Service Orders Processing – Intrepid ALI

The “**SOProcessing**” is an automation tool for QA engineers to test the xALIDBMSService. The tool is coded in Python 2.6 and is built with “py2exe’ for making it an executable application running under Windows environment.

# Using “SOProcessing” automation tool

*Link location:* ***$/NGALI/QA Automation/xALIDBMSService/SOProcessing***.

Obtain the latest version of the following executable from the above link location:

- **SOProcessing.exe**

- **SO\_MSAG\_errorcode.exe**

- **SO\_errorcode.exe**

To get the latest version of the above executable – SOProcessing.exe, SO\_MSAG\_errorcode.exe and SO\_errorcode.exe – do the following:

1. On Source Control Explorer, navigate to ***$/NGALI/QA Automation/xALIDBMSService/SOProcessing.***
2. Select “SOProcessing.exe”, “SO\_MSAG\_errorcode.exe” and “SO\_errorcode.exe”
3. Mouse right-click then select “Advanced” > “Get Specific Version”
4. Choose Type = “Latest version”
5. Check on “Overwrite writable File that are not checked out”
6. Check on “Overwrite all files even if the local version match the specified version”
7. Click “Check Out”

# Remote connection

***Usage***:

Run the “SOProcessing” tool.

When running the “SOProcessing”, the tool requests the user to enter information regarding remote connection to the provider’s host machine.

The following required fields are:

* Location Directory ’s host name
* Host login
* Password
* Provider’s parent directory

To connect to the Location Directory’s host machine, click “Connect”. If the connection is successful, then a confirmation message pop-up indicating that “Mapping to network drive Y: successfully”.

To cancel the remote connection, click “Cancel”. In this case, the “SOProcessing” uses the local machine which has to be replicated the same processing folders as of the remote machine.

The “SOProcessing” pop-up shows all available tasks of the tool in either case of “Connect” or “Cancel”.

**SOProcessing** has several tasks shown as the following menu items:

“**File**” contains:

* “Open a file to edit”
* “Save edited file”
* “Exit”

“**Create**” contains:

* “Create new ALI SO CFG file”
* “Create new MSAG SO CFG file”
* “Create new ALI SOI data file”
* “Create new MSAG SOI data file”
* “Edit existing ALI SOI data file”
* “Edit existing MSAG SOI data file”

“**Process**” contains:

* “Process ALI SO”
* “Process MSAG SO”

“**Show**” contains:

* “Show detail report of last run test case”
* “Show today’s Julian Date”
* “Show ALI SO error codes and its description”
* “Show MSAG SO error codes and its description”

“**Report**” contains:

* “Summary Report”

“**About**” contains the Service Order Processing automation tool.

# Create new ALI SO CFG file

***Usage***:

Select “Create new ALI SO CFG file” from “Create” menu item of the “SOProcessing” tool.

This script creates new configuration file which contains the required parameters for a new test case. The configuration file will be created on its current working directory where “SOProcessing” is running.

The CFG file will be created with file naming convention as:

“A\_<Julian Date><Sequence>\_<companyID>\_.cfg”

The configuration file contains two main sections - [General], [STA File] - and several other sections which can be append-able:

* [General]
  + datfile = name of data file to use
  + companyid = name of provider aka Company ID
  + location = provider’s location
  + waittime = max wait time to get a file done process
* [STA File]
  + inserts = count of insert records
  + processed = count of processed records
  + errors = count of error records
  + delete = count of delete records
  + changes = count of change records
  + autocorrect = count of autocorrect records
  + migrate =count of migrate records
* [PERR File]
  + process\_error = expected descriptive processing error
* [ERROR Type]
  + <error code> = <count records of error code>
* [AUTOCORR]
  + <error code> = <count records of error code>
* [MERROR Type]
  + <error code> = <count records of error code>

Example of a configuration file: A\_341002\_ATT.cfg

[General]

datfile = 341002.dat

companyid = ATT

location = SEATTLE

parentdrive = C:

parentdir = xALIDBMS\_parent

waittime = 60

[STA File]

inserts = 14

processed = 178

errors = 178

delete = 164

changes = 0

autocorrect = 12

migrate = 0

[PERR File]

process\_error =

[ERROR Type]

202 = 164

701 = 14

[AUTOCORR]

[MERROR Type]

During the “Create new CFG” process, the user is asked to enter the above parameters on dialog form based. The configuration file can be modified using any text editor or provided method “Open a file to edit” of the “SOProcessing”.

The new CFG file is saved on the current directory where “SOProcessing” being running.

# Create new MSAG SO CFG file

***Usage***:

Select “Create new MSAG SO CFG file” from “Create” menu item of the “SOProcessing” tool.

This script creates new configuration file which contains the required parameters for a new test case. The configuration file will be created on its current working directory where the “SOProcessing” is running.

The CFG file will be created with file naming convention as:

“M\_<Julian Date><Sequence>\_<username>\_.cfg”

The configuration file contains two main sections - [General], [STA File] - and several other sections which can be append-able:

* [General]
  + msagcfg = name of the cfg file used
  + username = name of the user logged in, ex: ASP users
  + location = provider’s location
  + parentdrive = provider’s drive of the parent directory
  + parentdir = provider’s parent directory
  + msagdat = name of dat file used
  + maxtimeout = max wait time to get a file done process
* [STA File]
  + processed = count of processed records
  + errors = count of error records
  + inserts = count of insert records
  + deletes = count of delete records
  + befores = count of “befores” records
  + afters =count of “afters” records
* [PERR File]
  + process\_error = expected descriptive processing error
* [ERROR Type]
  + <error code> = <count records of error code>

Example of a configuration file: M\_341001\_DMGR1.cfg

[General]

msagcfg = M\_341001\_DMGR1.cfg

username = DMGR1

location = SEATTLE

parentdrive = C:

parentdir = xALIDBMS\_parent

msagdat = DMSAG341001.dat

maxtimeout = 60

[STA File]

processed = 41

errors = 41

inserts = 41

deletes = 0

befores = 0

afters = 0

[PERR File]

process\_error =

[ERROR Type]

413 = 41

During the “Create new MSAG SO CFG” process, the user is asked to enter the above parameters on dialog form based. The configuration file can be modified using any text editor or provided method “Open a file to edit” of the “SOProcessing”.

The new CFG file is saved on the current directory where “SOProcessing” being running.

# Create new ALI SOI data file

***Usage***:

Select “Create new ALI SOI data file” from “Create” menu item of the “SOProcessing” tool.

*References*: *“ALI Service Order Data Definition” – Document Number: TCSP-289 - Version: 2.4 – Dec 12, 2013*

The “Create new ALI SOI data file” method displays in detail the ALI service order input file (SOI) generated by the TCS Administrative ALI exported for consumption by the Production in a dialog based form. It allows the user to enter appropriate data so it could generates a valid ALI SOI dat file.

To see the tool tip which shows the field description; column position in the data file; and its maximum length allowed by hove the mouse over the input text box. To move forward around the fields use “Enter” or “Tab” key. To move backward around the fields use “Shift-Tab” key.

Press “SAVE new ALI SOI data file” to create a new ALI SOI data file.

Press “Cancel” to cancel the creation of ALI SOI data file.

The created ALI SOI data file will be created on its current working directory where “SOProcessing” is running.

# Create new MSAG SOI data file:

***Usage***:

Select “Create new MSAG SOI data file” from “Create” menu item of the “SOProcessing” tool.

*References*: *“GIS Based MSAG Data Definition” – Document Number: TCSP-288 - Final 3.1 – Aug-21, 2014*

*Limitation: only create one record per dat file*

The “Create new MSAG SOI data file” method displays in details the MSAG service order input file (SOI) generated by the TCS Administrative ALI exported for consumption by the Production in a dialog based form. It allows the user to enter appropriate data so it could generates a valid MSAG SOI data file.

To see the tool tip which shows the field description; column position in the data file; and its maximum length allowed by hove the mouse over the input text box. To move forward around the fields use “Enter” or “Tab” key. To move backward around the fields use “Shift-Tab” key.

Press “SAVE new MSAG SOI data file” to create a new MSAG SOI data file.

Press “Cancel” to cancel the creation of MSAG SO dat file.

The created MSAG SOI data file will be created on its current working directory where “SOProcessing” is running.

# Edit existing ALI SOI data file:

***Usage***:

Select “Edit existing ALI SOI data file” from “Create” menu item of the “SOProcessing” tool.

The “Edit existing ALI SOI data file” allows the user to select a DAT file from “Listing of available DAT files” drop-down box.

ALI records from the selected ALI SOI data file will be loaded and displayed on the list view result grid. Extend the column header to the right to view the field name and its max length. Mouse clicked on the cell (field) to modify the cell’s value.

Press “SAVE ALI records” to save the modified ALI SOI data file. All of the current ALI records on the result grid will be saved to a file labeled as “A\_mm-dd-yy <today’s julian date><3-digits sequence number>.dat” on the current working directory.

Press “Cancel” to cancel the saving of modified ALI SOI data file.

# Edit existing MSAG SOI data file:

***Usage***:

Select “Edit existing MSAG SOI data file” from “Create” menu item of the “SOProcessing” tool.

The “Edit existing MSAG SOI data file” allows the user to select a DAT file from “Listing of available DAT files” drop-down box.

ALI records from the selected ALI SOI data file will be loaded and displayed on the list view result grid. Extend the column header to the right to view the field name and its max length. Mouse clicked on the cell (field) to modify the cell’s value.

Press “SAVE MSAG records” to save the modified MSAG SOI data file. All of the current MSAG records on the result grid will be saved to a file labeled as “M\_mm-dd-yy <today’s julian date><3-digits sequence number>.dat” on the current working directory.

Press “Cancel” to cancel the saving of modified MSAG SOI data file.

# Process ALI Service Orders:

***Usage***:

Select “Process ALI SO” from “Process” menu item of the “SOProcessing” tool.

Select one or many CFG files on the list from “Listing of available files with prefix A\_ and extension [‘cfg’, ‘CFG’]” list box. Click “OK” to process the selected CFG files.

The “Process ALI SO” reads the parameters from the selected CFG; collects data from various system generated data files which have their extension as STA, ERR, AUTOCORR, PERR; compares the expected results from the CFG file with the actual results from the system generated data files to determine the result of the test case. The test case is PASS when all of the expected results are the same as of the accordingly actual results otherwise is FAIL.

# Process MSAG Service Orders:

***Usage***:

Select “Process MSAG SO” from “Process” menu item of the “SOProcessing” tool.

Select one or many CFG files on the list from “Listing of available files with prefix M\_ and extension [‘cfg’, ‘CFG’]” list box. Click “OK” to process the selected CFG files.

The “Process MSAG SO” reads the parameters from the selected CFG; collects data from various system generated data files which have their extension as STA, ERR, AUTOCORR, PERR; compares the expected results from the CFG file with the actual results from the system generated data files to determine the result of the test case. The test case is PASS when all of the expected results are the same as of the accordingly actual results otherwise is FAIL.

# Show detail report of last run test case

***Usage***:

Select “Show detail report of last run test case” from “Show” menu item of the “SOProcessing” tool.

The “detail report of last run test case” is labeled as <Name of the CFG file>.log and it is located in the current working directory where the “SOProcessing” is running.

The execution of “Process - Process ALI SO, Process MSAG SO” creates the “detail report of last run test case.”

In the case of selection more than one CFG file to process from the “Listing of available CFG files” dialog, then the “Show detail report of last run test case” only shows the detail report of the last run CFG (test case).

# Show today’s Julian Date

***Usage***:

Select “Show today’s Julian Date” from “Show” menu item of the “SOProcessing” tool.

An information dialog pop-up showing “Today’s Julian date is XXX” where XXX is today’s Julian date.

This “today’s Julian date” is used as the default for ALI/MSAG SOI data file name.

# Show ALI SO error codes and description

***Usage***:

Select “Show ALI SO error codes and descriptions” from “Show” menu item of the “SOProcessing” tool

This action runs the “SO\_errorcode.exe” which shows a list box of ALI SO error codes and their descriptions.

To see the complete long description of an error code, click the mouse at the long description.

# Show MSAG SO error codes and description

***Usage***:

Select “Show ALI SO error codes and descriptions” from “Show” menu item of the “SOProcessing” tool

This action runs the “SO\_MSAG\_errorcode.exe” which shows a list box of MSAG SO error codes and their descriptions.

# Making “SOProcessing” an executable application

Download the “py2exe” for Python 2.6, and do the following:

1. Change to directory of “py2exe”.
2. On a command DOS prompt, type in as: “python.exe setup.py install”.

After “py2exe” done installation:

1. go to directory where the “SOProcessing.py” and “SO\_utils.py” are.
2. create a new “setup.py” as the following:

“setup.py”:

from distutils.core import setup

import py2exe,sys,os

sys.argv.append('py2exe')

setup(

options = {'py2exe':{'bundle\_files':1,'compressed':True}},

console =[{'script':"SOProcessing.py"}],

zipfile = None,

)

On a command DOS prompt, type in as: “python.exe setup.py”

Wait until the process done, the “SOProcessing.exe” is created on “dist” sub-folder of the current working directory where the “SOProcessing.py” and “SO\_utils.py” are.

# Sample testing scenarios using SOProcessing

### HP Quality Center test case 20167

### Verify error code “002” for non-numeric characters in telephone number

(ALI SO Processing)

**Pre-Condition/Assumptions:**

**-** Prepare an ALI SOI data file having a non-numeric character in TN field as similar to the attached file "117003.dat"

**Steps:**

1. Log on to IntrepidALIWeb as a Data Manager

2. Navigate to "ALI" > "Submit SOI"

3. Select a Provider from Provider drop-down box

4. Rename the file created from Pre-Condition above with the following format <today's julian date><3 digits sequence>.dat

5. Browse for the ALI SOI data file renamed from step 4

6. Click "Upload"

7. When the process done, verify that the ERR file having the error code of "002"

**Comments:**

**Pass Fail/Criteria:**

Pass - Verify that ALI SO processing return error code 002 if there is non-numeric character in telephone number

Fail - otherwise

### HP Quality Center test case 20168

### Verify error code “003” for non-numeric characters in the Main telephone number

(ALI SO Processing)

**Pre-Condition/Assumptions:**

**-** Prepare an ALI SOI data file having a non-numeric character in Main telephone number field, as similar to the attached file "117004.dat"

**Steps:**

1. Log on to IntrepidALIWeb as a Data Manager

2. Navigate to "ALI" > "Submit SOI"

3. Select a Provider from Provider drop-down box

4. Rename the file created from Pre-Condition above with the following format <today's julian date><3 digits sequence>.dat

5. Browse for the ALI SOI data file renamed from step 4

6. Click "Upload"

7. When the process done, verify that the ERR file having the error code of "003"

**Comments:**

**Pass Fail/Criteria:**

Pass - Verify that ALI SO processing return error code 003 if there ia non-numeric character in the Main telephone number

Fail - otherwise

### HP Quality Center test case 20170

### Verify error code “419” for Function Code Not Supported for SO processing

(MSAG SO Processing)

**Pre-Condition/Assumptions:**

**-** Prepare an MSAG SOI data file having character 'X' in FOC field, as similar to the attached file "DMSAG117002.dat"

**Steps:**

1. Log on to IntrepidALIWeb as a Data Manager

2. Navigate to "MSAG" > "Import"

4. Rename the file created from Pre-Condition above with the following format <DMSAG><today's julian date><3 digits sequence>.dat

5. Browse for the MSAG SOI data file renamed from step 4

6. Click "Upload"

7. When the process done, verify that the ERR file having the error code of "419"

**Comments:**

Supported FOC in SO Processing are: 'D', 'I', 'B', and 'A'

**Pass Fail/Criteria:**

Pass - Verify that MSAG SO Processing return error code 419 if there is Function Code Not supported by Service order Processing

Fail - otherwise