**ITOL**

**Issue Tracker Add-in for Microsoft Outlook**

# Overview

ITOL allows to create an issue in JIRA from a mail with a few clicks.

Since it seamlessly integrates with the Outlook user interface, ITOL lets you feel like working in a single program instead of jumping back and forth between two different worlds.

Issues can be created inside the Outlook explorer window as shown in Figure 1. Button “Issue Pane” shows or hides the pane “JIRA Issue” (1). To initialize an issue based on the selected mail, click button “Assign” (2), which performs the following actions:

* The mail subject is copied into issue summary. (3)
* If the mail subject contains the project name or shortcut, the issue is assigned to this project. (4)
* HTML mail body content is converted into JIRA markup. (5)
* Embedded images are replaced by thumbnails. (5)
* Mail attachments are added as issue attachments.
* Issue fields are initialized with default values.

Review the prepared issue data and click on button “Create” to create the issue in JIRA.

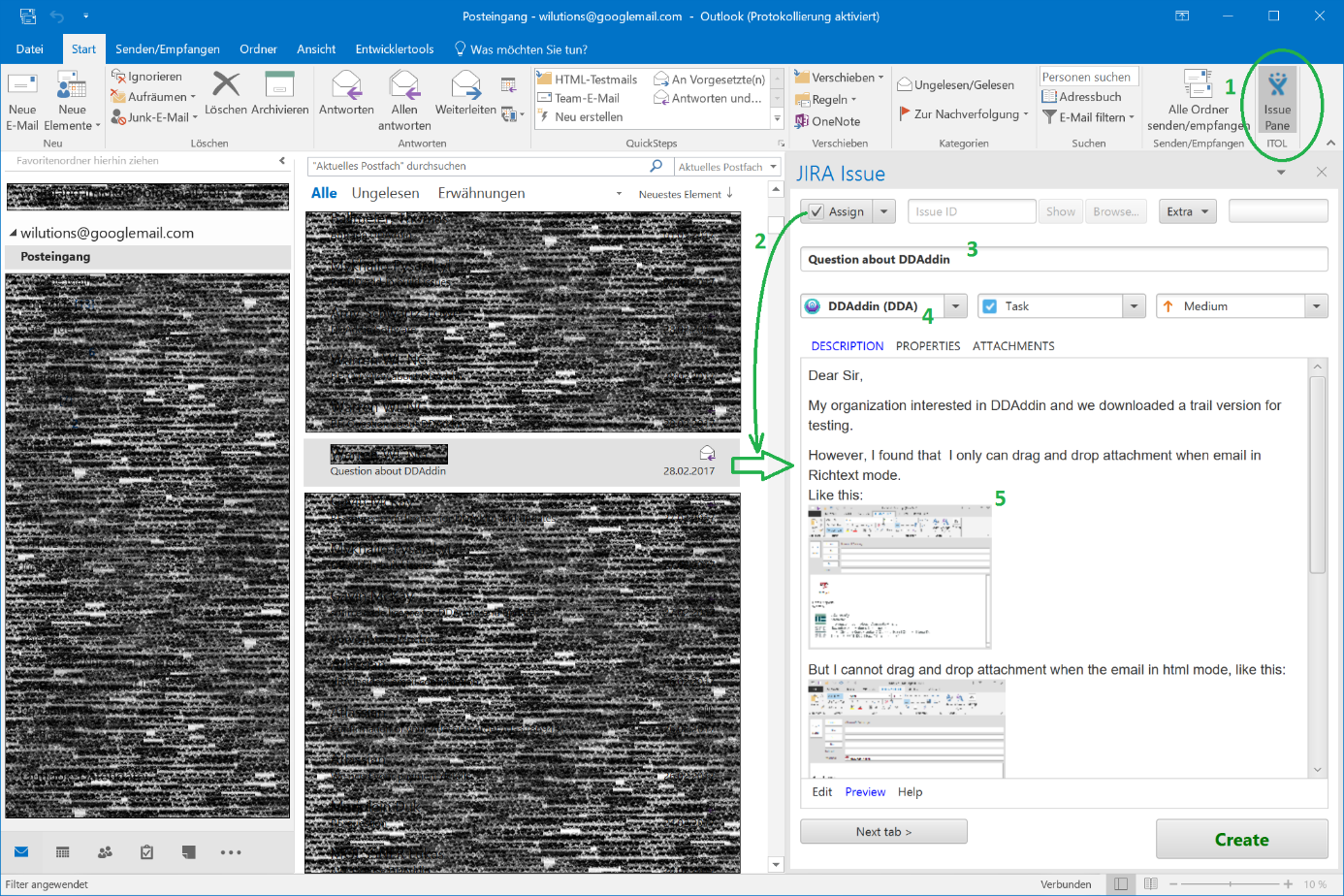


Figure 1, ITOL displayed in an Outlook explorer window

The ITOL Add-in is also integrated with the Outlook mail inspector window, as shown in Figure 2.

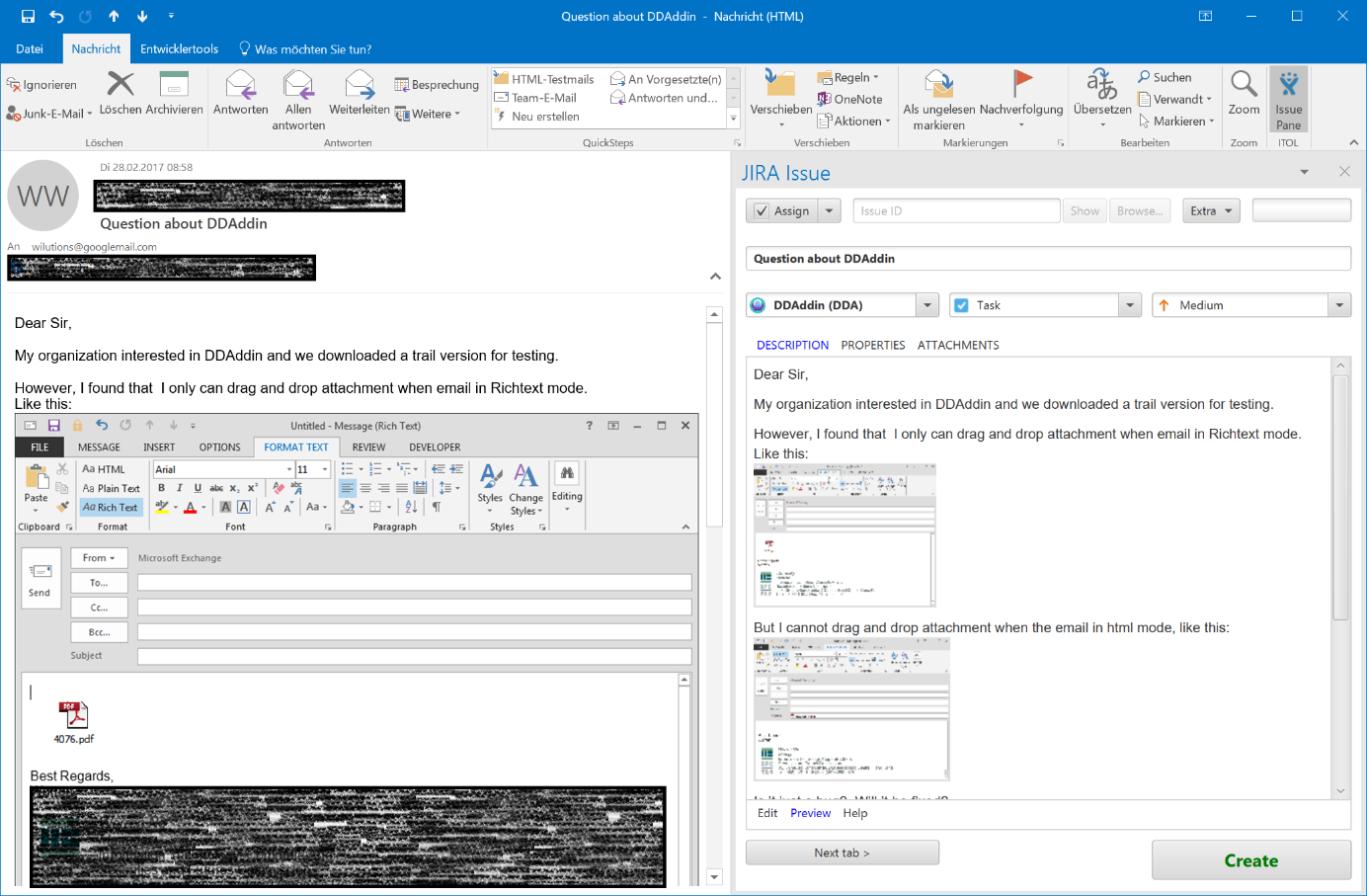


Figure 2, ITOL displayed in an Outlook mail inspector window

# Feature list

* Seamless integration into Outlook user interface as a task pane.
* Create, update and view issues. Create subtasks of issues.
* Scan mail subject for issue ID. If an ID is found, load the issue into the add-in.
* For a new issue, scan mail subject for project name or shortcut.
* For a new issue, copy mail body to description.
* For an existing issue, copy mail body into a new comment – provided that the mail is newer than the last comment.
* Optionally convert HTML mail body into JIRA markup.
* Optionally add all mail attachments to the issue. Exclude attachments listed in a blacklist (e.g. company logos).
* Optionally add the original mail as an attachment to the issue. The mail can be added in format MSG, RTF or plain text.
* Provides an editor for text fields that behaves most like JIRA’s markup editor – inclusive user mentions and file links, which can be inserted via drag & drop, too.
* Support for custom fields.
* Support for time tracking.
* Add issue attachments from clipboard, by drag & drop, from recent file list or by selecting files from the filesystem.
* One click to export issue attachments to a directory on the filesystem and open Windows Explorer or your favorite file manager. This functionality is especially useful when examining several log files.
* Navigate to the issue in JIRA.
* Optionally insert the issue ID into the mail subject. If you answer that mail and the receiver replies in turn, ITOL can display the associated issue and prepare a new comment (see above).
* Optionally store the mail sender address into a custom field. When an issue comment is added in ITOL, a new mail to this address is automatically prepared.
* Show history of issue comments.

# Requirements

* Windows 7 or newer
* Outlook 2010, 2013, 2016
* JIRA 7.0.0 or newer
* JIRA 7.2.8 or newer when using time tracking

# Installation

Go through the following steps to install the software:

* Close Outlook
* Execute ITOL.msi. This setup installs the add-in under user permissions. So, it’s not required to login as an administrator.
* Start Outlook

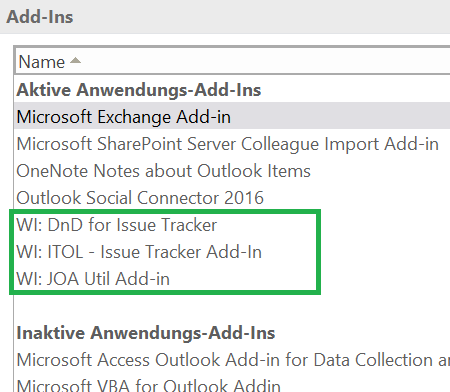
## Verify Installation

1. Outlook should show this button on the “Start” toolbar:

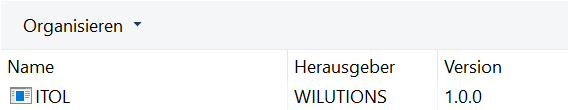


Figure 3 Outlook Toolbar Button Issue Pane

1. Three Add-ins should be listed at File – Options – Add-ins – Active Add-ins:



1. Windows Control Panel should list ITOL:



## Uninstall

* Close Outlook
* Uninstall via Windows Control Panel

## License

ITOL runs for 30 days without a license key for demonstration and testing.

The license key for a production version can be entered at “Extra – License...” after the connection to JIRA has been configured.

Another option to specify the license is to add the following registry keys:

Windows Registry Editor Version 5.00

[HKEY\_LOCAL\_MACHINE\SOFTWARE\WILUTIONS\ITOL\License]

@="your license"

[HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\WILUTIONS\ITOL\License]

@="your license"

# Connect to JIRA

## First Time Connecting to JIRA

The first time ITOL is used, it opens automatically the dialog “Connect to JIRA” when the toolbar button “Issue Pane” (see Figure 3 Outlook Toolbar Button Issue PaneFigure 3) is clicked.

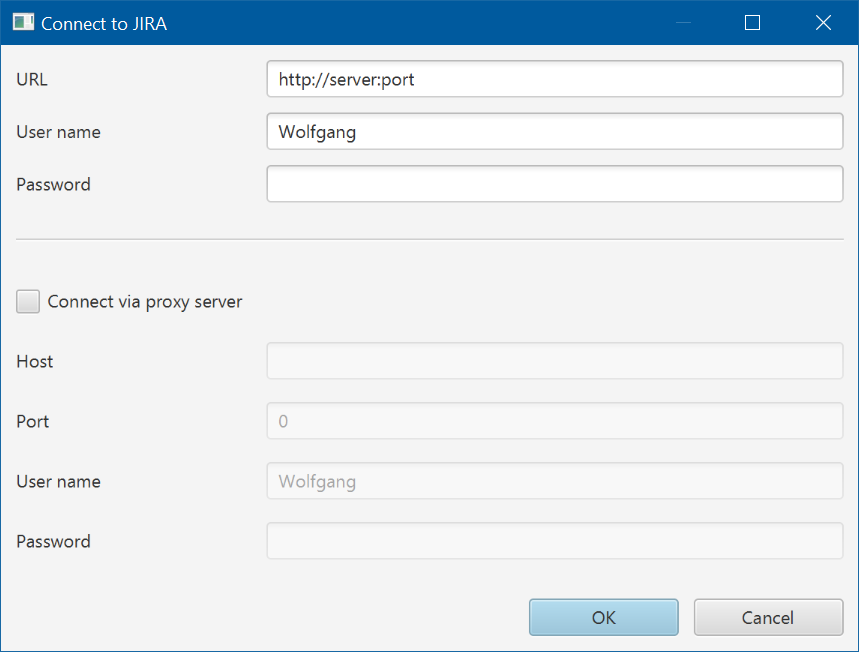


Figure 4 Dialog Connect to JIRA

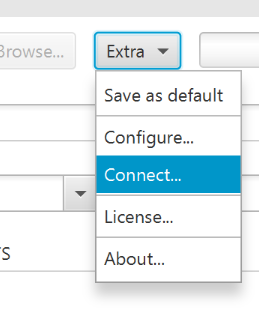
Enter the URL of your JIRA server and the logon credentials.

To use a proxy server, check “Connect via proxy server” and enter the proxy server data. Your network administrator can provide the required information.

After successfully connected, a so called “Outlook Task Pane” should be displayed in the Outlook explorer window, see Figure 1.

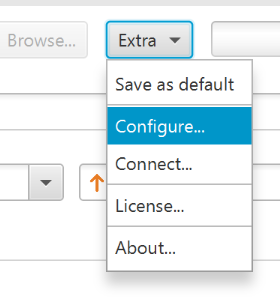
## Edit Connection to JIRA

To change the connection to JIRA, click “Extra – Connect…”:



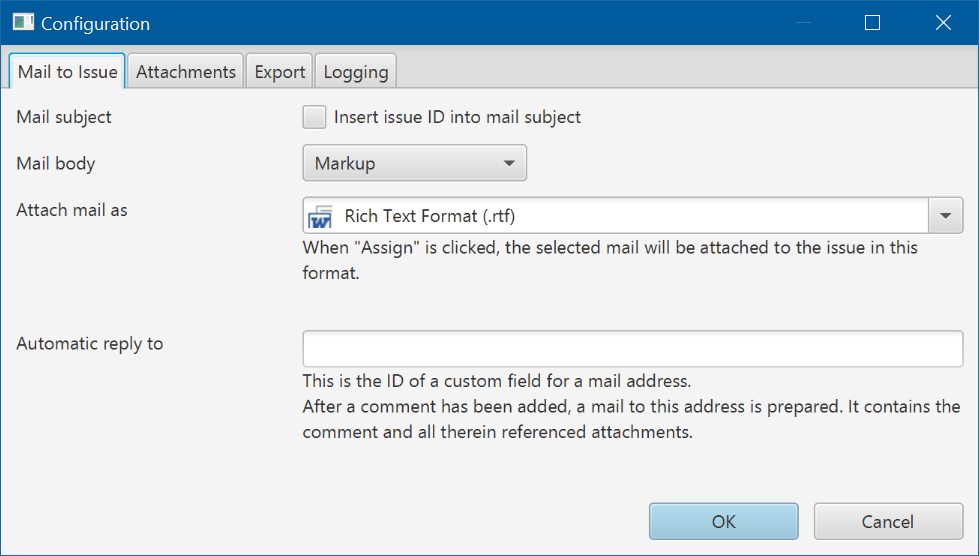
# Configuration

After a connection to JIRA has been established, further configuration options can be defined. To open the configuration dialog, click “Extra – Configure…”



## Configure How to Process Mail Properties

The first tab “Mail to Issue” of the configuration dialog allows to define, how mail properties are evaluated.



**Mail subject**

If this option is checked, the ID of the created issue is inserted into the mail subject. If the mail is replied, it contains the issue ID in the subject - which in turn, when the reply is answered, allows to find the issue related to the mail.

**Mail body**

Choose “Markup” if mail content text should be converted into JIRA markup language before being assigned to the issue description or comment. If formatting is not required select “Text”.

Mail content text is copied into the issue description or into a new comment. If no issue ID is found in the mail subject, ITOL assumes that a new issue should be created and copies the body into the description field of the issue. In case of an existing issue ID is found, the content text is suggested as a new comment to the issue.

**Attach mail as**

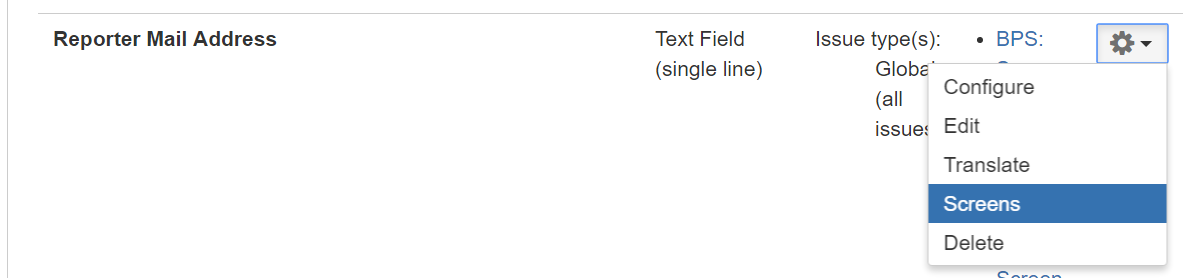
Select the format in which the original mail is saved as an attachment to the issue. Possible options are:

* Nothing: Neither the mail nor the attachments are added to the issue
* Outlook: Save the original mail in MSG format into the issue. If option “Mail subject” is checked, the file name added contains the new issue ID. This option allows to reply to the mail by someone who works on the issue but does not have the mail in her input box. Since the mail attachments are stored inside the MSG file, they are not added separately to the issue.
* Ritch Text Format: Add the mail content in RTF format, which is independent from Outlook but saves most text formatting features. The mail attachments are added separately to the issue.
* Plain Text: Add the mail body as a plain text file. The mail attachments are added separately to the issue.
* Only Attachments: Do not add the mail body, add only mail attachments.

**Automatic reply to**

This option allows to send a reply mail when an issue comment has been added. For using this feature, a custom text field must be created where a mail address can be stored. The field’s ID like “customfield\_10200” must be entered here. It can be found in the browser address when assigning the field to screens in JIRA.

Example: Create a custom field of type “Text Field (single line)” and navigate to the page that allows to assign the field to screens:



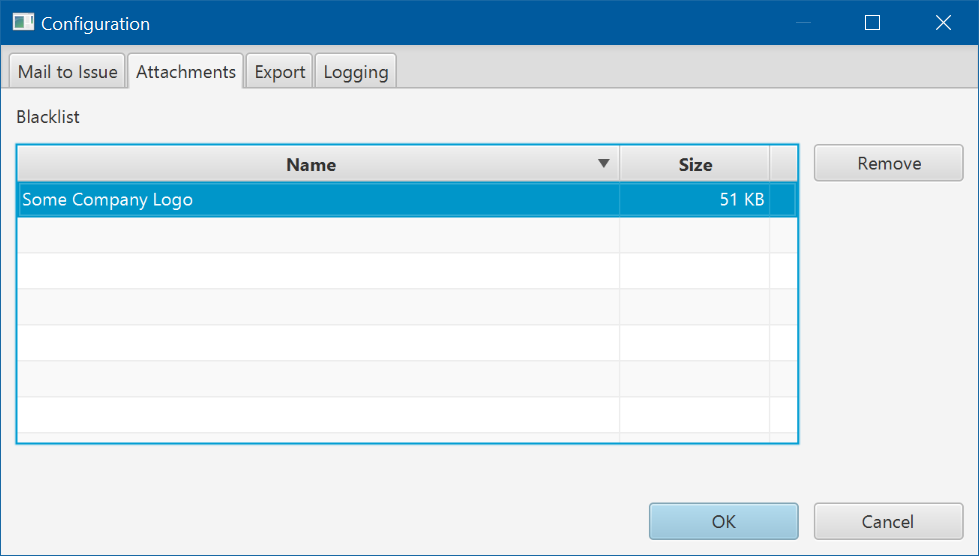
The browser address contains the field ID which is to be entered in the edit field.

https://wilutions.atlassian.net/secure/admin/AssociateFieldToScreens!default.jspa?fieldId=**customfield\_10200**&returnUrl=ViewCustomFields.jspa

When an issue is created, ITOL sets the mail sender address into this field.

## Manage Mail Attachments to Ignore

When preparing an issue with the data of a mail, the mail attachments are automatically handed over as issue attachments. Since mails often contain company logos which should not be added to the issue, it is possible to add them to a blacklist of files that should be ignored. The Tab “Attachments” shows this blacklist and allows to remove a file from the list.



Files are added to the blacklist in the issue pane on tab “ATTACHMENTS”: right-click on an entry and select “Add to blacklist…”.

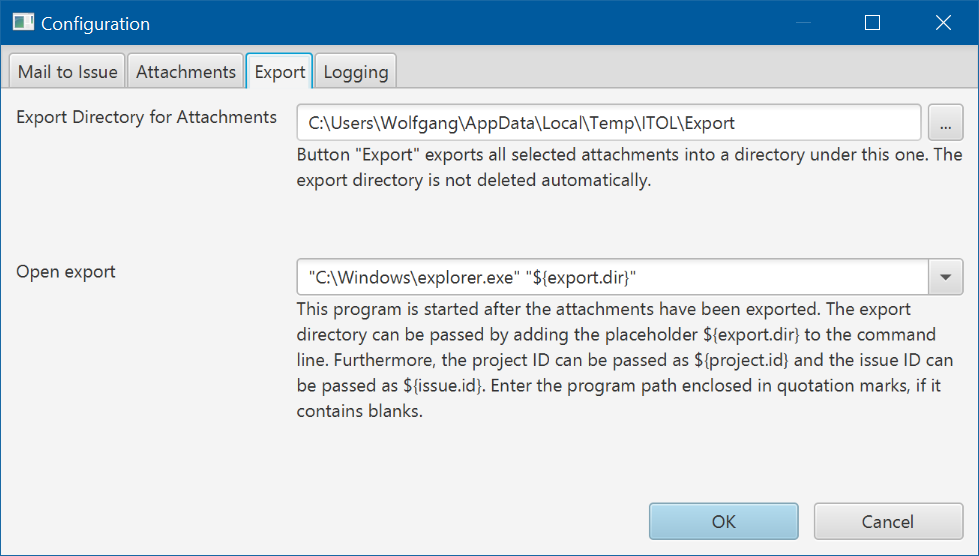
Only the file size and the MD5 hash value are stored in ITOL configuration, not the file itself.

## Configure Export of Issue Attachments

An issue might contain several log files of different software components that together e.g. document a misbehavior. In this case, it is often required to analyze the log files with special diagnostic tools.

Since this programs usually work on files stored in a directory on the computer, ITOL provides the download of all or a selection of attachments into the file system by one mouse click. This function is available on tab “ATTACHMENTS”: button “Export” saves all or only the selected files into a directory.

The destination directory can be configured on the tab “Export” of the configuration dialog.



**Export Directory for Attachments**

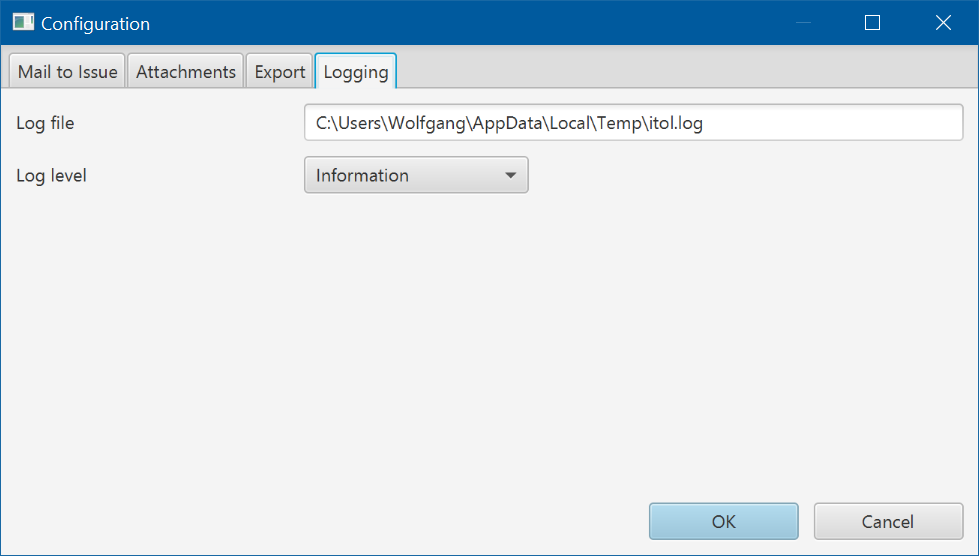
Button “Export” exports all selected attachments into a sub-directory of this one. The sub-directory is the named as the issue ID, if an existing issue is loaded in the issue pane. For a new issue, the sub-directory is named as: project key plus “-NEW\_” plus timestamp.

**Open export**

As described in the textbox below the edit field.

## Logging

A log file with information about the executed operations and how the program state changes thereby is written into the user’s temporary directory by default. This file can be very helpful to find the reason for a misbehavior.



**Log file**

The name of a file in an existing directory where the logging information is written.

**Log level**

Controls how verbose the logging information is written. Keep the level on “Information” for normal usage. Select level “Debug” only when it is necessary for debugging.

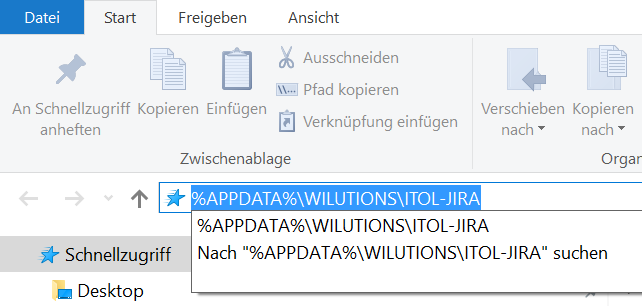
# Appendix

## Configuration Files

ITOL configuration data is stored in files in the user’s application data directory, e.g. “C:\Users\Wolfgang\AppData\Roaming\WILUTIONS\ITOL”.

Windows defines the environment variable “APPDATA” as a placeholder for the application data directory.

In order to navigate in Windows Explorer to the configuration data directory, enter **%APPDATA%\WILUTIONS\ITOL** in the address field.



## Configuration File “user.json”

All configuration values are stored in the file user.json. Rarely used values can only be edited directly in this file.

The configuration options are written into the file at the time when Outlook is closed.

This file also contains passwords which are AES-encrypted with a static key. Since the key is contained in the ITOL program code, the passwords are only weakly protected. The major part of projection is provided by Windows, while “user.json” is stored in the user’s private area. However, be careful by copying this file on a storage location that is accessible for others.

## Configuration File “application.json.templ”

Values, that are not user specific are saved into the file “application.json.templ”. This file can be used to share configuration options with other users. Therefore, it has to be renamed as “user.json” in the destination directory.

File “application.json.templ” does not contain passwords.

## Additional Logging

In addition to the log file that can be defined in the configuration dialog (see 6.4), two further log files can contain useful information for debugging: itol-stderr.txt and itol-stdout.txt. Both files are always written in the temporary directory of the user.