

Populating a Language

Once a language has been defined, there are two main ways to populate the language. You can:

- Manually enter all language data through the UI.
- Import a language using the Aras Innovator Language Pack Management Utility.

Manually Managing Language Packs in the Database

All multi-lingual deployments of Aras Innovator eventually need to manually configure languages in Aras Innovator, to account for its specific customization.

Once you have defined a language, refer to section [Defining a Language](#) , you can add values to this language for each of the UI elements.

Editing ItemTypes

ItemType	Property	Use	Where to edit in the UI
Action	Label	Displays in the Action menu of the toolbars	Administration\Actions
Activity Template	Label	Text to display the Activity message of a workflow	Administration\Workflow Maps pr Activity
Activity Template	message	Text to display the Activity label of a workflow	Administration\Workflow Maps pr Activity
Activity Template Task	description	Text to display the Task description of a Workflow Activity	Administration\Workflow Maps un label Relationship of an Activity



Activity Template Variable	Label	Text to display the label of an Activity Variable of a workflow	Administration\Workflow Maps un label Relationship of an Activity
CommandBarButton	Label	Text to display the label of a command bar button	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item
CommandBarButton	Label	Text to display the label of a command bar button	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarButton	tooltip_template	Text to display the tooltip of a command bar button	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item
CommandBarButton	tooltip_template	Text to display the tooltip of a command bar button	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarDropdown	Label	Text to display the label of the command bar dropdown	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item
CommandBarDropdown	Label	Text to display the label of the command bar dropdown	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarDropdown	tooltip_template	Text to display the tooltip of the command	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item



CommandBarDropdown	tooltip_template	bar dropdown Text to display the tooltip of the command bar dropdown	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarEdit	tooltip_template	Text to display the edit tooltip of the command bar	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item
CommandBarEdit	tooltip_template	Text to display the edit tooltip of the command bar	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarMenu	Label	Text to display the label of the command bar menu	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item
CommandBarMenu	Label	Text to display the label of the command bar menu	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarMenuButton	Label	Text to display the label of command bar buttons	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Sec Bar Item
CommandBarMenuButton	Label	Text to display the label of command bar buttons	Administration\ItemTypes\Client S Command Bar Section relationsh
CommandBarMenuCheckbox	Label	Text to display the label of	Administration\Client Presentation\Global\Presentation



		command bar checkboxes	Configuration\Command Bar Section Command Bar Item
CommandBarMenuCheckbox	Label	Text to display the label of command bar checkboxes	Administration\ItemTypes\Client S Command Bar Section relationship
CommandBarSection	Label	Text to display the label of command bar section	Administration\Client Presentation\Global\Presentation Configuration\Command Bar Section
CommandBarSection	Label	Text to display the label of command bar section	Administration\ItemTypes\Client S Command Bar Section relationship
Business Calendar Exception	description	Text displayed to describe a Business Day exception.	Administration\Calendars on the B relationship
Field	Label	Text displayed to label a field in a form	Administration\Forms on the Field relationship
Field	legend	Text displayed to label a field border in a form	Administration\Forms on the Field relationship
Filter Value	Label	Text displayed in pick lists of a filtered list in the UI	Administration\Lists on the Filter V
Grid Column	Label	Text displayed in Configurable	Administration\Grids on the Grid C relationship



		Grid column headers	
History Action	Label	Text to display the label of history action	ItemType not exposed through UI
History Action	Comment_text	Text to display the label of history action comment text	ItemType not exposed through UI
ItemType	label_plural	Text used in TOC	Administration\ItemTypes
ItemType	Label	Text used in item properties, and Item window title	Administration\ItemTypes
Life	Label	Text displayed to label a state of a lifecycle	Administration->LifeCycles on the properties
Message	Text	Text displayed for a notification message	Administration->Notification Messages
Message	Title	Title of the notification message	Administration->Notification Messages
PM_ProjectGridLayout	Label	Text displayed in the column header of the Project grid	Administration\Preferences on the Layout relationship of the World F
Property	Label	Text used in the search grid column headers	Administration\ItemTypes on the relationship



Property	default_value	Text used in the default value of a multi-lingual string property	Administration\ItemTypes on the Relationship
RelationshipType	Label	Text used in the relationship tabs in Item windows	Administration\RelationshipTypes
Report	Label	Displays in the Report menu of the toolbars	Administration\Reports
SearchMode	Label	Text used to display the different search modes	ItemType not exposed through UI
SecureMessageViewTemplate	Thumbnail_tooltip_template	Text to display thumbnail tooltip	Administration\Forms\SecureMessageView on the Field Label relationship
SecureMessageViewTemplate	Sketch_tooltip_template	Text to display sketch tooltip	Administration\Forms\SecureMessageView on the Field Label relationship
SelfServiceReportHelp	Rich_help_text	Text to display help text	ItemType not exposed through UI
SSVCPresentationConfiguration	Form_tooltip_template	Text to display form tooltip	ItemType not exposed through UI
UserMessage	Text	Displays in custom error messages in the UI	ItemType not exposed through UI
Value	Label	Text displayed in pick lists in the UI	Administration\Lists on the Value



Workflow Map	description	Text displayed for description of a workflow	Administration\Workflow Maps of a workflow
Workflow Map	Label	Text displayed in UI for name of a workflow	Administration\Workflow Maps of a workflow
Workflow Map Path	Label	Text to display the vote path between two Workflow Activities	Administration\Workflow Maps on two activities
Workflow Map Variable	Label	Text to display the label of a Workflow variable	Administration\Workflow Maps on Variable relationship

Each row in the table above represents a property in the user interface that has been defined as a multi-lingual string. The translator needs to edit each Item of that type that needs to display a non-English value.

Using the Language Pack Management Utility

To aid in the ability to move language packs from one database to the next, Aras has created a Language Pack Management Utility to export and import language values from a database. The Language Pack Management Utility is a command line utility that imports and exports language packs from the Aras Innovator database on a SQL level. The following section explains how to use the utility available in the Language Pack Management Utility folder of the Aras Innovator CD Image or from the Aras Community Projects site at <http://www.aras.com/communityProjects/default.aspx> .

The Command Line

There are several elements to the Language Pack Management Utility command line tool. First, is the executable file for the Language Pack Management Utility itself, `LanguageTool.exe` . The details of the various options for running the executable at the command line are as follows:



```
Usage: LanguageTool.exe [-export/-import] [-config_file:<file path>]
[-folder:<folder path>] [-log_file:<file path>] [-log_level:<log level>]
] [-server:<SQL server name>] [-db:<database name>] [-login:<login name>]
[-pwd:<login password>]
```

Where:

- **-export/import** : This is the required parameter to indicate if the operation is to export or import a language.
- **- config_file** : (Optional) The path to the configuration file for current operation, ImportConfig.xml or ExportConfig.xml.
- **- folder** : (Optional) The path to the data folder. This is the output folder for the export operation or the input folder for the import operation.
- **-log_file**: (Optional) The path to the log file.
- **-log_level**: (Optional) The logging level (high, medium, low).
- **-server** : (Optional) The name of the Microsoft SQL Server instance where the Aras Innovator database is installed.
- **-db**: (Optional) The name of the Aras Innovator database.
- **-login**: (Optional) The Aras Innovator login assigned to the Aras Innovator database.
- **-password**: (Optional) The password for the Aras Innovator login assigned to the Aras Innovator database.

Important

The optional parameters can be generally included in the LanguageTool.exe.config configuration file, but the command line parameters take precedence.

LanguageTool.exe.config

The `LanguageTool.exe.config` configuration file that is referenced by the Language Pack Management Utility is a straightforward xml file that defines the parameters for the batch load activity.




```

<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<configSections>
<sectionGroup name="userSettings"
type="System.Configuration.UserSettingsGroup, System,
Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089" >
<section name="Aras.Tools.I18N.ExpImpMLData.Properties.Settings"
type="System.Configuration.ClientSettingsSection, System,
Version=2.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089"
allowExeDefinition="MachineToLocalUser" requirePermission="false"/>
</sectionGroup>
</configSections>
<userSettings>
<Aras.Tools.I18N.ExpImpMLData.Properties.Settings>
<setting name="config_file" serializeAs="String">
<value>C:\German\ImportConfig.xml</value>
</setting>
<setting name="folder" serializeAs="String">
<value>C:\German\data</value>
</setting>
<setting name="log_file" serializeAs="String">
<value>C:\German\log.txt</value>
</setting>
<setting name="log_level" serializeAs="String">
<value>high</value>
</setting>
<setting name="server" serializeAs="String">
<value>localhost</value>
</setting>
<setting name="db" serializeAs="String">
<value>InnovatorSolutions</value>
</setting>
<setting name="login" serializeAs="String">
<value>innovator</value>
</setting>
<setting name="pwd" serializeAs="String">
<value>innovator</value>
</setting>
</Aras.Tools.I18N.ExpImpMLData.Properties.Settings>
</userSettings>
<startup>
<supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5.2"/>
</startup>
</configuration>

```

To help understand how to configure this file, the example above can be broken down line by line:

```

<setting name="config_file" serializeAs="String">
<value>C:\German\ImportConfig.xml</value>
</setting>

```



This is the path to the path to a configuration file for current operation, ImportConfig.xml or ExportConfig.xml.

```
<setting name="folder" serializeAs="String">  
<value>C:\German\data</value>  
</setting>
```

The path to the data folder. This is the output folder for the export operation, or the input folder for the import operation.

```
<setting name="log_file" serializeAs="String">  
<value>C:\German\log.txt</value>  
</setting>
```

This is the path to the log file.

```
<setting name="log_level" serializeAs="String">  
<value>high</value>  
</setting>
```

This is the logging level, 'high' recommended.

```
<setting name="server" serializeAs="String">  
<value>localhost</value>  
</setting>
```

The name of the Microsoft SQL Server instance where the Aras Innovator database is installed. This value can be found in the Aras Innovator InnovatorServerConfig.xml in DB-Connection tag. (server="localhost")

```
<setting name="db" serializeAs="String">  
<value>InnovatorSolutions</value>  
</setting>
```

This is the name of the Aras Innovator database in SQL Server. This value can be found in the Aras Innovator InnovatorServerConfig.xml in DB-Connection tag. (database='InnovatorSolutions')



```
<setting name="login" serializeAs="String">  
<value>innovator</value>  
</setting>
```

This is the login assigned to Aras Innovator user of the Aras Innovator database in SQL Server. This value can be found in the Aras Innovator InnovatorServerConfig.xml in DB-Connection tag. (uid='innovator')

```
<setting name="pwd" serializeAs="String">  
<value>innovator</value>  
</setting>
```

This is the name login assigned to the Aras Innovator user of the Aras Innovator database in SQL Server. This value can be found in the Aras Innovator InnovatorServerConfig.xml in DB-Connection tag. (pwd='innovator')

Any of the parameters may be left out as long as the command line equivalent parameter is defined.

Export Configuration

In order to export a language pack from the Aras Innovator database, you need to define what languages and ItemTypes to export. The definitions of these settings are found in the ExportConfig.xml .



```

<export>
<languages list="en, de" />
<itemtype name="Action" />
<itemtype name="Activity Template" />
<itemtype name="Activity Template Task" />
<itemtype name="CommandBarButton" />
<itemtype name="CommandBarDropDown" />
<itemtype name="CommandBarEdit" />
<itemtype name="CommandBarMenu" />
<itemtype name="CommandBarMenuButton" />
<itemtype name="CommandBarMenuCheckbox" />
<itemtype name="CommandBarMenuSeparator" />
<itemtype name="CommandBarSection" />
<itemtype name="CommandBarSeparator" />
<itemtype name="Field" />
<itemtype name="FileSelectorTemplate" />
<itemtype name="Filter Value" />
<itemtype name="Grid Column" />
<itemtype name="History Action" />
<itemtype name="ItemType" >
<properties list="label,label_plural" />
</itemtype>
<itemtype name="Life Cycle State" />
<itemtype name="PM_ProjectGridLayout" />
<itemtype name="Property" >
<properties list="label,default_value" />
</itemtype>
<itemtype name="RelationshipType" />
<itemtype name="Report" />
<itemtype name="SearchMode" />
<itemtype name="SecureMessageViewTemplate" />
<itemtype name="SelfServiceReportHelp" />
<itemtype name="SSVC_Preferences" />
<itemtype name="SSVCPresentationConfiguration" />
<itemtype name="UserMessage" />
<itemtype name="Value" />
<itemtype name="Workflow Map" />
<itemtype name="Workflow Map Path" />
</export>

```

To help understand how to configure this file, the example above can be broken down line by line:

```

<languages list="en, de" />

```

These are the languages by Language Item code property defined in Aras Innovator. The above example shows en (English) and de (German).

```

<itemtype name="Field" />

```



Each ItemType defined in this file contains all of its multi-lingual string properties exported from the database.

```
<properties list="label,label_plural" />
```

If you want to select some, but not all multi-lingual string properties, add this tag with the properties to export.

Import Configuration

To import a language pack into the Aras Innovator database, you first need to define the Language Item in the database, refer to section [Defining a Language](#) . Next, you need to setup the ImportConfig.xml.



```

<import>
<itemtype name="Action" />
<itemtype name="Activity Template" />
<itemtype name="Activity Template Task" />
<itemtype name="CommandBarButton" />
<itemtype name="CommandBarDropDown" />
<itemtype name="CommandBarEdit" />
<itemtype name="CommandBarMenu" />
<itemtype name="CommandBarMenuButton" />
<itemtype name="CommandBarMenuCheckbox" />
<itemtype name="CommandBarMenuSeparator" />
<itemtype name="CommandBarSection" />
<itemtype name="CommandBarSeparator" />
<itemtype name="Field" />
<itemtype name="FileSelectorTemplate" />
<itemtype name="Filter Value" />
<itemtype name="Grid Column" />
<itemtype name="History Action" />
<itemtype name="ItemType" >
<properties list="label,label_plural" />
</itemtype>
<itemtype name="Life Cycle State" />
<itemtype name="PM_ProjectGridLayout" />
<itemtype name="Property" >
<properties list="label,default_value" />
</itemtype>
<itemtype name="RelationshipType" />
<itemtype name="Report" />
<itemtype name="SearchMode" />
<itemtype name="SecureMessageViewTemplate" />
<itemtype name="SelfServiceReportHelp" />
<itemtype name="SSVC_Preferences" />
<itemtype name="SSVCPresentationConfiguration" />
<itemtype name="UserMessage" />
<itemtype name="Value" />
<itemtype name="Workflow Map" />
<itemtype name="Workflow Map Path" />
</import>

```

Each ItemType defined in this file should have a corresponding XML file containing the language values in the data folder.

XML Resources

The XML resources represent the static content of the Aras Innovator user interface, such as menu options and toolbar buttons. There is no automated tool for updating these resources. They must be done manually in a text editor.

For instance, in the \\Innovator\\Client\\xml\\item_menu.xml file



```
<?xml version="1.0" encoding="UTF-8"?>
<menuapplet on_load="onItemMenuLoad" on_select="onClickItem" on_check="onCheckMenu" show="item_menubar">
<menubar id="item_menubar">
<menu id="file_menu" name="File">
```

Would become

```
<?xml version="1.0" encoding="UTF-8"?>
<menuapplet on_load="onItemMenuLoad" on_select="onClickItem" on_check="onCheckMenu" show="item_menubar">
<menubar id="item_menubar">
<menu id="file_menu" name="Datei">
```

in the \Innovator\Client\xml.de\item_menu.xml file.

Aras Innovator houses all the generic user interface XML resources in the \Innovator\Client\xml folder. However, each solution could have its own xml resources as well. See section [Updating the User Interface \(Xml-based resources\)](#) .

Updating the Resource.Config.xml

The Resource.Config.xml located in \Innovator\Client\XML folder defines the language(s) that can be loaded on the Client. When you define the language pack, you need to update Resource.Config.xml file and add a reference to your language.

The following is an example of adding the German Language to the Resource.Config.xml:

```
<satelliteresources>
...
<resource culture="neutral"/>
<resource culture="ja"/>
<resource culture="de"/>
...
```

Once you have updated the Resource.Config.xml and saved it, you need to restart IIS on the Server.