



Activities ▼



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# Miscellaneous Activities

This topic contains all different kinds of activities, which are not quite assignable to a specific section. The following activities are included:

- Assign Value
- Calculator
- Convert HTML to PDF
- DocuSign
- Execute PowerShell Script
- Fill PDF Form Fields
- Generate Document
- Generate Password
- Muhimbi Document Converter
- PDF Merge
- Read CSV
- Regex String Search
- Social Networks
- Transfer File
- Write to CSV
- XML Builder

## Assign Value

The assign value activity is used to assign values to workflow variables or business entity links. Use the **+** button to add new value to assign. You can add up to ten values and by checking the **Show system** fields in the Business field selection is possible to show system variable that helps the assignment of values with more available fields.



**Activity (Assign Value)**  
Use this wizard to assign custom values to output variables.

Input: **+** Some text

Output: Demo BE.Field 1 **X**

**Business Entity Fields** **Validate** **OK** **Cancel**

## Calculator

The calculator activity is used to perform various arithmetic operations (+, -, \*, /, %), square roots, exponentiation, logarithmic functions and trigonometric functions. The input can either be a static value or can be bound with a workflow variable or business entity link. With the Add text field button is possible to perform operation on static field and workflow variables or business entities.

sqr(x) -> square root

abs(x) -> absolute value

x^y -> power

log(x) -> logarithmic

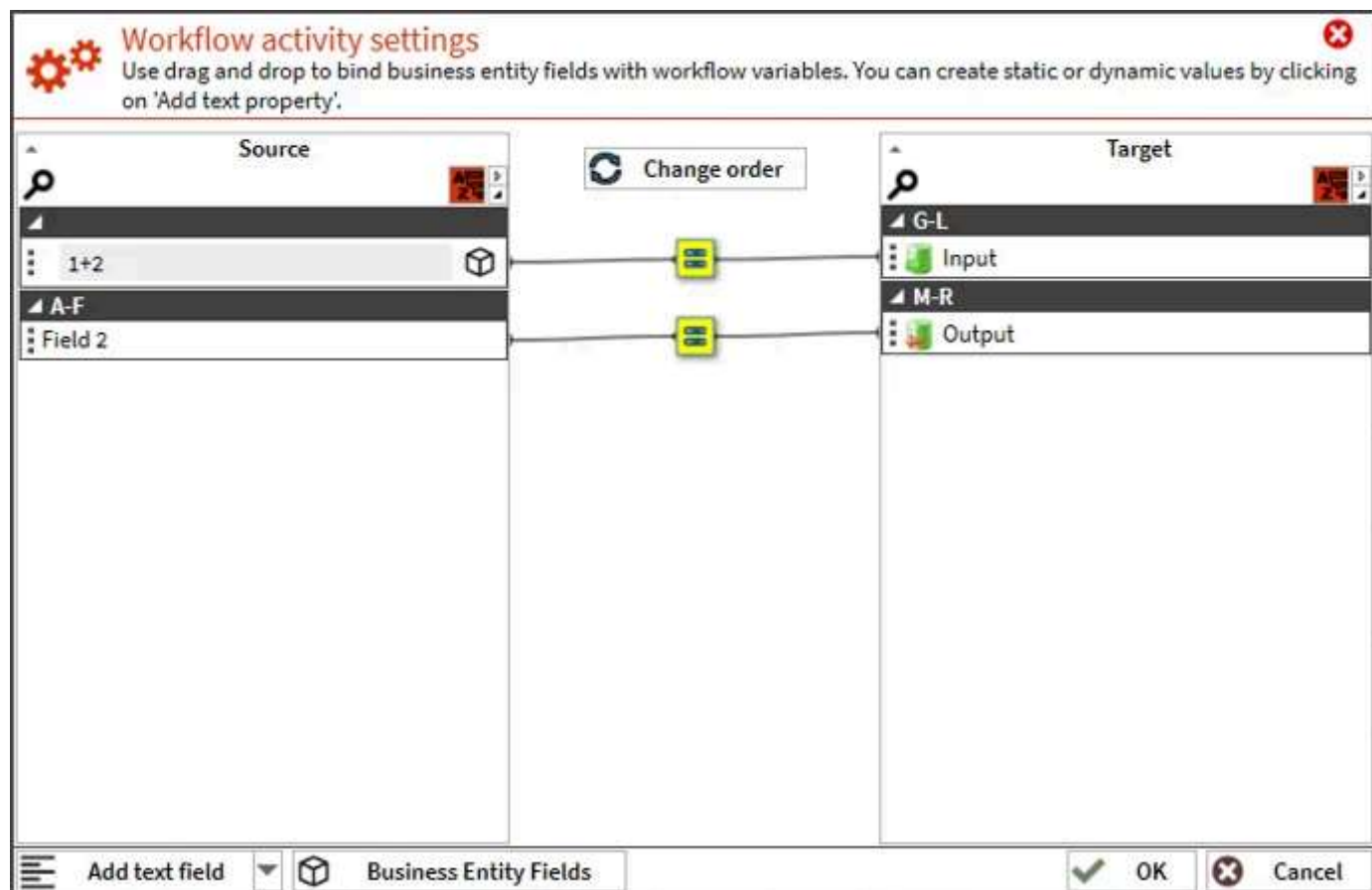
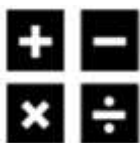
fac(x) -> factorial

sin(x) -> sine

cos(x) -> cosine

tan(x) -> tangent

With the bottom right white button is possible to configure an action in case of exception, e.g. division per 0.



## Convert HTML to PDF


The activity enables to convert an HTML file to a PDF file. The HTML file can be inserted as text or with an attachment field. After that, a template can be chosen where the margins and format are automatically replaced with the values you chose to configure, different templates can be added and stored under this path: ..

<FireStartInstallDir>\FireStart Resources\PhantomJS\Templates.

Make sure the field format and orientation are set. With the bottom right white button is possible to configure an action in case of exception like fault in conversion. For more information regarding the templates, please see the PhantomJS documentation: <https://github.com/ariya/phantomjs> .

The PDF can be stored locally on the server or again in an attachment field.







## Activity (Convert HTML to PDF)







Converts a given html file to a pdf file. Parameters can be configured.


**Input**


**HTML Input (Text or Attachment):**  
 ↩Workflow Variables.HTML Input↩ Bound 

**Input JS Template:**  
 DefaultTemplate (including Footer).js 



**Configuration options:**

<b>Margin Left (cm):</b> 1 	<b>Margin Top (cm):</b> 1 	<b>Header Height (cm):</b> 0 
<b>Margin Right (cm):</b> 1 	<b>Margin Bottom (cm):</b> 0.5 	<b>Footer Height (cm):</b> 0.8 


**Format:**  
A4 

**Orientation:**  
Portrait 




**Output**

**Output File Path:**  
 C:\UserName\test.pdf  

☒ Overwrite existing file

**Output Attachment Field:**  
 Demo BE 2.Field 4 

☒ Delete from temporary folder

 **Business Entity Fields**
 **Validate**
 **OK**
 **Cancel**

## DocuSign

This activity is used to sign documents with DocuSign. The option of the signature field can be defined with x\y coordinates (expressed in pixels, 1cm~37px). Multiple signature fields can be used in one document. The envelope id can be used in an intermediate event to wait for the completion of the signing process. You can also specify on which page you would like to add the signature in the field Page number. Test/Production mode can be switched, further information about those two modes can be found here: <https://www.workbooks.com/help/production-vs-sandbox>. Name and Email field establish the recipient/s of the document.

DocuSign uses the OAuth 2.0 authentication method. Basic authentication is no longer supported. For all new DocuSign Activities, OAuth 2.0 will be used by default, and it is not possible to use Basic Authentication. Existing activities need to be converted to use OAuth. To do so, open an activity, click the **Convert to OAuth** button, click **OK**, and save the process model. Note that this cannot be reverted to use Basic authentication again.



**Activity (DocuSign)**  
 This activity is used for document signing via DocuSign.

**Login information**  
 User:  
 NameOfUser
 Password:  
 .....
 Integrator key  
 Demo BE.Field 1
 Bound

**Configuration**  
☐ Production mode
 ☒ Test mode  
 Filepath  
 test.pdf
 Subject  
 NameOfSubject
 Name  
 max.mustermann
 Email  
 max.mustermann@firestart.com
 Page number  
 5
 X coordinate  
 400
 Y coordinate  
 200

**Output**  
 Envelope Id  
 Demo BE 2.Field 2

Business Entity Fields
 Validate
 OK
 Cancel

## Execute PowerShell Script

This activity is used to execute a PowerShell script. By default, the script runs on the server on which the FireStart Server is running. If the option "Execute on different server" is activated, the script can also be executed on any server with a

running RemoteAgent. Within the settings, the PowerShell can be kept alive for a certain time after execution of the script and the standard timeout can be switched off. The return value of the script (output) is written to the business entity field selected in the drop-down box. The load and save dialog allow the storage and re-using of scripts. They are located at *<FireStartInstallDir>\FireStart Resources\Activities\Execute PowerShell Script*, therefore, the scripts are accessible by all process modellers on a FireStart server. Furthermore, scripts can be copied to the folder from any external source. As the scripts sometime requires authentication information, it is recommended to take security considerations into account. Functions like `ConvertTo-SecureString` and `ConvertFrom-SecureString` might be helpful here. For more information and best practice articles, see <https://www.pdq.com/blog/secure-password-with-powershell-encrypting-credentials-part-1/>.



**Activity (Execute PowerShell Script)**  
Use this wizard to configure your activity.

☐ Execute on different server (RemoteAgent needed)

Server names: \_\_\_\_\_

Settings

Script:

Output:  
Unselected

☐ Redirect error output  
Output (Standard Error):  
Unselected

Business Entity Fields

Validate OK Cancel

## Fill PDF Form Fields

The Fill PDF Form Fields is used for filling a PDF form with data. First, there needs to be an input file specified. The path for input files points to the server (not to the client), therefore a network drive would be a good solution to avoid having to store PDFs directly on the server. After that, the mapping between the PDF fields and the input needs to be set. By clicking 'Load PDF File' the fields available in the PDF will be visible, Business Entity item can be chosen from the dropdown menu, then is possible to drag and drop different business entities field into the fields loaded from the PDF. A different file can be specified to define the mapping by checking the box 'use separate mapping file' and upload another file, the fields will be uploaded directly from this file. Finally, it needs to be specified where the finished PDF file should be saved on the server.





**Activity (Fill PDF Form Fields)**  
 This activity is used to fill form fields in a PDF file.

**Input**  
 Input files:  
 Demo BE 2.Field 4
 

Bound

☒ Use separate mapping file  
 Mapping file path:  
 C:\UserName\PDFForm.pdf  
☐ Flatten form fields
 

Load PDF file

Preview PDF file

**Form field mappings**  
 BusinessEntity item for input mapping:  
 <Unselected>

**Activity output**

1

Some Text

NameOfCustomer

NameOfUser

Date now

Bound

A-F

Field 4 (Demo BE 2)

Add text property

Change order

**BusinessEntityFields**

A-F

Bearbeiter

Datum

G-L

Kunde

S-U

Text1

V-Z

Vertragsnummer

Auto-map

**Output**  
 Output attachment field:  
 Demo BE 2.Field 4  
 Output file path:

Business Entity Fields

Validate

OK

Cancel

## Generate Document

The Generate Document (dox42) activity enables to pass data and generate a document based on a deposited Word template. The template itself can be designed using the

<https://help.firestart.com/en/knowledge/miscellaneous-activities>


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dox42 plugin (<https://www.dox42.com/Modules/dox42-Office-Add-Ins>). During the generation, the placeholders in the Word template are replaced by the actual data you pass in the activity.

More info are available in this


file: [https://www.dox42.com/Download/dox42\\_AX\\_Documentation\\_EN.pdf](https://www.dox42.com/Download/dox42_AX_Documentation_EN.pdf).


# dox42


**Generate document (Generate Document)**
✕









This activity generates a document from a dox42 template.


---

Dox42 endpoint address:  
 


Dox42 template path (relative to dox42 server):  
 


Input parameters:

Name	Value			
Item	 <WEM NEW.Item>	Bound		✕
Quantity	 <WEM NEW.Quantity>	Bound		✕
Price	 <Workflow Variables.Price>	Bound		✕
Vendor	 <Workflow Variables.Vendor No.>	Bound		✕







---

Output filename:  
 



Output filetype:  
 

Output file:

 Business Entity Fields
 
 Validate
  OK
  Cancel

## Generate Password


This activity is used to generate a random password of a given length. It can also be specified if the generated password should contain special characters and/or numbers.


**Activity (Password Generator)**



A new password can be generated with this activity. The length of the password and the use of digits and / or special characters can be

**Activity Settings**


**Password length**  







**Special Characters**  



**Numbers**  



**Output**  
**Password**


 Business Entity Fields
 
 Validate
 
 OK
 
 Cancel



## Parameters

Name	Usage	Description
Password length	Required	The length of the generated password
Special Characters		Set to yes, if the generated password should include special characters. { @, ., -, &, \$, %, #, :, ,, ;, *, +, %, =, /, \, (, ), {, }, [, ], !, / }
Numbers		Set to yes, if the generated password should include numbers.
Output Password	Required	The target field the generated password is written to.

## Muhimbi Document Converter

With this activity, an HTML file is converted to a PDF file. A Muhimbi web service must be available and specified.




 **Activity (Muhimbi Document Converter)**   
Convert documents with Muhimbi Document Converter

File path:


Input file path

←Demo BE.Field 1→

Bound 

Output file path


←Demo BE.Field 2→

Bound 

Webservice configuration:

Webservice URL

←Demo BE.Field 3→


Bound 


Timeout in minutes


5


Max outputfile size (MB)

5

 Business Entity Fields

 Validate


 OK

 Cancel

## PDF Merge

This activity merges given PDF files. You can select multiple PDF files and they will be merged and stored in a single PDF file on the server. There is also the possibility to store them in a Business Entity field by specifying it in attachment field. With the Configuration option you can delete the file from the source or even overwrite the existing file with the same name. Batch merge is possible by storing multiple files in one variable of type attachment field.





### Activity (Pdf Merge)

This activity merges multiple pdf files into one pdf file.

Input

Source files:

test.pdf

test2.pdf

Output

Filename:

result.pdf


Folder:


Attachment field:


Demo BE 2.Field 4


Configuration options:

☐ Overwrite existing file ☐ Delete from source

 Business Entity Fields

 Validate

 OK


 Cancel

## Read CSV

With this activity, a CSV file can be read, and the values can be written into a business entity item. It's also possible to write a CVS string by hand by selecting the radio option Load from input text. Once the CSV is uploaded click on Load column and the different column will be mapped in the activity output section. If your column has a title, check the box First row contains columns names. Then is it possible to choose a business entity, the field of this will be mapped in the right section, map it with drag and drop.

Hint: The outcome of this activity will create multiple objects of the same BE, to go through the multiple objects of the mapped BE, the Loop activity is a good choice ([Loop info](#)).





## Activity (Read CSV)


This activity gives you the opportunity to map a csv file from a given source to a business entity

Input CSV:

☒ Load from file
 ☐ Load from input text

Source:

✕
🔗
📦
🌐

Separator:  

☐ First row contains column names
 Load columns

Output data:

BusinessEntityItem for output mapping:

Demo BE

Activity output

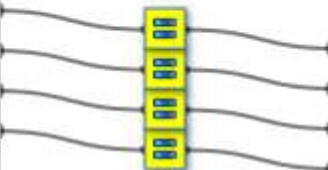
🔍

▲ A-F

- Column 1
- Column 2
- Column 3
- Column 4

Add column Remove column

Change order



BusinessEntityFields

🔍

▲ A-F

- BE\_FOREIGN\_ITEM\_ID
- Field 1
- Field 2
- Field 3
- Field 4

Auto-map

📦 Business Entity Fields
📄 Validate
✅ OK
❌ Cancel

## Regex String Search



The Regex String Search activity looks for a specific string in a given input and returns it as an output, otherwise, it returns an empty field. Input output and Regex can be stored in variables. When Return all matches to several items is selected, then the output it will be stored in a field of a business entity and it will be possible to access the stored



element via loop. Here you can find more about Regular Expressions and how to build them: <https://cs.lmu.edu/~ray/notes/regex/> .

Hint: The outcome of this activity will create multiple object of the same BE, to go through the multiple objects of the mapped BE, the Loop activity is a good choice ([Loop info](#)).





 **Activity (Regex String Search)** 

Analyzes an input string with the given regular expression and returns the matches.


Input data:


Input Text:

Demo BE.Field 1 



Regular Expression:

Demo BE.Field 2 




Output data:


☒ Return first match  
Only the first match will be returned and stored into one field.


☐ Return all matches to one field  
All matches will be returned and stored into one field. The values are separated by ";".


☐ Return all matches to several items  
Fields of workflow variables and business entities, which are set to "CreateNew" are not allowed. For each return value a new item will be created. Instead of workflow variables, you can define abstract business entities to hold the values.


Output Field:

Demo BE.Field 3 

 Business Entity Fields

 Validate

 OK

 Cancel

## Social Networks

With this activity, a post can be created on different social networks. This requires an account in the selected network and during the configuration of the wizard the activity needs to be granted permission to post as the said account.



 **Activity (Social Networks)**  
This activity allows you to post a message to different social networks.

☐ None  
☒ **Log in with Facebook**  
☐ Log in with Xing  
☐ Log in with Twitter  
☐ Log in with Yammer

**Log in with Facebook**  
Next visit <https://www.facebook.com/device> on your smartphone or computer and enter this code:  
**WKLAF94E**

Enter the text that will be posted to the social network:


 Business Entity Fields  Validate  OK  Cancel

## Transfer File

With this activity it is possible to move and copy files in the server, an input and output path is needed. The source file path or the file itself can be stored in a variable, same for the output file. With the Configuration option you can delete the file from the source or even overwrite the existing file with the same name. Batch transfer is possible by storing the files in one attachment variable.







**Activity (Transfer File)**
✕

This activity is used to transfer files from different sources.

**Input**  
Source files:  

 Demo BE 2.Field 4
✕
🔗
📦

➔

**Output**  
Folder:  


C:\Users\username\Documents
✕
📦
📄


Attachment field:  

<Unselected>
▼

**Configuration options:**  

☐ Overwrite existing file
☐ Delete from source

 Business Entity Fields

 Validate

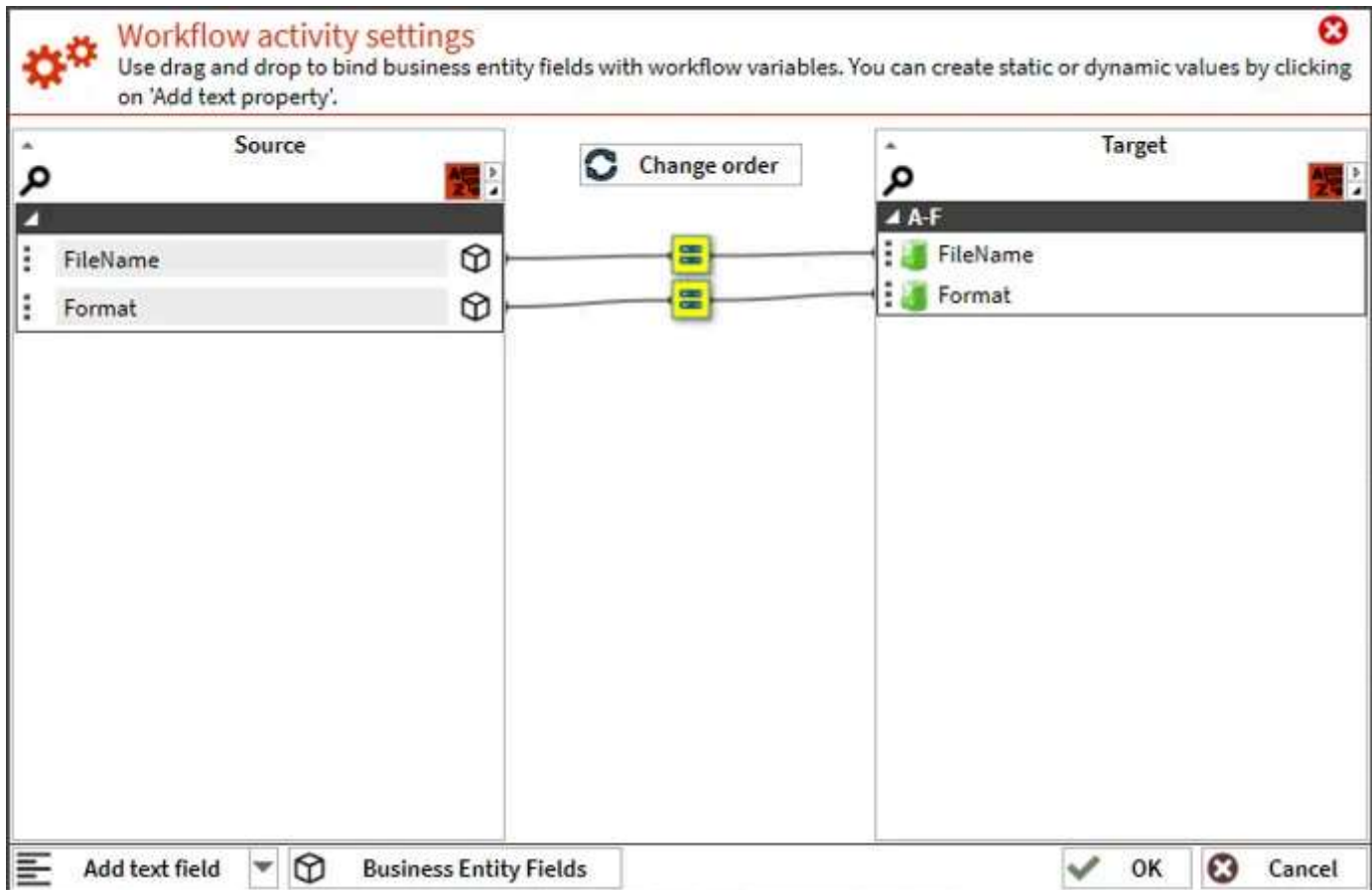
✔ OK

✕ Cancel

## Write to CSV

The Write to CSV Activity adds text to a CSV file or creates a new CSV file. This can be used, to store database tables in a CSV file in order to be able to exchange them between different systems or programs. The parameter format must be connected to the desired text. This can also be dynamically mapped to a business entity link. The semicolon is used as a default separator between the columns of the CSV file and FileName parameter specifies to which file the text is written, a full path is suggested. The file path always refers to the server on which the workflow is executed, if the file does not exist it will be created, otherwise the outcome of the activity will be appended to the existing file. It is also possible to insert different row on the same column by looping the input.







## XML Builder

With this activity, data can be read and written from and into a XML file. The XML file field can be linked with a file on the server or variable. You can navigate in the different attributes of the file using XPath, here you can find further information: [https://www.w3schools.com/xml/xpath\\_syntax.asp](https://www.w3schools.com/xml/xpath_syntax.asp). The access mode establish in which way we want to access the file we can read, add, replace or delete elements from the original file, the field Operation helps to point out where we do apply our access. In case we are going to set an attribute, the field attribute name will be shown. In the with value field one or more element can be specified. The input file is never effected, the modification will be always reflected in the output file, which can be either specified by a path on the server or be stored in a variable.







 **Activity (XML Builder)**  
Read/Write from/to an XML file. 

**Input**

**Attachment**


XML-string

XML-file:  



Demo BE 2.Field 4    

**Configuration**



XPath expression:  

/note/to 


Access mode:  

Read  


Operation:  

Attributes from all elements  

Attribute name:  


NameOfAttribute 

Seperate elements in return value with:  




**Output**





BusinessEntityField:  

Demo BE.Field 1 

☐ Write to file

File path:  



 Business Entity Fields  Validate  OK  Cancel

Was this article helpful?

Yes

No