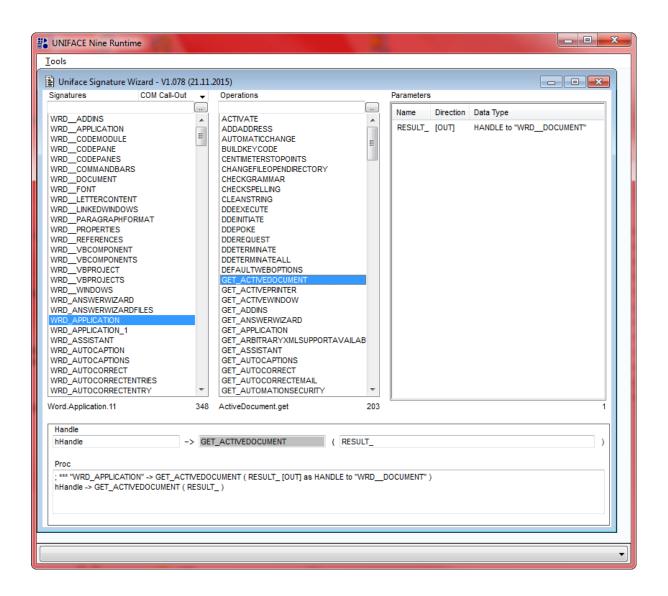
Signature Wizard

(SigWiz)



Documentation (V1.0)

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WARNING: Signature Wizard will modify the signature definitions in the specified repository. Incorrect use can cause serious problems and may render signatures unusable. Make sure that you back up the repository before you modify the signatures. Use Signature Wizard at your own risk.

Installation

How to setup the Signature Wizard (SigWiz) as a standalone project please see the README.md file.

<Under construction>

Configuration

The Signature Wizard (SigWiz) is using a configuration file called sigwiz.cfg that by default has the following content:

```
; *** default Sigwiz.cfg:
[UPATH]
COM=COM Call-Out
S3C=C Call-Out
;ALL=ALL

[SETTINGS]
MAX_HITS=50
```

The section [UPATH] specifies the types of signatures (e.g. COM Call-Out) that are displayed in the drop-down list on the main SigWiz form. Currently only the types COM and S3C are supported. It is possible to also use ALL (show all types of signatures), but this option should be used with care.

The section [SETTINGS] currently only features one setting: MAX_HITS. With MAX_HITS the number of records can be specified that will be retrieved in one go (the default is 50). If more hits are returned then SigWiz will retrieve the records in steps of <MAX_HITS> records (e.g. 50).

The location of sigwiz.cfg can be specified by a logical or a file mapping:

1. Logical:

```
[LOGICALS]
sigwiz.cfg = .\adm\sigwiz.cfg
```

2. File mapping:

```
[FILES]
sigwiz.cfg = .\adm\sigwiz.cfg
```

In case no logical or file mapping is used then SigWiz will look for sigwiz.cfg in the working directory.

ASN settings:

Make sure that the following entities are mapped to the repository database that includes the signatures that you want to edit.

```
[SETTINGS]
$resources_output = .\rso

[ENTITIES]

ULANA.DICT = $DBMS_DEF:ULANA.*

USIMPL.DICT = $DBMS_DEF:USIMPL.*

USIOPER.DICT = $DBMS_DEF:USIOPER.*

USIPARM.DICT = $DBMS_DEF:USIPARM.*

USOPER.DICT = $DBMS_DEF:USOPER.*

USPARM.DICT = $DBMS_DEF:USOPER.*

USPARM.DICT = $DBMS_DEF:USOPER.*

USSPEC.DICT = $DBMS_DEF:USSPEC.*

USSPCKW.DICT = $DBMS_DEF:USSPECW.*
```

Navigation

When starting the signature wizard then the available signatures of a specific type (e.g. COM Call-Out) are loaded (if any exist).

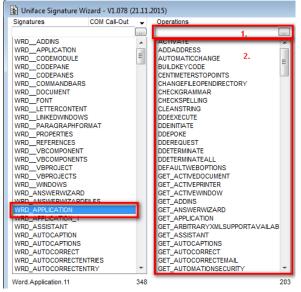
Note: the screen shots and descriptions in this document apply to COM Call-Out signatures (unless explicitly specified otherwise)



Type of Signatures that are displayed (e.g. COM Call-Out)

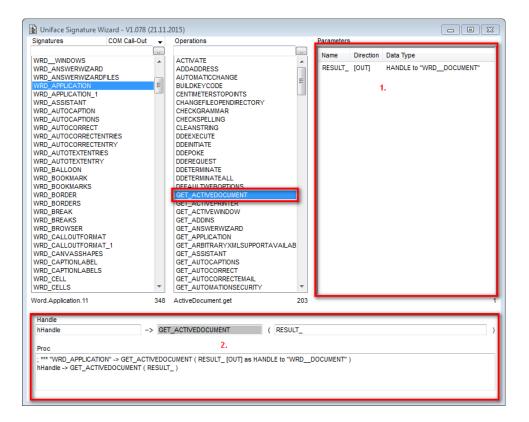
- 1. Signature Filter field; e.g. when "WRD" is entered then only signatures that start with "WRD" are shown; when the filter field is empty then all signatures of a specific type are shown At least three characters need to be entered into the field (or when it's emptied) before the signature list is updated; an update can also be forced by pressing the button () next to the filter field. The filter also applies to most actions from the Tools menu.
- 2. List of Signatures; below the field the number of currently loaded signatures is shown (e.g. 348).

When clicking on a specific signature then the list of the associated operations are shown. And below the list of signatures the literal object name is shown (e.g. "Word.Application.11").



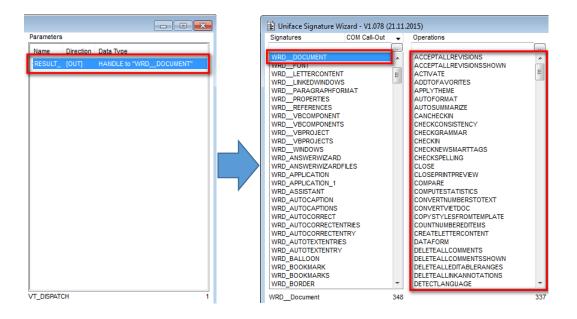
- 1. Operation Filter field; e.g. when "ADD" is entered then only operations that start with "ADD" are shown; when the filter field is empty then all operations of a specific signature are shown
- At least three characters need to be entered into the field (or when it's emptied) before the operation list is updated; an update can also be forced by pressing the button (....) next to the filter field.
- 2. List of operation; below the field the number of currently loaded signatures is shown (e.g. 203)

When clicking on a specific operation then the list of the associated parameters are shown. And below the list of operations the literal operation name is shown (e.g. "ActiveDocument.Get").



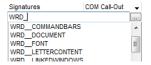
- 1. List of parameters
- 2. Syntax of selected signature & operation; can be copy & pasted as code template into the Uniface Proc Edit.

By double clicking on a parameter of type handle the referenced signature (if it can be found) is made active and the associated parameters are shown. For other parameter types no action will be performed on the double click. And below the list of parameters the external type of the selected parameter is shown (e.g. COM type "VT_DISPATCH").



Tools menu

The Tools menu option apply to all signatures that are visible in the signature list.



In case a filter is specified (e.g. "WRD_") for the signatures then the action will only apply to the filtered list.

Check parameters - only COM Call-Out:



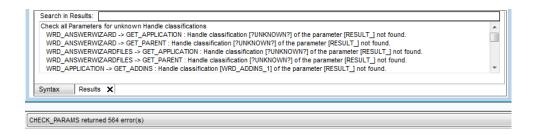
The Tools menu option "Check Parameters" will check all parameters of type handle if the referenced handle classification can be found (i.e. does a signature with the handle classification name exist in the current repository).

Note: when importing COM signatures (using e.g. the IDF command line option /sti /mwr=com ...) then it's possible that Uniface encounters return values for parameters that are defined just as an Object. Here Uniface does not know which type of Object (Handle classification) it should use and it will set the handle classification to "?UNKNOWN?". It is up to the developer to examine any "?UNKNOWN?" handle classification and update such a parameter so that it's referring to a correct (existing) handle classification.

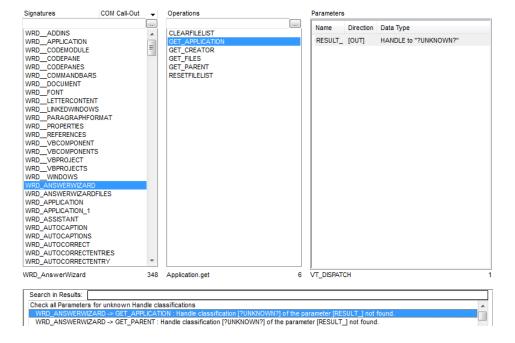


When checking the parameters it's possible to choose all parameters or only IN, OUT, or INOUT parameters.

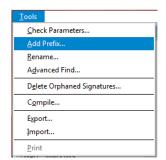
After the parameter check has been finished the result can be found in the Results tab in the lower have of the screen. Here all the parameters with unknown handle classifications (e.g. "?UNKNOWN?") are shown.



When double clicking on an item in the Results tab then the referenced signature / operation / parameter combination is made active.



Add prefix - only COM Call-Out:



The Tools menu option "Add Prefix" will add a prefix to all signatures.

Note: Signature names that include an underscore (e.g. "WRD_APPLICATION") will not be prefixed, except for signature names that end with a number (e.g. "APPLICATION_1").



Before adding a prefix it is checked if the user would like to continue with this action.

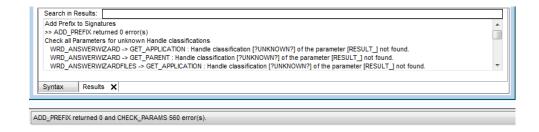


Add a prefix and press Ok to continue

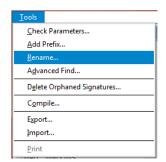
Note: it is recommended to keep the prefix short and use an underscore at the end (for better readability); e.g. "WRD_"

After the prefix has been added to all signatures the result of this action will be shown in the Results tab in the lower have of the screen.

Note: The "Add Prefix" will also perform an explicit "Check Parameters".



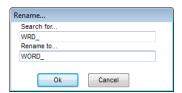
Rename - only COM Call-Out:



The Tools menu option "Rename" will either remove a prefix from all signatures or replacing it by another prefix.



Before adding renaming the signatures it is checked if the user would like to continue with this action.

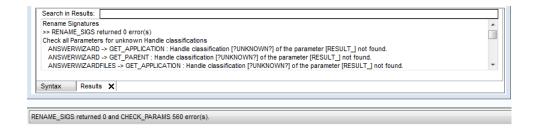


Specify the prefix you would like to search for (e.g. "WRD_").

And then specify if you want to remove the prefix (by leaving "Rename to..." empty) or with which prefix you would like to replace it ("WORD").

After all matching signatures have been renamed the result of this action will be shown in the Results tab

Note: The "Rename" will also perform an explicit "Check Parameters".



Advanced Find - only COM Call-Out:



The Tools menu option "Advanced Find" will search all parameters for the specified COM interface (e.g. "VT_VARIANT"). The search result will be shown in the Results tab in the lower have of the screen.

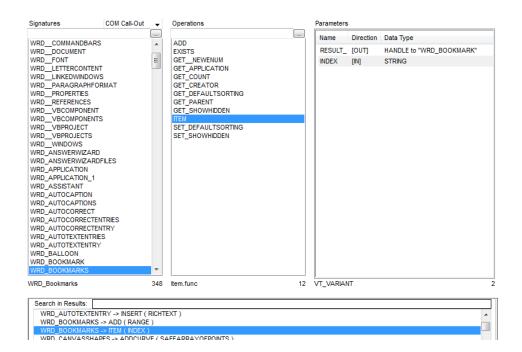


Specify the COM interface for the search (e.g. "VT_VARIANT")



The list on the left shows all available COM interfaces that can be used as search criteria.

After the search is finished the result is shown in the Results tab in the lower have of the screen.



Delete Orphaned Signatures:



The Tools menu option "Delete Orphaned Signatures" will delete all compiled signatures for which no sources exist.

Note: When Classic Deployment is used then the repository table ULANA is checked for orphaned signatures. When Standardized Deployment is used then the \$RSO path is checked. Please make sure that \$RSO path is pointed to the same directory as used by the Development Environment (IDF).

The result of the action is shown in the application message line:

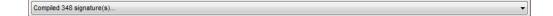


Compile:



The Tools menu option "Compile" will compile all signatures.

The result of the action is shown in the application message line:



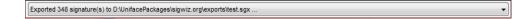
Export:



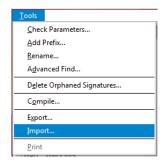
The Tools menu option "Export" will export all signatures to a Uniface export file.

Note: When exporting to a ZIP (file name with extension .zip) then each signature is exported to a separate export file within the ZIP archive.

The result of the action is shown in the application message line:



Import:

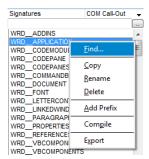


The Tools menu option "Import" will import a Uniface export file.

Note: The Signature Wizard will not check if the specified export file includes any signature definitions. All valid Uniface export files will be imported.

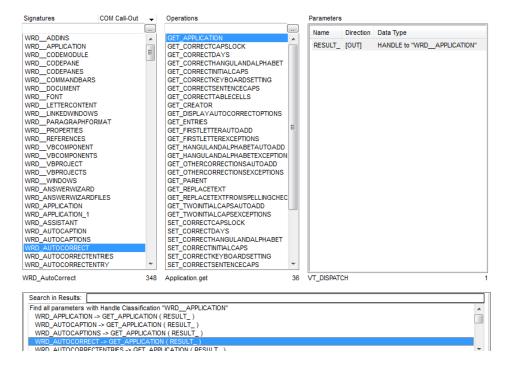
Signatures context menu

Find - only COM Call-Out:

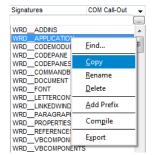


The signatures context menu option "Find" will search all parameters that use the selected signature name as handle classification. The search result will be shown in the Results tab in the lower have of the screen.

After the search is finished the result is shown in the Results tab in the lower have of the screen.



Copy:

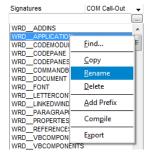


The signatures context menu option "Copy" will make a copy of the selected signature.



Specify the name of the new signature and press Ok.

Rename - only COM Call-Out:



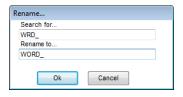
The signatures context menu option "Rename" will rename the selected signature(s).



If only one signature is selected then specify the new signature name and press Ok.



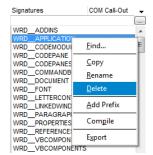
When selecting multiple signatures it is first checked if the user would like to continue with this action.



Specify the prefix you would like to search for (e.g. "WRD_").

And then specify if you want to remove the prefix (by leaving "Rename to..." empty) or with which prefix you would like to replace it ("WORD_").

Delete:

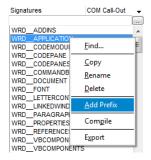


The signatures context menu option "Delete" will delete the selected signatures.



Before deleting the selected signature(s) it is checked if the user would like to continue with this action

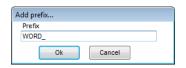
Add Prefix - only COM Call-Out:



The signatures context menu option "Add Prefix" will add a prefix to the selected signatures.



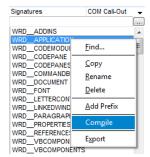
Before adding a prefix to the selected signature(s) it is checked if the user would like to continue with this action



Add a prefix and press Ok to continue

Note: it is recommended to keep the prefix short and use an underscore at the end (for better readability); e.g. "WRD_"

Compile:



The signatures context menu option "Compile" will compile the selected signatures.



Before compiling the selected signature(s) it is checked if the user would like to continue with this action

Export:



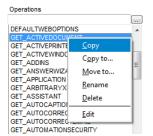
The signatures context menu option "Export" will export the selected signatures.



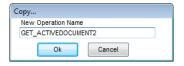
Before exporting the selected signature(s) it is checked if the user would like to continue with this action.

Operations context menu

Copy:



The operations context menu option "Copy" will make a copy of the selected operation.



Specify the name of the new operation and press Ok.

Copy to:

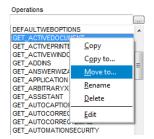


The operations context menu option "Copy to" will copy the selected operation(s) to another signature.

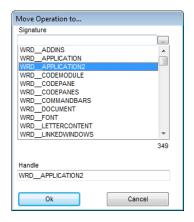


Select the signature where the selected signature(s) should be copied to and press Ok.

Move to:

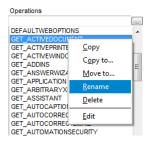


The operations context menu option "Move to" will move the selected operation(s) to another signature.

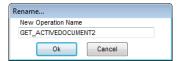


Select the signature where the selected signature(s) should be moved to and press Ok.

Rename - only COM Call-Out:

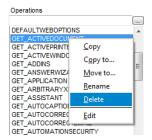


The operations context menu option "Rename" will rename the selected operation.



Specify the new name of the operation and press Ok.

Delete:



The operations context menu option "Delete" will delete the selected operation(s).

Before deleting the selected operation(s) it is checked if the user would like to continue with this action.

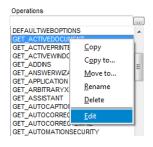


Dialog for deleting one operation.

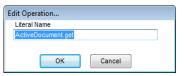


Dialog for deleting multiple operations.

Edit - only COM Call-Out:



The operations context menu option "Edit" will edit the literal name of the selected operation

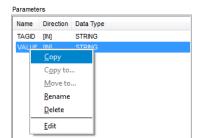


Specify the new literal operation name and press Ok.

Note: for functions specify FunctionName.func and for properties PropertyName.get or PropertyName.set (depending if it's a GET or a SET operation).

Parameters context menu

Copy:

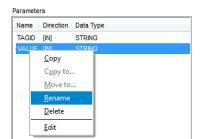


The parameters context menu option "Copy" will make a copy of the selected parameter.



Specify the name of the new parameter and press Ok.

Rename:

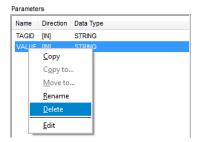


The operations context menu option "Rename" will rename the selected parameter.



Specify the new name of the parameter and press Ok.

Delete:

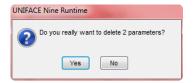


The parameters context menu option "Delete" will delete the selected parameter(s).

Before deleting the selected parameter(s) it is checked if the user would like to continue with this action.

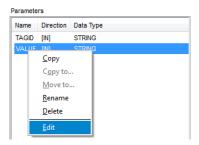


Dialog for deleting one parameter.



Dialog for deleting multiple parameters.

Edit - only COM Call-Out:



The parameters context menu option "Edit" will open the "Parameter Edit" screen that allows changing implementation (e.g. COM) specific parameter settings.

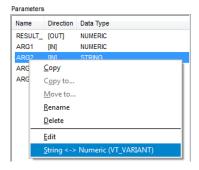


Default "Parameter Edit" screen.



"Parameter Edit" screen for Handle parameters.

String <-> Numeric (VT_VARIANT) - only COM Call-Out:



Easily change the data type of a COM VT_VARIANT parameter from String to Numeric and vice versa.

Note: the COM type VT_VARIANT is comparable to the Uniface data type ANY. By default Uniface will map VT_VARIANT to String, but it also could be a Numeric, Boolean, or another data type. Please check the help of the specific COM program what is appropriate for the parameter in question.

Edit Handle Classification - only COM Call-Out:



Change the Handle Classification of a Handle parameter.



Select the Handle Classification (signature) for the Handle parameter and press Ok.