

Intrexx Professional

Intrexx Compact

RELEASE 5



Integration

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Writing Conventions

In this handbook, text passages will be displayed in *italics* when they refer to settings in the displayed dialogs. Menu items that are available in context menus can, in addition, always be selected from the main menu. Main menu items will not be described if they are not available in the context menu. A description of the general main menu items can be found in the  *Portals* handbook. Programming code in the text will be displayed in the `Courier` font. Context menus can be opened by clicking with the right mouse button on the described element.

In the following, `<intrexx>` refers to your Intrexx installation path; under Windows, for example, this is usually  `c:\intrexx\`. On Linux, the normal install path is  `/opt/intrexx/`. The following symbols will be used for designation of special kinds of information:

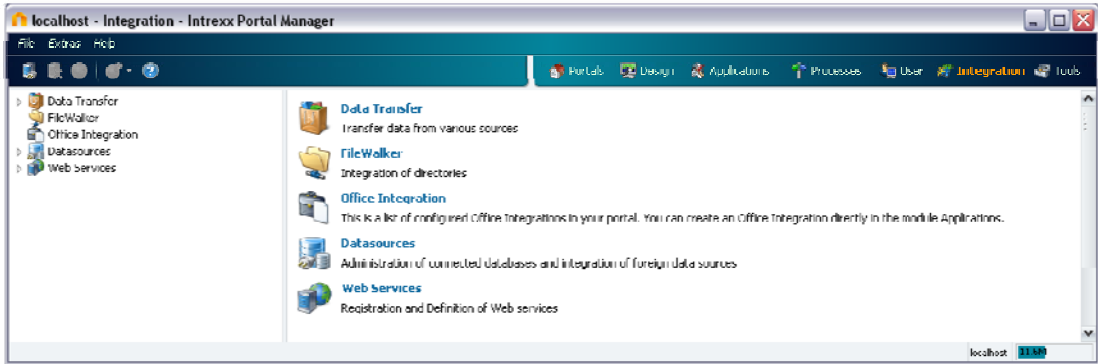
-  Information
-  References to an Intrexx handbook
-  Directories
-  URLs
-  Click on buttons

Background KnowledgePrevious Knowledge

In order to understand this documentation, no previous special knowledge is required. You can find helpful information in the Intrexx handbooks  *Portals* and  *Applications*.

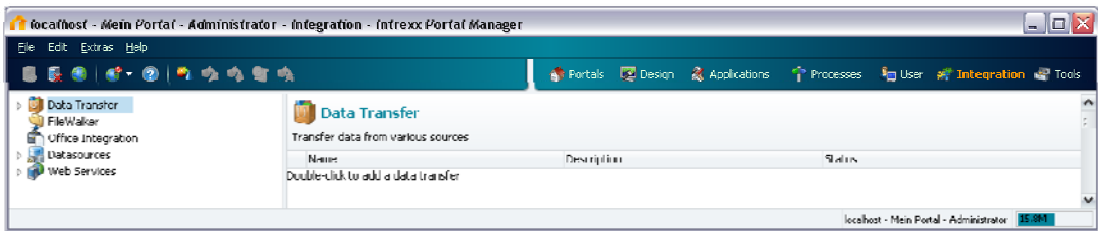
1. General

In the *Integration* module, you will find different functions that will help you integrate data into the portal.



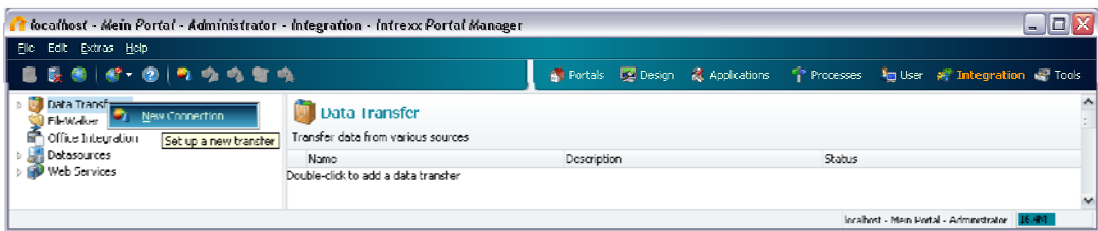
If you are connected to a portal, you can reach the individual functions by clicking the corresponding link in the left-hand area of the module.

2. Data Transfer

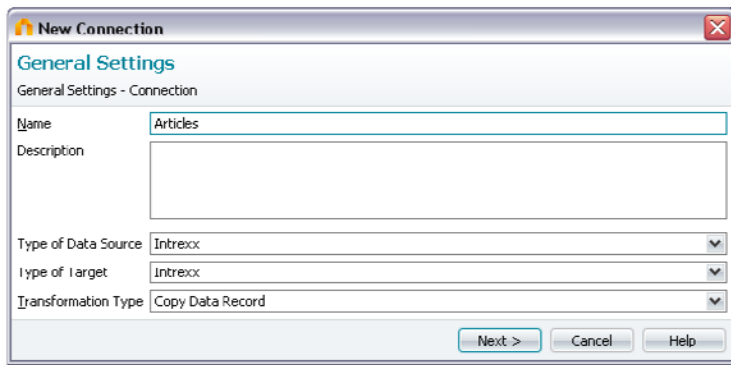


With the *data transfer*, data from Intrexx applications or from foreign data sources can be imported and exported. A *data transfer* can be executed as a one-time event, or regularly and automatically at defined times in the background.

2.1. Connections



A new connection can be set up via the context menu item *New Connection*.

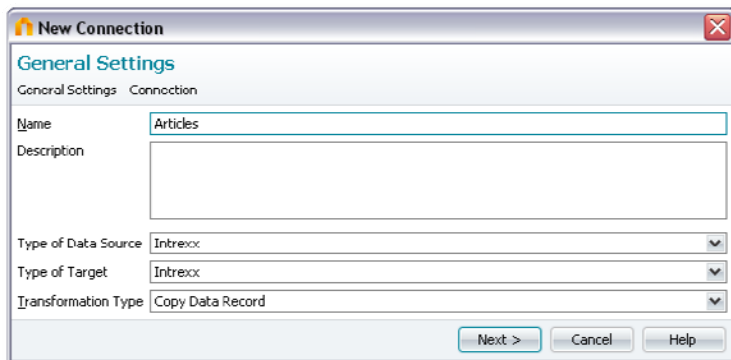



Enter a *Name* for the connection here. Under *Description*, you have the ability to make a comment about the properties of the data transfer. In *Data Source Type* and *Target Type*, enter the kind of data records to be copied and what kind of data that will be imported in these records respectively. The following can be selected:

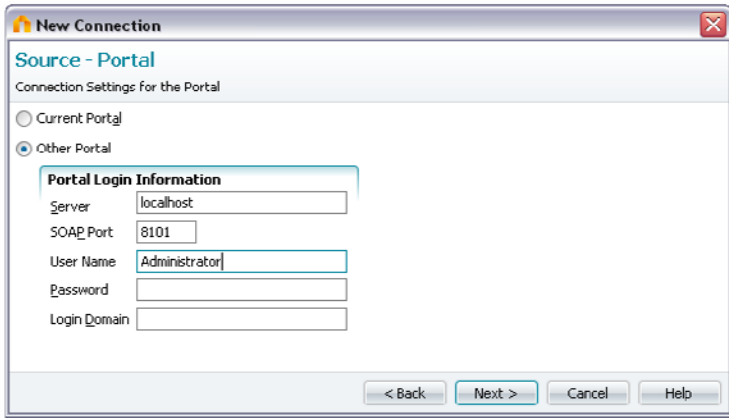
- *Intrexx* databases
- *JDBC* data sources
- *Text files*
- *XML files*
- *Groovy Script*

Under *Transformation Type*, the type of data transfer will be defined. This option refers to whether data records will be copied or a transformation via Groovy script will be performed.

2.1.1. Type of Data Source: Intrexx





If the data source type *Intrexx* has been selected, you will arrive at the following dialog after clicking  *Next*.

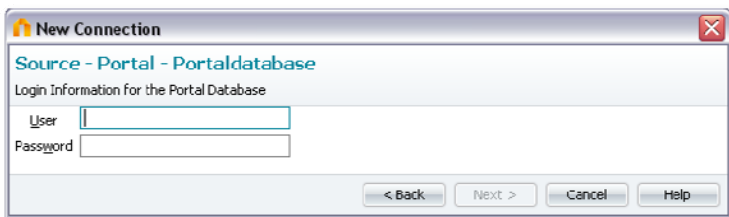



With the *Current Portal* option, the data will be taken from a database in the portal with which you are currently connected. Alternatively, you can connect to another existing Intrexx portal with the *Other Portal* setting.

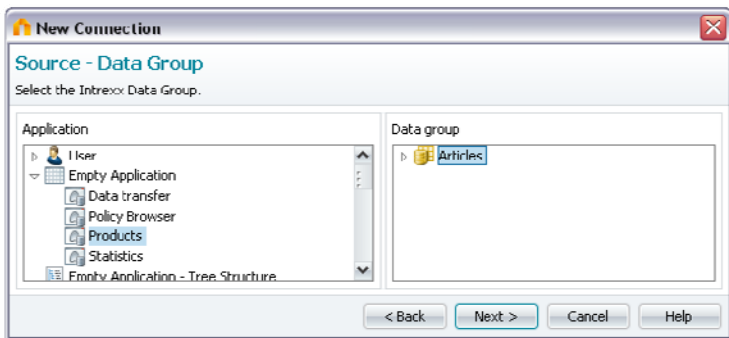
With the latter option, enter under *Portal Login Information* the *Server*, *SOAP Port*, *User Name*, the *Password*, and the *Login Domain*.


-  The SOAP port of a currently opened portal can be determined from the *Portals* module under *Portal Properties* (*Portal* menu), on the *Ports* tab.

Click  *Next* to continue.



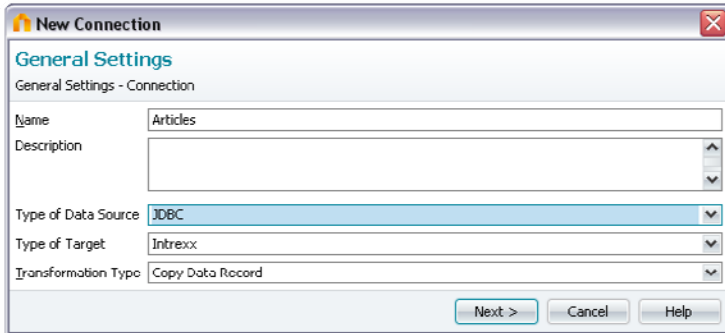
Enter the username and the password of the portal database here. Then click  *Next* to continue.




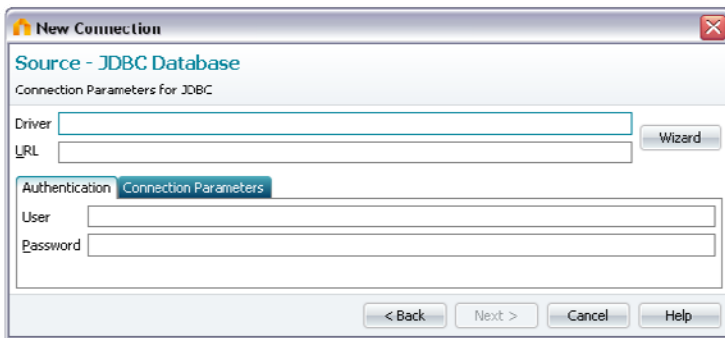
In the *Applications* column, all applications will be grouped by template. If an application has been entered to the portal based on a template, an  arrow icon will be shown to the left of the template name. Clicking this icon will show the applications contained within it. Select the desired application here.

In the *Data Groups* column, all data groups of the application will be shown. Select the desired data group here.

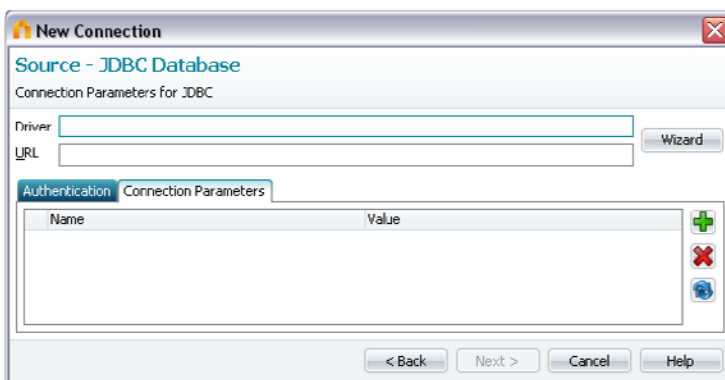
2.1.2. Type of Data Source: JDBC





If *JDBC* is selected as data source type, you will reach the following dialog after clicking  *Next*.




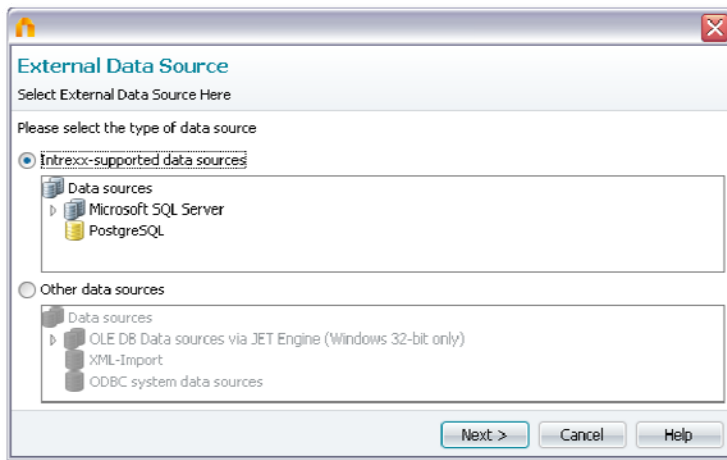
Enter the *Driver* and the *URL* of the datasource from which the data originates. If authentication is necessary, please enter in addition the *User Name* and the *Password*.




On the *Connection Parameters* tab, driver-dependent parameters can be entered. Click on  *Add Parameter* in order to enter a new parameter. Enter the *Name* and the *Value* in the corresponding column.

 United Planet assumes no responsibility for errors arising from the entry of incorrect connection parameters in this dialog.


With  *Wizard*, you can access an assistant that will help you with the configuration of the JDBC data source. However, it cannot be guaranteed that, for each external data source, the coverage of an assistant has been prepared.




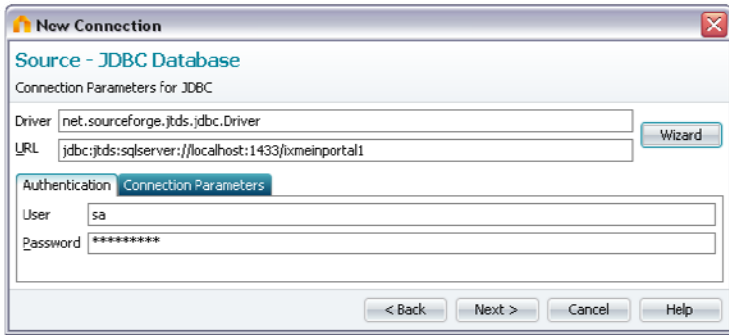
With the *Intrexx-supported data sources* setting, all database drivers that were installed during the Intrexx setup process or later will be listed as database types ( *Setup*). Select the database type of the external data source here.

The *Additional data sources* setting gives you access to OLE DB data sources/ADO data sources like

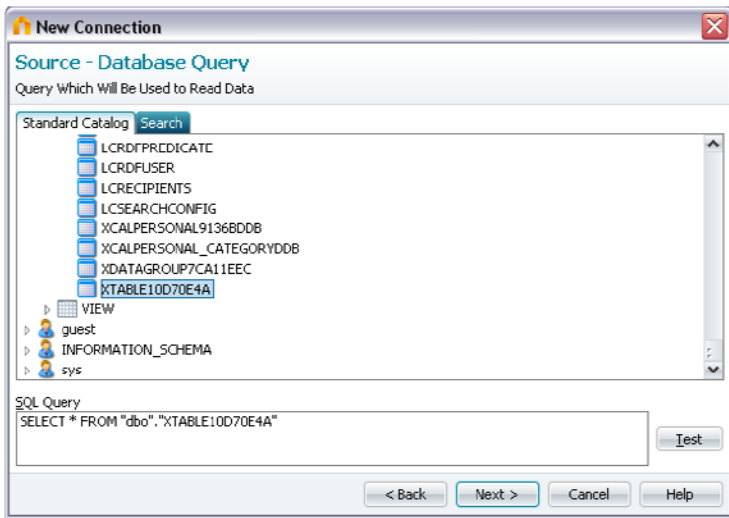
- Access
- dBase 5.0
- dBase III
- dBase IV
- Excel 3.0
- Excel 4.0
- Excel 5.0-7.0
- Excel 8.0/9.0
- Exchange
- HTML import
- Lotus WK1
- Lotus WK3
- Lotus WK4
- Paradox 3.x
- Paradox 4.x
- Paradox 5.x
- Text (see Appendix).


XML imports and a connection to *ODBC system data sources* are also possible. After selecting the data source, click  *Next*.

The following dialogs will vary by database type. Please consult the online help (*F1*) for Intrexx. If all entries for data source connection are complete, please click  *OK*. The wizard will now fill out the fields *Driver* and *URL* for you.

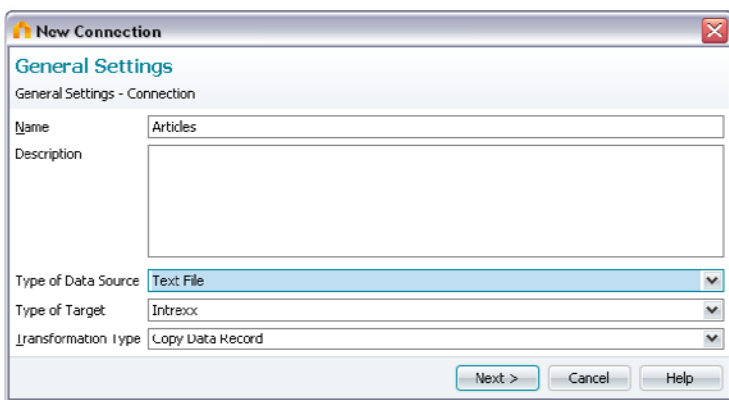


Click  Next here.

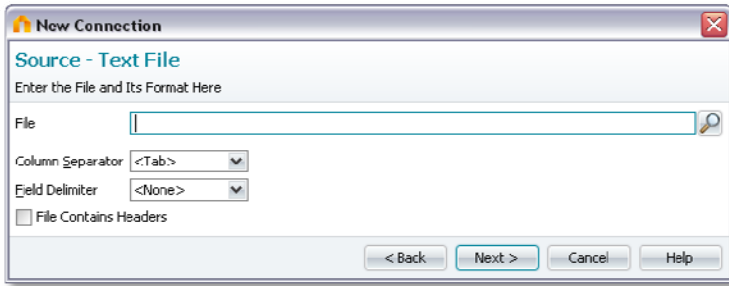


In the *Standard Catalog*, all tables and views that are available for you to select as data source will be listed. If you select one of the tables, a select statement will be automatically entered as the SQL Query, with which all data records will be completely read out. The statement can be modified to your specifications and run by clicking  *Test*.

2.1.3. Type of Data Source: Text File

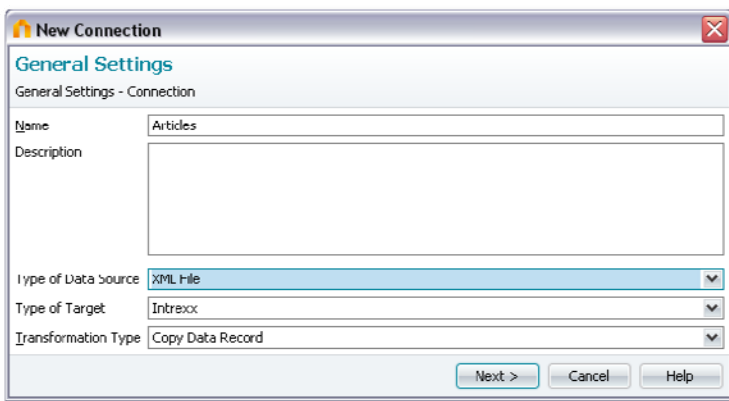



Selecting this option allows data to be imported from a text file. Click  Next to continue.

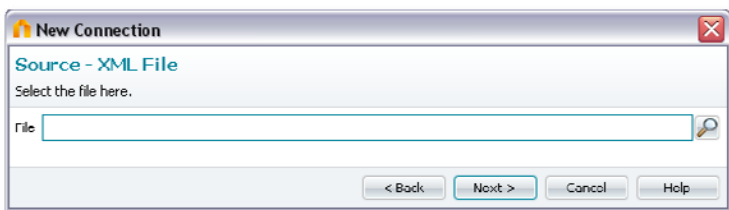


Select the *File* that contains the data here. The file must exist in a directory that has been enabled for the server. Next, the *Column Separator* and the *Field Limiter* can be selected, which will be used in the text file. With the setting that the *File contains header*, the first line will not be imported; rather, it will be shown in the following dialog pages as the column title.

2.1.4. Type of Data Source: XML File

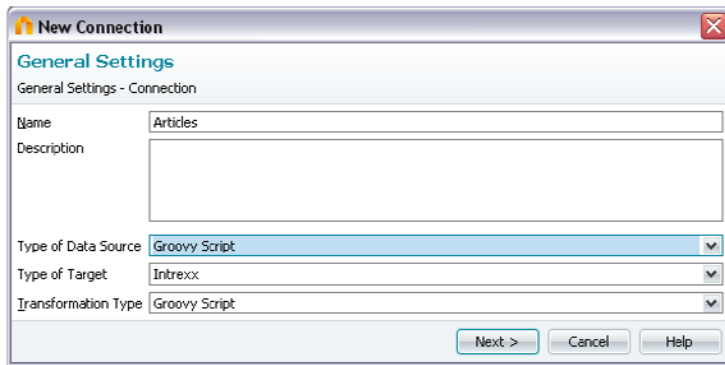



With this selection, data can be imported from an XML file. Click  *Next* to continue.

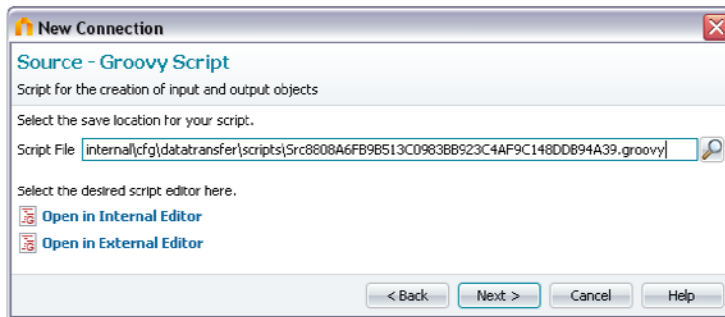



Select the XML file here.


2.1.5. Type of Data Source: Groovy Script

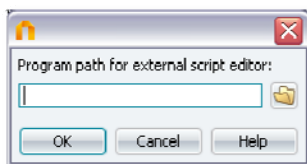


Groovy Script can also be used for querying data sources. Click  *Next*.

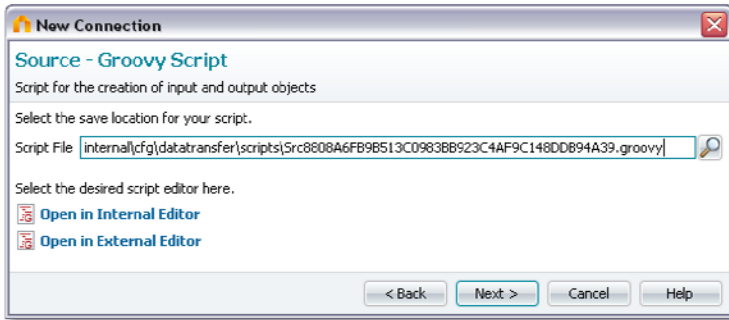



First, select the location for the *Script File* to be saved. Here the directory  *internal\cfg\datatransfer\scripts* will be automatically suggested for the location of the new script file. Additionally, Intrexx will generate a unique file name, consisting of the character string *Src* and a GUID with the ending *.groovy*. If you prefer a different save location, please note that the directory must be reachable from the server. Additionally, the selected file name must be unique in the portal.

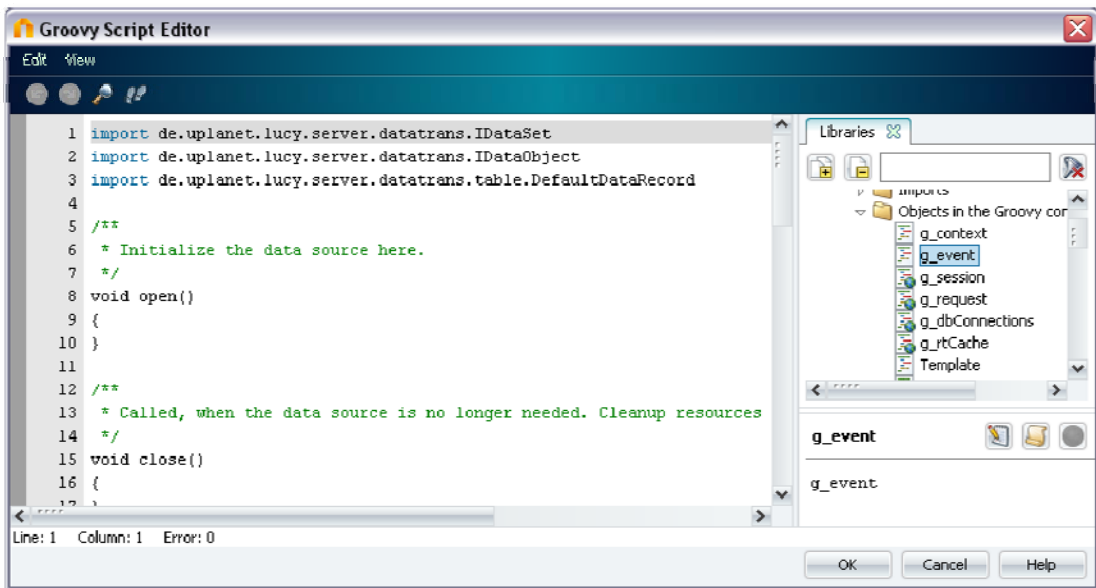
After clicking  *Open in external editor*, a text editor of your choice can be opened in order to edit the script.





Enter the program path for the external editor you wish to use here and then click  *OK*.



By clicking  *Open in internal editor*, the script will be opened in the Intrexx Groovy Script Editor.



A complete description of the editor can be found in the  *Editors handbook*.

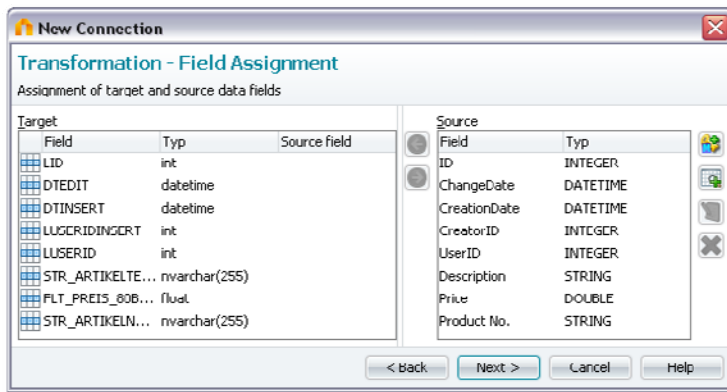
-  If one wishes to access column names using `getValue()` and `setValue()`, they must be entered corresponding to the database in use with capital and lower-case letters. Please take account of the conventions of your database here.

2.1.6. Type of Target

The settings for the various target types correspond to the settings made when configuring the data sources.

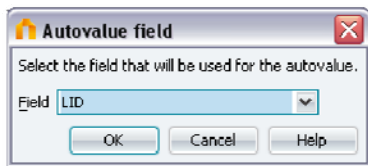
a) Field Assignment Intrexx and JDBC

If the target types for the data transfer have also been set, for the types *Intrexx* and *JDBC* you will reach a dialog in which you can define the assignments of source and target data fields.



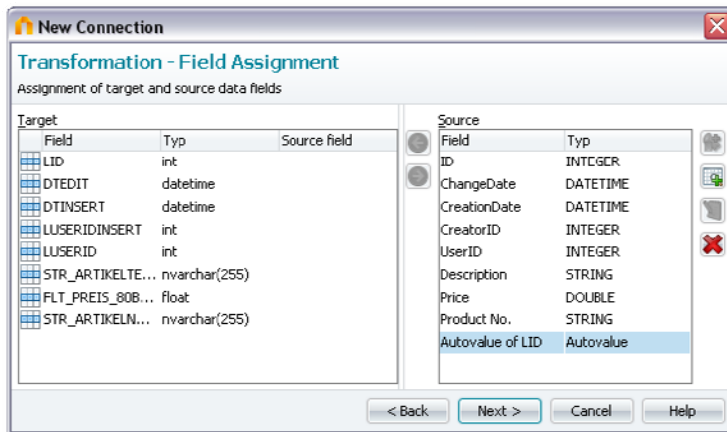
For this, highlight the corresponding fields in the areas *Target* and *Source* and create the assignment with the help of the arrow buttons.

Clicking on *Add autovalue* will open an additional dialog.



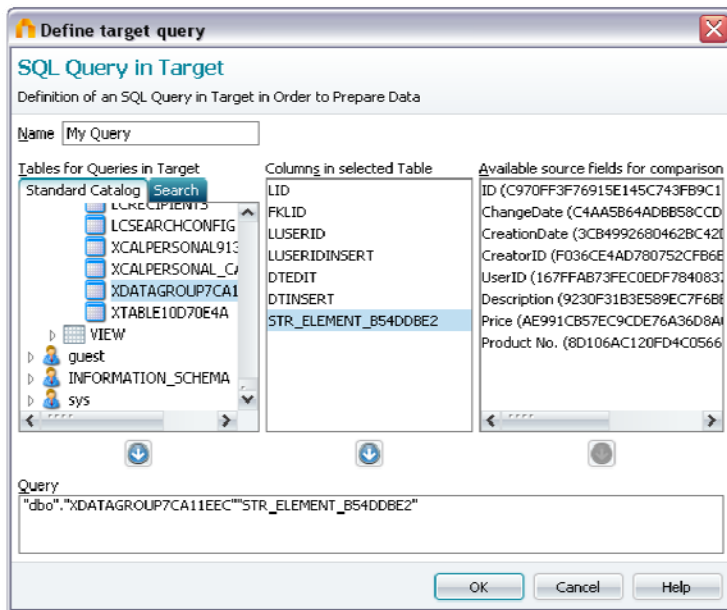
Here fields with integer values can be selected. As an autovalue field, the maximum value that can be found in the selected field will automatically be increased by a value of one. This newly calculated value will then be used upon data transfer in the assigned target data field.

After clicking *OK*, the new value has been defined.




You will now find the autovalue at the end of the list of source data fields and can assign it to a target data field.

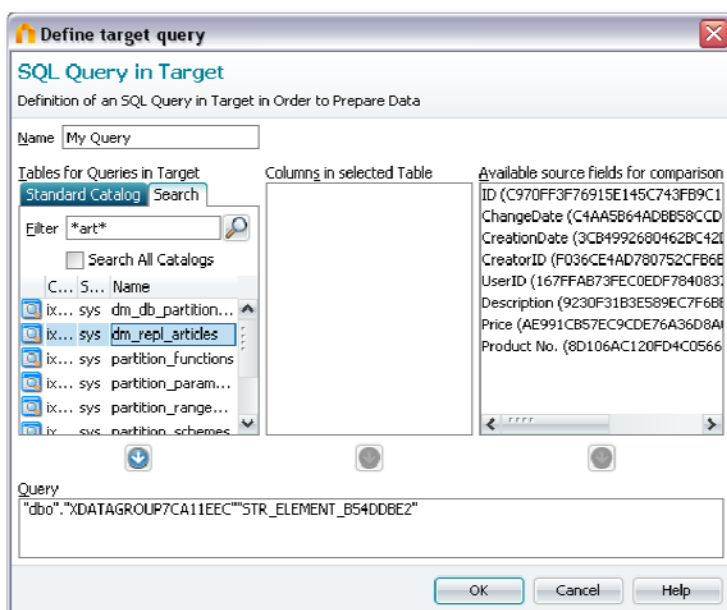
Add query takes you to a dialog in which you can define an SQL query.





If data is to be accepted after filtering, you can formulate a statement here. You can then assign the query result as usual in the field assignment to a target data field.

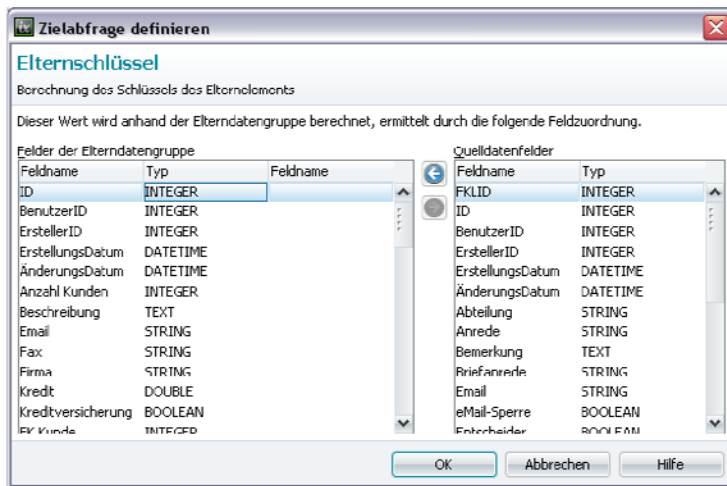
In the upper area of the dialog, enter the *Name* of the SQL query. In the lower area, you will find the *Query* field. Database tables, fields, and the source fields for the comparison can be selected in the three columns above the query field. If you click on the  arrow button below a column, the element highlighted in the column will be inserted into the *Query* field. When formulating the query, please take care to use the correct syntax depending on the database.


In the *Tables for query in target* column, you will find the *Search* tab.

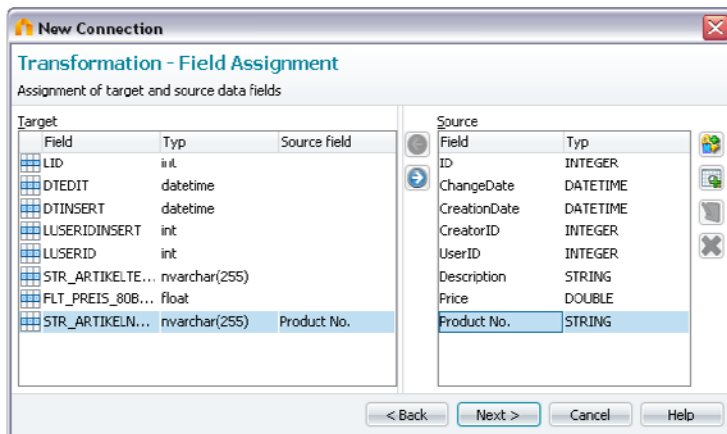






Here you have the ability to search specifically for tables. To do so, enter the search term into the *Filter* field and then click on  *Search*.

Once you have created the query, please click on  **OK**.

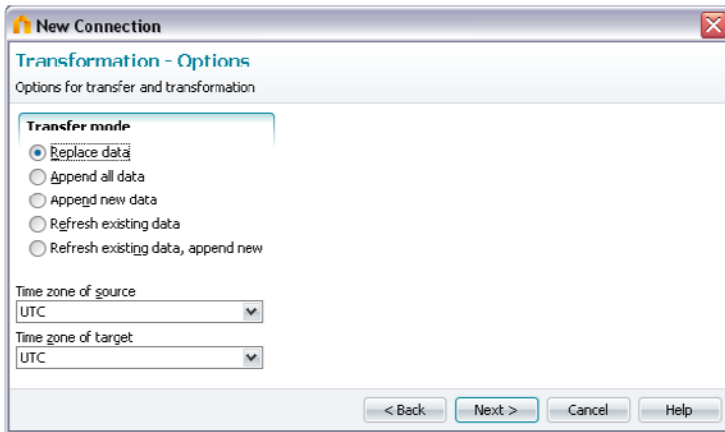


If the data source deals with a dependent data group (such as contact persons for customers), you can define here which field should serve as key for the assignment of the child data records to a data record of the parent data group. After completing the assignment, click  **OK**.



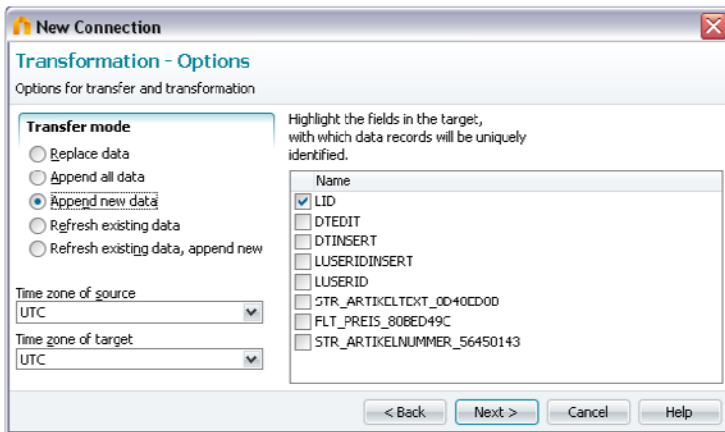
With  **Edit**, the settings for a query can be changed. Queries will be entered like automatic values at the end of the *Source* column. If you select a query there, it can be edited, or assigned to a target field with the   arrow buttons. After assigning fields, click  **Next**.

2.2. Transformation




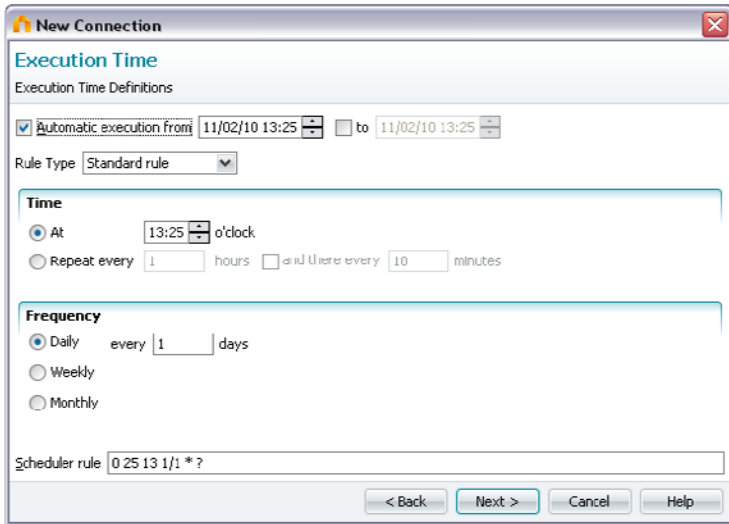
In the transformation options, the type of data transfer will be defined. With the option to *Replace existing data*, all data in the target data group will be replaced. The option to *Attach all data* will allow you to keep existing data in the target data group. The transferred data will be added to the file.

Selecting the option to *Attach new data* will show all fields of the target data group in the right-hand area of the window. Select the fields here whose value can be used to identify a data record as new. These fields must be connected with a corresponding field of the target data group in the field assignment in order for the value to be transferred from the source data upon each import.



With the option to *Refresh existing data*, existing data will be refreshed, if changes were made to the source data group since the last update.

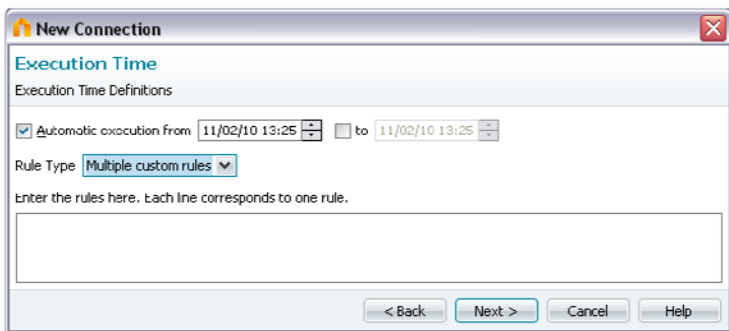
The option to *Refresh existing data, attach new data* corresponds to the *Attach new data* option, with the difference being that existing records in the target data group will be updated, i.e. refreshed, if changes were made to the source data group since the last update. Intrex saves all date values in GMT (Greenwich Mean Time) to the database. Select the *Time zone of source* and *Time zone of target* here. Click  *Next* to continue.



If you wish to *Automatically execute* the data transfer job, a starting and ending date can be entered here. The job will automatically be run in the background in the entered time frame and/or from the starting date.

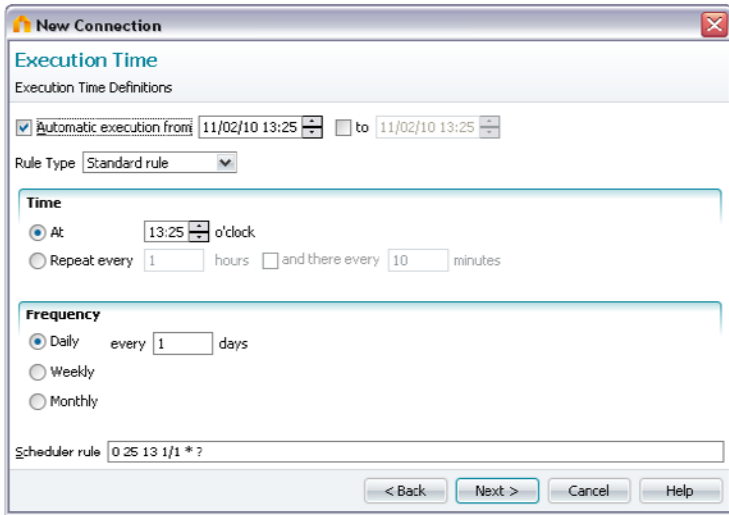
With the *Standard Rule* setting, the time and frequency of the execution time can be entered. When using this, the scheduler rule in the lower part of the dialog will be automatically refreshed.

Selecting the *Custom Rule* setting allows a *Scheduler Rule* to be manually entered. Because there are a virtually unlimited amount of possible rules, it is not possible to enter every desired rule via the standard dialog. With the *Multiple custom rules* option, an edit field will be shown, in which you can enter more complex rules.



Information about the construction of these rules can be found at www.opensymphony.com/quartz/wikidocs/Tutorial.html. The detailed description of CronTrigger expressions can be found at quartz.sourceforge.net/javadoc (CronTrigger class).

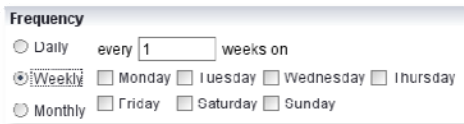
Select the *Standard Rule* option to show the additional settings in the dialog.



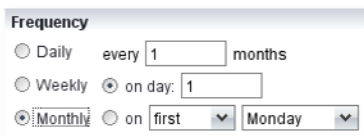
When using automatic execution, enter the time at which the data transfer will be executed. Define the execution interval, either daily, weekly, or monthly, at which the job will begin. Depending on whether you select a daily, weekly, or monthly execution, the dialog's appearance will differ.




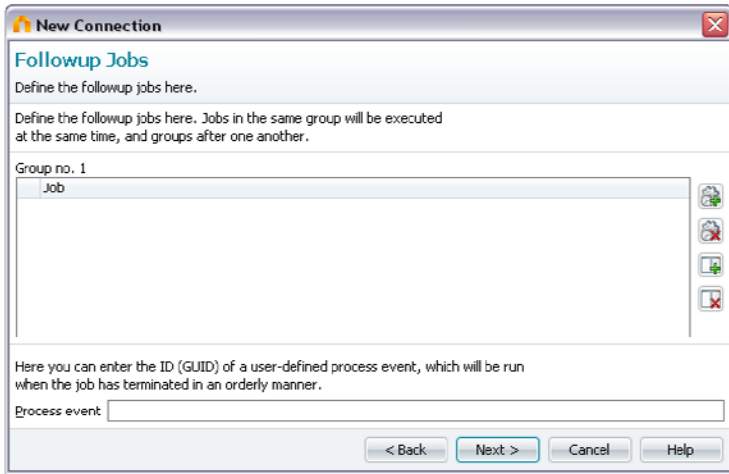
When selecting the *Daily* setting, in the *every ... days* field, enter after how many days the job should be repeated.




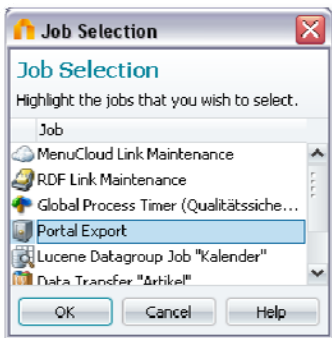
With the *Weekly* setting, enter in the *every ... weeks* field after how many weeks the job should be repeated. A weekday must also be entered. Without entering the weekday, the data transfer will not be run.




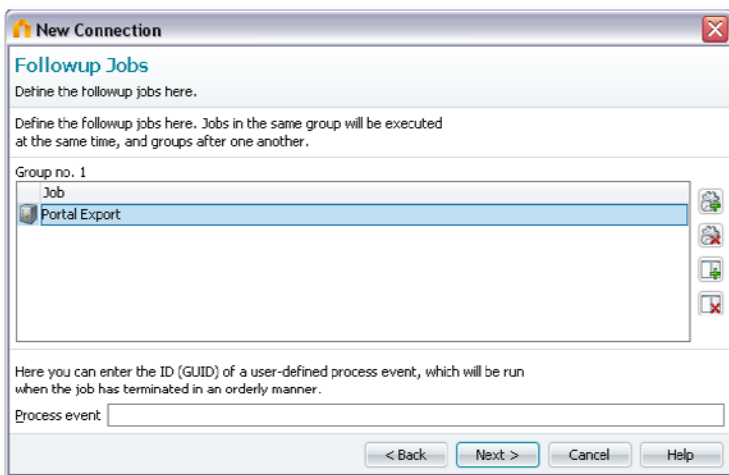
With the *Monthly* setting, in the *every ... months* field, enter after how many months the job should be repeated. You must additionally enter the day on which the execution will be repeated. In this, the entry can be made as a number (first, second, third day, etc.), or as a weekday (first Monday of the month, second Saturday of the month, etc.). Without this entry, the job will not be run. Click  *Next* to continue.





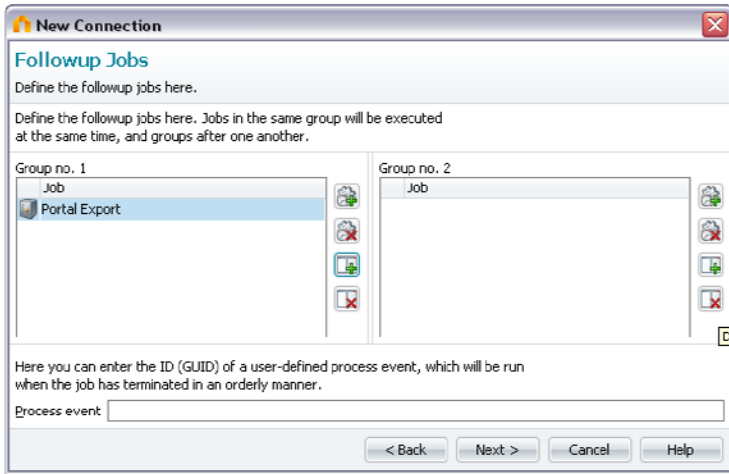
Additional existing connections can be executed after the current data transfer has been run here. With  *Add Task*, you will reach a dialog in which existing tasks can be selected.





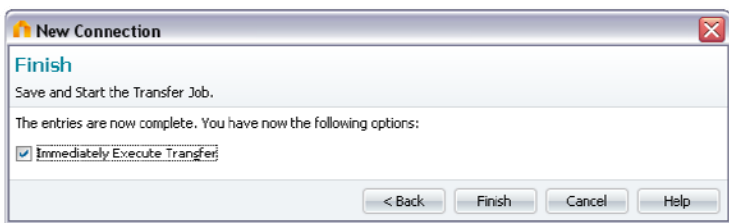
Highlight the task here that will be executed as a subsequent job to the current data transfer, then click  *OK*.




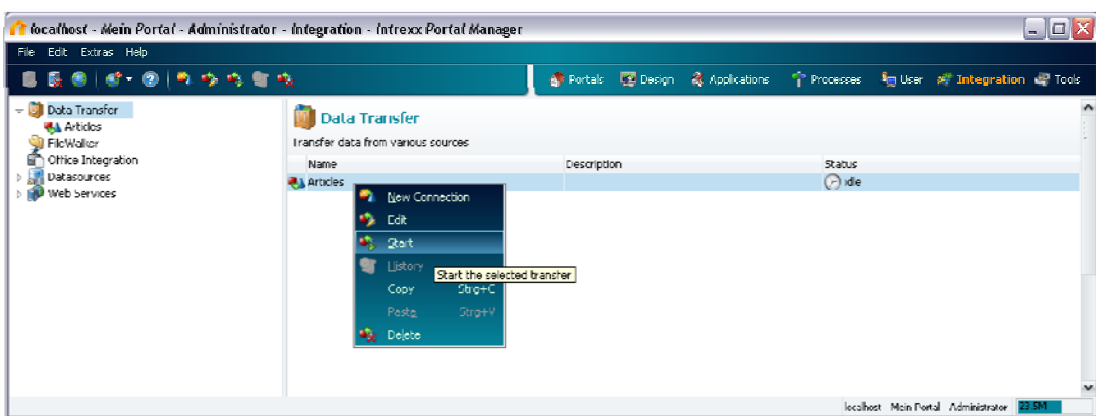
An existing subsequent task can be removed from the list by selecting  *Delete task*. With  *Add group*, the task window will be divided and an additional group will be added.



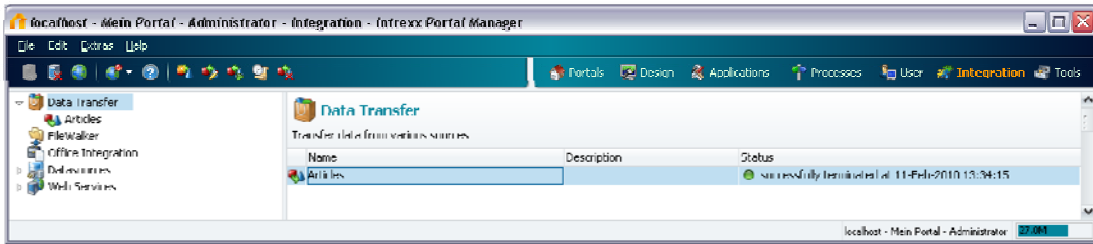
Tasks can be added to the new group as well, where the following applies: tasks in the same group will be executed all at the same time, and the individual groups will be run after one another. With  *Remove group*, the second group will be deleted. When a job has been completed normally, a process event that you defined in the *Process* module can be run in addition. Just enter the GUID of the process here. Click  *Next*.



The setting to *Execute transfer immediately* will run the data transfer after clicking  *Finish*. The new connection will then be shown in the list of saved connections. It can be edited, viewed, and deleted via the context menu. In addition, the data transfer can be started here.

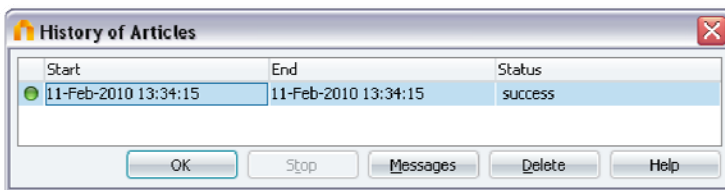
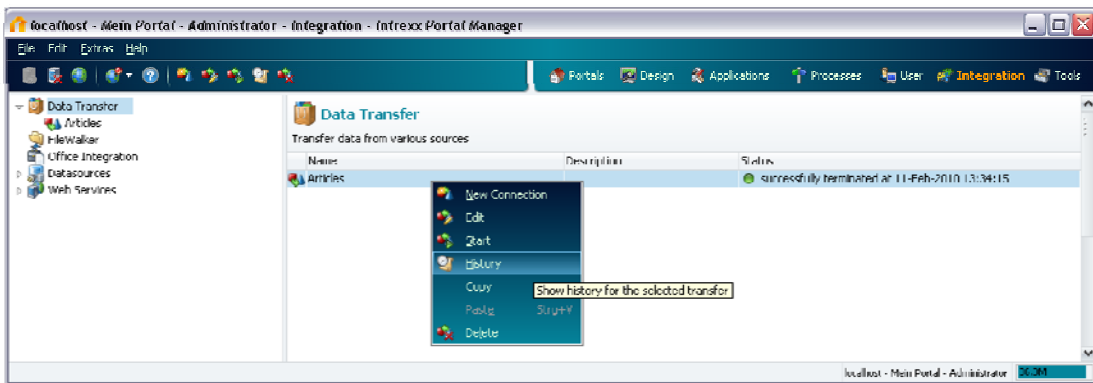



With completed connection jobs, the start and end date, as well as the status of their progress will be shown.




The progress of a job will be shown during execution in percent, and an error-free run will be shown with the entry *Successful*. Please check the connection settings if a job does not complete without errors.

In the context menu of a connection, the history of the individual jobs can be viewed.



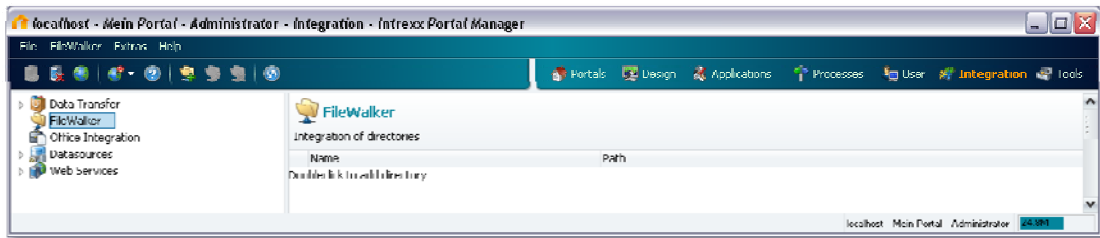
With a click on  *Messages* any errors that occurred during the data transfer process will be reported.



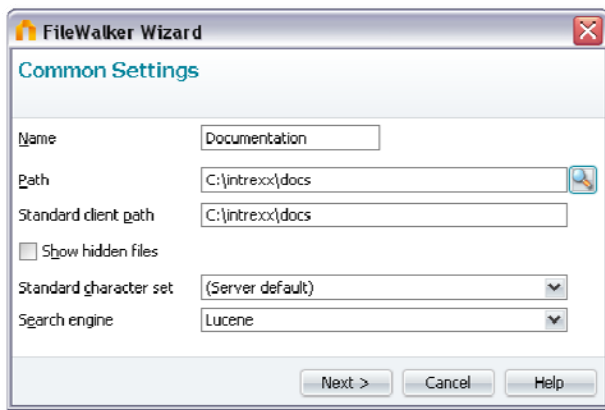
 Before first running a new connection, please always create a database backup. Errors made in the settings can, in certain circumstances, lead to a loss of original data. United Planet can offer no support in this case.


3. FileWalker

With the *FileWalker* you can make direct access to files saved on your network available to users in the browser. You will set up this connection with the *FileWalker*.



Selecting *Add* from the context menu or by double-clicking on the right-hand area will open a wizard, which will lead you through the configuration of the connection.




Enter a *Name* for the connection. With  *Search*, a connected directory can be selected. The *Directory Path* will then be automatically entered.

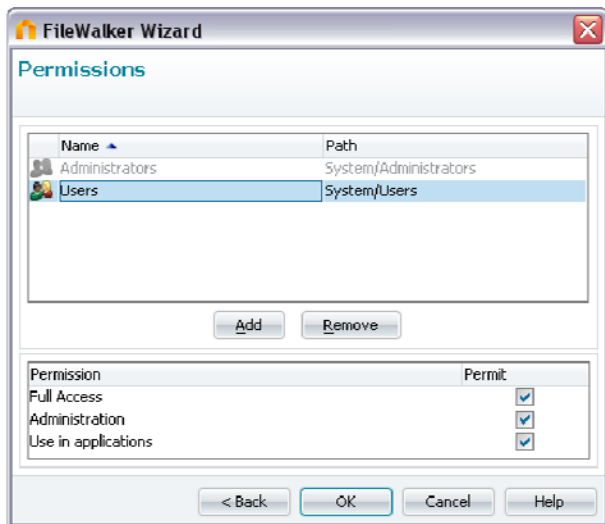
In the *Standard Client Path* field, the directory for access to clients will be entered. As the mapping for client and server access (such as in heterogeneous network environments) may vary, the directory path and the standard client path can differ.

The setting to *Show hidden files* allows hidden files to be shown as well.

The *Lucene* search engine is contained within the delivery package of Intrexx and is selected as the default search engine.

Click  *Next* if the required entries have been made.

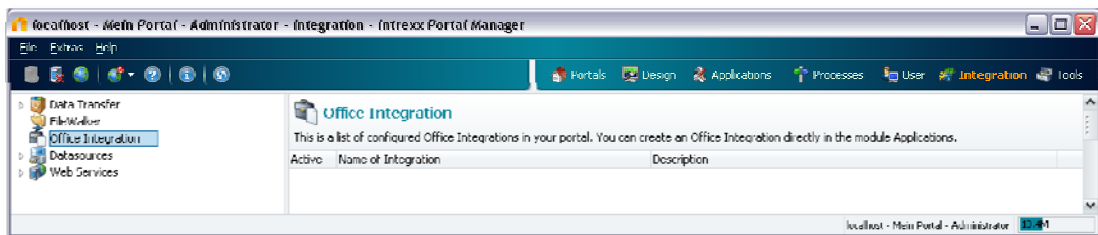
In the following dialog, the permissions for access to the connection can be controlled ( *Permissions*).



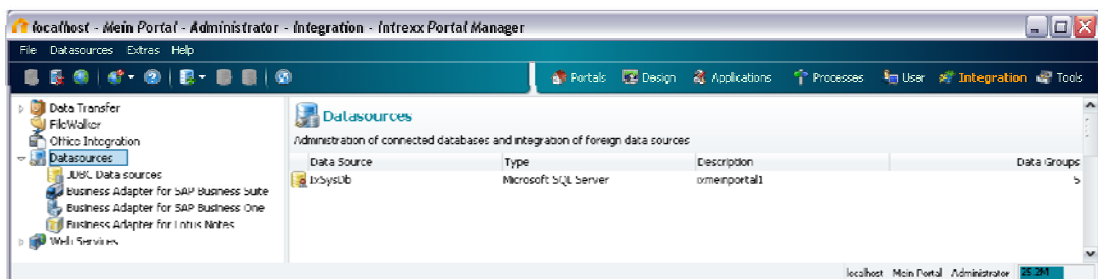
After clicking OK, the connection will be created. You can now select the connection from a selection list in the properties dialog of the *FileWalker* view element in the module *Applications*.

4. Office Integration

General information on this topic can be found in the *Office Integration* handbook.



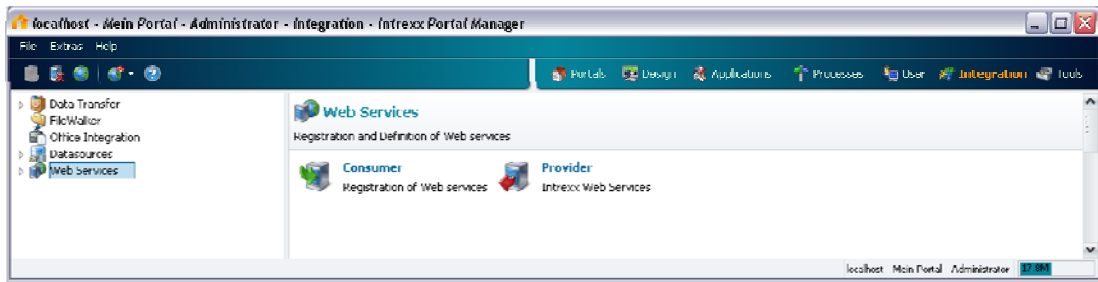
5. Data Sources



With *Data Sources*, connections to data sources can be created for foreign data access. A complete description can be found in the *Foreign Data Access* handbook.

6. Web Services

With *Web Services*, existing web services can be used and individual web services, which make portal data available for use, can be created.



You can find all information on this topic in the  *Web Services* handbook.

7. Appendix: Data Transfer - Import / Export from Textfiles

In Intrexx you have the possibility to import data that exists in the form of a text file into your portal via a data transfer. You can also export portal data into text files.

Every file, from or into which data will be imported or exported, has to have the following format: the names of the data fields have to be in the first row, separated by semicolons. At the end of the row there has to be no semicolon. The semicolon can be replaced with any other separator by definition in the *schema.ini*.

In the following rows the data has to be listed. The order of the fields has to be equal to the order in the first row.

If you want to export data into a text file, you first have to create a configuration file. In a text editor (Notepad, for example), create a text file named *schema.ini* in ANSI format. For each file in this directory, create a section that describes the properties of a text file that looks like the one below:

```
[table.txt]
ColNameHeader=True
Format=Delimited(;)
MaxScanRows=25
CharacterSet=ANSI
Col1=Feld1 Char
Col2=Feld2 Integer
Col3=Feld3 Float
```

Description:

Line 1: File name in brackets (required)

Line 2: Column names exist (True) or not true (False) (required)

Line 3: Divider character (required)

Line 4: Number of rows which will be read for the detection of the field data type

Line 5: Character set

Lines 6 through 8: Names and data types of the individual columns. Permitted values are *Bit, Byte, Char, Currency, Date, Float, Integer, Longchar, Short* or *Single*.

For date data types, use the format *dd-mmm-yy, mm-dd-yy, mmm-dd-yy, yyyy-mm-dd, or yyyy-mmm-dd*. (*mm* describing numbers for months and *mmm* letters for months.)

A field that only contains numbers with leading zeros, and must be imported with the zeros into Intrexx, must be defined as *Char*.

When importing from a text file (*.txt, *.csv) via the OLEDB interface into an Intrexx application, leading zeros in a field otherwise filled only with numbers will not be imported, if the assigned target field in the application has the data type *string*.

This characteristic of the OLEDB interface cannot be influenced by Intrexx. It deals with fields filled only with numbers automatically as *integer* fields, but there is also a configuration file named *schema.ini* in the same directory as the text file, which defines the data type.

Additional information can be found at:  msdn.microsoft.com.