the name of the step (see screenshot below, ellipse 2), and select ‘PrintDocument’ as ‘AutoMergeAction’ (see screenshot, ellipse 3). Then, type in the name of the printer to be used in the ‘PrintTo’-field within the ‘Print Document’-section (see screenshot, ellipse 4). **IMPORTANT:** Before typing in the printer's name within this step, you have to ensure that the printer has been installed and added appropriately. Furthermore, it is crucial to use the same name as used during the printer-installation process. For more details, please see chapter 6.1.)



5. Finish to configure the service-based printing step by adding the 'PrimaryRecordURL'. To do so, you have to select 'CreateDocument:OutputDocumentRef' from the first drop-down menu of the 'Look for'-area within the form assistant on the left (see screenshot, ellipse 1). Afterwards, select 'RecordURL(Dynamic)' from the drop-down menu below (see screenshot, ellipse 2). Then, click on 'Add' (see screenshot, ellipse 3) and on 'OK' (see screenshot, ellipse 4). Afterwards, the 'PrimaryRecordURL'-field is automatically filled (see screenshot, ellipse 5). Click on 'Save and Close'. Now you have appropriately added the service-based printing step.

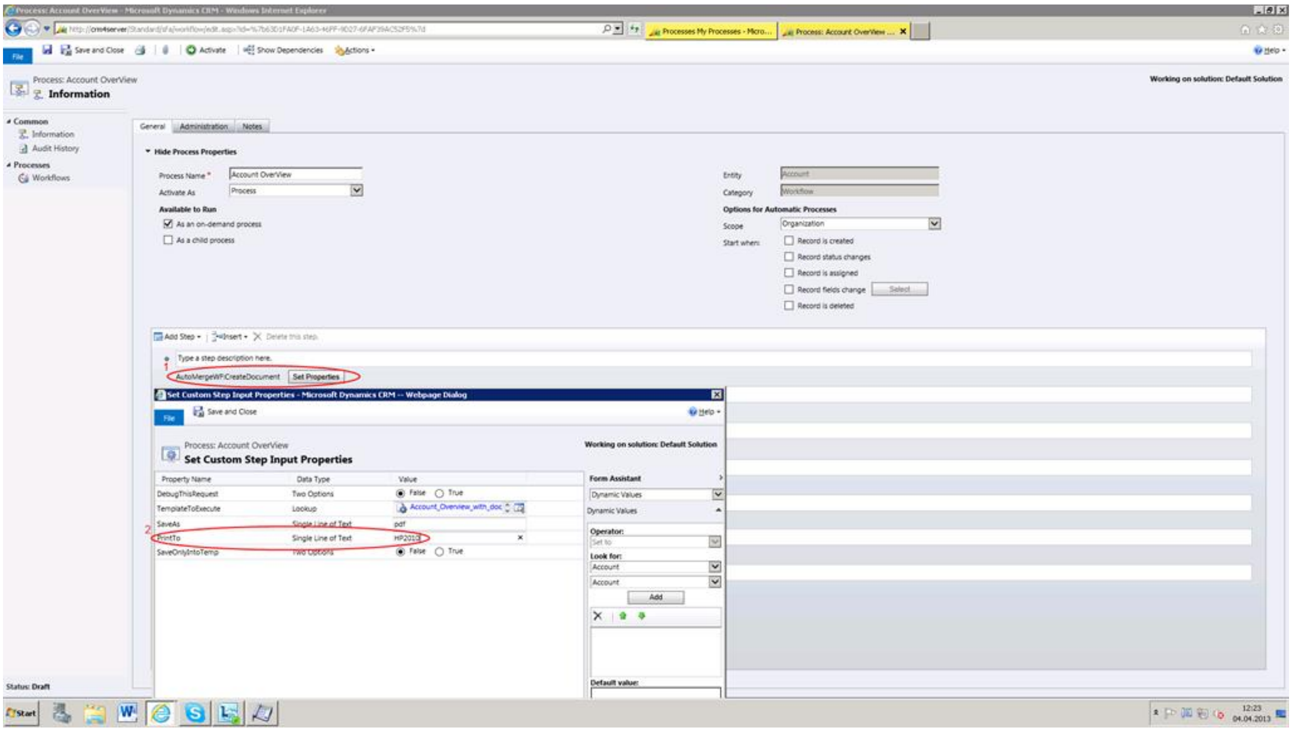
NOTE: If there is already a printer name specified within the 'Print To'-field in the 'Create Document'-section, you have to delete this name to avoid double printing (see screenshot, ellipse 6).



Exception 1: Adding the service-based printing step to already existing workflows

If you would like to add the service-based printing step to an existing workflow which includes a plug-in based printing step, you need to do the following:

Chose the workflow which you would like to modify and deactivate it. Then, double-click on it and open the 'CreateDocument'-step by clicking on 'Set Properties' (see next screenshot, ellipse 1). A new window will open. Within this window, delete the printer-name (see next screenshot, ellipse 2) and click on 'Save and Close'.

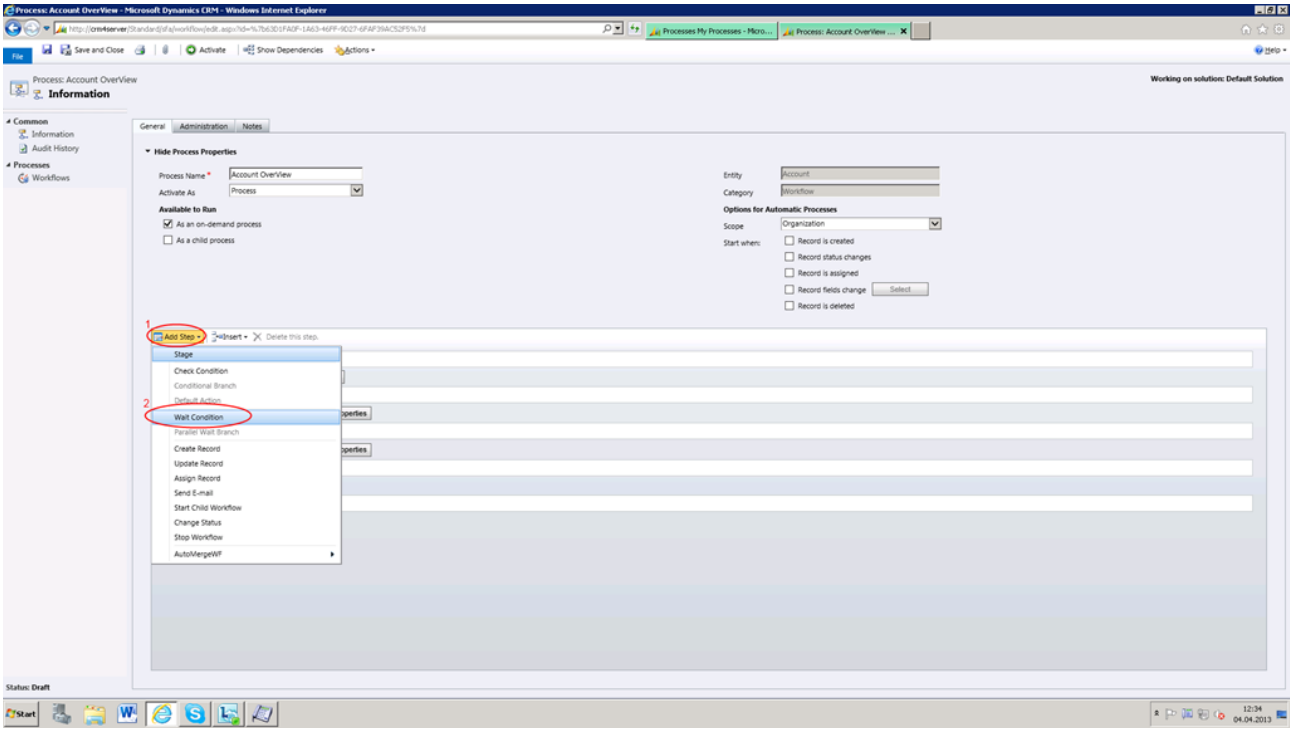


After having deleted the plug-in based printer step, you can add the service-based printer step directly after the already existing 'Create Document'-step of the workflow. To do so, please follow the steps in the 'How to add the service-based printing step to a workflow'-section above.

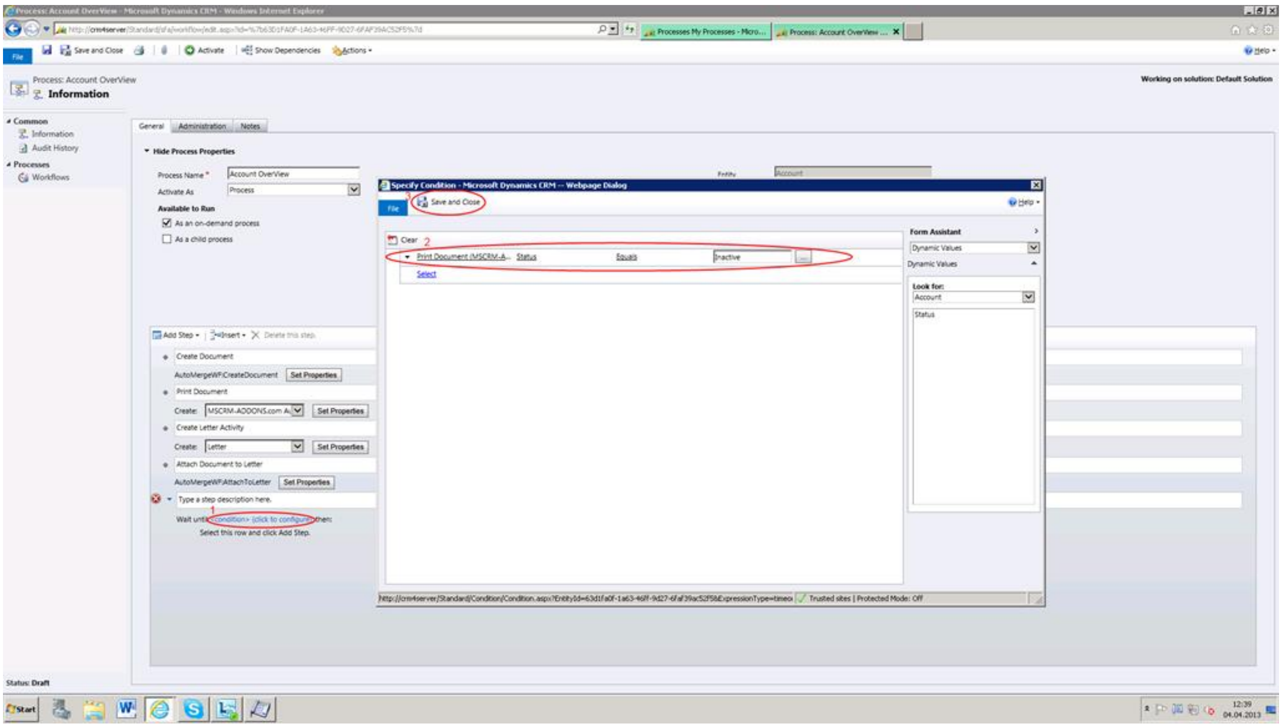
Exception 2: Adding the service-based printing step to workflows including a 'Delete Document'-step

If you would like to add the service-based printing step to a workflow which includes a 'Delete Document'-step it is important to know that the service is only checking every 90 seconds if there are generated documents to be printed. In the worst case, documents are generated and deleted within this 90 seconds and the service is not able to print the documents, because they have been already deleted. To avoid this, it is important to include a 'Wait'-condition before the 'Delete Document'-step in your workflow. To do so, follow the steps below:

1. Click on 'Add Step' (see screenshot, ellipse 1) and chose 'Wait Condition' from the drop down menu (see next screenshot, ellipse 2).



2. Click on 'condition (click to configure)' within the newly added wait condition (see screenshot, ellipse 1). A new window opens. Within this new window, you have to specify the wait condition. Chose 'Print Document (MSCRM-ADDONS.com AutoMergeWorkingItem' from the first drop down menu, 'Status' from the second, 'Equals' from the third and 'Inactive' from the fourth drop down menu (see screenshot, ellipse 2). The condition now causes that generated documents are only deleted if they have been already printed. Afterwards click on 'Save and Close' to complete this workflow step (see screenshot, ellipse 3).



7 Examples

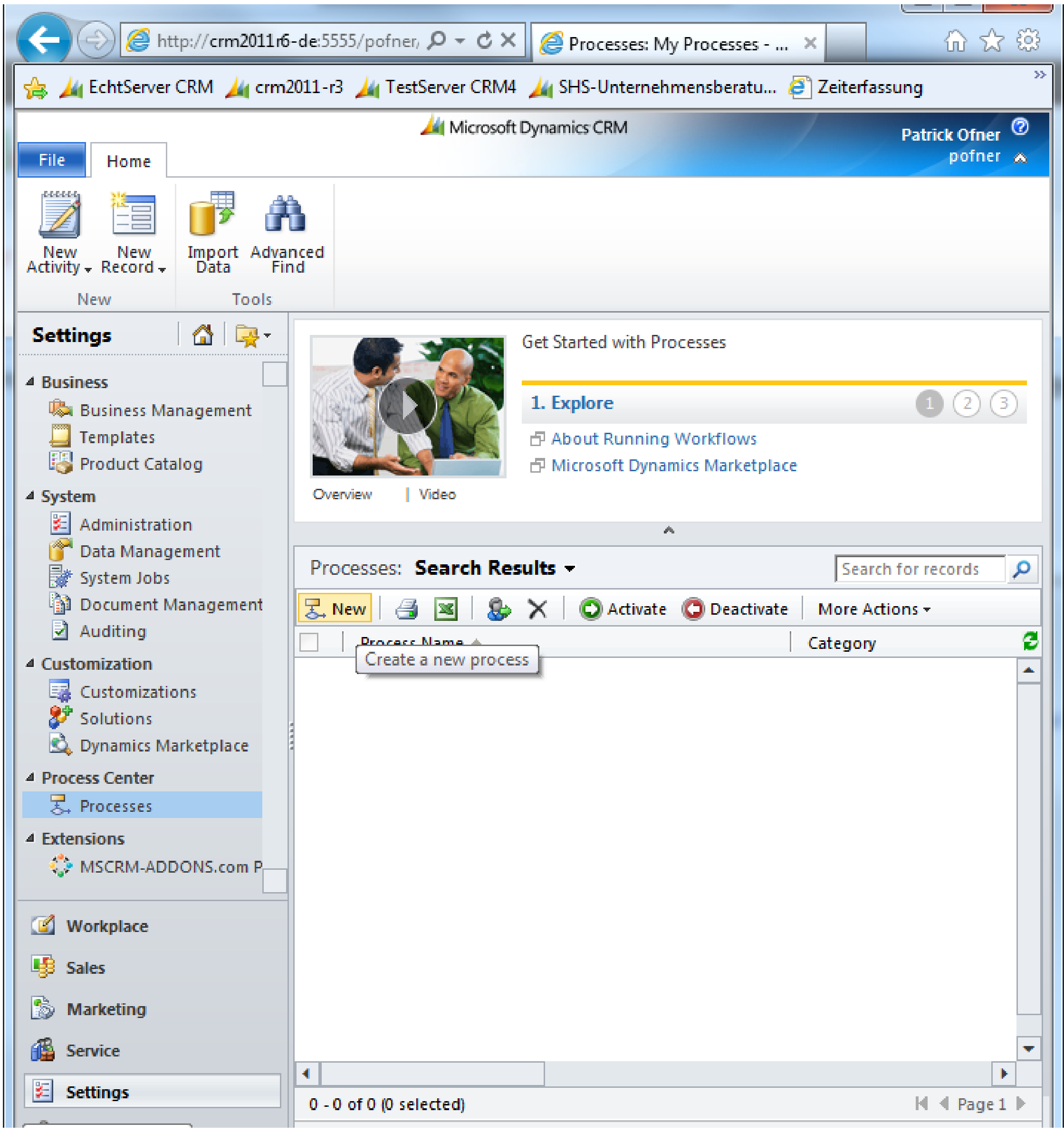
In this section you can find two AutoMerge examples.

7.1 Scenario 1: Workflow

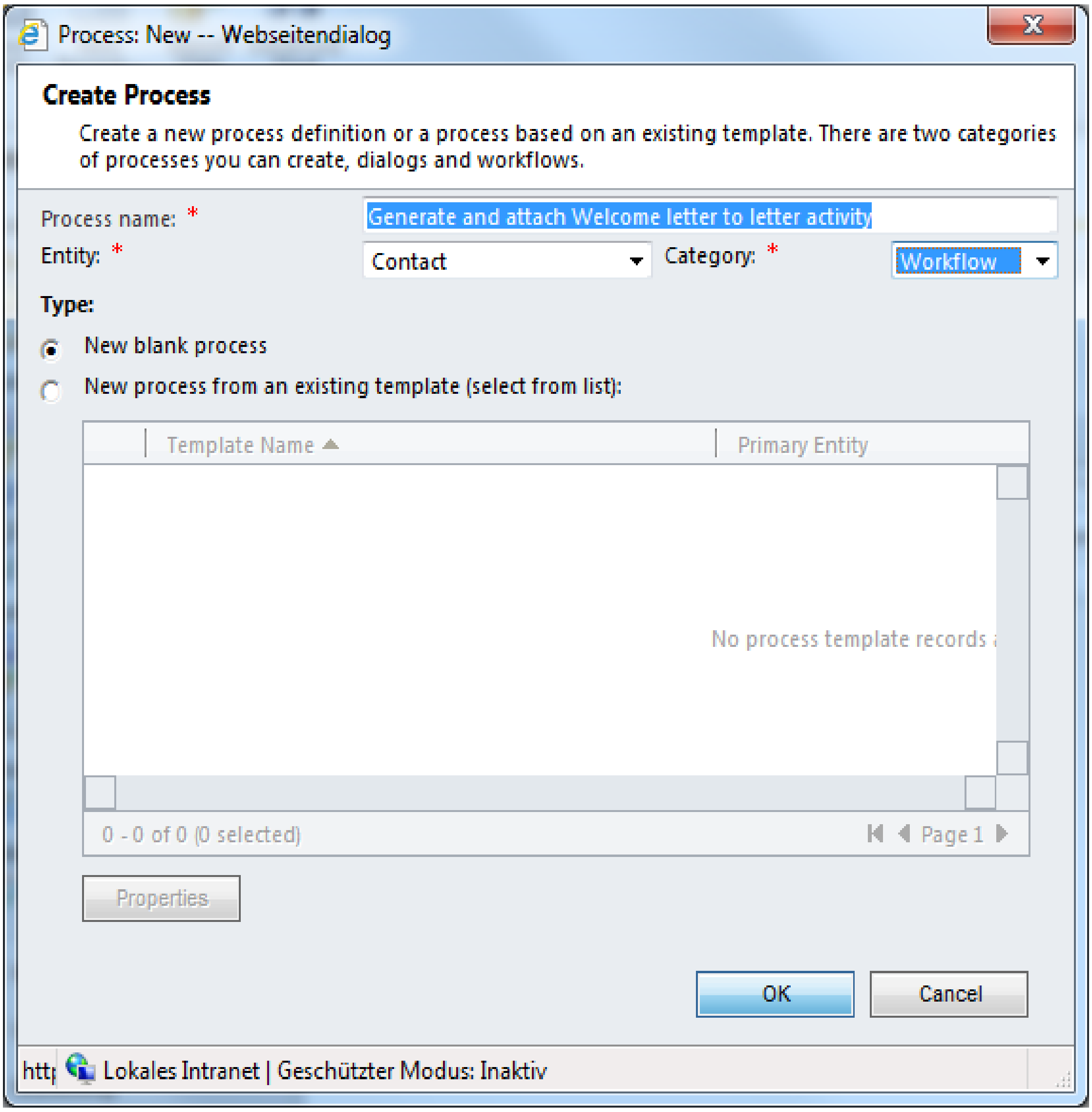
In the first scenario we want to use AutoMerge to achieve the following: For each newly created contact we want to create a welcome letter and attach it to a CRM letter-activity.
This Scenario only works with On-Premise.

INFO: This example workflow can be downloaded here: http://mscrm-addons.com/LinkClick.aspx?fileticket=Pdo9Ke3QM8A%3d&tabid=176&mid=830

To achieve this, we have to create a new workflow. Within CRM we navigate to "Settings" -> "Processes" and hit [New].

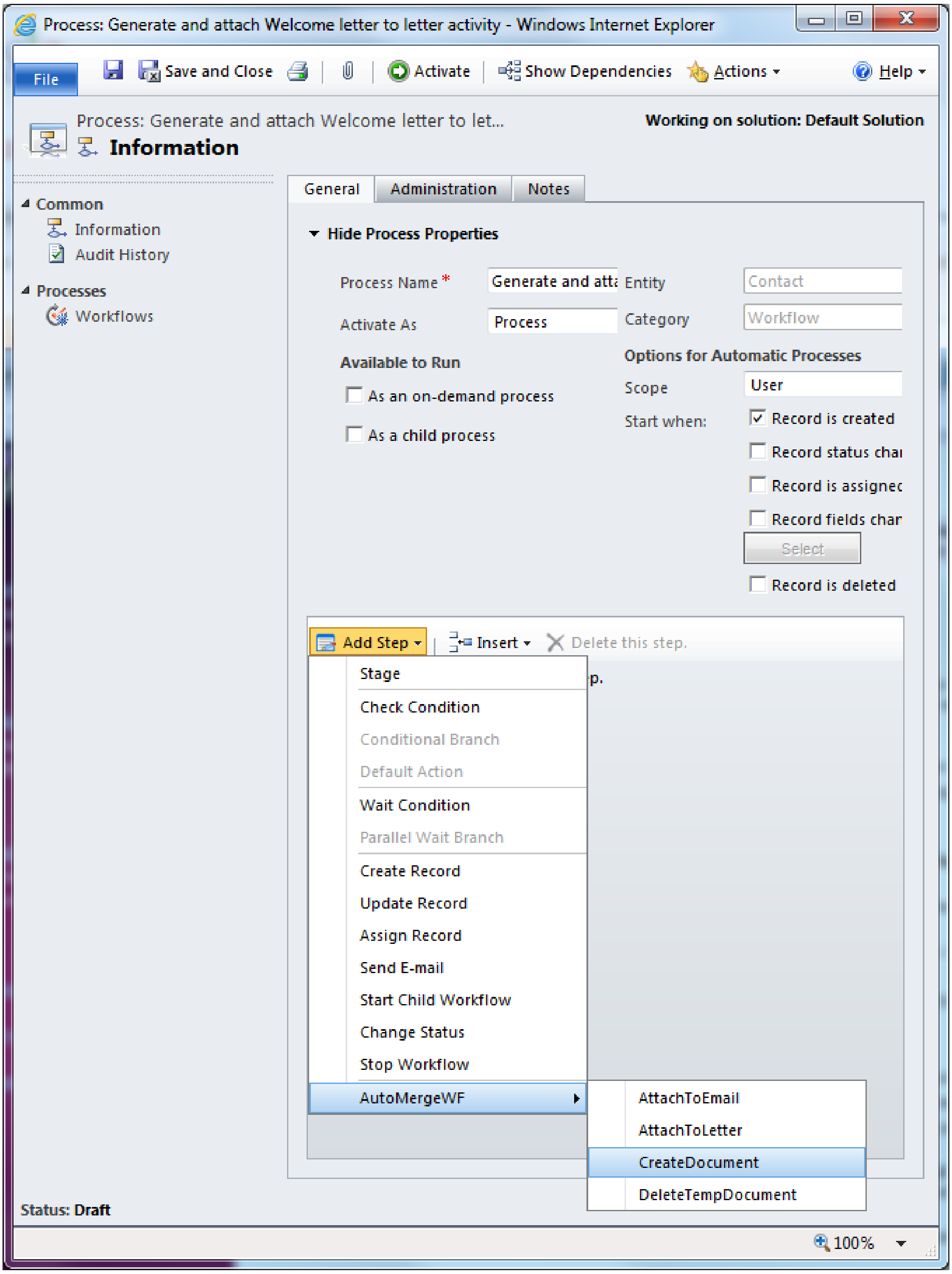


Thereupon, the following dialog will appear:



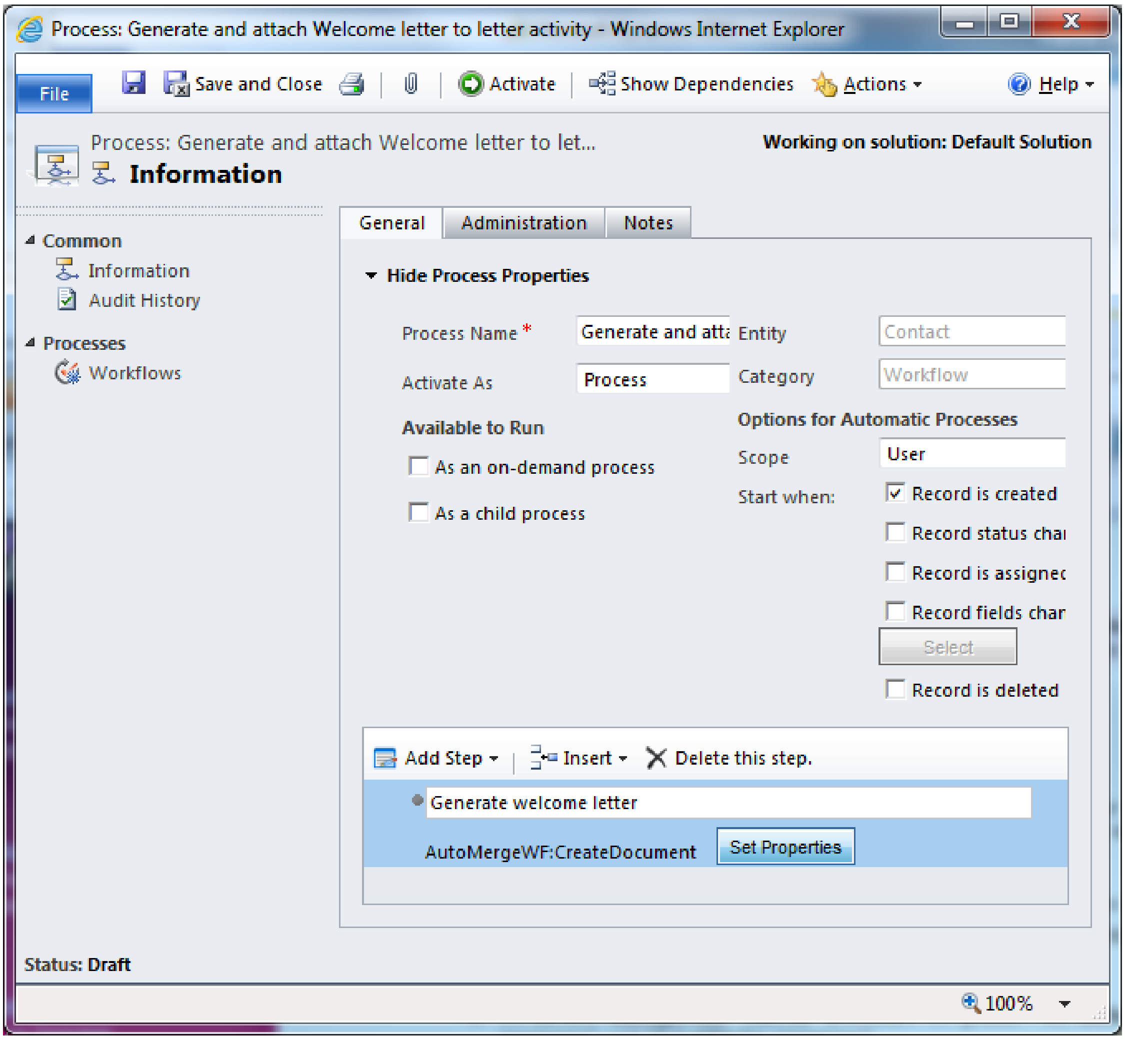
We type in a name of the new process ("Generate and attach Welcome letter to letter activity"), select the "contact" entity and choose the "Workflow" category. Furthermore, we leave the default setting "New blank process".

We hit [OK] to proceed.
Then the following window will open:

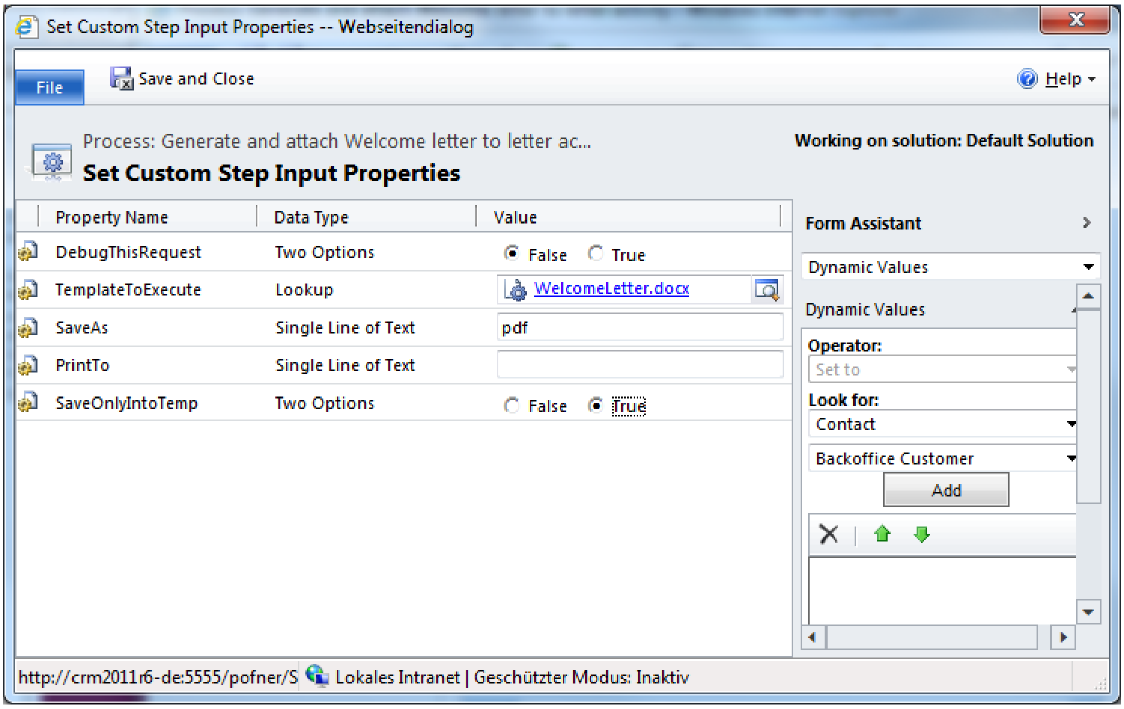


Due to the fact that we want to create a welcome letter for every new contact we have to choose "Record is created" as starting option.

Then we add a new "CreateDocument"-step to the workflow:



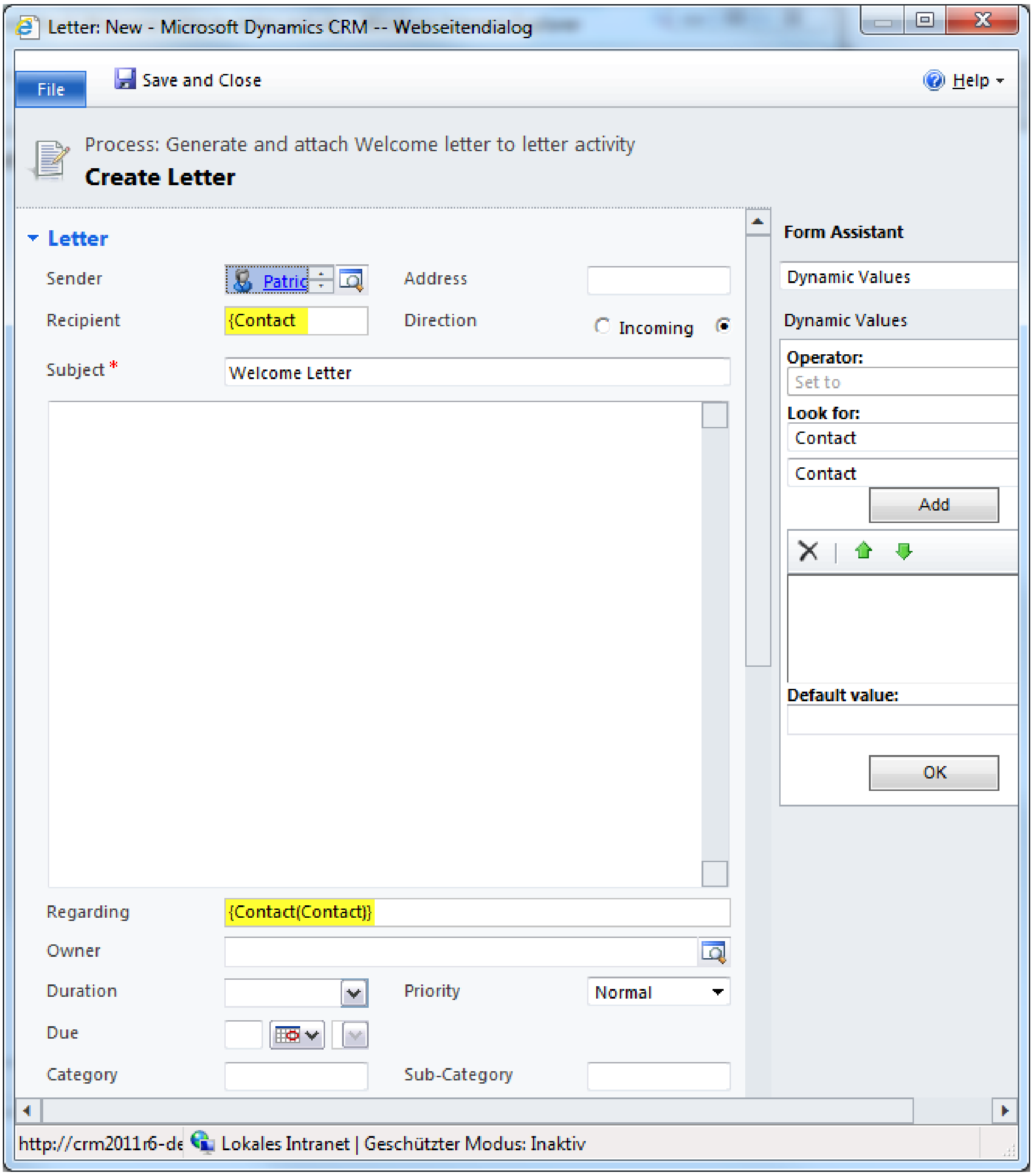
We type in the name “Generate welcome letter” and hit [Set Properties] to define them. Thereupon, a new dialog will appear:



- **DebugThisRequest**:We set this property to "False" because we do not need any log files.
- **TemplateToExecute**: Here, we select the "WelcomeLetter.docx" template.
- **SaveAs**: The generated document should be stored as .pdf. To achieve this, we have to fill in "pdf".
- **PrintTo**: we don't want to print the generated document. Therefore, we leave this field empty.
- **SaveOnlyIntoTemp**: We set this option box to "True", because first we only want to save the template locally and then we want it to be attached to the letter. There is no need to additionally save it on a file share or SharePoint.

Then we hit [Save and Close].

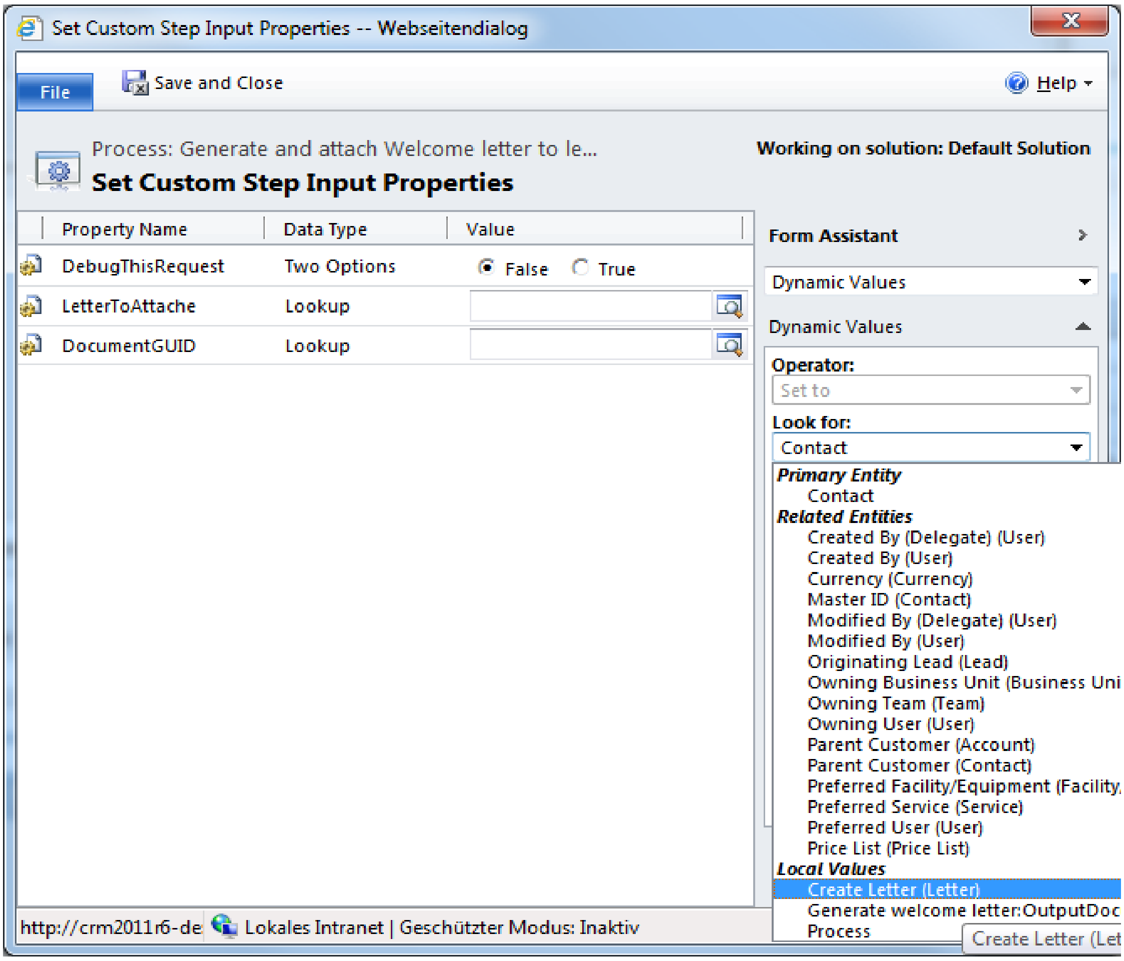
Next, we want to create a letter to which the generated document will be attached later. To achieve this, we add the standard workflow step "Create Record" to the workflow. We type in the name "Create Letter", choose "letter" in the drop down box and hit the "Set Properties"-button.



We selecte any user as sender.
The "Recipient" should be the newly created contact. This can be achieved by using the "Form Assistant" at the right side of the window: First, we place the cursor in the "Recipient" field. Then, we select the "Contact" entity and its "Contact" field. Afterwards, we hit [Add] and [Ok] to include it.
The "Regarding" field is set automatically.

We hit [Save and Close] to proceed.

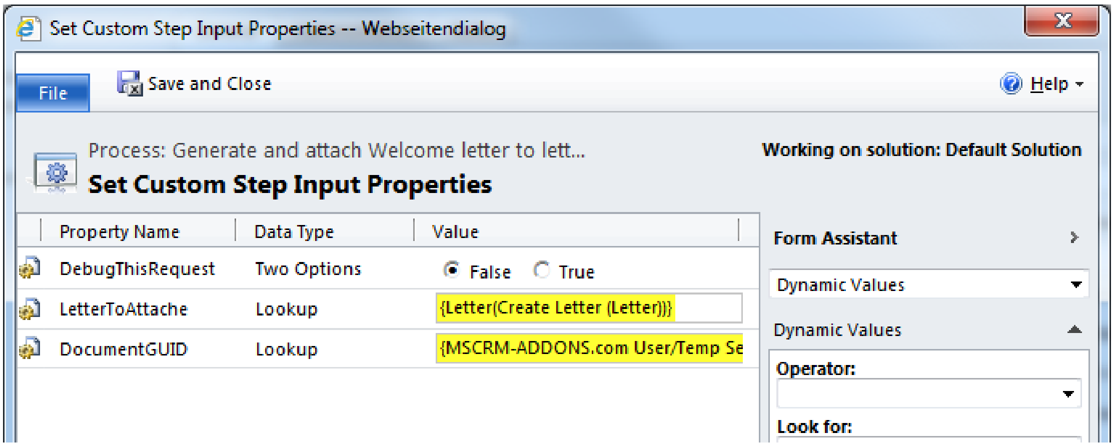
Next, we have to attach the generated document to the created letter. This can be done by using the "AttachToLetter" request of the AutoMerge steps. We add this step, type in the name "Attach Document To Letter" and hit [Set Properties] again. Thereupon, the following dialog will appear:



Within this dialog, we define the values of the following properties:

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **LetterToAttach:** Here we have to refer to the before created letter. We do this by using the "Form Assistant" again. First, we set the cursor in the field of the property. Then, we select "Create Letter (Letter)" of the "Local Values" like shown in the screenshot above. Then, we hit [Add] and [OK].
- **DocumentGUID:** Here we have to refer to the document generated before. This can be achieved similarly to the "LetterToAttach" property. But in this case we select "Generate welcome letter:OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" and hit [Add] and [Ok].

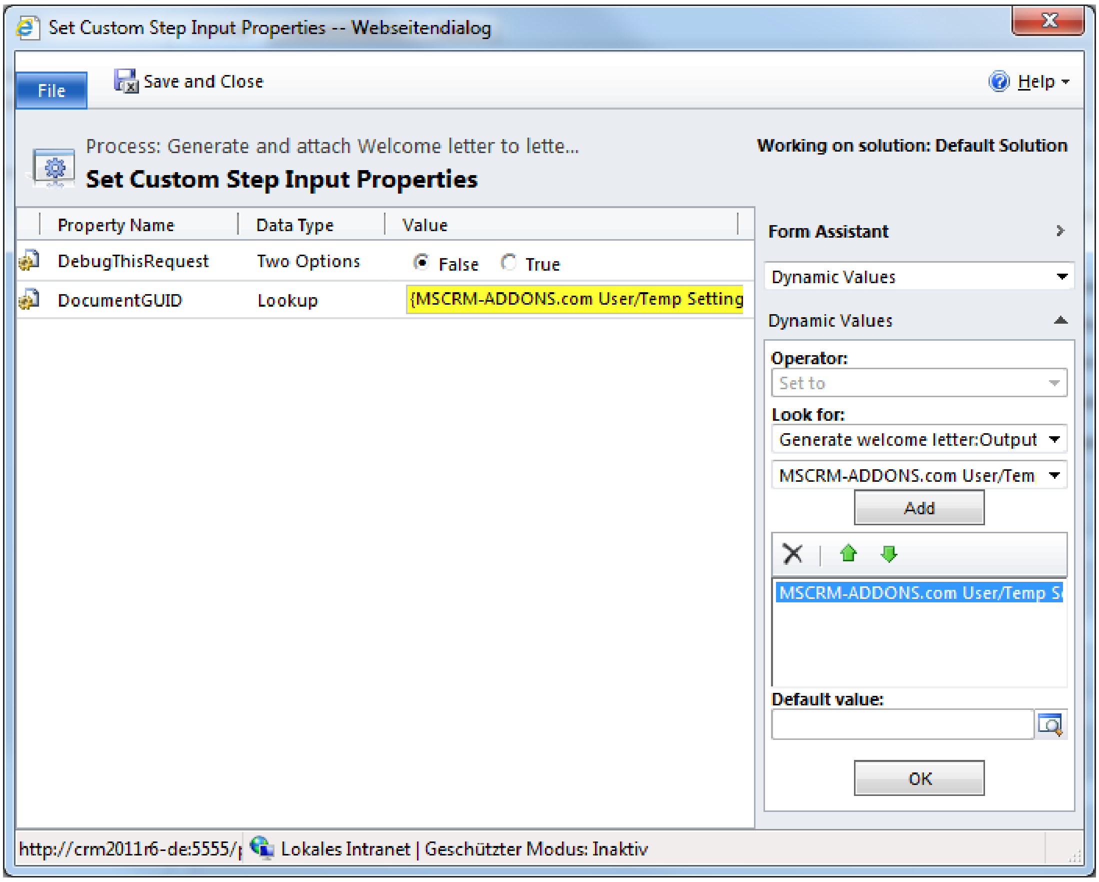
Then, the dialog will look like this:



We complete our adjustment by pressing [Save and Close].

The final part of our workflow is to delete the temporary document again, because it is already attached to the letter and we don't need it any more.
For that, we add the "DeleteTempDocument" step at the end of the workflow. We type in the name "Delete Temp Document" and hit [Set Properties].

Then, the following window will open:

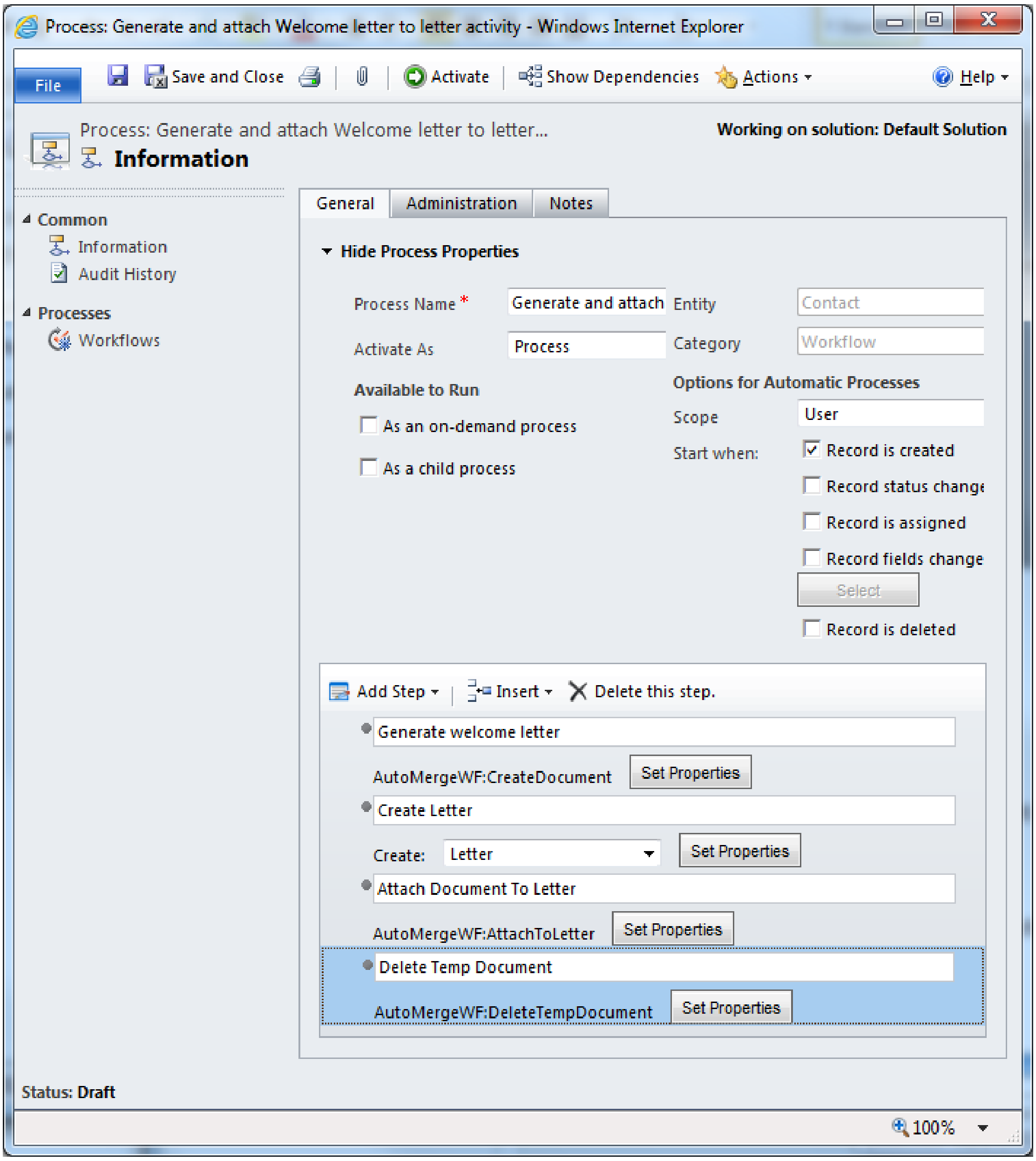


Here we only have to set two properties.

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **DocumentGUID:** Here we have to refer to the document generated before. To achieve this we do the following: Set the cursor into the value field. Then we select "Generate welcome letter:OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" from the "Form Assistant" and hit [Add] and [Ok].

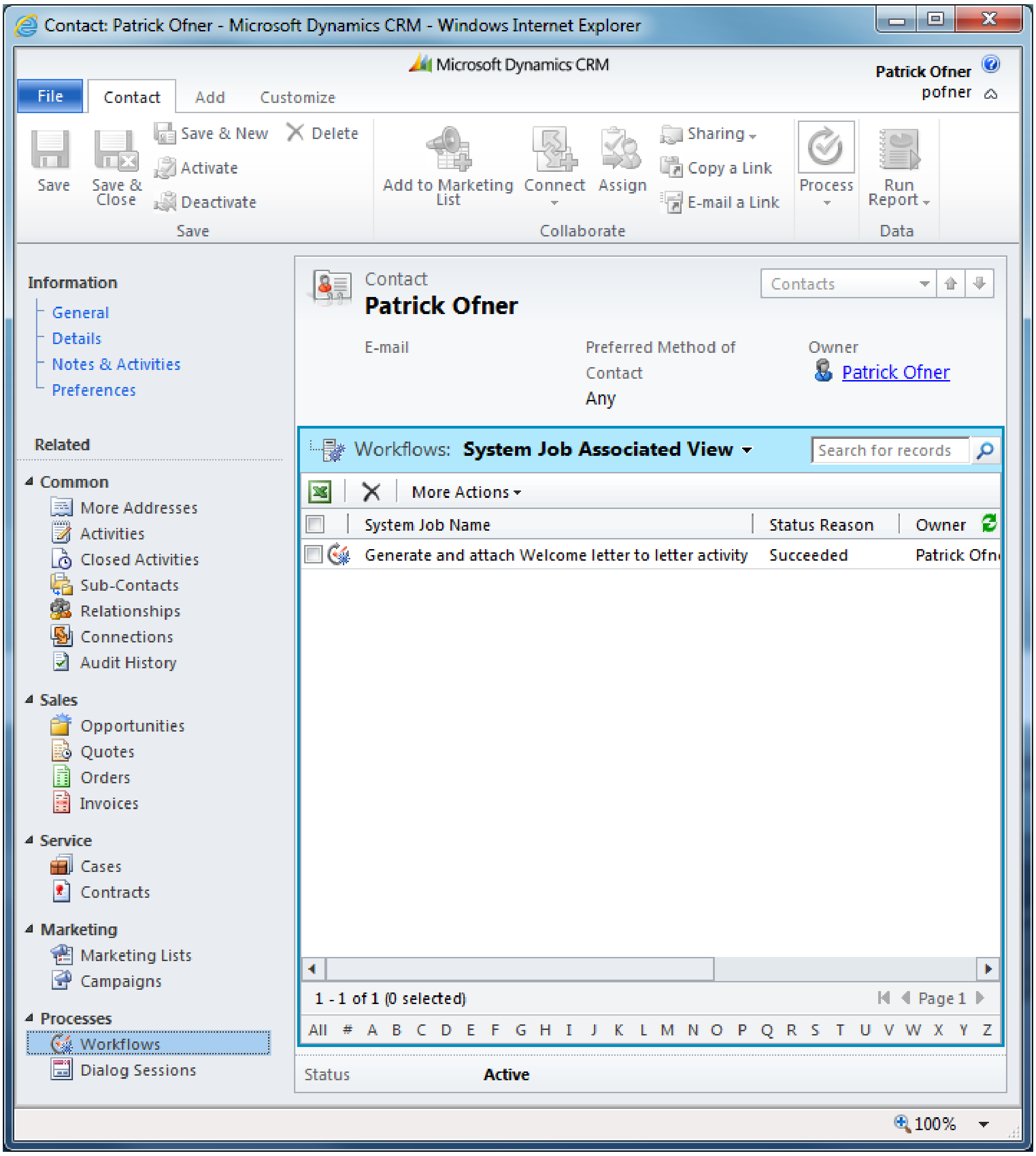
Then, after all properties have been set correctly, we hit [Save and Close].

The finished workflow will look like this:

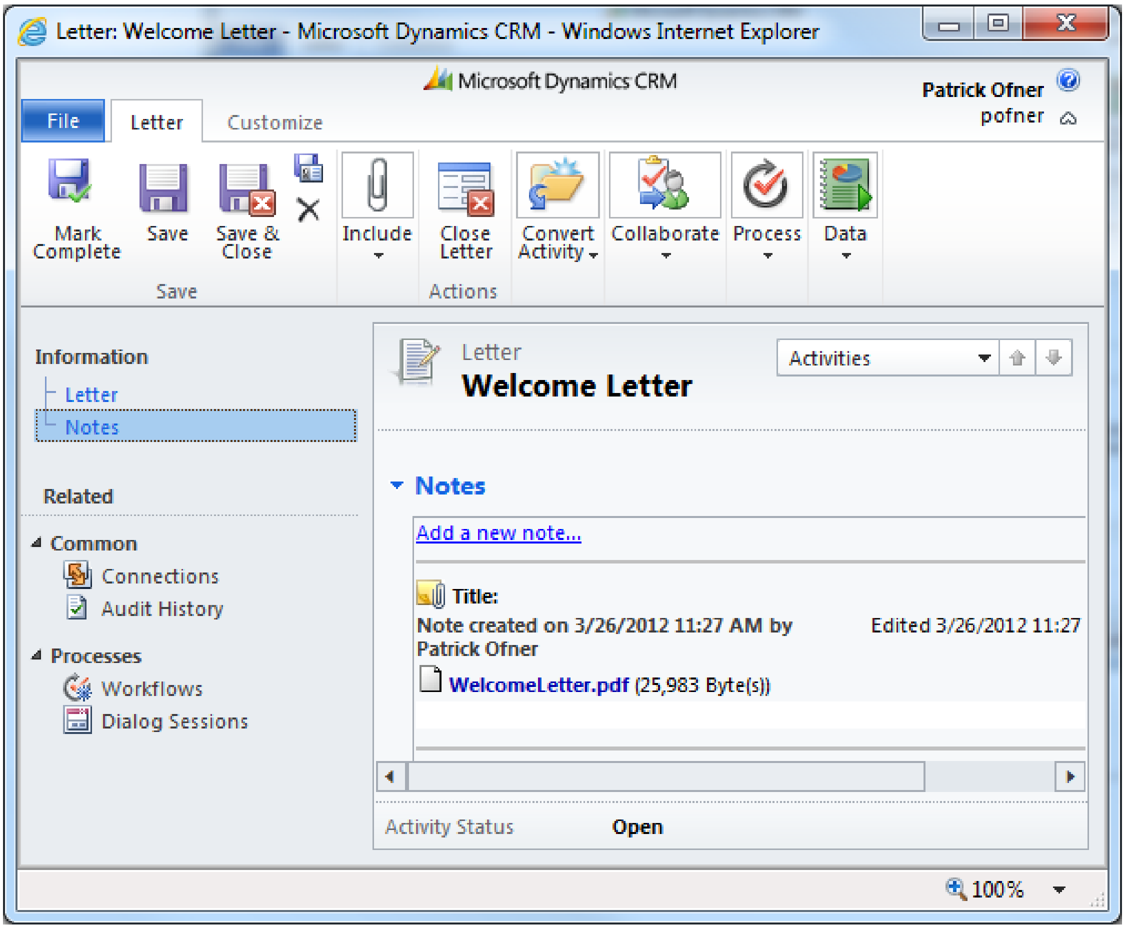


After hitting [Activate] the workflow will be enabled and we can try it out.

To do this, we create a new contact and navigate to "Workflows". After a short duration we are able to find our configured workflow there (shown in the screeshot below).



Under “Activities”, we can find the created letter:



We open it and navigate to the "Notes"-section where we can find the attached welcome letter. We can open it by clicking on it. The letter will look like this:

James Elliott
PTM EDV-Systeme GmbH
Bahnhofgürtel 59
8020 Graz
Austria

Dear Mr. Patrick Ofner,

PTM EDV-Systeme GmbH would like to welcome you as a new customer to our company. It is a great pleasure for us.

We like to let our customers know that they are very important and therefore it is crucial to us that our customers are 100% satisfied.

We are proud of the fact that we can offer our customers quick and competent services. If you have any problems or questions regarding our products, please do not hesitate to contact us.

We can be contacted in the following ways:

Phone: 0043 316 680 880
Email: support@mscrm-addons.com

Sincerely,

James Elliott
Support staff

Now the letter is ready to send.

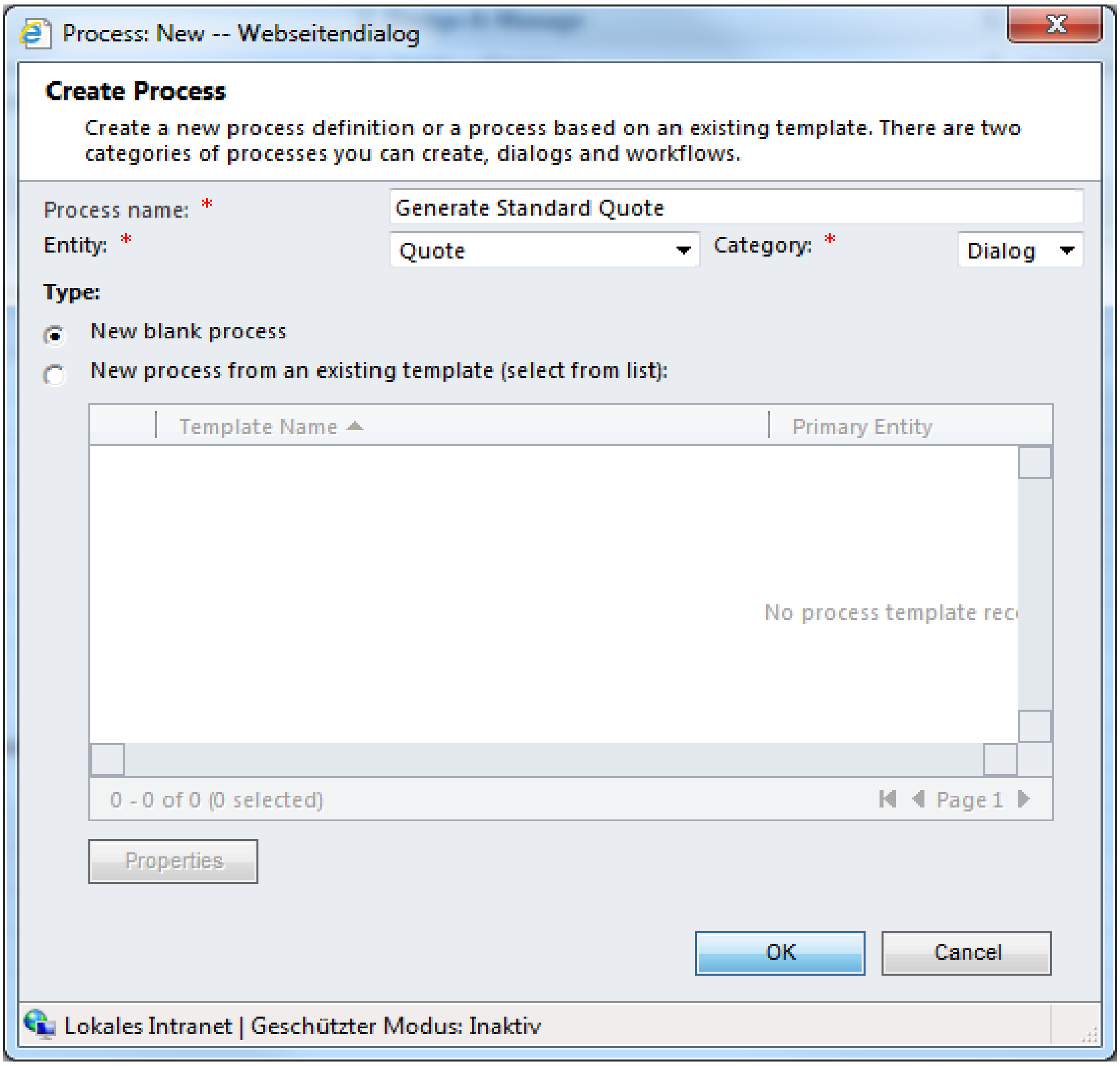
7.2 Scenario 2: Dialog

In this second scenario we want to use AutoMerge to achieve the following: After the user has chosen or opened a quote he should have the possibility to select a template for the merge process. Further on he should also be able to define the file extension of the generated document and if the document should be attached to an email or letter. If the user chooses attach it to a letter, he should have the possibility to define whether he wants to print the letter or not.
If the user chooses "attach to email" it should be sent automatically.
This scenario only works with On-Premise.

We put this into practise by using the AutoMerge functionality inside a CRM dialog.

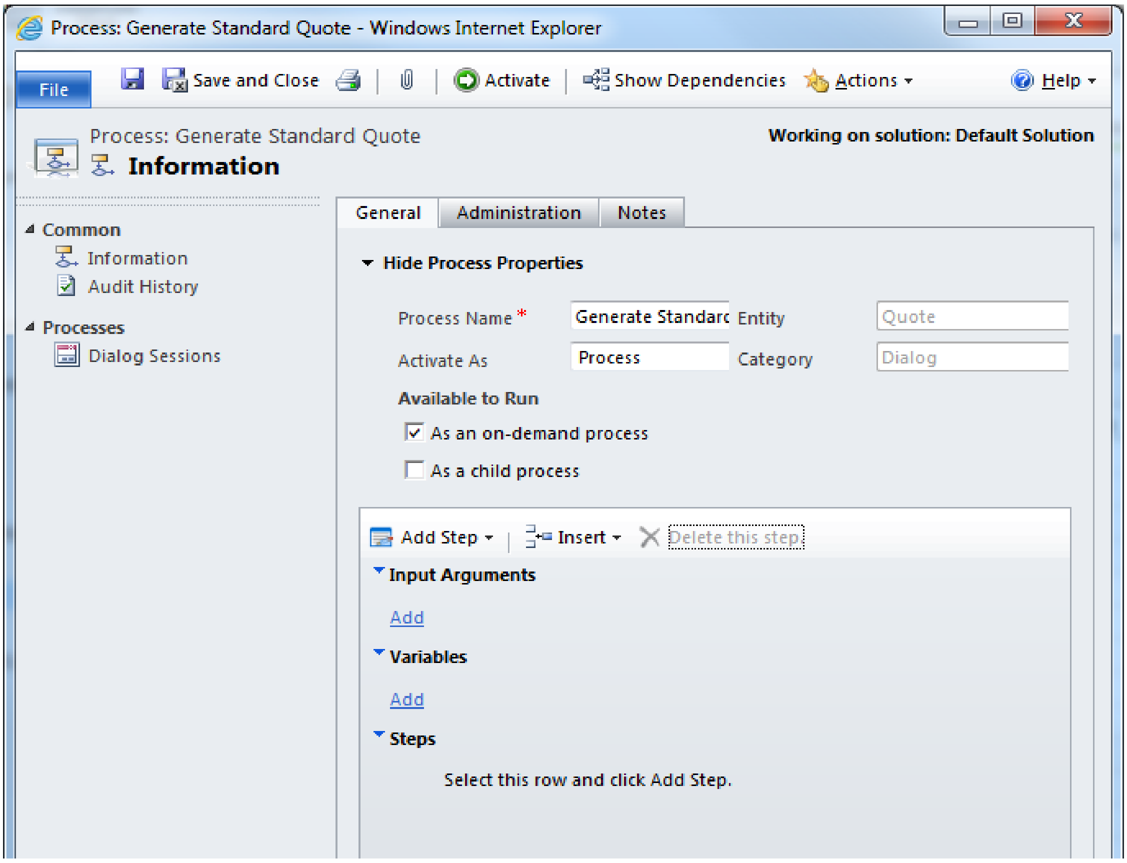
INFO: This example dialog can be downloaded here: http://mscrm-addons.com/LinkClick.aspx?fileticket=UYKRsDlYho0%3d&tabid=176&mid=830

Within CRM, we navigate to "Settings" -> "Processes" and hit [New].



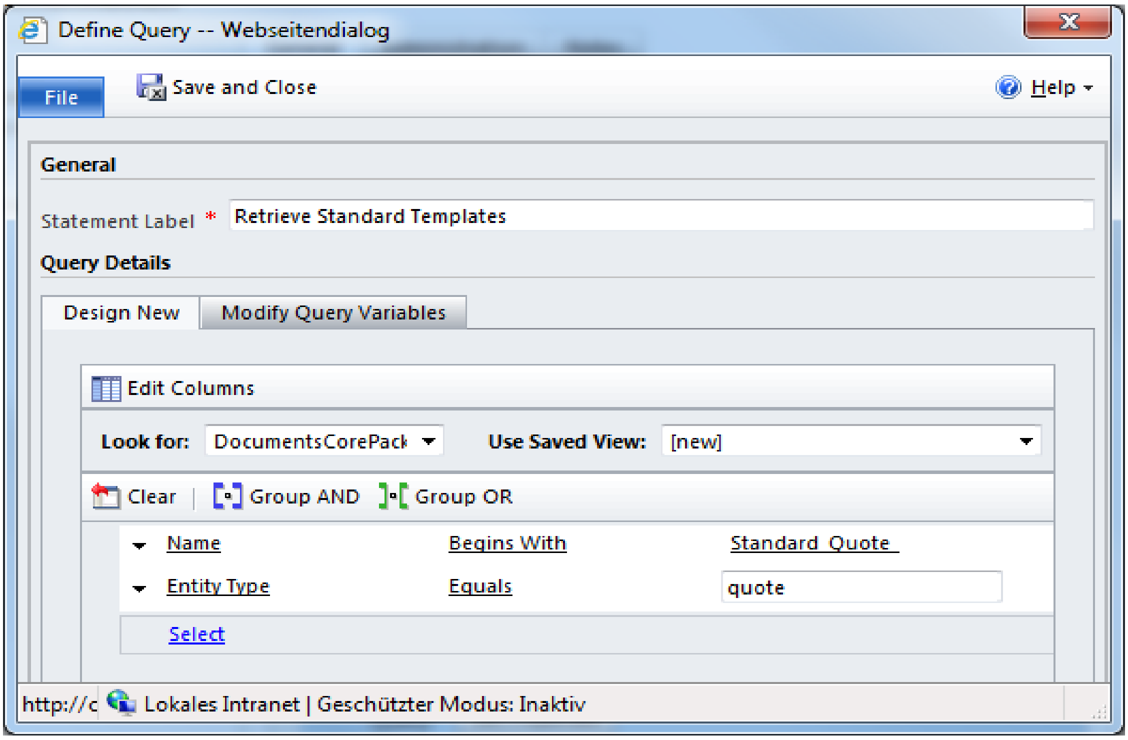
In the popped up window we type in a name of the process ("Generate Standard Quote"), select "Quote" as entity and choose the "Dialog" category.
We hit [Ok] to continue.

The following window will open:



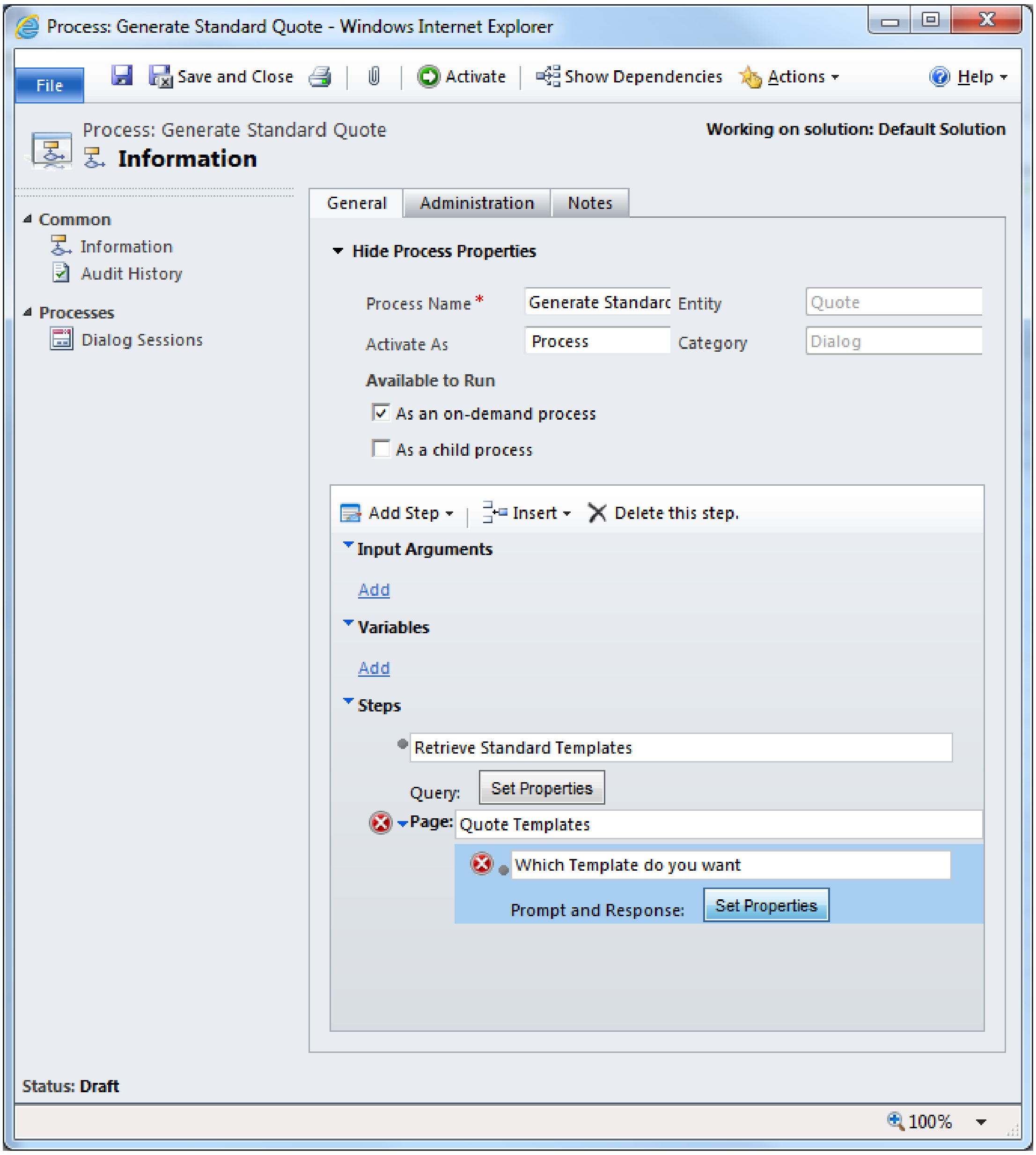
7.2.1 Part 1: User Interaction

First, the user should be able to select a template from a pick list. Therefore, we add the “Query Crm Data”-step to our dialog. We define the name “Retrieve Standard Templates” and hit [Set Properties].

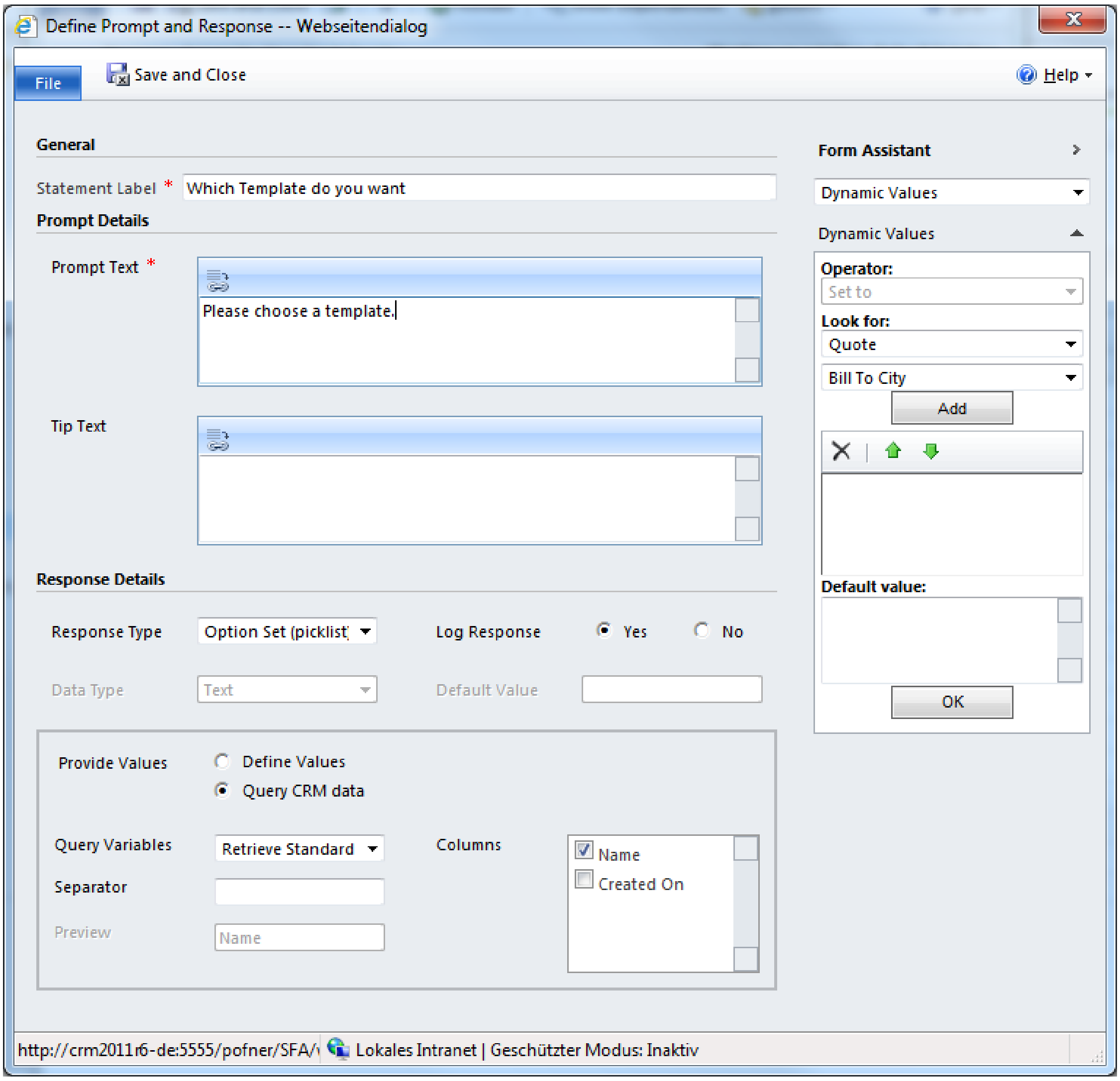


We use the popped up window to define a query. It will retrieve all templates of the type "quote" starting with "Standard_Quote_" of the "DocumentsCorePack Templates"-entity. We hit [Save and Close] to proceed.

Next, we add a new page to the dialog and type in the name "Quote Templates". Underneath, we include a new "Prompt and Response" with the name "Which Template do you want?"



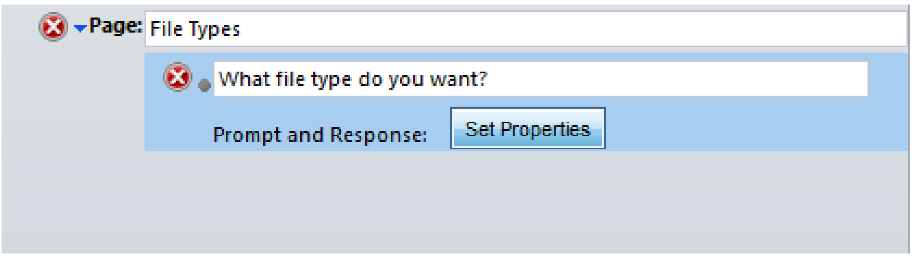
To define its properties we hit [Set Properties]:



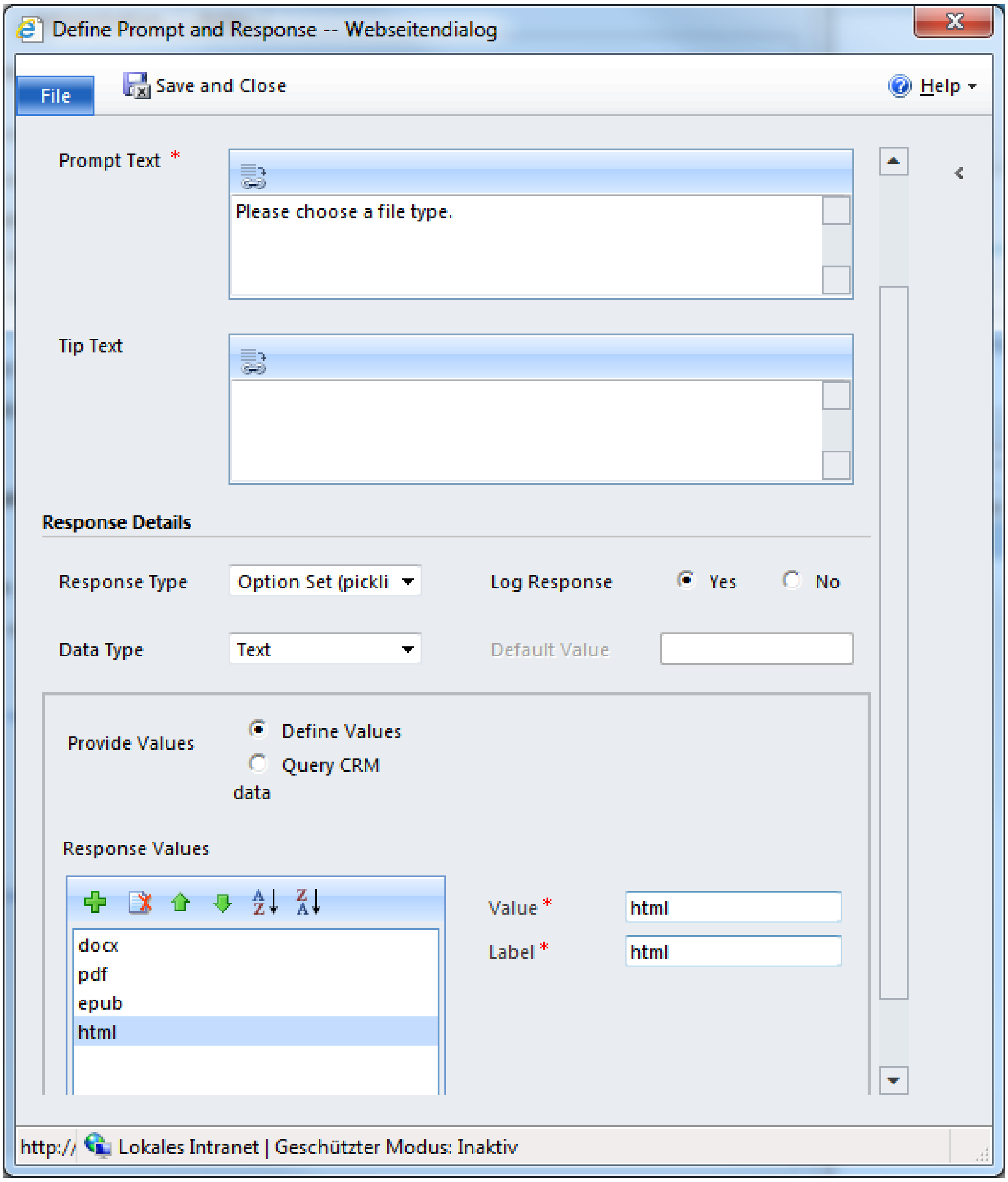
We define "Please choose a template" as "Prompt Text" and set the "Response Type" to "Option Set (picklist)". We check "Query CRM data" then select "Retrieve Standard Templates" and use the "Name"-column.

We hit [Save and Close] to continue.

Next, we want to give the user the possibility to select the file extension of the generated document.
Because of that, we add a further "Page" to our dialog and name it "File Types". Same as above, we add a "Prompt and Response"-step to it. We name it "What file type do you want?".



We click on [Set Properties] to set them up.

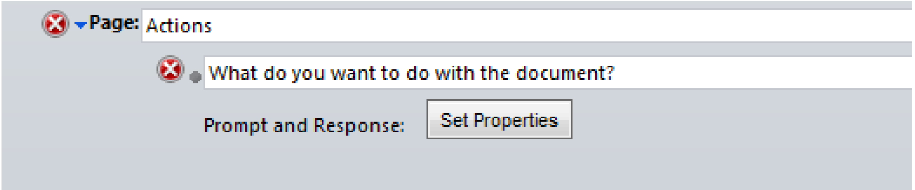


The "Prompt Text" should be "Please choose a file type." As "Response Type" we choose "Option Set (picklist)" again. But in this case we check "Define Value" and add "docx", "pdf", epub" and "html" as "Response Values". This can be achieved by clicking on the green cross.

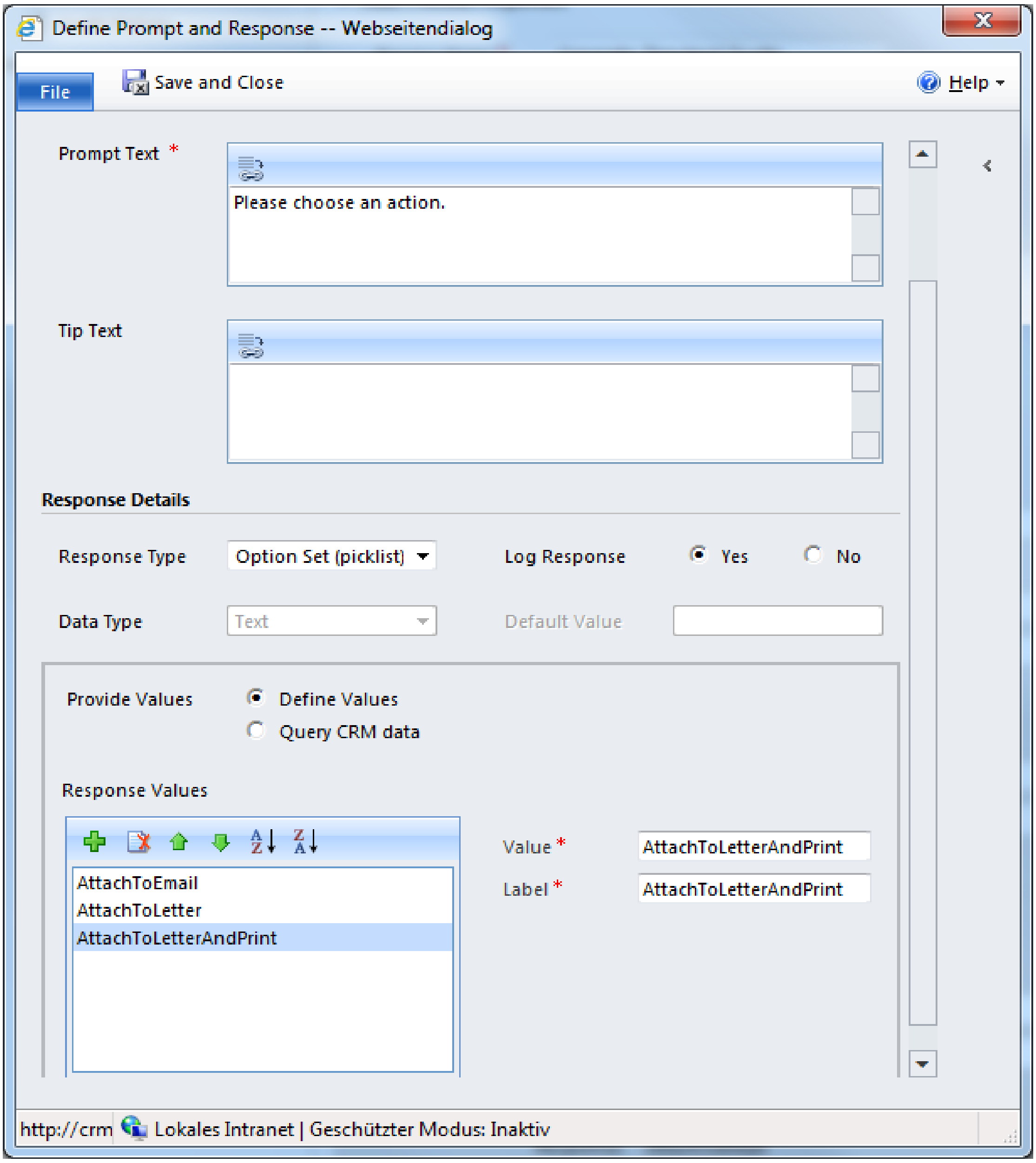
We hit [Save and Close] to proceed.

The final part is to provide the user the possibility to select if he wants to attach the generated document to an email, to a letter or to a letter and print it out.

For that we add a further "Page" to the dialog and name it "Actions". Underneath, we add a "Prompt and Response"-step as well. We give it the name "What do you want to do with the document?".



We hit [Set Properties] to set them up.



We define “Please choose an action” as “Prompt Text” and select the “Response Type” “Options Set (picklist)”. Then we check “Define Values” and add the following items by hitting the green cross to the list:

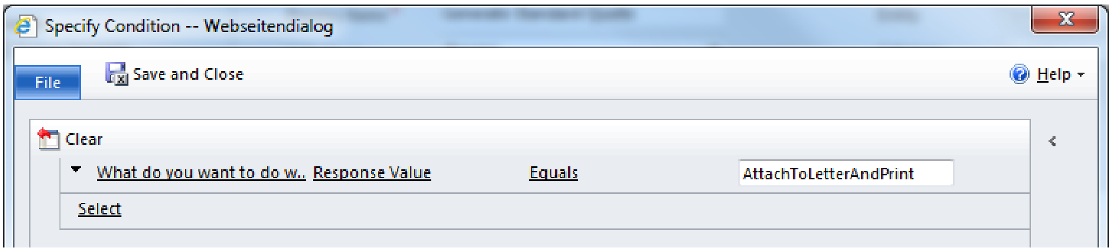
- **Name:** AttachToEmail **Value:** AttachToEmail
- **Name:** AttachToLetter **Value:** AttachToLetter
- **Name:** AttachToLetterAndPrint **Value:** AttachToLetterAndPrint

We hit [Save and Close] to proceed.

7.2.2 Part 2: AutoMerge steps

Next, we add a "Check Condition"-step with the name "Print or not". We use it to decide if the document should only be generated or if it should be printed as well.

To define it, we click on the condition itself:

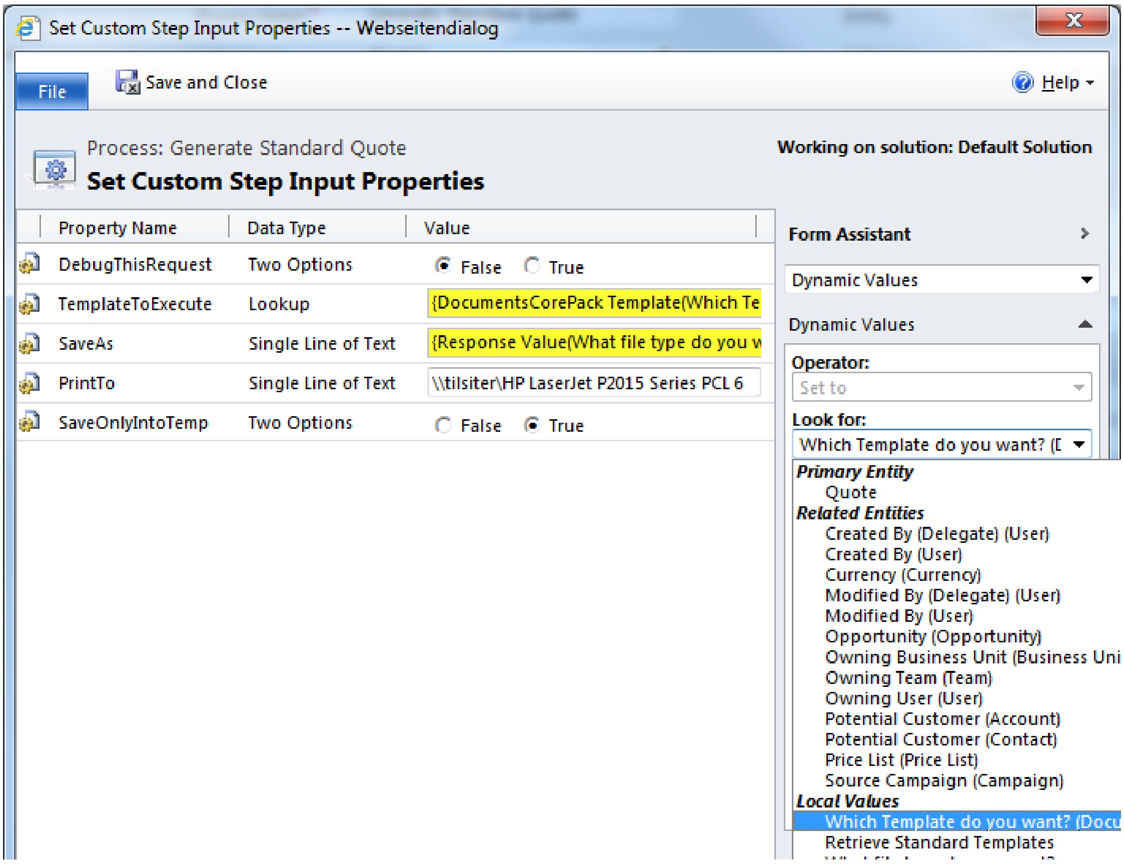


We select the "What do you want to do with the document?" prompt and response, created before. Next, we choose its "Response Value" and define that it has to "Equals" "AttachToLetterAndPrint".

We complete the condition by clicking [Save and Close].

7.2.2.1 Part 2.1: Generate and print

If this condition is true we want to generate and print the document and attach it to a new letter. Therefore, we add the "GenerateDocument"-step of the AutoMerge functionalities to it underneath. We name it "Generate and print document" and hit [Set Properties].

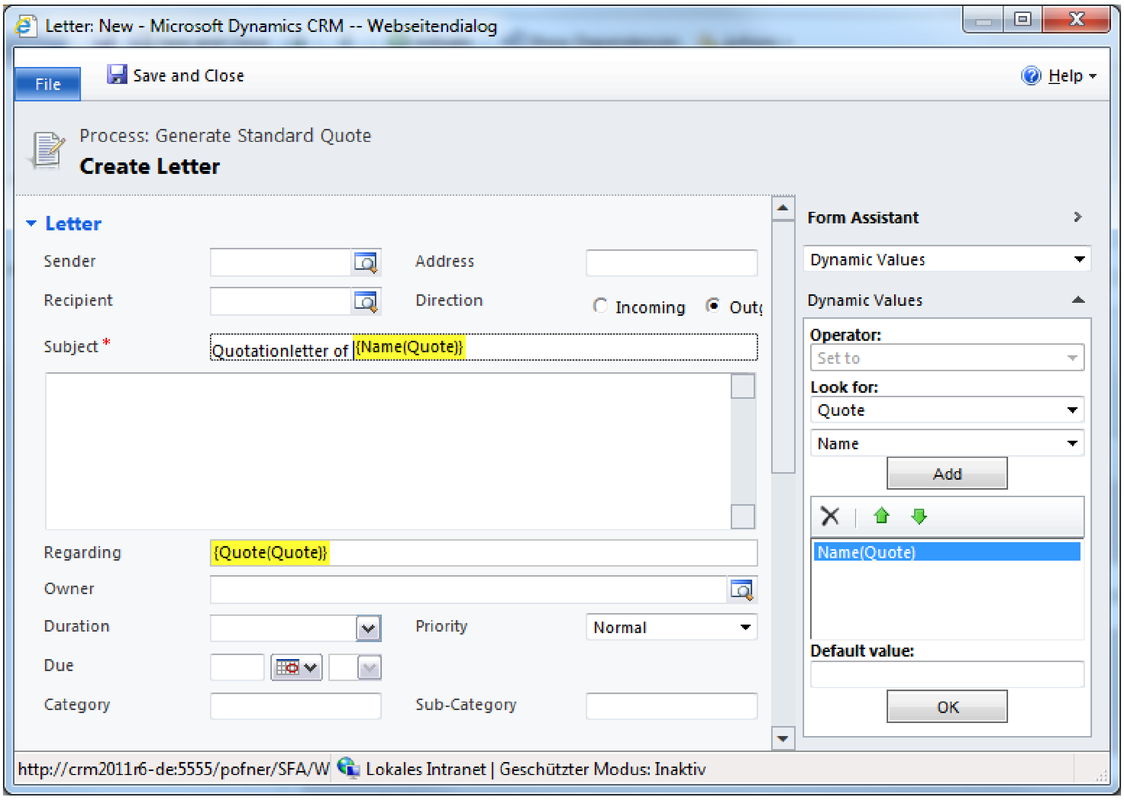


This window allows us to define the following properties:

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **TemplateToExecute:** Here we have to refer to the template chosen from the user before. To achieve this, we put the cursor into the field and use the "Form Assistant" on the right side of the window. We select the "Which Template do you want? (DocumentsCorePack Template)"- prompt and response as shown in the screenshot above. Then we select "DocumentsCorePack Template" hit [Add] and [Ok].
- **SaveAs:** Here we have to refer to the selected file type. This works the same way as for the property above, except that we select "What file type do you want?" and "Response Value".
- **PrintTo:** We are using this property to define the path of a network printer. In this case "\\tilsiter\HP LaserJet P2015 Series PCL 6".
- **SaveOnlyIntoTemp:** We set this property to "True".

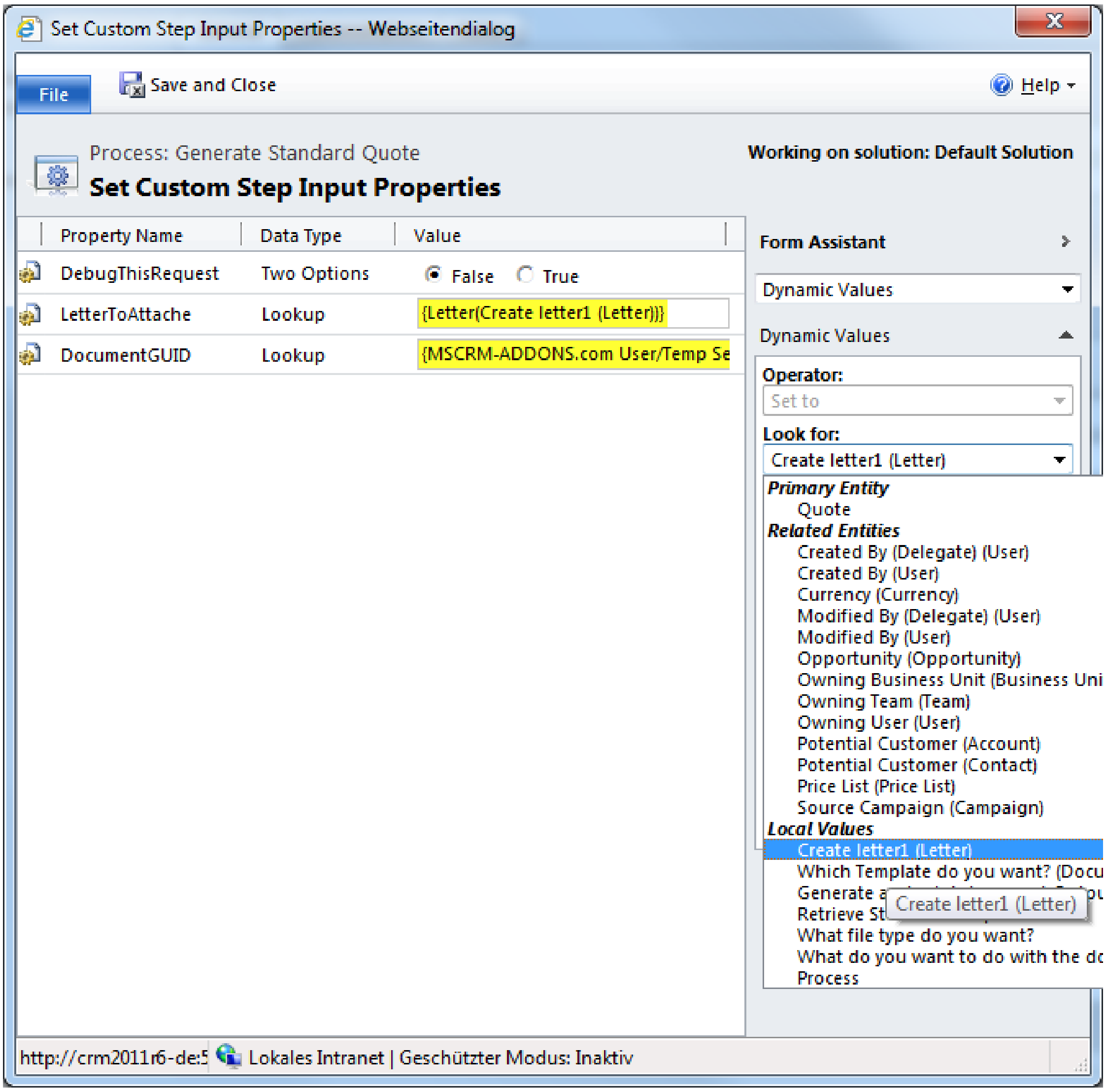
We hit [Save and Close] to proceed.

Underneath, we add a "Create Record"-step. We select "letter", name it "Create letter1"and define its properties:



We define its "Subject" using the "Form Assistant".
The "Regarding"-field is set automatically.
We hit [Save and Close] to continue.

Afterwards, we have to attach the before generated document to this letter. Therefore, we add an "AttachToLetter"-step, name it "Attach letter1" and define the properties as shown underneath:

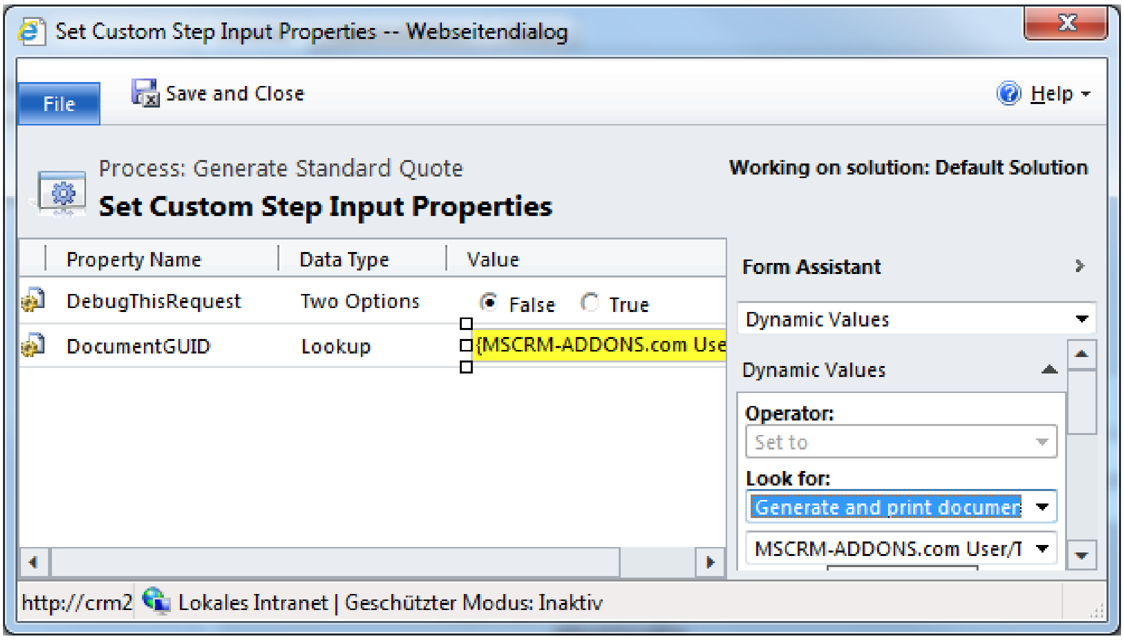


Properties:

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **LetterToAttach:** We refer to the before created letter using the "Form Assistant" ("Create letter1 (Letter)" and "Letter")
- **DocumentGUID:** Here we have to link to the generated document. We use the "Form Assistant" again and select "Generate and print document: OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" and "MSCRM-ADDONS.com User/Temp Settings".

We save and close the window.

At the end of this condition branch we have to delete the generated document stored in the "MSCRM-ADDONS.com User/Temp"-entity.
To achieve this, we add the "DeleteTempDocument"-step, give it the name "Remove document1" and define its properties as follows:



We use the "DocumentGUID"-property to refer to the generated document. For that, we select "Generate and print document: OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" and "MSCRM-ADDONS.com User/Temp Settings".

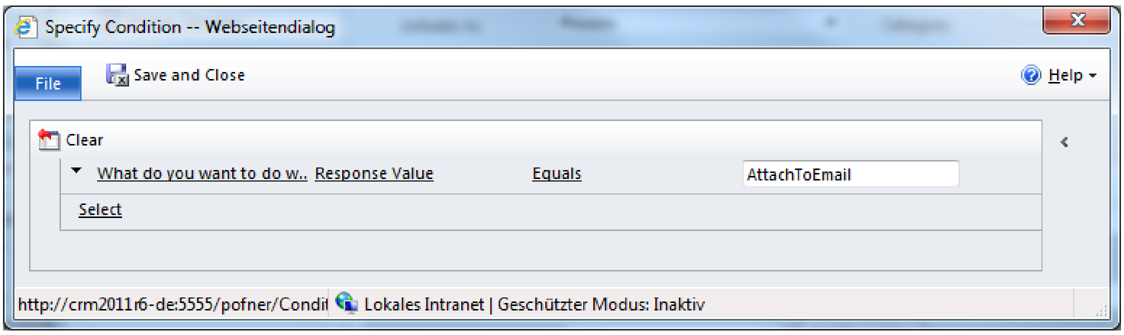
7.2.2.2 Part 2.2: Generate only

Next, we have to focus the else branch of the condition. It will be executed if the user has selected "AttachToEmail" or "AttachToLetter".

First, we have to add the "Default Action"–step (else branch) to create the if condition.

Then, we add a new "CreateDocument"-step with the name "Generate document only" to the else branch. We define the properties same as in the if branch before, except that we leave the "PrintTo"-property empty because we only want to create the document.

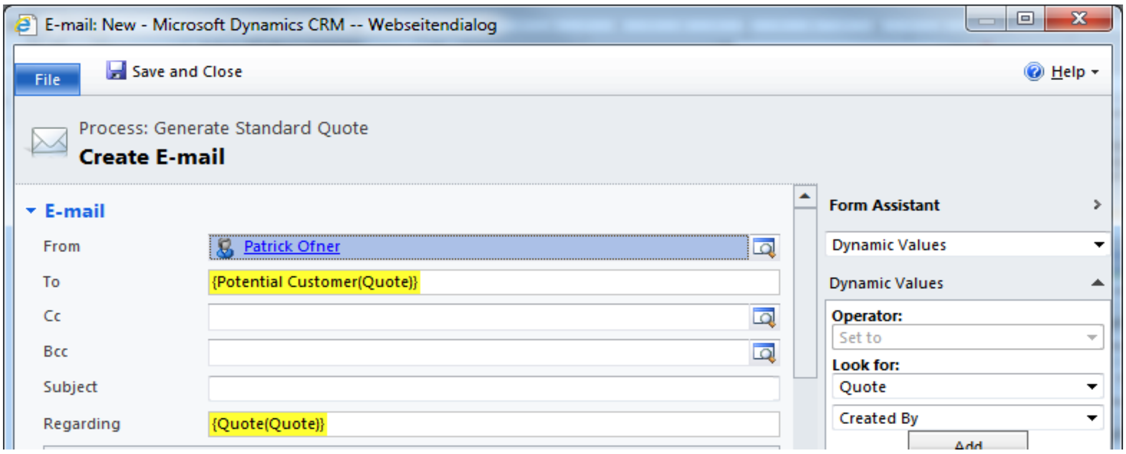
Next, we have to add a further condition to this else branch. If the user has chosen "AttachToEmail" we have to use an email, otherwise ("AttachToLetter") we have to use a letter.
This can be done by adding a new "Check Condition"-step to the dialog. We name it "Email or Letter" and define it as follows:



If the value of "What do you want to do with the document?" is "AttachToEmail" the condition is true, otherwise false.

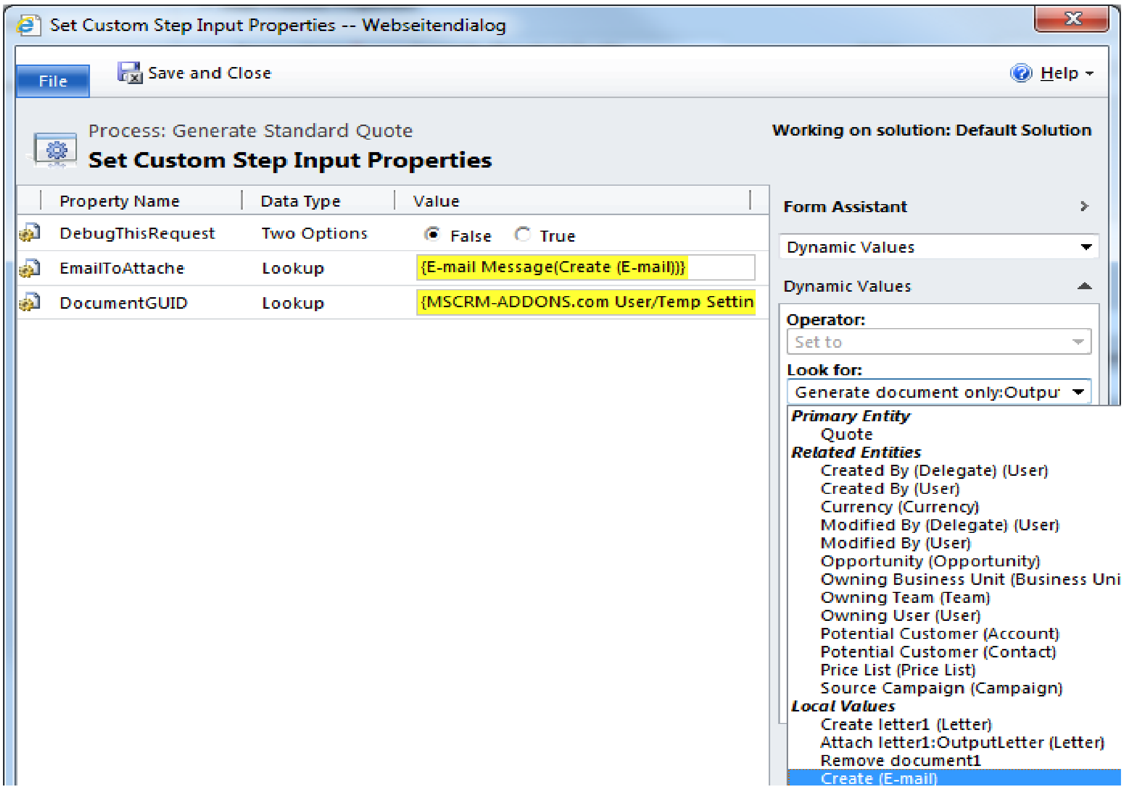
7.2.2.3 Part 2.2.1: Attach to Email

In the true branch of this condition we create an email by using the "Create Record"-step. We type in the name "Create Email" and define it as shown underneath:



We use any user as sender and the "Potential Customer" as recipient. The "Regarding"-field is set by default.

The next step is to attach the created document to this email. This can be achieved by using the "AttachToEmail" step. We name it "Attach to Email" and adjust its properties.

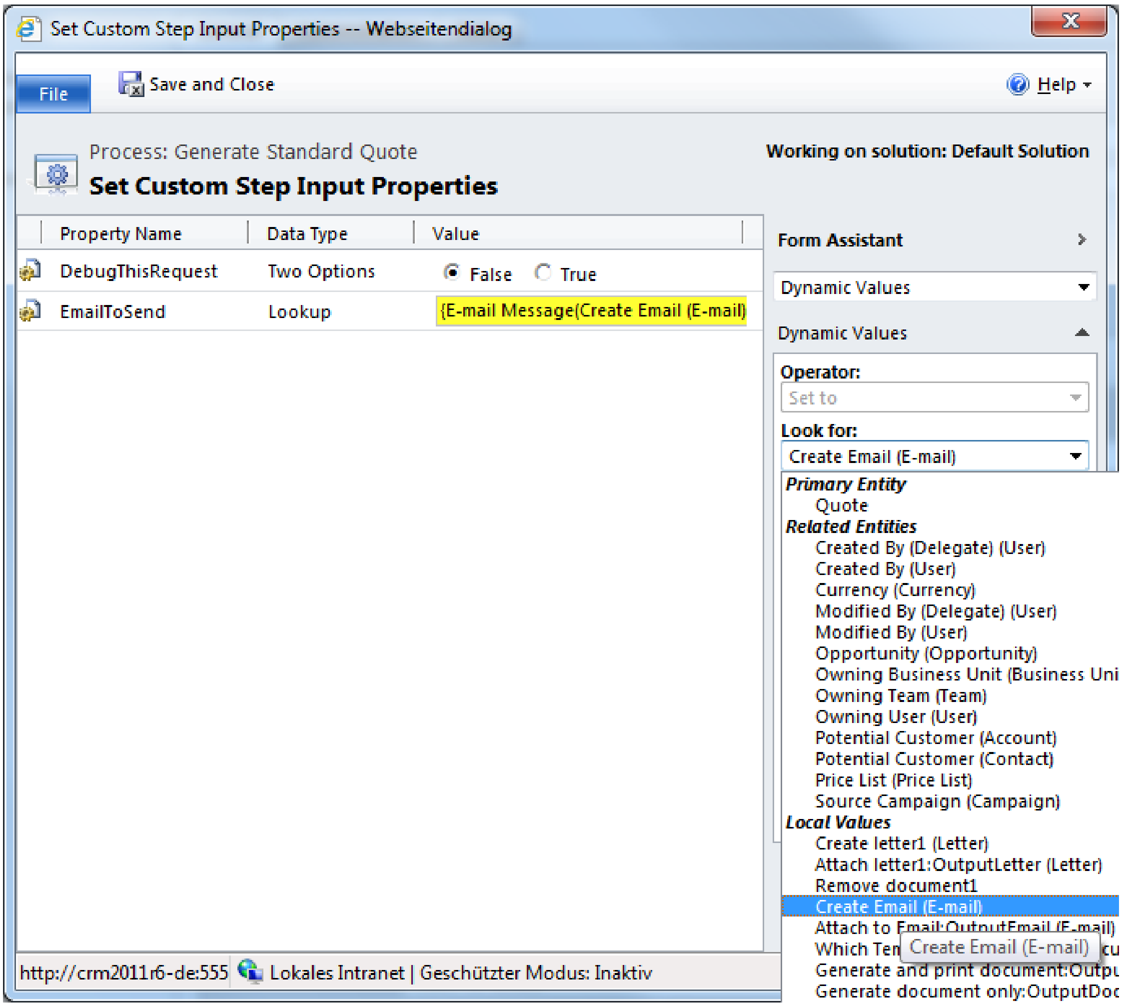


Properties:

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **LetterToAttach:** We refer to the before created email using the "Form Assistant" ("Create (Email)" and "E-mail Message").
- **DocumentGUID:** Here we have to link to the generated document. We use the "Form Assistant" again and select "Generate document only: OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" and "MSCRM-ADDONS.com User/Temp Settings".

Important: If the file type of the generated document is "html" this step will copy its content into the email body. Otherwise, the generated document will be added as attachment to the email.

At this time, the email is ready for sending. We'll use the "SendEmail"-step to do this. We name it "Send Email" and define its properties like this:



Properties:

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **EmailToSend:** We refer to the before created email using the "Form Assistant" ("Create (Email)" and "E-mail Message").

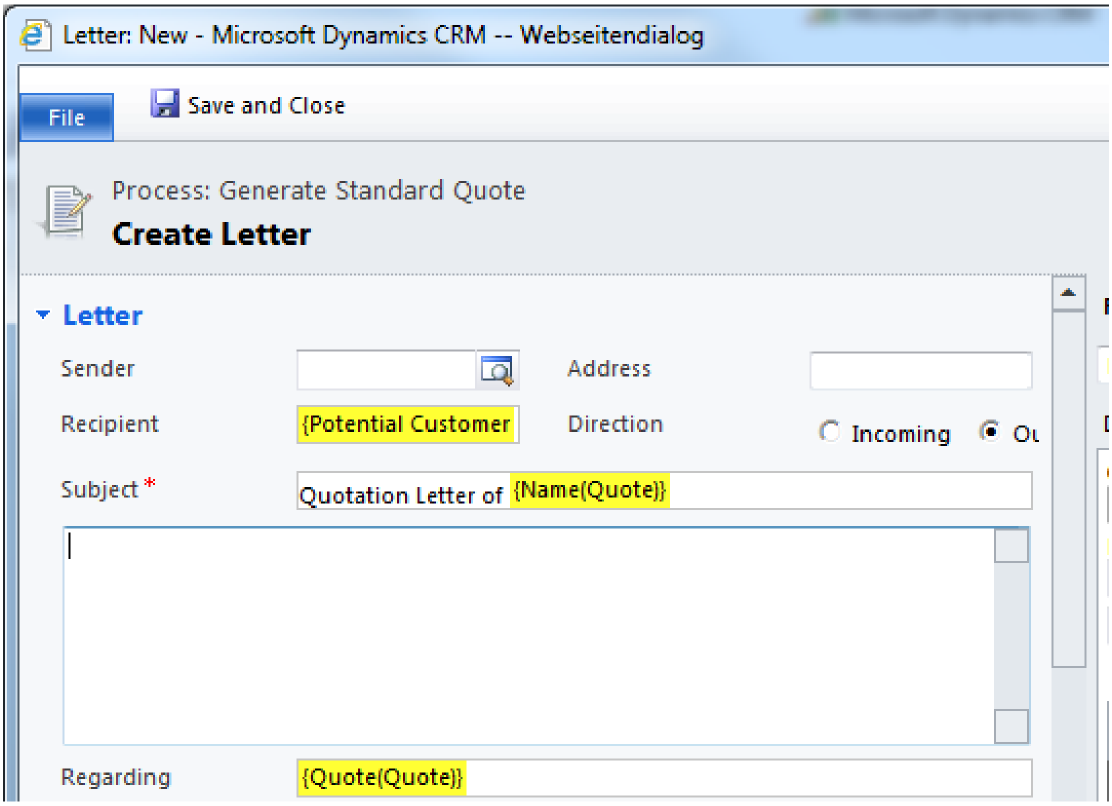
7.2.2.4 Part 2.2.2: Attach to Letter

Now we have finished the if branch and focus the otherwise way. It will be executed if the user has chosen "AttachToLetter". Here we want to create a letter and attach the generated document to it.

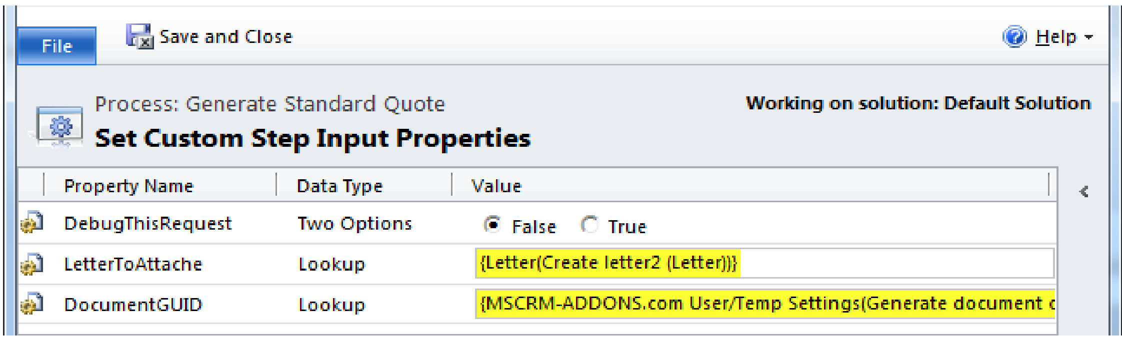
To do this we have to add the "Default Action"-step (else branch) to this condition.

To this else branch we add the following two steps:

"Create Record"-step of the entity "Letter" with the name "Create letter2". We define its properties as shown underneath:

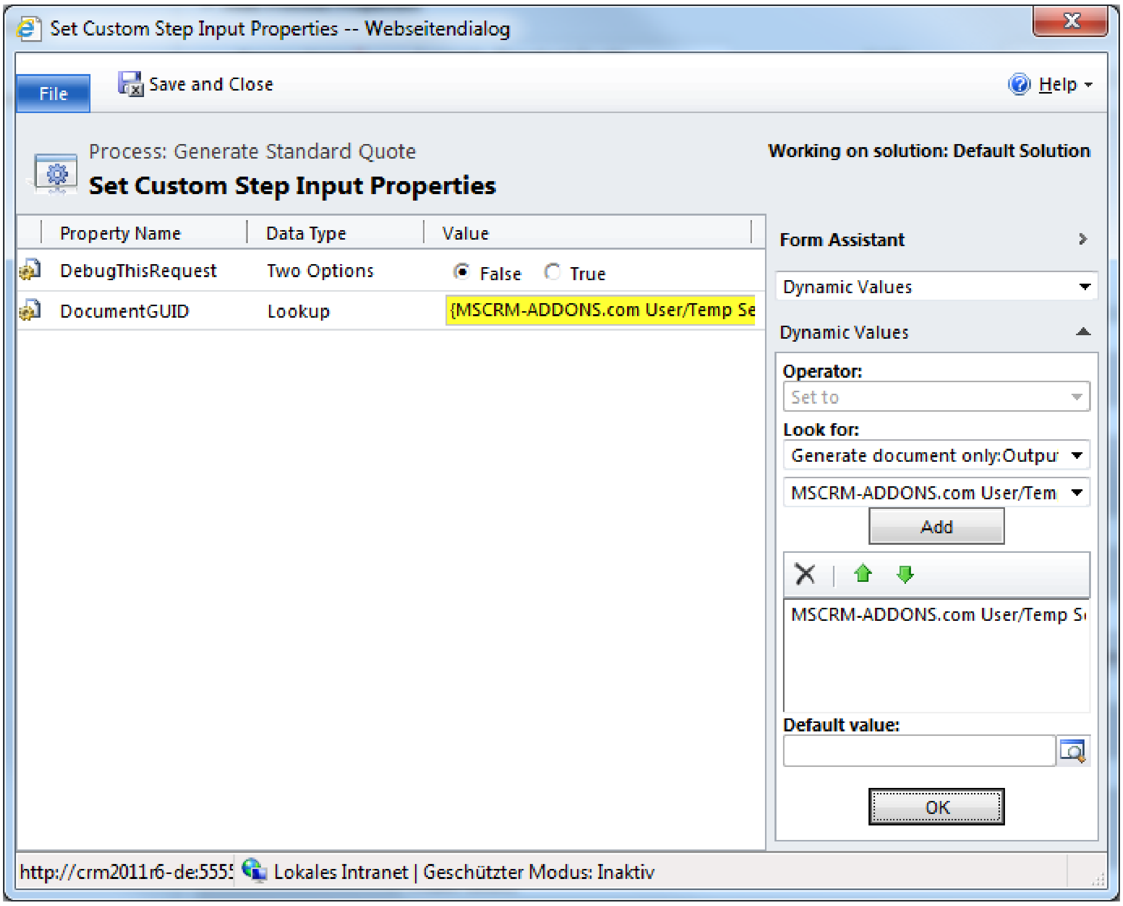


And we add the "AttachToLetter"-step with the name "Attach to letter2" to it. We define its properties as follows (same as in the first "AttachToLetter"-step, except that we select "Create letter2 (Letter)" for "LetterToAttach" and "Generate document only): OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" for "DocumentGUID"):



At this point the document is created and attached to an email or a letter. At the end, we can delete the temporary document again.

Therefore, we add the "DeleteTempDocument"-step outside of the if condition to our dialog. The reason for that is that we want to delete the document in any case ("AttachToEmail" or "AttachToLetter"). We name it "Remove document 2" and define its properties as shown below:

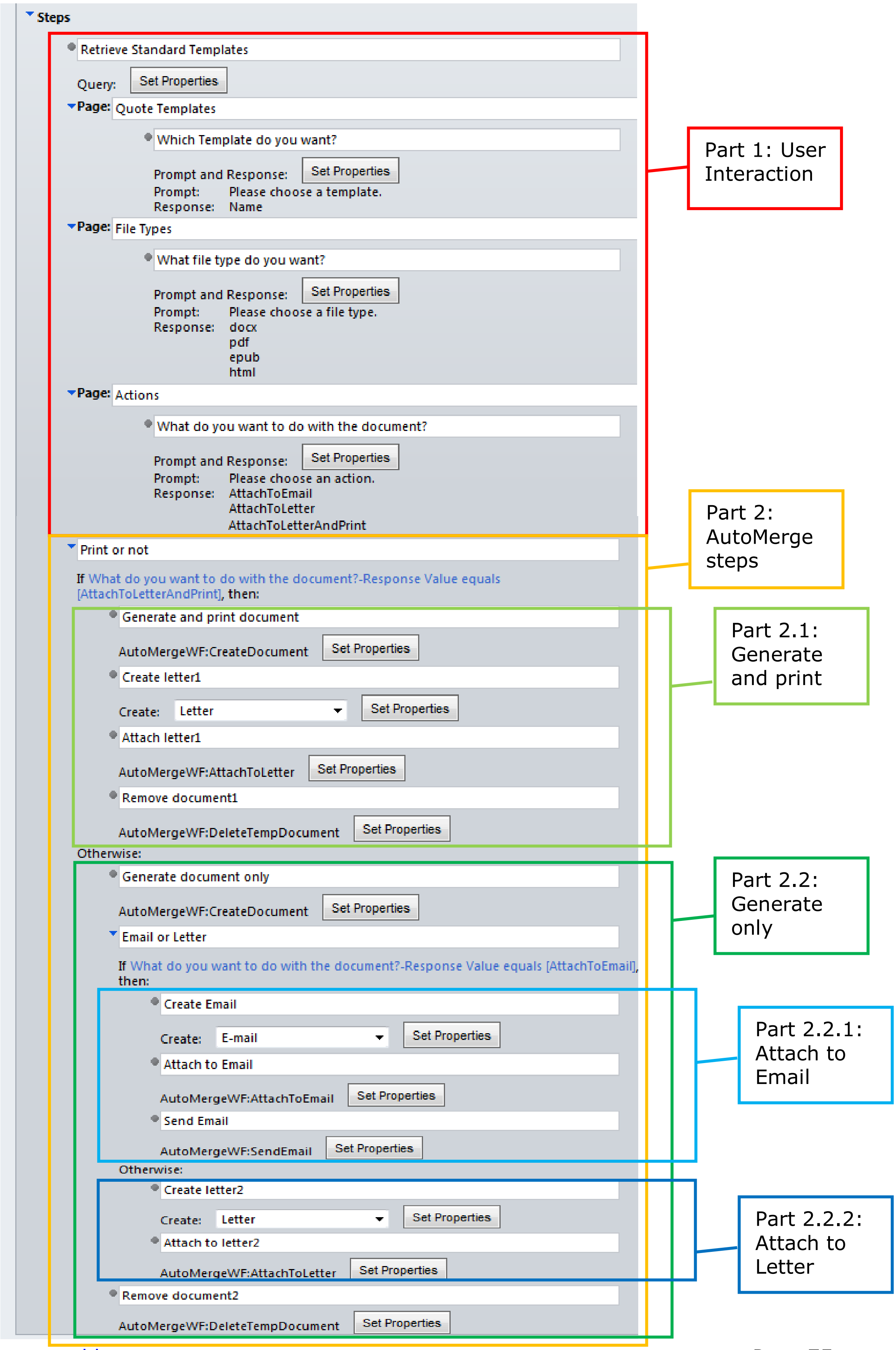


Properties:

- **DebugThisRequest**: We set this property to "False" because we do not need any log files.
- **DocumentGUID:** Here we have to link to the generated document. We use the "Form Assistant" again and select "Generate document only: OutputDocumentRef (MSCRM-ADDONS.com User/Temp Settings)" and "MSCRM-ADDONS.com User/Temp Settings".

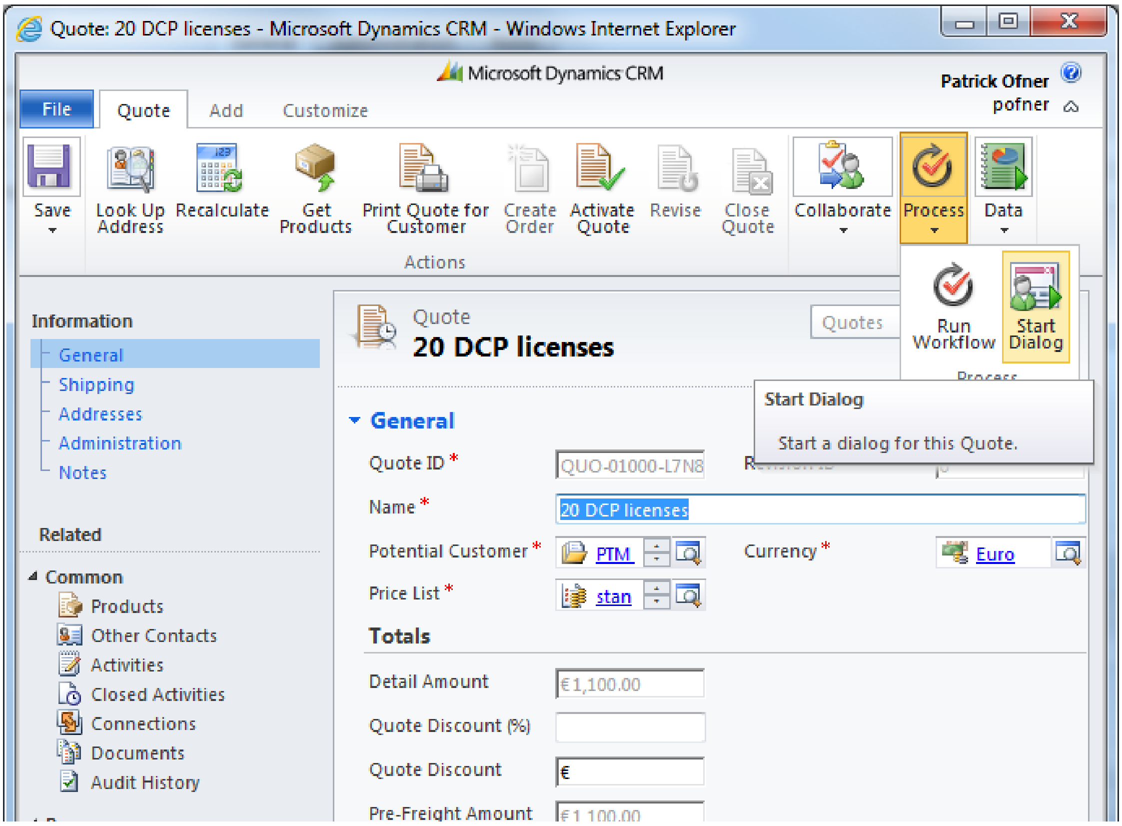
Now we are finished.
After the dialog has been activated, it can be used.

7.2.3 Result dialog

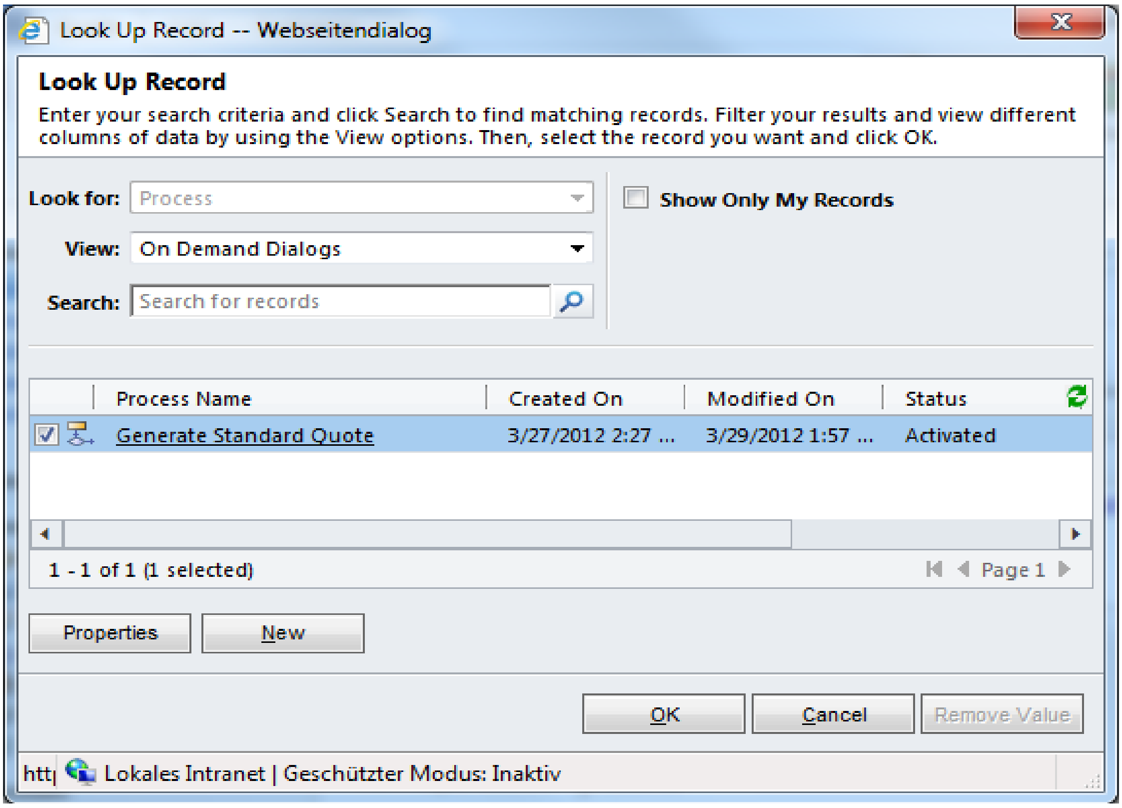


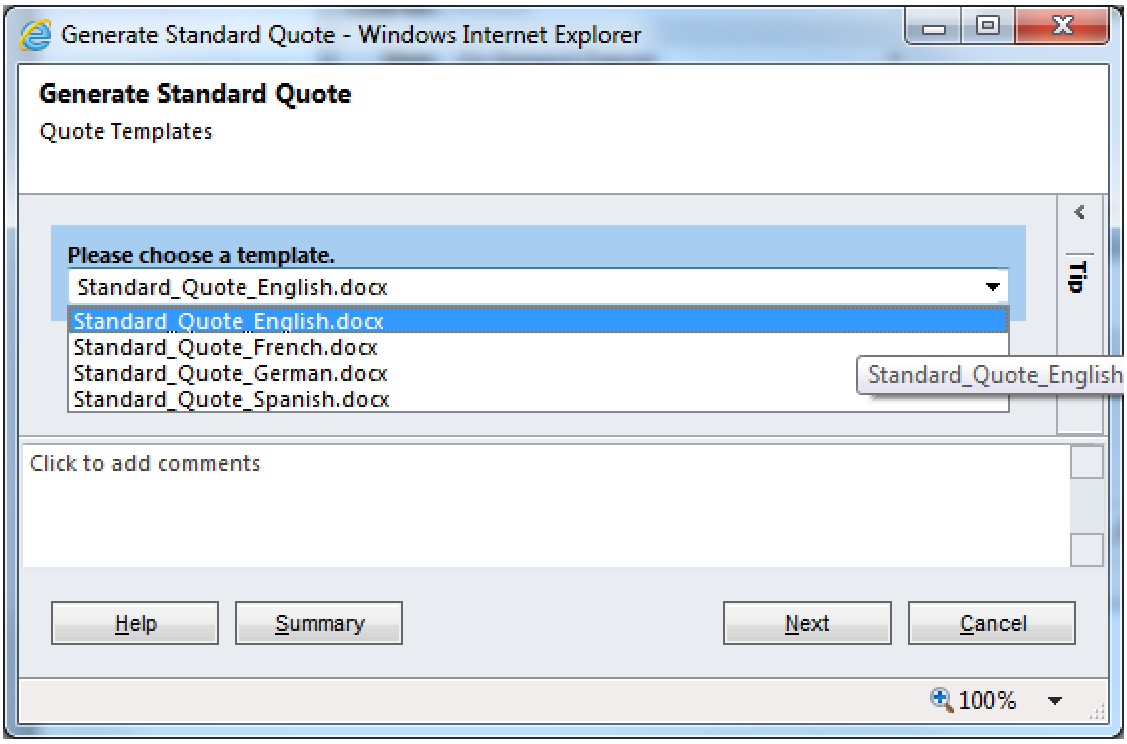
7.2.4 Test Dialog

To start our dialog, we open a quote and hit “Start Dialog”.

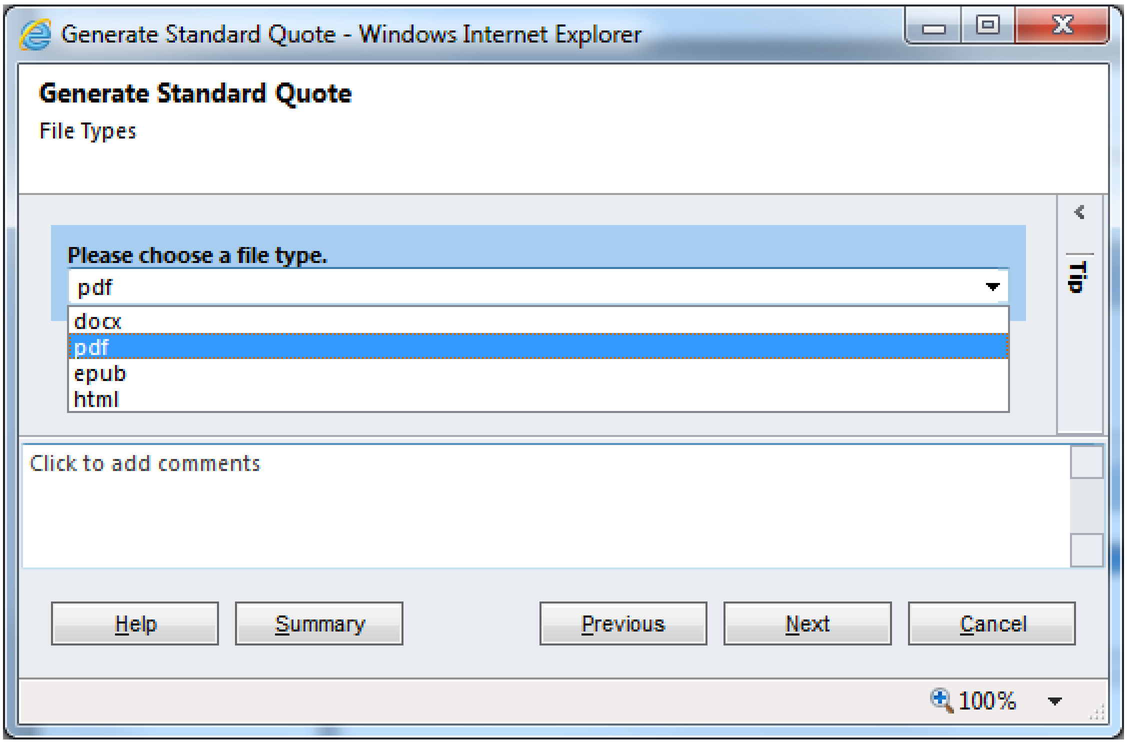


Thereupon, we choose our dialog and hit [Ok]:

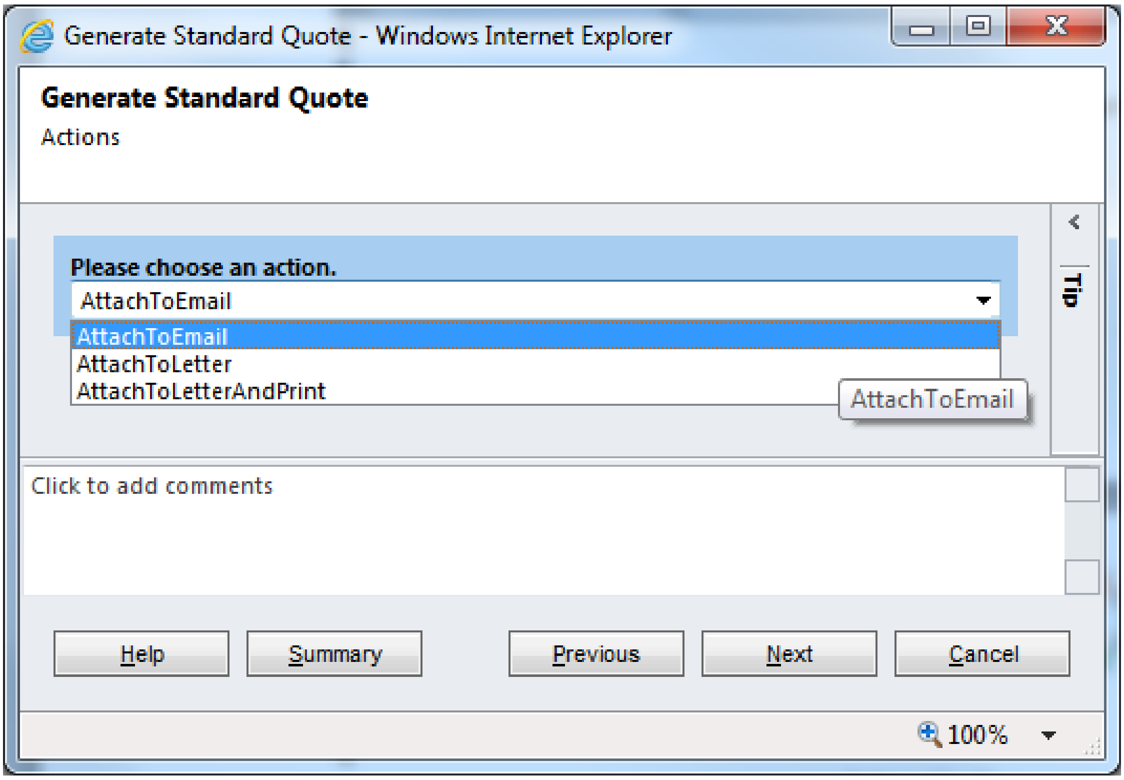




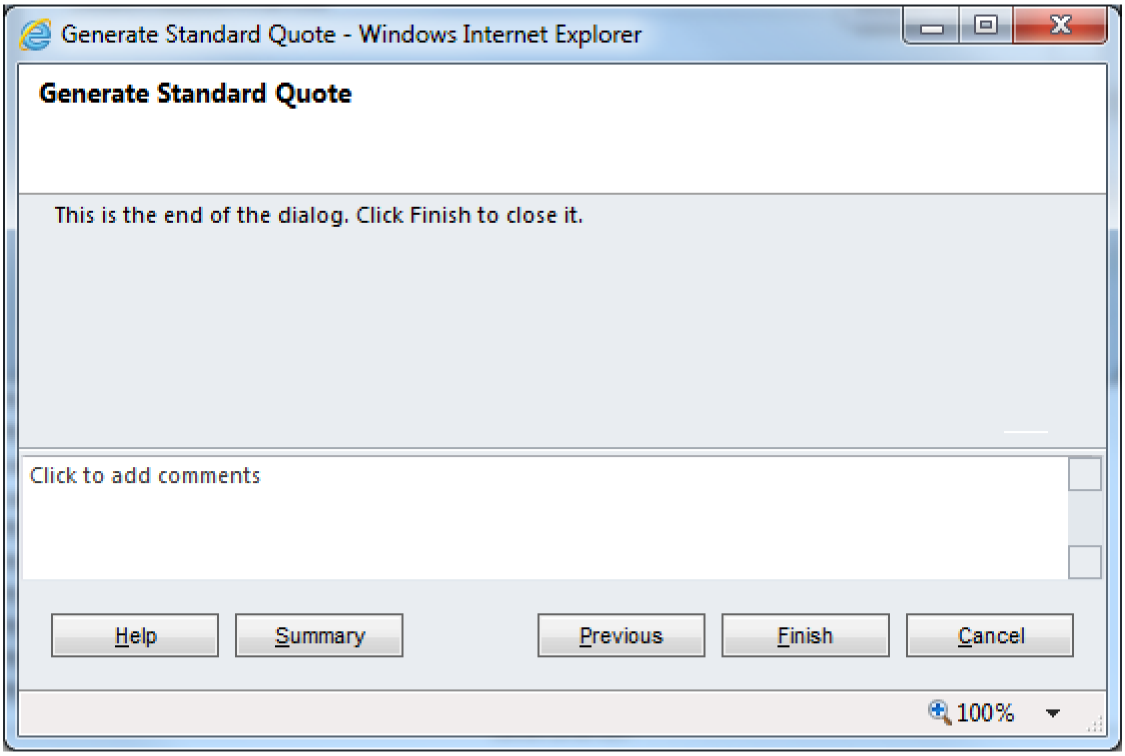
First, we can choose between all standard templates. We choose "Standard_Quote_"English.docx" and hit [Next].



In this window we have the possibility to select the file type. We choose "pdf" and hit [Next] to continue.

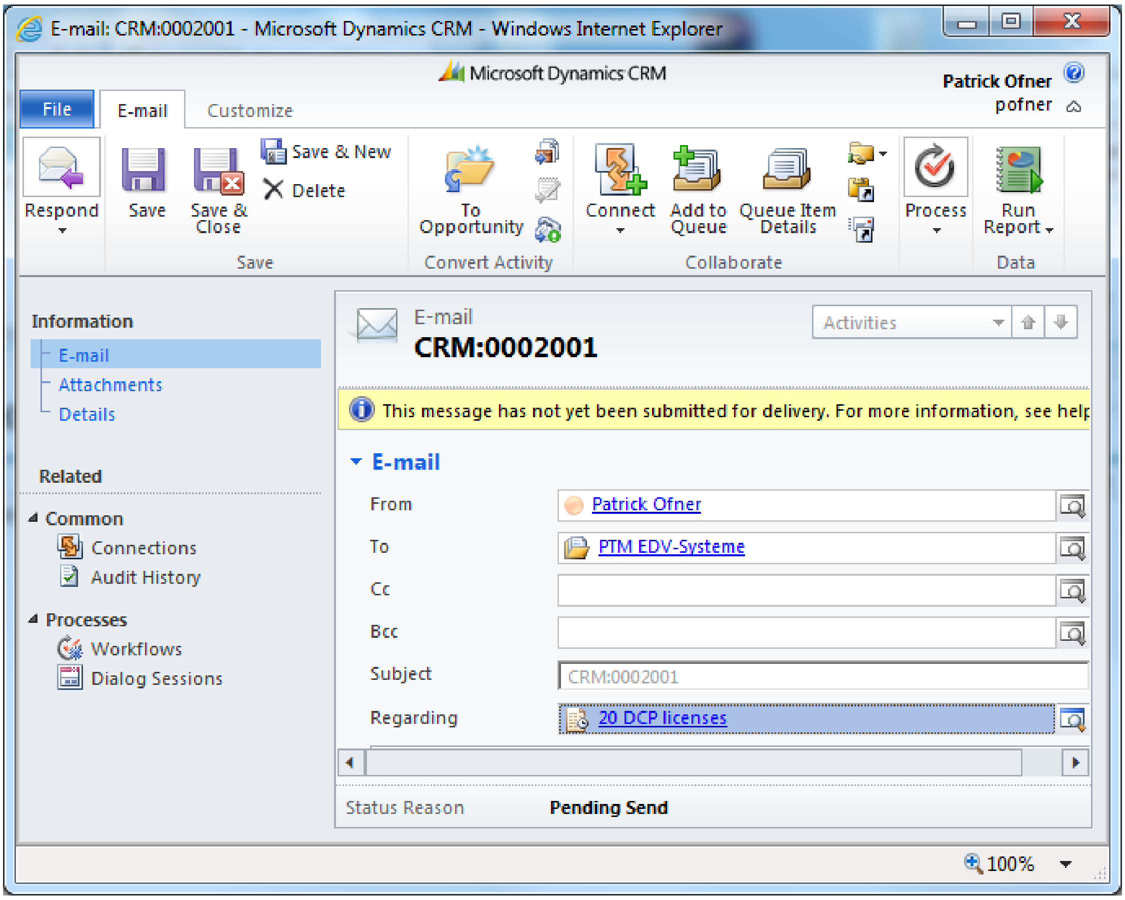


Then we can define what should happen with the generated document. We select "AttachToEmail" and hit [Next] to proceed.

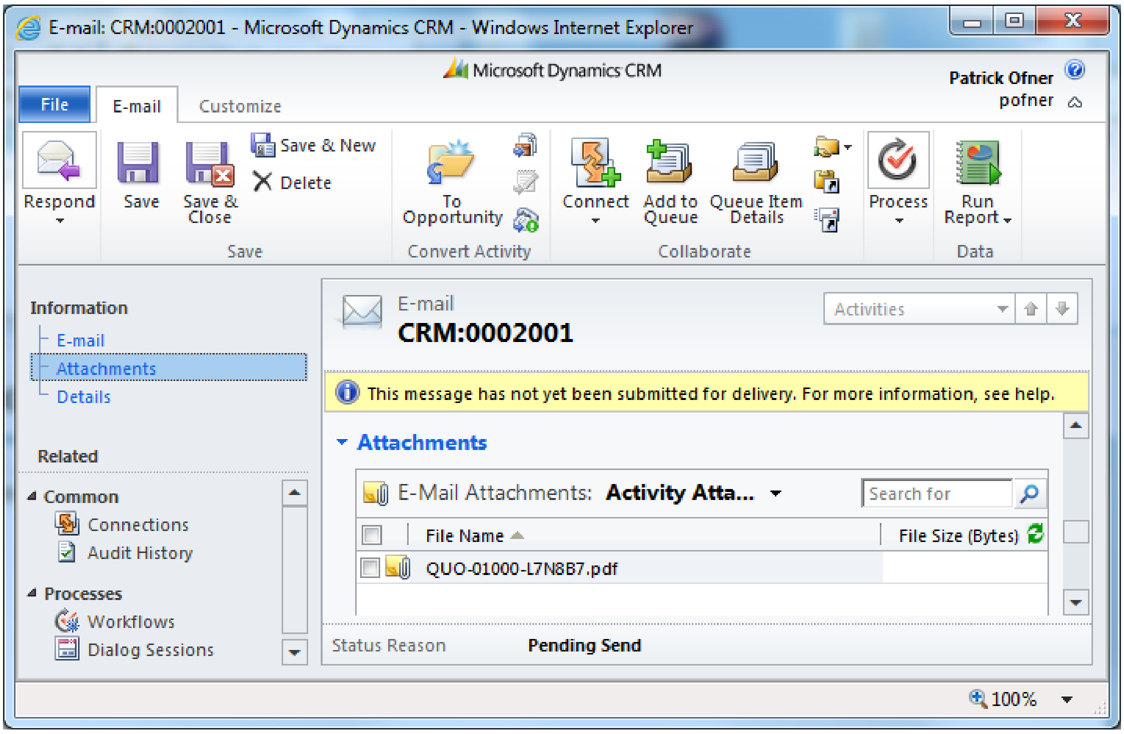


After a short time, this window will pop up and let us know that the dialog has ended. We hit [Finish] to close it.

Then, we navigate to the "Closed Activities"-area of this quote. There we can find the Email:



In the “Attachment”-area we can see the generated document stored as pdf.



Demo-Company Inc., 1234-Demo Road

Your Company_logo

PTM EDV-Systeme
To: Mr. James Elliott
Bahnhofgürtel 59,Graz8020 - Austria

DearMr.James Elliott,

Thanks for the interest in our products. Regarding your request per e-mail from 3/30/2012, we can offer you the following:

No.	Product Name	Price	Qty.	Amount
Default Subject				
5454654 6546	**Documents Core Pack CRM 2011**	€56.00	20	€1,120.00
		Group Default Subject total:		1.120,00 €

Total:€1,120.00

This quote is valid for XX days from today.

Terms and conditions conditions:
Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet.
Consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, n sea takimata sanctus est Lorem ipsum dolor sit amet.

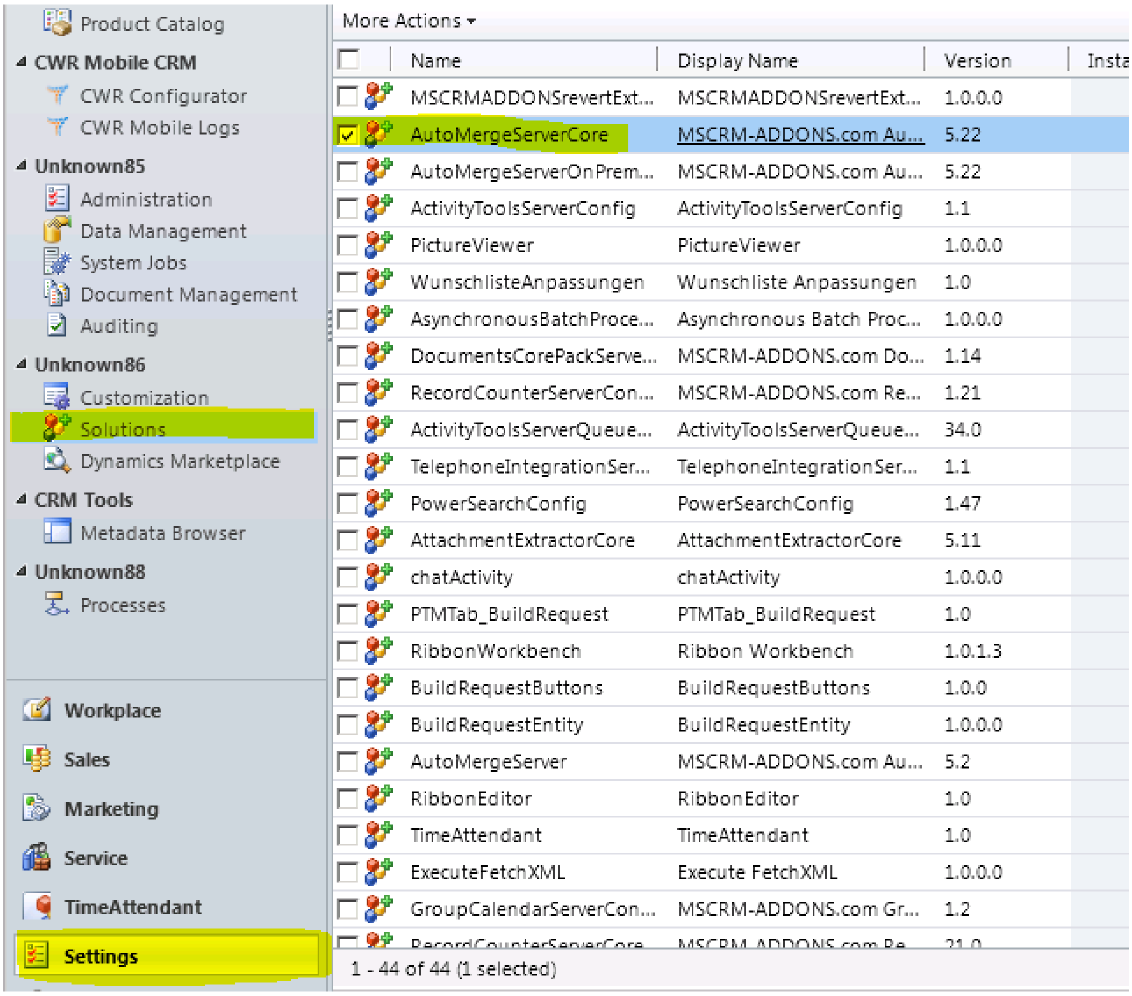
Payment conditions:
Normally you have to buy at our online-shop and to pay in advance with Paypal, MasterCard, VisaCard or American Express.
If you prefer to pay by bank transfer, this is also possible, but we cannot forward the software-activation-key until the payment arrives in our account.

8 How to activate debugging for AutoMerge

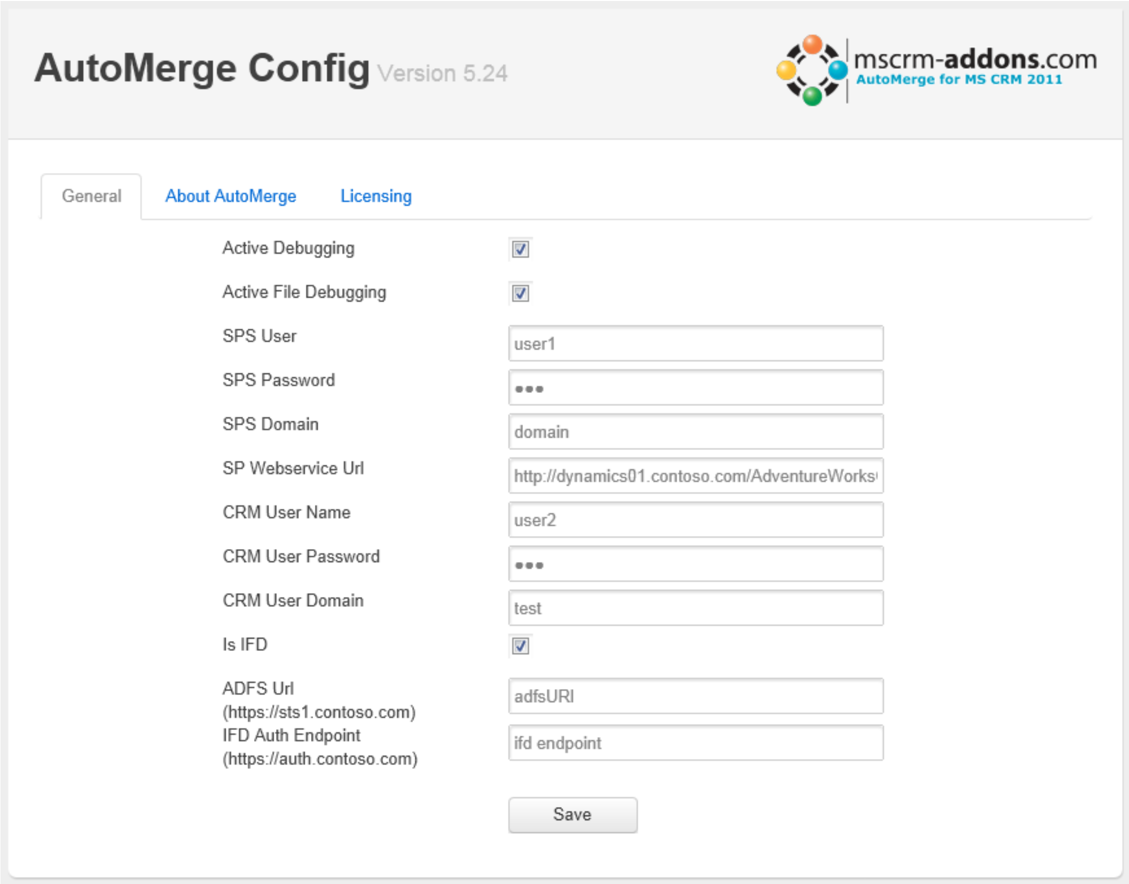
This article describes how to activate debugging for AutoMerge for Microsoft Dynamics CRM 2011. Basically, there are two possibilities to enable debugging.

- **Solution 1:** Activate file debugging by using the AutoMerge configuration (Recommended).
- **Solution 2:** Activate debugging by using the AutoMerge configuration.

Solution 1
Navigate to "Settings" -> "Solutions" and click "AutoMergeServerCore".

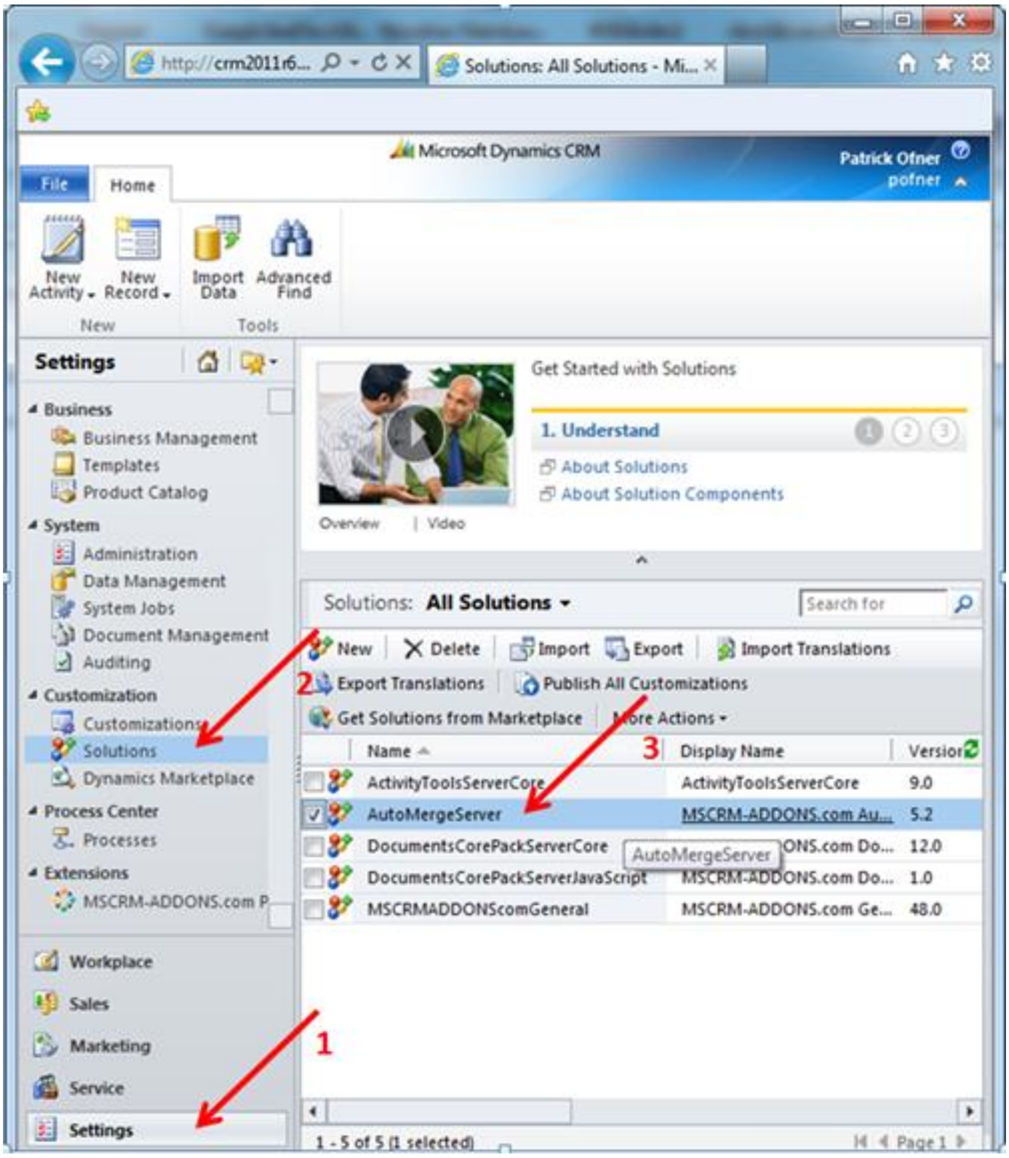


In the AutoMerge Config check "Active Debugging" and "Active File Debugging". Click "Save" to finish.



File-debugging is now active and the logfiles will be saved in the "log"-folder in your AutoMerge installation-folder.
Navigate to the installation-path of AutoMerge and send the files in the "log"-folder with an error description to our support address (support@mscrm-addons.com).
Example: C:\Program Files (x86)\PTM EDV-Systeme GmbH\AutoMerge for Microsoft CRM 2011\log

Solution 2
Within your CRM, navigate to "Settings" [1] -> "Solutions" [2] and double-click on the "AutoMergeServer"-solution [3]. (see next screenshot)



After that, the configuration page of AutoMerge opens. (see screenshot below)

Check "Activate Debugging" [1] and click on "Save" [2].
From now on, debugging is activated.

9 Contact

If you have got problems with this product, please consult our Knowledge-Base at http://support.mscrm-addons.com ,

Or contact us via:

Email: support@mscrm-addons.com
Tel.-Nr.: +43 316 680 880 0