# **Docs Creator Add-on**

General help and documentation, by apps experts



# apps experts

Stuttgarter Straße 3 73525 Schwäbisch Gmünd Germany www.apps-experts.de

# Company details

Docs Creator Add-on - General help and documentation

Author: Markus Hegele <a href="http://www.apps-experts.de">http://www.apps-experts.de</a>

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# **General Information**

The Google Docs Creator add-on from apps experts features a document merge function for Google Docs! Create custom document templates as a Google Doc and maintain personalized content, such as customer master data, price information and addresses in

Google Sheets. The Google Docs Creator Add-on combines this information with the selected Google Docs template into individual Google Docs documents, enabling you to create documents automatically in your drive storage. Additionally, graphics such as a company logo or charts based on Google Sheets can be automatically added to the automated documents. The generated documents can also be sent automatically by email. The add-on also allows the creation of all personalized documents with all pages within one Google Doc, allowing easy printing of the generated contents.

Please note that the add-on was developed with Google Apps Script. Therefore, the Google Apps Script quotas and limits apply to your Google account, for this add-on. For more information click here.

# Installation of add-on

The Docs Creator add-on is available as a Google Sheets and Google Docs add-on in the Google Workspace Marketplace. Use the following link to access the add-on:

Google Docs Creator Add-on



#### **Private users**

A basic version of the Add-on is available free of charge and can be installed from the Google Workspace Marketplace with a private "@gmail.com" Email address. In order to use all available functions private users can pay for the Plus-Version. For more information on all products please visit our <u>website</u>:

>> Overview Google Docs Creator Add-on

#### **Companies**

Provided that your company's Google Workspace administrator has not disabled the installation of Add-ons centrally for the entire organization via the Google Workspace administration interface, all employees with a Google Workspace account can <u>install</u> the Add-on through the Google Workspace Marketplace.

If a personal installation has been disabled in your company, it is still possible to activate the add-on centrally on the administration console, which makes the add-on available to all employees or to specific organizational units of your company. For more information about the central provisioning approach via Google Workspace administration console please check the following links:

- Allow or restrict add-ons in Docs editors
- Distribute a Marketplace app to users
- Install Marketplace apps in your domain

### Important: Allow third-party apps for Drive files

The Docs Creator add-on only works if the option "Allow users to access Google Drive with the Drive SDK API" is enabled in the admin settings of your Google Workspace domain. You can find more info in <a href="mailto:this Google support article">this Google support article</a>.

We offer the Google Docs Creator Add-on specifically for companies in a variety of business license packages, depending on the size of the company. For more information about business license packages please visit our website:

>> Overview Google Docs Creator Add-on.

# **Quick Start Guide**

- After installing the add-on just open a spreadsheet and check for menu item "Enhancements → Docs Creator → Start and Job Overview"
- 2. On the start page "Job Overview" you can see all your created Jobs. Create a new Job by clicking on the red button "Create".
- Assign any name to your new Job in the general Job settings. Also set the desired start time. You can optionally activate a processing log. Then click on the "Next" button ( > symbol)
- 4. In the next step "Data Source Settings" you can configure all settings about the processed data. For this first select the relevant sheet which data should be processed. By default, row number one is pre-selected as the column header row. Row number two is defined as the start row of your data. You can adjust this default values if necessary. All processing results will be written into a column for status messages. As default a new column with header "Protocol Docs Creator" will be created by the add-on.
- 5. Via the filter settings you can define a condition based rule to filter your data records if necessary. Defining a filter is optional. You can skip this step any time by just moving forward via the "Next, no filter" link.
- 6. Last step to finalize your job creation is to configure the "Action Settings" dialog. Most important is that you select a Google Docs template first from your Google Drive storage. In this document template you can use placeholders to refer to the column headers of your selected sheet. To use a column header in your template as a placeholder surrounded just by %-characters.

Examples: %Name%, %Address%, %Email%,...

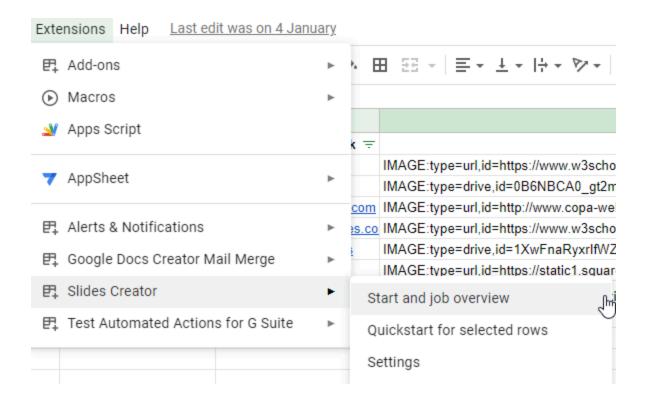
Please note that a placeholder, apart from the percentage at the start and end, must be identical to the column headers used in the Google Sheet. It is also case-sensitive.

7. Furthermore, you can also specify the merge method of document creation by the add-on in the action settings. Depending on your selection, you determine whether the add-on should create a separate Google Docs document for each processed

- table row or one document for all processed rows based on your selected document template. You can also choose a label function with which you can insert several lines of content into one page of your document.
- 8. You can finish job creation by clicking the blue "Save"-Button. Your created Job is now listed on the start page "Job Overview". You can start the Job manually at any time using the "Execute" button (2-Symbol).

# Open the add-on

If you have installed the add-on and authorized it for deployment, you will now also see the menu item "Docs Creator" under the "Extensions" menu item, when opening a Google Spreadsheet or a Google Docs document. Here you will find three more menu items: "Start and job overview", "Quickstart for selected rows" and "Settings", with which you can call up the central functions of the Add-on.



It basically doesn't matter whether you start the add-on from a Google spreadsheet or from a Google Docs document. However, be aware that the job overview when accessed from a Google Docs document will only show jobs that use this document as a template. When calling up the job overview from a Google Spreadsheet, the job overview lists the jobs that use the currently accessed spreadsheet as a data source. Regardless of which document template these jobs use. The actual range of functions, like creating, changing or deletion of a job is unaffected. The only exception is the menu item "Quick start for selected rows". This is only available if you start the add-on from a Google Spreadsheet, since you can only start processing via this menu item if you have selected rows in a currently open spreadsheet.

# Start and job overview

Job Overview is the main point of entry into the add-on. As soon as you open this you will receive an overview of all existing Jobs for the currently open Google Spreadsheet. Starting from the job overview, you can edit or delete current Jobs, or add a new job via the "Create" button. You can find out more about this in the chapter <a href="Start and job">Start and job</a> overview.

#### Quickstart for selected rows

You can use this menu item to define and run a standard job for the currently opened worksheet. Once defined, you can always start the defined job for this spreadsheet directly. The job always processes the currently marked rows or this single row that is highlighted by the cursor. Note, however, that the marked lines must be contiguous. For example, you can mark and process rows 5-15. However, you cannot mark rows 5, 8 and 13 individually. In this case only line 5 is processed.

**Important:** The menu item "Quick start for selected rows" is only available if you start the add-on from a Google spreadsheet. If you open the add-on via a Google document, this menu item does not exist, because at this point the add-on must know for which currently selected rows the add-on should start processing.

# Settings

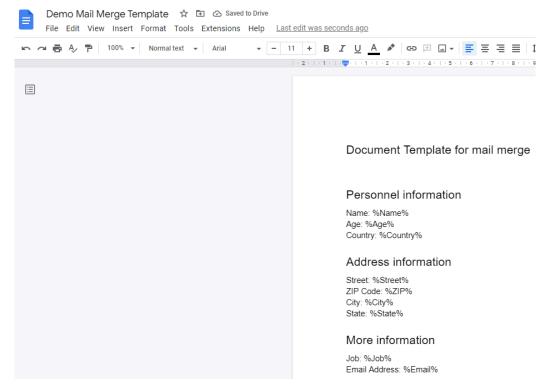
Use this menu item to start the user-specific settings for the add-on. You can find out more about the settings <a href="here">here</a>.

# Creation of Google Docs template

The basis for creating mail merge documents via the add-on is the creation or use of a mail template in the form of a Google Docs document. You can use any Google Docs document that you have access and editing permission to in your drive storage. You can create a new Google Docs document in Google Drive or customize an existing document.

For the dynamic creation of Google documents to work later, you must set placeholders in your document template. These placeholders are later automatically replaced by the content maintained in a Google Sheet when the documents are created. The add-on recognizes placeholders if they begin and end with the percentage sign. The text between the percent signs can be assigned arbitrarily.

Examples: %Title%, %Subtitle%, %sysDate%, %Logo%



By assigning placeholders, you can make the content of your Google Docs document dynamic and later replace it with the content maintained in a Google Sheet, thus creating many documents based on one template.

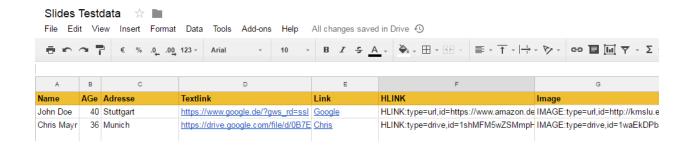
#### Tip: Also set placeholders in the Header and Footer area

The add-on also recognizes placeholders that you set into the header and footer area of your document template. This means that you can also dynamically insert content into the header and footer using values from your Google spreadsheet.

# Maintenance of data in Google Sheets

For each placeholder maintained in your Google Docs document, you can now create a column in any Google Sheet of your Drive storage. Set the column headers in the first row of the Google Sheet. The column headings are used to assign the respective placeholder to the Google Docs template. Therefore, the column headers in the table must be identical to the placeholders, minus the-%sign at the beginning and end of the placeholders.

When assigning the placeholders and column headers, please note that the add-on is case-sensitive. The map-to-column mapping only works if the column headers and your used placeholders are identical.



It doesn't matter which placeholder is maintained in which column of the table. You can also maintain additional columns in the Google Sheet that are not used for a placeholder. Maintain the appropriate information which will later be used for the documents and will replace the placeholders in the document template from the second row onwards. Finally, when creating the documents, the information from each row is used for a separate document.

# Tip: Copy the placeholders into the Google Sheets from the Google Docs template!

For the add-on to work, the column headings of the Google Sheets must be identical to the placeholders. It is best to copy the individual column headings to the desired position of the Google Doc document and surround the placeholder with a %-sign at the beginning and end of the column heading. This will avoid typing errors and make sure the add-on works without errors!

# **Insertions of Google Sheets Links**

The Google Docs Creator add-on can not only insert text, but can also add links automatically into the documents that are to be created. In Google Sheets there are two different types of links.

Formula based links are technically based on the Google Sheets formula "HYPERLINK". If you link a text in a cell of your Google Sheets using the menu item "Insert Link" in the context menu, the HYPERLINK formula is applied technically to Google Sheets. If you enable the "Consider formula based links" in action settings during job creation dialog, the add-on recognizes these links and reads not only the value of the cell but also the link to it and replaces the corresponding placeholder from the document template with the text and with the link that was specified in the HYPERLINK formula.

Regrettably, not all of the links in Google Sheets can be retrieved this way. For example, if you insert the text: "www.google.com" into a cell, Google Sheets automatically creates a link to the website www.google.com and links the text entered to the web address of the

same name. Unfortunately, these links can not be read from Google Sheets, because they are not based on the HYPERLINK formula. To add these links to the merged documents, the "Consider text based links" option was implemented for the add-on. If this option is activated in the advanced settings, the add-on checks whether a text begins with "HTTP", "HTTPS" or "www". If this is the case, the add-on assumes that the text is linked to a web page and also inserts a link to the read-out text in the document.

**Important:** In order for the add-on to process links, the corresponding option in the action settings of your job must be activated first. Otherwise, the add-on ignores existing links within the Google Sheet and only inserts the actual texts of the individual cells in the sheet.

# Insertion of Images, Charts and individual links

With the Docs Creator add-on, you can add text and linked text, but also other elements, such as images, graphics or charts automatically into the documents. In principle the procedure is initially identical. They assign a placeholder, e.g. %Image% or %Chart% anywhere on your presentation template. This placeholder is later replaced by the actual image or diagram. Accordingly, you should set the placeholder on the desired paragraph of the relevant page.

In your Google Sheet you will need a column with the corresponding column header, for example: "Image" or "Chart". However, in these columns you do not store normal text values in the respective row. Instead, you refer to the graphics, images or charts you have created with a notation created specifically for this requirement.

#### General structure of the notation for the integration of

- Images: IMAGE:type=drive,id=12345,replacemethod=CENTER\_INSIDE
- **Links:** HLINK:type=url,id=http://musterurl.de,linktext=Text des Links
- Charts: CHART:sheetid=12345,chartid=54321,linkingmode=LINKED

**Important:** The notation for inserting images, links and charts described in this section is only available in the plus and business versions of the Docs Creator add-on. Accordingly, the action settings options "Insert images from Drive / URL" and "Insert charts from Sheets" are automatically activated or deactivated based on your licensing. You can not enable these two options individually.

The notation for the integration of images, links and charts was built as uniformly as

possible. Use the first five characters to specify whether you want to insert a picture or graphic (IMAGE), a link (HLINK), or a chart (CHART). The sixth character is always a colon (:). After the colon, you can specify various parameters to which you must specify certain values. The structure is always the same. First enter the parameter and after an equal sign (=) add the value of the parameter. Use a comma (,) to separate several parameters.

# Overview of all existing parameters:

Parameter	Used at:	Mandatory	Possible Values
type	IMAGE/HLINK	yes	"drive" oder "url"
id	IMAGE/HLINK	yes	if type=url then arbitrary URL, if type=drive then drive file ID
height	IMAGE	no	Sets the image's height, in pixels. If you don't use this parameter or set it to 0, the image is inserted in its original size.
width	IMAGE	no	Sets the image's width, in pixels. If you don't use this parameter or set it to 0, the image is inserted in its original size.
linktext	HLINK	no	Free text as Linktext.
downloadurl	HLINK	no	if type=drive. For "true" (Default) Download URL is used.
(sheetid) → deprecated	CHART	yes	ID of Google spreadsheet → Use parameter "charturl" instead
(chartid) → deprecated	CHART	yes	ID of the chart within the Google spreadsheet → Use parameter "charturl" instead
charturl	CHART	Ja	URL of published chart

# **Insert Images**

To refer to an image, you have two options. Either you refer to an image in your Google Drive storage or you can refer to an image accessible through a URL that you are authorized to access. For example, you can refer to images from the Internet or to images you have placed on a web space for your website or blog.

To reference a picture so that it later replaces the corresponding placeholder in the Google Doc document, use the following notation:

IMAGE:type=drive,id=drivefileid

IMAGE:type=url,id=anyUrl,width=100, height=100

Important: The add-on first needs access if you want to insert images from drive! You must explicitly authorize each image for the add-on before an insertion via the IMAGE-notation is possible. To do this, go to the menu item "Settings"  $\rightarrow$  "Advanced settings"  $\rightarrow$  "Authorize images for Add-on" and select the images to be inserted once by clicking on the "Select images" button. Further information

If you wish to use an image from your Google Drive then specify the value "drive" for the type parameter. The id parameter is also mandatory and you specify the unique ID of the image stored in Drive at this point.

Example: IMAGE:type=drive,id=OB3gKzpHOR4AbX2tsNORRLVFtZHc

If you want to display an image using a URL, specify the value "url" for the type parameter. You then set the actual URL in the id parameter.

Example: IMAGE:type=url, id=https://cloud.google.com/\_static/fc5017f606/images/cloud/gcp-logo.svg

To get the unique ID of an Google Drive stored image just open the context menu of this file via Google Drive and open the "Share" dialog via the corresponding menu item. Than click on the "Copy link" button on the bottom left area of this pop-up. No you have a unique url for this image that looks like:

https://drive.google.com/file/d/1oSNCA2adkPIZ9XxflwdcfhyVRd76Ee-2oVeEy\_NAn5ffo/view?usp=sharing

 $\rightarrow$  The id is located between "/d/" and the next "/" which is orange highlighted in our example above

Optionally, you can also specify the width and height parameters. If you use these

parameters, the add-on tries to change the image to be inserted to the size you want. Accordingly, you must specify a numerical value for each of these two parameters, which then determine the size of the image in pixels. If you do not use these parameters or set the value of these parameters to 0, the image will be inserted in its original size.

Please note that there are limits regarding size and format at insertion of images. Images are fetched once at insertion time and a copy is stored for display inside the document. Google has defined that images must be less than 50MB in size, cannot exceed 25 megapixels, and must be in either PNG, JPEG, or GIF format.

#### Insert individual links

You can also add individual links using the notation specific to the add-on. Similarly to images, you can either link to a file from your Google drive, or you can link any URL.

To reference a text with an individual link so that it replaces the corresponding placeholder later in the Google Docs presentation, use the following notation:

HLINK:type=drive,id=drivefileid,downloadurl=true

HLINK:type=url,id=anyUrl,linktext=anyText

If you wish to link to a file from your Google Drive storage, then set the parameter type to "drive". The parameter ID is also mandatory and this is where you specify the unique ID of the file stored in Drive.

Example: HLINK:type=drive,id=1CS6\_ORXgTmXH-OC\_jOMCD4Bzpervm35pd\_RzpokNbBc

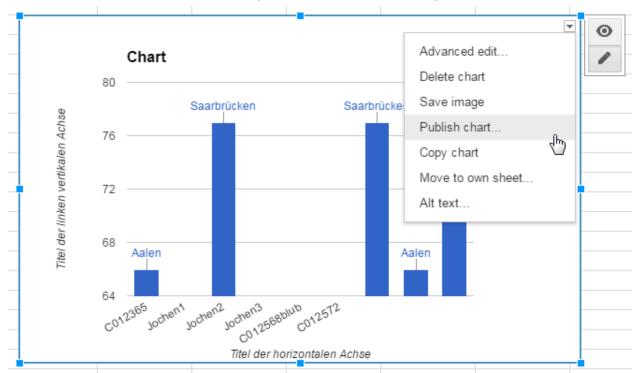
Optionally, you can also specify the parameter DOWNLOADURL with the value "true". If you specify the parameter with the value "true", a download URL is inserted as a link, where the download of the files later starts directly. If you do not specify the parameter or set the value "false", it is linked to the usual URL of the Drive file, which allows you to view / edit the file in the browser.

If you want to add a link to an arbitrary URL, specify the value "url" for the parameter type. In the parameter ID you must specify the actual URL that is to be linked later on. Example: IMAGE:type=url, id=http://www.google.de,linktext=Link to manual

Optionally, when inserting links, regardless of whether type=drive or type=url, you can still add the "linktext" parameter and, if necessary, to set the text of the link. If you do not specify the parameter, the filename of the file to be linked is determined for type=drive and inserted as link text. For type = url, the actual link is also used as link text.

# **Inserting Charts**

It is also possible to insert charts that you created from Google Sheets. However, the prerequisite is that you temporarily publish the chart that you wish to insert. Only then the add-on can access the chart and you can determine the required ID of the chart.



More information on publishing a chart in Google Sheets can be found <u>here</u>.

# To refer to a chart that will later replace the corresponding placeholder in the Google Docs document, use the following notation:

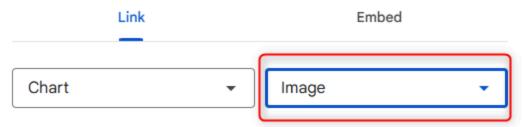
CHART:charturl=https://docs.google.com/spreadsheets/d/e/2PACX-1vStXSuOOj5h3iM W8ZP8XeKg8llcx7V5I9LSMJXERMfviCptj1CylRhMLYMkrfA8wkxDGrSrt7JvrUt6/pubch art?oid=616057019&format=image

To refer to a diagram, you must specify the charturl parameter. For the charturl parameter you specify the URL of the published chart. You can find this via the Publish-dialog of the chart. First publish your chart via the blue "Publish" button within the publish-dialog. Make sure to switch the to publish chart from "Interactive" to "Image" before publishing. After publishing just copy the URL of the published chart and insert it as the value of the parameter "charturl" (see the following illustration).

# Publish to the web

This document is published to the web.

Make your content visible to anyone by publishing it to the web. You can link to or embed your document. Learn more



**Note:** Viewers may be able to access the underlying data for published charts. Learn more

https://docs.google.com/spreadsheets/d/e/2PACX-1vSeYr-P6Cbul9SKroZhsRmPGCBXvIXEZKGmVCrOdq0vJVKEo7yiw8oplnbXypTNsG9eHoel9BRXYa3H/pubchart?oid=44594573&format=image



**Important:** Technically, when a diagram is inserted into the Google Document, an image of the diagram is always copied. Thus, the inserted diagram cannot be automatically updated or changed later in the generated document.

# Start and job overview

The job overview of the Docs Creator add-on is the central entry point for the add-on. You can reach this via the menu item "Extensions  $\rightarrow$  Docs Creator  $\rightarrow$  Start and job overview". In the job overview all existing jobs are displayed for the currently open Google spreadsheet. The jobs are sorted by name. For each existing job the name, the stipulated start time and the time of the last processing are displayed. In addition, various buttons are available to manage existing Jobs. More information can be found in the chapter "Manage Jobs".

#### Jobs overview



Furthermore, in the job overview the "CREATE" button, shown in red below the listed Jobs, is available for creating new jobs. More information in the chapter "Create Job".

# Create Job

You can create a new Job using the red button "CREATE" in the Job overview. The creation of a new Job is divided into the following four areas:

- 1. General Job Settings
- 2. Data Source Settings
- 3. [Optional] Filter Settings
- 4. Action Settings

You will be guided through these areas step by step during Job creation. You can navigate between the areas at any time using the "Next" and "Back" buttons which are displayed as arrow keys.



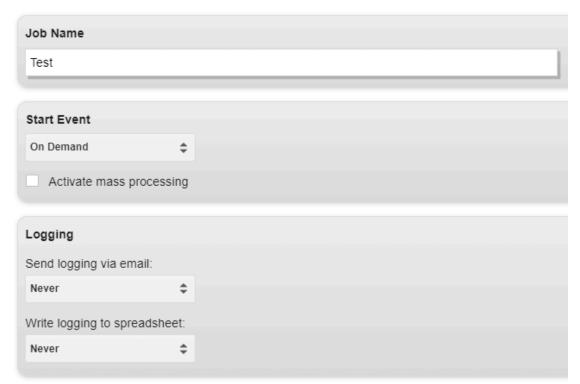
When navigating using the arrow keys, the Add-on always checks the settings you have selected. If an error occurs here, you need to correct it before navigating to the next area. The Add-on always highlights the incorrect entry in red so that you can correct the error immediately.

Furthermore, you can save your entered Job settings at any time using the "Save" button and continue creating the Job via the job overview at a later time. By clicking on the "Cancel" button, you terminate the creation of the Job and the Job settings you have made will not be saved.

# **General Job Settings**

After clicking on the "CREATE" button, you will initially be taken to the General Job Settings. This is where you specify a name for the new Job, as well as defining the settings for start time and logging functions.

General Job Settings



#### **Jobname**

The job name is mandatory and can be freely chosen. It will subsequently become the central name for you to find your newly created Job in the Job overview. Since a unique ID is also created for each Job, the job name does not have to be unique. However, it is recommended to name the job name clearly according to its later function.

#### Start Event

Next choose a start time for your newly created job. You can choose from the following options:

- On Demand
- Fixed Time
- Periodically
- Event Based On Form Submit

#### On Demand

If you select the option "On Demand", the job will only be executed if you explicitly start it by clicking the Job overview and the "Execute" button.

#### **Fixed Time**

Select the option "Fixed Time" if you want the Job to be executed precisely once at a specific time. For this option you must set the date and time to start the processing.

# **Periodically**

With the option "Periodically" you can set the start time of the job so that it is executed regularly. You can select whether the job starts automatically once a month, once a week, once a day or once an hour. Please note that this option is not included in the free version of the add-on.

#### **Event Based - On Form Submit**

Using the "Event Based" option, you can set the start time of the job so that it is started automatically whenever a form is sent from a Google Form connected to the Google Spreadsheet and the form data is submitted to the connected spreadsheet and entered. The job of the add-on is therefore started every time a new entry is added to the Google Form. In this context, the add-on also only processes this newly added line with the values transferred from the form. Please note that this option is not included in the free version of the add-on.

Start Event		
Periodically	<b>♦</b> Daily timer	\$ Midnight to 1am
Logging		
Send logging via ema	il:	
Always	<b>\$</b>	
Write logging to sprea	dsheet:	
Always	<b>\$</b>	
Select spreadsheet fo	r logging:	
Select sheet		
Select sheet:		
apps experts log	<b>\$</b>	

# Mass processing

If you enable this option in the advanced settings, you can create a larger number of documents in a processing run. While previously the processing has been interrupted after approx. 70-100 rows by the runtime limit of 6 minutes set by Google, mass processing bypasses this time limit. For this to work, the processing is technically divided into packages of 15 lines each, and each processing package is then started separately. As a user, you receive a pop-up during the processing phase that shows you the status of each processing package. During processing, you can stop it by clicking on the cancel button (not recommended). After processing is concluded, this button is replaced by an OK button and you can close the dialog with one click and call the created documents via the status column. Mass processing can only be used online, i.e. when a job is started manually. So mass processing is not available for periodically starting jobs. **Please note that this option is not included in the free version of the add-on.** 

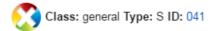
#### Mass Processing

The document merge will be processed in packages of 25 rows. Merge has been started. Protocol:

Rows to be processed next: start row: 11 - number of data sets: 2 Processing Result:



Cancel



# Logging

In the Logging section, you can choose between two logging functionalities. The logging via email sends you an overview of the processing results by email after the implementation of a job. You can specify whether the email protocol should "Always" be sent to you i.e. after every processing run, or only in the case of "Only at errors and/or warnings".

In addition to logging via email, you can also activate logging with Google Spreadsheets. Again, you can specify whether the log entries are to be written "Always " or " Only at Errors and/or Warnings "in the Google spreadsheet of your choice. In both cases, the start and the completion of the job processing is always logged in the selected Google spreadsheet.

#### Tip: Utilizing the preset "apps experts log" spreadsheet

By default, table logging creates a new spreadsheet named "apps experts log" for the Google spreadsheet you selected. If you use this spreadsheet for logging, the corresponding headings of the log are automatically created in the first line of the spreadsheet.

# **Data Source Settings**

Clicking on the Next button takes you from the General Job Settings to the Data Source Settings. In this area you define which table contents your job should process.

# Data Source Settings

Processing data				
Select sheet:				
Daten	<b>\$</b>			
Row of column head	ers:			
1				
Start row of data:				
2				
Process visible	ows only (no file	tered / hidden	rows)	
Processing results				
Column for status me	essages:			
Protocol Docs Creato	r \$			

#### **Select Sheet**

First you need to select the sheet from which the add-on should process the content. Therefore, select the desired spreadsheet via the drop-down "Select Sheet".

#### Row of column headers

Use the field "Row of column headers" to determine in which row of the previously selected spreadsheet the column headers are located. Usually this is in line one. Therefore, this is also the default value. If necessary, you can specify a different line index at this point.

#### Start row of data

Use the field "Start row of data" to determine the row from which the actual data contents begin. Usually this is one line after the column headings. Therefore, the default value is line two. If required, you can specify a different line index for the starting line of your data at this point. In any case, the line index for the starting line of the data must be greater than the line index for the column headings.

# Process visible rows only

The add-on essentially processes all row contents from the start row of the data to the last row at the end of the spreadsheet. This generally also applies to hidden or filtered lines. However, if you activate the option "Process visible rows only", the add-on will skip rows that are either simply hidden or not currently displayed because of a filter you have set up.

#### Tip: Defining data sets that are relevant for processing

In terms of the add-on, the option "Process visible rows only" is not the best choice for skipping datasets within your data. It is usually easier to limit which datasets are relevant for processing using the add-ons filter settings. You can find out more about this in the chapter Filter Settings (optional).

# Column for status messages

You can use the "Column for status messages" drop-down to select any column in your Google sheet to output status messages for processing the add-on. By default, a "Protocol Docs Creator" column is automatically created. All notifications from the add-on can be found in this column. However, you can also select an arbitrarily named column of your Google sheet to output the notifications at this point.

# Filter Settings (optional)

Click on the "Next" button to go directly from the Data Source Settings to the Filter Settings. This section is optional. You do not have to set any filter criteria. However, you can use a filter to further restrict the selection of datasets in your spreadsheet that was previously defined in the data source settings. If you do not need a filter, simply click on the link "Next, no Filter".

If you wish to use the filter, you can further restrict the datasets you would like to process. The filter works similarly to the filter function available in Google Spreadsheets or Microsoft Excel. If you set a filter, only rows that are true according to the selected filter condition are taken into account during processing.

#### Filter Settings (optional)



With the filter condition shown in the figure, for example, only datasets that contain the text "Keane" as a surname AND have reached an age of 40 or older are processed. Of course, the filter only applies to the datasets that you have previously entered in the settings for the data source. For all datasets selected via the data source that do not match this filter condition, the result of the filter is incorrect and the action specified in the action settings is not executed for these rows. The rows that are not processed because of the predefined filter function are output in the "Column for status messages" after the execution of a Job with the note "Dataset not processed. Result of filter condition was false."

# Tip: Conditions that can not be interpreted by the filter

If a condition that you defined via the filter can not be interpreted by the filter, you will receive the following message in the status column for the processed rows: "Dataset not processed. This filter condition can not be processed by the filter." You get this message if you set illogical conditions. For example, you can not compare a column containing text or a number as values with a date value. The filter can not appropriately evaluate your condition and can not make a conclusion.

# **Action Settings**

After the filter settings, the last step in the creation of a job is the action settings. Use the action settings to determine which Google Docs document should be used as a letter template and in which target folder of Google Drive created documents are stored. Also you can define additional notification methods to send created documents directly via e-mail or chat.

#### In detail, you have the following options and sections in the action settings:

- General Settings
  - Google Docs letter template

- Google Drive
- Filename of created documents
- Merge method
  - Merge (separate documents)
  - Merge to print (one collective document)
  - Label merge
- File type of created documents
- Advanced Settings
  - Configure an additional action
  - Sharing settings
  - Consider formula based links
  - Consider text based links
  - Insert images from Drive/URL
  - Insert charts from sheets
- Configure an action
  - Send e-mail
  - Change sheet data
  - Send chat message (Business-Version)
  - Call web service (Business-Version)

# **General Settings**

The "General settings" section contains the most important setting options. Here you have to define the desired Google Doc letter template. In addition, you can define other settings, such as the desired Drive storage folder, the file name or the target format of the documents to be created.

#### Google Docs letter template

This is where you select your document template from your Google Drive in the format of a Google Docs document. The document template is the basis for creating the individual documents. Select the relevant document from the "Select template" button. After selection, the title of the selected Google document is also displayed next to the "Select template" button with the action settings.

#### Google Drive

Via the button ""Select folder" you can specify which folder of your Google Drive storage should be used to store all the generated documents. By default, the folder "Docs Creator by apps-experts.de" is selected here. This is automatically created in your Drive storage. If you do not change the selected Drive folder, you will find all the created documents there.

# Action Settings

General Settings		
Google Docs lette	ar template.	
Google Drive:		
Select folder	Docs Creator by apps-experts.de	
Filename of creat	ted documents: Tip: use placeholders!	
File_%sysCount	%	
Merge method:		
Merge (separate d	ocuments) \$	

#### Filename of created documents

This is where you can specify which file names the generated documents should receive. By default, the documents are named "File\_% sysCount%" after creation. The placeholder %sysCount% equates to a counter (see section "System variables"). Accordingly, all documents are incremented corresponding to the processed line and are thus by default named File\_1, File\_2, etc. You can use this setting to define the file names as desired and also work with the placeholders for the individual column headings. The file name is built with the value of the corresponding column in your Google Sheet.

Examples: "Letter %Customer%", "Marketing-%contactPerson% %Email%"

#### Merge method

At this point you can specify which type of processing the add-on performs for merging the table contents with the selected document template. You can choose from the following options:

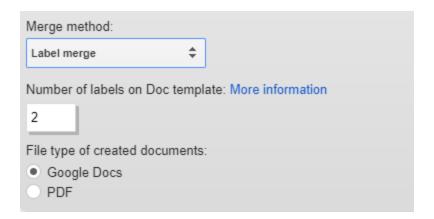
- Merge (separate documents)
- Merge to print (one collective document)
- Label merge

If you select the option "Merge (separate documents)" a new document will be created for each table row processed by the add-on based on the selected Google Docs document template. The documents created are created in the desired file format and with the corresponding specified file name and stored in the specified drive storage folder.

Please note that document creation in the free version of the add-on is limited to up to 10 records and cannot process more than 150 records per month.

If you choose the option "Merge to print (one collective document)", the add-on also creates a copy of the contents of your defined Google Doc template for each processed row. However, a separate document is not created for each processed row, but only one document that contains all created contents. In the end you only get a single document in the intended storage folder. This option is very well suited, for example, for later printing of all letters that have been created.

Alternatively, you can also select the "Label merge" option at this point. This option is used to create a document for the purpose of printing labels. The add-on therefore processes several data rows within one template document. To do this, you must specify how many rows should be merged into your template at once. Therefore, even after selecting the option, the add-on also shows another field called "Number of labels on Doc template" so that you can specify the number of rows to be processed.



For label printing, you must also adapt your document template accordingly. In the end you only get a single document in the intended storage folder with created labels for all rows to be processed. An example of how your document template must be structured for this use case can be found via the following link:

■ Docs Creator Template Label Merge [EN] → Copy template directly

You are welcome to copy this template to your Google Drive and adapt it individually. Please note that the option "Number of labels on Doc template" must be set exactly to the number of lines to be processed. In the example template provided by us, this would be the number 10.

# Important: When Merge all rows into one document or creating one document for label printing, certain restrictions apply:

- The use of placeholders for the filename is possible, but generally the content from the last processed data row is used.
- A generated document contains only one header and footer area, which is valid for all pages of the created print document, therefore, placeholders in the header and footer are also replaced with the contents from the last processed data row.
- If you use images with the setting "Wrap text" within your Google Doc template, the defined image margin must be set to 0mm in the image settings, since information on the margin cannot currently be transferred from the template to the new document to be created. Accordingly, when using margins, there may be shifts within the generated document. We already have reported this problem to Google. However, no solution has been provided so far.
- Likewise, images with the setting "Wrap text" cannot be used in an enumeration list, as this also causes problems.
- Also images with the settings "Break Text", "Behind Text" and "In front of Text" are not working properly.
- The use of system variables, such as %sysCount%, is possible without any problems. However, when creating labels, an index must be added to the system variable, similar to the other placeholders. So e.g. %sysCount1%, %sysCount2% etc.

### File type of created documents

Use this option to set the file format of the documents that are to be created. The documents can either be stored in your drive storage in Google Docs format or in PDF format. Please note that the PDF format option is not included in the free version of the add-on.

# **Advanced Settings**

In the "Advanced settings" section you have more optional setting possibilities. Please note that some of these options, such as the additional notification via Google Chat or the insertion of diagrams and images, are not included in the free basic version. In detail, you have the following setting options:

#### Configure an additional action

Via the "Configure an additional action" option you can define an additional action that the add-on processes This action will be executed by the add-on for each processed dataset in addition to the actual document creation. You can choose from the following actions:

- Send e-mail
- Change sheet data
- Send chat message (Business-Version)
- Call web services (Business-Version)

After you have selected one of these options via the corresponding drop-down menu, another area "Configure action" opens directly below the advanced settings. Here you can then define the action-specific settings in detail. You can find out more about this in the corresponding chapter "Configure an action".

#### **Sharing settings**

Documents that are created by the add-on can directly be shared after their creation. Over option "Sharing settings" you have similar to sharing files over Drive manually the following options to share created files directly when they are created by the add-on:

- Off
- Private, only specific people
- Anyone with the link
- Public on the web
- Anyone at "yourdomain" with the link
- Anyone at "yourdomain"

By default option "Off" is selected, so that all created documents are stored private with no sharing access. If you change sharing settings to "Private, only specific people" you can grant access to specific people to the created documents. In this case select a specific column of your google sheet at option "Column for collaborators" where you can maintain all relevant email addresses for sharing. If you select the option "Anyone with the link" or

"Public on the web" you share your documents in general with public. Anyone who has a link to the documents can then access those. If you set them public on the web then your files are also indexed by Google search and can be found there by everyone. If you are using the add-on with an Google Workspace account you have two more options at this setting. If you select "Anyone at yourdomain with the link" or "Anyone at yourdomain" every user of your organization with a Google Workspace user account can access these documents. If you set them to "Anyone at yourdomain" everyone in your organization can find these over Drive or Google Cloud search. Please note that the option "Sharing settings" is not included in the free version of the add-on.

#### **Sharing permissions**

If option "Sharing settings" is activated, then the option "Sharing permissions" is also available. With this option you define if collaborators of the document can "view", "comment" or "edit" if they have access to the document. By default this option is set to "view" permission if one of the "Sharing settings" was set.

#### Column for collaborators (comma separated e-mails)

Option "Column for collaborators" is only relevant and visible if option "Sharing settings" is set to "Private, only specific people". In this column you can maintain all relevant email addresses for sharing. If you would like to grant multiple users access, just insert all relevant email addresses comma separated. As an alternative you can also insert a placeholder, that refers to a column of your Google Sheet where the values of the relevant E-Mail addresses are maintained for sharing.

Example: "John.Doe@gmail.com,youremail@yourDomain.com".

#### Consider formula/text based links

For the add-on to process links, these options must be enabled in the advanced settings. The "Consider formula based links" option only takes into account links that are created in the Google Sheet based on the HYPERLINK formula. The "Consider text based links" option interprets any text that starts with "http", "https" or "www" as a link and inserts it into the documents to be created, if this is activated in the actions settings. For more information, see the section Inserting Google Sheets links.

#### Insert images from Drive/URL

The option is automatically activated if you have licensed one of the proprietary Plus or Business versions of the add-on. For more information on how this option works, click <a href="https://doi.org/10.1001/journal.org/">here</a>.

#### **Insert charts from Sheets**

The option is automatically activated if you have licensed one of the proprietary Plus or Business versions of the add-on. For more information on how this option works, click <a href="https://doi.org/10.2016/journal.org/">here</a>.

# Important: Usage of placeholders within the action settings

Irrespective of the specified action, you can work with placeholders, when required, to dynamically insert table contents when configuring a selected action. For example, when configuring the "Send e-mail" action, you can create the subject or the text of an email with dynamic content. To address the contents of the currently processed table row, take the column heading and surround it with a %- sign at the beginning and end. For example, the placeholder for a column "Name"  $\rightarrow$  %Name%. The add-on also takes into account upper and lower case as well as special characters and spaces. Therefore, make sure the placeholder is identical to the column heading. Additionally you can use all available system variables as placeholders. For more information about system variables please refer to the chapter "System Variables".

# Configure an action

The "Configure action" section within the action settings opens below the advanced settings when you select one of the following actions via the "Configure an additional action" option:

- Send e-mail
- Change sheet data
- Send chat message (Business-Version)
- Call web services (Business-Version)

#### Send e-mail

With the action "Send e-mail" you have the possibility of sending the created documents directly via e-mail. You configure the action simply by entering the **e-mail recipient**, **subject and a text**. Please note that you can always insert placeholders based on your column headings and system variables for these free text fields. For example, by specifying a placeholder in the field "E-mail recipients", you can also dynamically define the recipient of the email based on your table data that is to be processed. You can also optionally enter further details for "CC- and BCC-recipients". If an e-mail is to be sent to several recipients, enter the different e-mail addresses in the corresponding recipient field, separated by

commas.

Use the "Send document as" option to specify the form in which you want to send the generated documents via e-mail. You have two options here:

- Link to drive file
- Fiel as attachment

By default, the "Link to drive file" option is selected. In this case, only a link to the generated document is inserted in the mail text when the e-mail is sent. If you have licensed the add-on, you can alternatively insert the generated documents as PDF attachments in your e-mails. To do this, simply select the "File as attachment" option.

Please note that the option to send e-mails via the add-on is subject to a specific daily limit set by Google. If you have activated mailing in your action settings, the add-on will display your remaining e-mail contingent in the status column, if your remaining contingent is less than 50 e-mails. For more information on Google's quotas click <a href="here">here</a>.

Configure action
Email recipients:
Email subject: Tip: use placeholders!
Email body:
E-mail body
CC recipients:
BCC recipients:
Send document as:
Link to drive file

# Tip: Formatting and line breaks within the email text:

The add-on sends e-mails in HTML format. Therefore, you can use HTML tags to format your e-mail text as you wish. Use a <br/>br> tag to add a line break. You can insert a paragraph by using the tag. Formatting such as bold or italic text sections are also possible with the appropriate tags. An overview of the tags for formatting texts via HTML is available <a href="here">here</a>.

The items listed in the **Advanced action settings** of this action are optional and can be used if required. Here you can specify whether a **specific display name** or a **deviating reply-to e-mail** should be stored.

Advanced action settings
Deviating display name of email:
Deviating reply-to email :
Use generic no-reply email

The option "Use generic no-reply e-mail" is only available if you use the add-on with a Google Workspace account with a business license version, as this option is not supported by Google for private Gmail accounts.

#### Change sheet data

With the action "Change sheet data" you can choose from two options to prepare the document of the processed table contents. You can choose from the following options:

- Change cell contents
- Change cell background color

#### Change cell content

With the option "Change cell contents" you can change the contents of a column you have selected for all processed table rows. Simply select the relevant column via the drop-down "Select target column". You can enter the desired content using the free text field "Insert new cell content". You can also use placeholders to dynamically control the content of the field based on a <u>system variable</u> or a value from the currently processed row.

#### Change cell background color

By selecting the option "Change cell background color", all processed table rows are highlighted at on selected column with a respective background color. Simply select the relevant column via the drop-down "Select target column". You determine the color using the field "Background color in CSS notation". Here you can select the color by specifying a respective CSS (Cascading Style Sheets) notation. For example, for a red background color you can enter the following in this field: red / #ff0000 / rgb(255, 0, 0). You can therefore enter a hexadecimal value, an RGB color or, in the case of the standard colors, simply "red", "blue" or "green".

Configure change	sheet data action	n:			
Change cell backgro	und co \$				
Select target column	1:				
Choose entry	<b>\$</b>				
Background color in	CSS notation - E	xample: red,	#ff0000, rgb(	(255, 0, 0)	

Send chat message (Business-Version)

With the action "Send chat message" you have the possibility to send a message to a chat for each processed dataset or once for each processing run. You have the option to send the information either to Google Chat, MS Teams or to a Slack Channel.

Important: Google Chat, MS Teams and Slack are fee-based tools for businesses
Please note that Google Chat can currently only be used with a fee-based Google
Workspace license. Slack and MS Teams are also software tools especially offered for
companies and their in-house collaboration. Both tools cannot be used with a private
Google account. Unfortunately, it is not possible to send messages to other Google chat
tools, such as Hangouts. This is why the action is only available in the business version of
the Add-on!

To configure this action, begin by specifying via the "Select Chat" option whether the messages are to be sent to a Google Chat or to a Slack Channel. Afterwards you need a so-called Webhook URL. This URL defines which Google Chat or Slack Channel the add-on will send the messages to. You must initially create this URL for your Google Chat or for the desired Slack Channel. Please note the following two instructions for creating a Webhook URL:

Google Chat: <u>Define an incoming webhook</u>

Slack: Enable webhooks

MS Teams: Create Incoming Webhook

Once you have created a Webhook URL for the desired chat, you then copy this URL into the "Chat webhook URL" field.

Configure action				
Select chat:				
Google Chat	<b>\$</b>			
Chat webhook URL:				
Message type:				
Text	<b>\$</b>			
Chat subject: Tip: use	placeholder	s!		
Chat message:				
Insert chat messa	iges into san	ne conversatio	on	

In the remaining sections of the action, you then define the content and format of the actual chat message. Via the option "Message type" you can determine whether you want to send a simple text message or a "card", which is a message based on a graphic card. The only difference is the graphical display in the chat history of the chat or channel, although the display as a card is usually more appealing to the user, it also occupies more space in the chat history. Test both formats to help you decide which graphical illustration is more suitable for you.

The fields "Chat subject" and "Chat message" are text fields that you can use to enter the title and the actual content of the chat message. You can also use dynamic placeholders in these fields based on the column headings and system variables. For an overview of the existing placeholders, see the chapter "System Variables".

The option "Insert chat messages into same conversation" is only available if you have selected Google Chat. If you activate this checkbox, all messages within a processing run will be inserted into the same conversation within the Google Chat. If the checkbox

remains unchecked, every message sent to the chat is a new conversation.

The options "Append link to message" and "Link description" listed in the Advanced action settings offer you the option to add a link at the end of chat messages.

Advanced action settings	
Append link to message	
%sysSheetUrl%	
Link description:	
%sysSheetName%	
Link to image on card based message:	

By default, these two fields are preset with the placeholders %sysSheetUrl% and %sysSheetName%. As a result, each chat message contains a link to the currently processed spreadsheet. The name of the spreadsheet is used as the link text. For instance, if required, you can adapt the link text individually with a static text or also use other placeholders for the design of the link text. You can also simply change the actual link to a static link, such as the link to another web application, if required. If you have selected the setting "Card" as the message type, you can also add a "Link to image on card based message" to the chat messages you want to send. To do this, simply enter the corresponding URL to the graphic. The graphic must be publicly accessible via this URL.

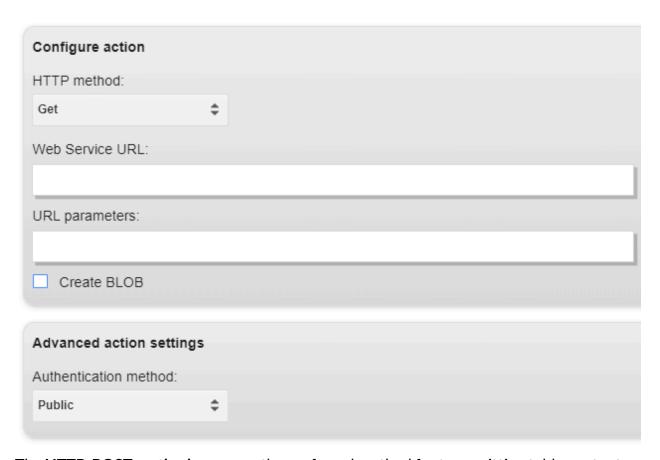
#### Call web service (Business-Version)

Using the action "Call web service", you have the possibility to pass on information about the processed table contents to third party systems. You can use this action to call up a web service and the add-on will then transmit the table contents for each processed row to this web service, which can then process this information as required. This action is very technical and you usually need programming knowledge or IT know-how for the individual integration of a web service, as the content transmitted by the add-on must be processed individually.

From a technical point of view, the invoked web service must be a REST-based web service. To call the web service, you must always enter the option **"Web service URL"** with the URL of the web service you wish to call. The add-on then calls this URL for each

parameters if this is necessary for calling the web service. You can also fill a URL parameter dynamically with a placeholder or a system variable. This could look as follows, if you want to pass the value of the column "ID" and the user who executes the script to the web service as a URL parameter: "id=%objld%&user=%sysUser%"

If you call your web service via the **HTTP GET** method, passing URL parameters is the only way to pass attribute information of the processed drive element. Keep in mind that this method is not recommended for safety reasons. This method is therefore only recommended if, for example, you only want to pass an ID of the processed dataset, or if you want to trigger subsequent processing for each processed table row completely independently of the processed table contents.



The **HTTP-POST method** serves as the preferred method for transmitting table contents. Here, the add-on transmits all contents of each processed table row to the stored web service in the form of a JSON object.

If you activate the "Create BLOB" checkbox, the generated file itself will be transmitted as a <u>BLOB</u> in addition to the processed table row data.

If you activate this option, you can optionally specify whether the transfer of the generated document should take place in an office format. If you do not activate the option "Transfer Google Docs in office format", the generated documents will be transferred in PDF format by default. In addition, you can also activate the transfer of the files Base64 encoded by setting the option "Transfer file Base64 encoded", if this should be necessary for your use case.

To ensure that the web service stored in the option "Webservice URL" can actually be called, you must define a relevant "Authentication method" in the Advanced action settings. You have the following options:

- Public
- Basic authentication
- Google service account
- Apps Script OAuth2 Token

#### **Public**

If you select the option "Public", no authentication takes place. This means that the stored web service must be publicly accessible and the stored URL can technically be called up by anyone without authentication. Use this method only for initial tests with test data.

#### **Basic authentication**

When authenticating via a basic login, you must enter a user and password in the corresponding fields. This method must also be classified as unsafe for security reasons, as the user and password are transmitted in plain text in the HTTP header. Only use this method for initial tests with test data

#### Google service account

If the web service you have configured was developed with Google Cloud Platform technologies, it can be accessed via a service account created in the Google Cloud. To do this, you must create a corresponding service account in the Google Cloud Platform and store the associated credentials in Google Drive. Then you can store these credentials for the authentication method in the Add-on via the option "Select credentials" and the Add-on uses these credentials to authenticate itself to the web service. You may also need to add OAuth scope in the appropriate field if your web service requires the permissions. Please enter these in the field "OAuth scopes" separated by a space. This method is suitable for productive use. Our Add-on merely processes the stored credentials and does not store the credential information. This means that these credentials are only in your

Drive storage at all times.

#### **Apps Script OAuth2 Token**

This authentication method uses the OAuth2 token generated by the add-on via Google Apps Script to log in to the associated web service. This method can only be used if the applied web service and the add-on are started with the same Google account. For example, you can use this authentication method if you have developed an individual web service via Google Apps Script and this service is to run with the same user with whom you also use the Job for executing the web service action. This method is very easy to use within Google Workspace or with only one user and does not require any further configuration.

#### Example implementation for action "Call web service"

In order to facilitate the use of the action with the Google Docs Creator add-on, we provide you with a sample web service at this point. This web service was developed in Google Apps Script as a WebApp and can be called via the following URL either via HTTP-GET or HTTP-POST:

https://script.google.com/macros/s/AKfycbxtOtRMhYMKUbG88jdIN\_ikel1I5tSnFoc9LVTi -C5OWP1jgA/exec

The web service has been implemented in such a way that it receives the transmitted data and sends the information directly by email to the logged-in Google account. You can simply call up this web service as a first test via the browser using HTTP-GET. It is best to include a URL-parameter with the URL, for example

https://script.google.com/macros/s/AKfycbxtOtRMhYMKUbG88jdIN\_ikel1I5tSnFoc9LVTi -C5OWP1jgA/exec?id=12345&user=test@test.de

Alternatively, you can also use the web service for a test in the Add-on by configuring it as shown in the following screenshot:

Configure action	on
HTTP method:	
Get	<b>\$</b>
Web Service UF	RL:
https://script.go	ogle.com/macros/s/AKfycbxtOtRMhYMKUbG88jdlN_ikel1l5tSnFoc9LVTi-C5OV
URL parameters	
✓ Create BLC	В
Transfer Go	ogle Docs in office format
Transer file	Base64 encoded
Advanced action	on settings
Authentication r	nethod:
Public	<b>\$</b>

The example service will then send you the transmitted table data for each processed row via email. Please note that the sent emails are credited to your email quota, as you also authenticate yourself on the web service by calling up the Add-on. Therefore, only send individual test emails.

You can access the source code of this sample implementation via the following link: <a href="https://script.google.com/d/1Z">https://script.google.com/d/1Z</a> nyFG1hPHyiHdWQ42-KFWTVoztdcFQzCZty9p4g4wRm UQbyI9aWz2md/edit?usp=sharing

The function doGet(e) reacts to HTTP-GET calls, receives the URL parameters and sends them by email. The function doPost(e) reacts to HTTP-POST calls and receives the transmitted data for each table row and also sends them by email. In the body of the mail you should receive a structure like the following for each processed table row:

```
{
receiver: hugo.maier@test123.de
lastname: Maier
firstname: Hugo
link:http://test123.de
age: 24
sysCount: 8.0
```

```
sysCountTotal: 8.0
sysCountProcessed: 8.0
sysDate: 26.01.2021
sysDomain: apps-experts.de
sysLangu: de
sysName: Theo Tester
sysRangeUrl: https://docs.google.com/spreadsheets/d/1JAnM8feAAcWjOS...
sysRowIndex: 9.0
sysSheetLastRow: 9.0
sysSheetName: Test data Docs Creator
sysSheetUrl: https://docs.google.com/spreadsheets/d/1JAnM8feAAcWjOS...
sysSpreadsheetUrl:https://docs.google.com/spreadsheets/d/1JAnM8feAAcWjOS...
sysSpreadsheetName: Add-on Test
sysSheetPath: Add-on Test / Test data Docs Creator (row: 9)
sysTime: 08:48:21
sysUser: theo.teser@apps-experts.de
}
```

 $\rightarrow$  Please note that the structure of the object depends on your column headings. The attributes "receiver, lastname, firstname, link, age" used in this example are part of the object because they were used as column headers in our example.

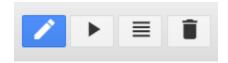
You can then use this data presented in the mail programmatically for further processing within your individual web service.

#### Tip: Using the sample implementation as a template

You are also welcome to use the source code as a copy template for your own implementation. You can copy the Apps Script file into your own Drive folder via the menu item "File-->Create Copy". Make sure that the copied script contains at least the Drive authorisation scope: https://www.googleapis.com/auth/drive.readonly, otherwise logging in via the Apps Script OAuth2 token will not work.

# Manage Jobs

All Jobs displayed in the job overview can be managed individually from the homepage. The following management options are available via the buttons displayed in the right-hand area for each job:



- Edit Job
- Execute Job
- Job Details
- Delete Job

#### **Edit Job**

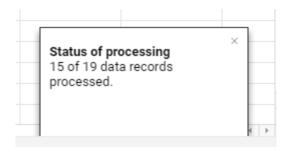
You can use the blue pencil icon "Edit" to change an existing job at any time. All the setting options of the add-on that were available to you when the job was created are then available to you again. You will find an overview of this in the chapter "Create Job".

#### **Execute Job**

You can start a job directly via the "Execute" button displayed as the classical "Play" symbol. Clicking on the "Execute" button immediately starts the processing of the job online.

#### Important: Check your job settings before executing a job!

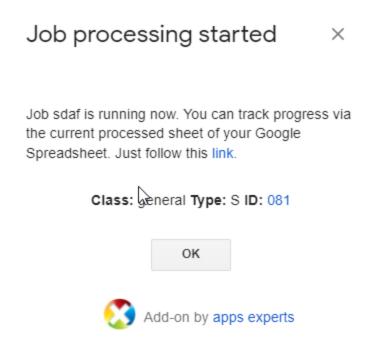
Before you run a job, make sure that it is configured correctly and also performs the intended action for the desired datasets!



If you have called up the job overview from a Google spreadsheet, the current processing status is always displayed in a small pop-up in the lower right area, while a job is processed. As a result, you will always receive information on how far processing has progressed. As soon as the processing has been completed, you will receive the information "Job processing completed" in the same place.

In the column for status messages, which is automatically created in the standard system with the column heading "Protocol Docs Creator", the processing result is displayed after processing is completed. This gives you an overview of whether the action was carried out successfully for each line processed by the add-on. If there was an error in the processing, this is also displayed in the status column.

Alternatively, if you have called up the job overview from a Google document, a pop-up within the Google document will confirm the successful start of job processing. At this point, the add-on also offers you a jump to the currently processed sheet data.



If necessary, you can open the corresponding Google spreadsheet and track the status of the processing for each row via the status column. Within your open Google document you will not see a progress bar. Only after finishing the job processing you will be informed about the completion of the processing via another pop-up. This pop-up will provide you with a direct link to the created Google Docs documents.

#### Tip: Start a job only for the currently selected rows

The add-on menu item "Quickstart for selected rows" can be used to start a job for the currently selected rows only. Please note, however, that this menu item is only available if you call the add-on from a Google spreadsheet. Further information

#### **Job Details**

The "Details" button, displayed as a "list symbol", gives you a quick overview of all the defined settings for the job. For example, you can see which action the Job is executing, whether a filter has been defined and when the Job was last started.



#### **Delete Job**

You can delete a Job by clicking on the "Delete" button, which is displayed as a waste basket symbol. To avoid accidental deletion, you will receive a confirmation request after clicking on the button. As soon as you confirm this, the selected Job is irretrievably deleted with all its settings and is no longer displayed in the Job Overview.

#### **Job Status and Prioritization**

A job created via the add-on can have different job statuses over time, depending on the processing status. You can see the current job status both in the job overview and in the job details of the respective Job. The following table provides an overview of the individual statuses.

Job Status	Comment
New	A newly created Job that has not yet been started. The start time is manual. The Job can be started via the Job overview if required.
Scheduled	A newly created Job that has not yet been started. The start time is set periodically. The Job is started regularly according to the set interval.
Registered	A newly created Job that has not yet been started. The start time is event-based. The Job reacts to incoming Google Form submissions and processes them.
Skipped	A periodically created Job that was skipped during the last processing run because the Job priority was too low compared to other Jobs or there was not enough remaining script time to process the Job.
Error	The last processing run of the Job ran on error. The processing was not completed.
Completed	The last processing run of the Job was completed successfully.

Furthermore, the fields "Last run" and "Last run duration time" in the Job details allow you to see when a Job was last started and how long it took to process. Both pieces of information are of particular interest for Jobs that are started periodically in the background. Indicating when the last run took place allows you to see whether the periodic processing of a Job has taken place. The status of the Job provides information on whether the Job was completed successfully. The duration of the last run is only indicated if a Job was completed successfully. Otherwise, no information is given in this field. The last start time of the last run, on the other hand, is always entered if a Job was started.

The "Job Status" of a Job and the information about the time and duration of the last processing of a Job are important for the prioritization of periodically running Jobs. For this, you need to know that only one scheduled Job per hour can be started for each Google account in an Add-on. Likewise, Google currently has a six-minute limit for the maximum execution time of a script. Due to these restrictions, it may be necessary for the Add-on to prioritize scheduled Jobs.

#### Important: Jobs executed online are not prioritized.

The prioritization presented in this section only applies to periodically scheduled Jobs. All Jobs executed online can be restarted at any time. The maximum script duration, on the other hand, also limits Jobs that are controlled online. This is currently six minutes and applies to Jobs started online as well as in the background.

If, for example, several Jobs are scheduled to run at the same time, the Add-on must decide the sequence in which the Jobs are started. Jobs that are to be run once at a specific time have the highest priority. Then come Jobs scheduled monthly, followed by weekly and daily Jobs. Accordingly, Jobs scheduled several times a day have an even lower priority. Hourly scheduled Jobs have the lowest priority. This prioritization looks as follows in a practical example:

- 1. Monthly scheduled Job on the 1st of the month at 9 a.m.
- 2. Daily scheduled Job at 9am
- 3. Hourly scheduled Job

If you look at the three Jobs listed, on the first of the month all three Jobs are scheduled for processing at 9 am. The Job that runs monthly has the highest priority, followed by the Job that runs daily. The hourly Job has the lowest priority. If, for example, there is not much script run time left after the monthly and daily scheduled Jobs have been processed, the hourly scheduled Job is skipped and is given the status "Skipped". Processing does not take place at this point. In the next time slot for processing one hour later, only the hourly scheduled Job is pending for processing. This Job is then processed.

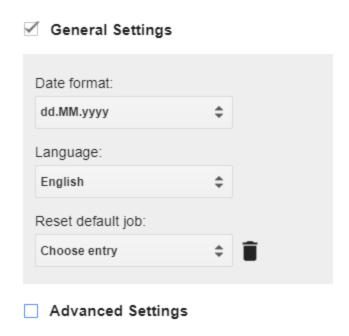
#### Tip: Plan periodic Jobs wisely

In order for the periodic processing of Jobs to work smoothly, it is better to offset the start times of the Jobs slightly. For example, schedule monthly and weekly Jobs at night and try to use hourly Jobs as rarely as possible and, ideally, start them daily at different times or several times a day to avoid too many coinciding starting times.

Please note that customers with a fee-based version have the option to activate an <a href="enhanced prioritization">enhanced prioritization</a> in the advanced settings. In addition to the prioritization described above, this also takes into account the duration of the Job runtimes per Job and attempts to optimize the number of Jobs processed within the maximum script runtime.

# **Settings**

Using the "Settings" menu item, you can make various settings for the add-on and define these individually for your user. For example, you can set your preferred language for the add-on here. Always ensure you confirm these changes at the end by clicking on the save button at the bottom of the settings dialog!



## In detail, you have the following options and fields in the settings:

- General Settings
  - Date-Format
  - Language
  - Reset default job
- Advanced Settings
  - o Time Zone
  - o Maximum script runtime
  - Job Prioritization
  - Catch up of skipped Jobs
  - Authorize images for Add-on

## **General Settings**

#### **Date-format**

This option allows you to customize the date format. The add-on then uses the specified format for dates in emails and messages.

#### Language

Select your preferred language here. After changing the language, you must reload the Google spreadsheet that is currently open. Subsequently, all menu items and text will be displayed in the selected language.

## Reset default job

At this point you can delete a standard job stored for a specific spreadsheet. To do this, simply select the desired worksheet via this drop-down and click on the recycle bin icon. You can then use the add-on menu item "Quickstart for selected rows" to define a new standard job at any time for the currently open worksheet. If certain entries of the dropd-down are disabled and can therefore not be selected, then there is currently no standard job defined for these worksheets.

## **Advanced Settings**

In the "Advanced settings" section you have more setting options. Please note that some of these options are not available in the free basic version. In particular, the option "Maximum script runtime" is only available for Google Workspace customers, as only these customers have access to a longer script runtime, under certain conditions.

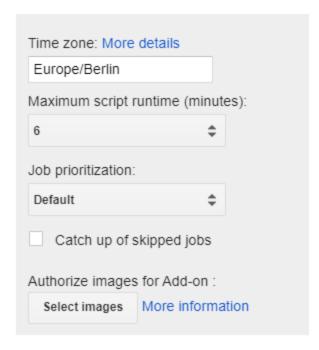
#### **Time Zone**

Here you can adjust the add-on to the time zone in which you are currently located. This parameter essentially influences when the jobs that you create and periodically schedule are started. The start time you select for the job always refers to the time zone specified in this option.

## Maximum script runtime

By default, the maximum script runtime for each user is 6 minutes. However, users who have a Google Workspace Business or Enterprise license may also have a higher maximum script runtime. In order for the add-on to take this into account, it must be set here. **Please** note that this option is not included in the free version of the add-on.

## Advanced Settings



#### Job Prioritization

The option "Job Priorisation" allows you to choose between the two different prioritization methods "Default" and "Enhanced". Essentially, both methods process jobs that are waiting to be processed according to priorities. The default method only takes into account the priority issue and does not take into account past runtimes of the jobs. The remaining runtime of the script is also only taken into account, insofar as jobs are executed until less than one minute of the remaining runtime of the script is available. However, the extended method also takes into account the past runtimes of the individual jobs. This method can then use the available maximum script execution time more efficiently. For example, a job with a low priority can still be processed although a job with a higher priority could no longer be executed due to a presumably too long processing time. For more information on prioritizing Jobs, see chapter Job Status and Prioritization. Please note that this option is not included in the free version of the add-on.

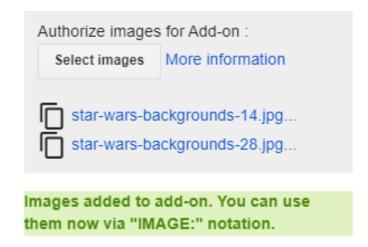
## Catch up of skipped Jobs

If you have scheduled many periodically running Jobs, it may happen that not all Jobs can be processed within the available maximum script runtime. These Jobs are then marked with the status "Skipped" and were not processed accordingly. If you activate this option, the add-on will try to catch up on such Jobs as quickly as possible at the next possible opportunity, provided there is enough free time in one of the next time slots. Further

information on prioritizing Jobs can be found in the chapter <u>Job Status and Prioritization</u>. Please note that this option is not included in the free version of the add-on.

## Authorize images for add-on

In order for the procedure for inserting images from Google Drive to work, as described in the "Insert Images" chapter to work, you must authorize the add-on to access these in Google Drive stored images. Before the insertion of an Google Drive image via the "IMAGE"-notation will work, you have first to select these images at this point. To do this, click the "Select Images" button and then browse for the images in the pop-up that follows and select them. You can also select multiple image files at once. At this point, when selecting the desired drive images, do not be irritated by the fact that the preview of the listed images within the Google Drive picker pop-up does not work. The add-on only has access to an image (including the preview) if you have selected it once via the Google Drive picker pop-up. All successfully selected images are afterwards listed once at this point by the add-on.



With a click on the copy icon, you can copy the "IMAGE"-notation syntax for this authorized image to the clipboard. This way you avoid unnecessary errors while working with the "IMAGE:"-notation syntax. Simply paste the copied syntax at the relevant position in your Google Sheet. Please note that this procedure is only necessary when you are inserting images from Google Drive, but not when you insert images via a public available URL.

# System variables

The Docs Creator add-on provides the following placeholders by default, which you can use at any time in the add-on in a free text field, such as the email subject or a chat message.

System variable	Note
%sysJobname%	Name of the Job that is currently running.
%sysUser%	Email address of current user
%sysLangu%	Language of current user in format de, en, etc.
%sysDate%	Day date in format MM/dd/yyyy, Example: 05/30/2022
%sysTime%	Current time in format: hh:mm:ss, Example: 05:28:22
%sysCount%	Counter for current processed dataset.
%sysCountTotal%	The total number of datasets to be processed.
%sysCountProcessed%	Counter for successfully processed rows without hidden, filtered or faulty rows.
%sysDocUrl%	Link of the current created document. Often used in the e-mail body to insert a link to the created file for easy access.
%sysRowIndex%	Counter for the currently processed row of the Google Sheet.
%sysSheetLastRow%	The index of the last row of the spreadsheet. This can differ at the beginning and at the end of processing.
%sysSpreadsheetName%	Name of the currently processed Google spreadsheet.
%sysSheetName%	Name of the currently processed spreadsheet.
%sysSheetPath%	Name of the currently processed spreadsheet including the currently processed row in the format: "mySheetName (row: myRowIndex)"
%sysSpreadsheetUrl%	Link to the applied Google spreadsheet.
%sysSheetUrl%	Link to the currently processed spreadsheet.
%sysRangeUrl%	Link to column A of the currently processed row.

## **API Usage and Permission Scope Descriptions**

The add-on needs different permissions of your Google Account to provide its functionality. The needed permission scopes are listed and explained more detailed here:

Details of permissions scopes an add-on is using

## Important: Google API Services Usage Disclosure

apps experts use of information received from Google APIs will adhere to Google API Services User Data Policy, including the Limited Use requirements. >> more

If you have any questions or problems with our products, please check out our <a href="help center">help center</a>. We are always happy to receive feedback and answer your questions. For further support please send us a <a href="support request">support request</a>. Please strive for as much clarity and detail as possible and include screenshots when applicable.

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