



Winshuttle command line interface integration via an Automation Anywhere Metabot

Table of Contents

Winshuttle command-line interface integration with Automation Anywhere	3
Version	3
Terms of usage	3
Environment	3
Overview	3
Winshuttle CLI Process for Automation Anywhere	3
Setup	5
Metabot Logic	6
ErrorMissingFilesLogic	6
ErrorRunningScriptLogic	6
SuccessfulQueryRunLogic	6
SuccessfulTransactionRunLogic.....	7
WinshuttleRunQueryScriptLogic	7
WinshuttleRunTransactionScriptLogic	8
Input Parameters	9
Save SAP Credentials in Winshuttle Studio	9
Output Parameters	10
Taskbot Examples	11
Who to Contact	12

Winshuttle command-line interface integration with Automation Anywhere

Version

1.0 June 2020 - release of Winshuttle Command Line Interface (CLI) integration with Automation Anywhere

Terms of usage

This Process is provided solely as an example demonstrating how to integrate Winshuttle scripts with Automation Anywhere. We recommend that users test this Process in a non-production environment in a non-production SAP system. The user assumes all risks related to or resulting from automating Winshuttle activities in their SAP systems.

The user of this Process must also act in compliance with the Winshuttle end-user license agreement, ("EULA"), and acknowledges that use of the Process is not included in Winshuttle's standard support and maintenance plan. Winshuttle expressly disclaims all liability with respect to this Process and your use thereof.

Environment

This was built and tested in an environment including the following:

- Automation Anywhere version 11.3
- Winshuttle Command Line Integration Metabot for Automation Anywhere is available as a no-cost example on Winshuttle.com or Automation Anywhere's Bot Store
- Winshuttle Studio Connect 12.1
- Windows 10 with Office 365

Overview

Winshuttle empowers business users to rapidly move data in and out of SAP using standard business applications. With Winshuttle products, companies improve productivity, reduce repetitive manual labor and harness the power of their data to fuel their business. Winshuttle provides integration to SAP without requiring code or screen captures.

Automation Anywhere has additional capabilities to integrate with other systems to complete tasks prior to and after Winshuttle runs, and automate how files are submitted, captured and run.

The combination of Winshuttle integration to SAP and Automation Anywhere RPA capabilities is powerful. It brings together the best of both worlds, accelerating Automation Anywhere customers' integration to SAP via Winshuttle.

Winshuttle CLI Process for Automation Anywhere

The Winshuttle CLI Process for Automation Anywhere provides an example for calling Winshuttle scripts leveraging the Winshuttle Command Line Interface (CLI) and operates efficiently for running individual

Winshuttle command-line interface Integration with Automation Anywhere

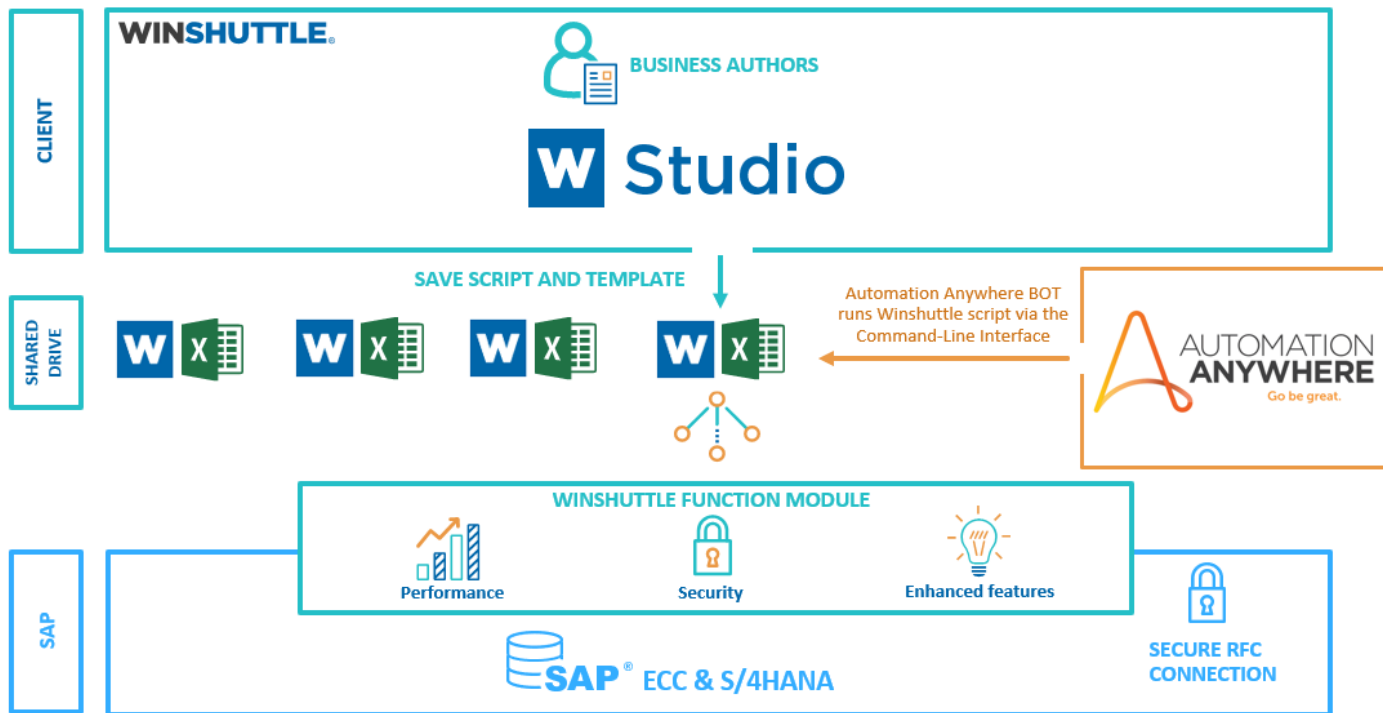
scripts. This option works in a similar way to an API in that it requires input parameters of the Script, Template, saved SAP credentials and several optional parameters. The CLI limitation is that there are no return codes; however, you can check the results via an optional email sent by the CLI or by inspecting the SAP Log message in your Excel template.

To better understand how the Winshuttle Command Line Interface (CLI) functions, the version 12 documentation is located here:

Transaction: <https://docs.winshuttle.com/studio-en-12-1-x-online-help-studio-w-connect/12/run-from-command-line-transaction.htm>

Query: <https://docs.winshuttle.com/studio-en-12-1-x-online-help-studio-w-connect/12/run-from-command-line-query.htm>

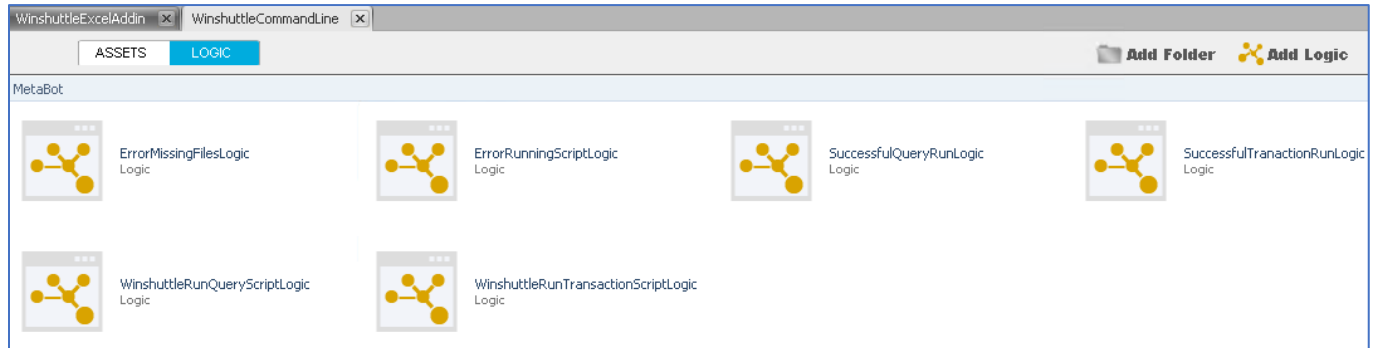
The following diagram depicts how the Winshuttle Command Line Interface process can be executed from Automation Anywhere:



Setup

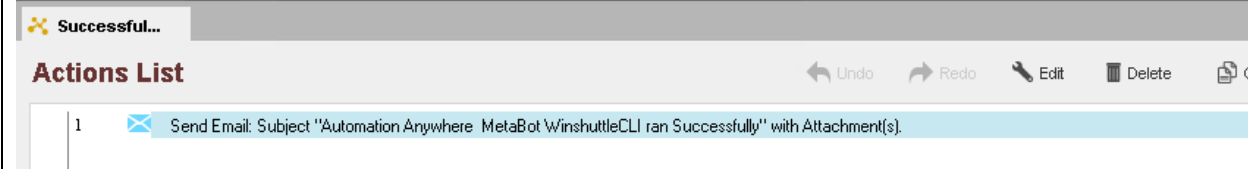
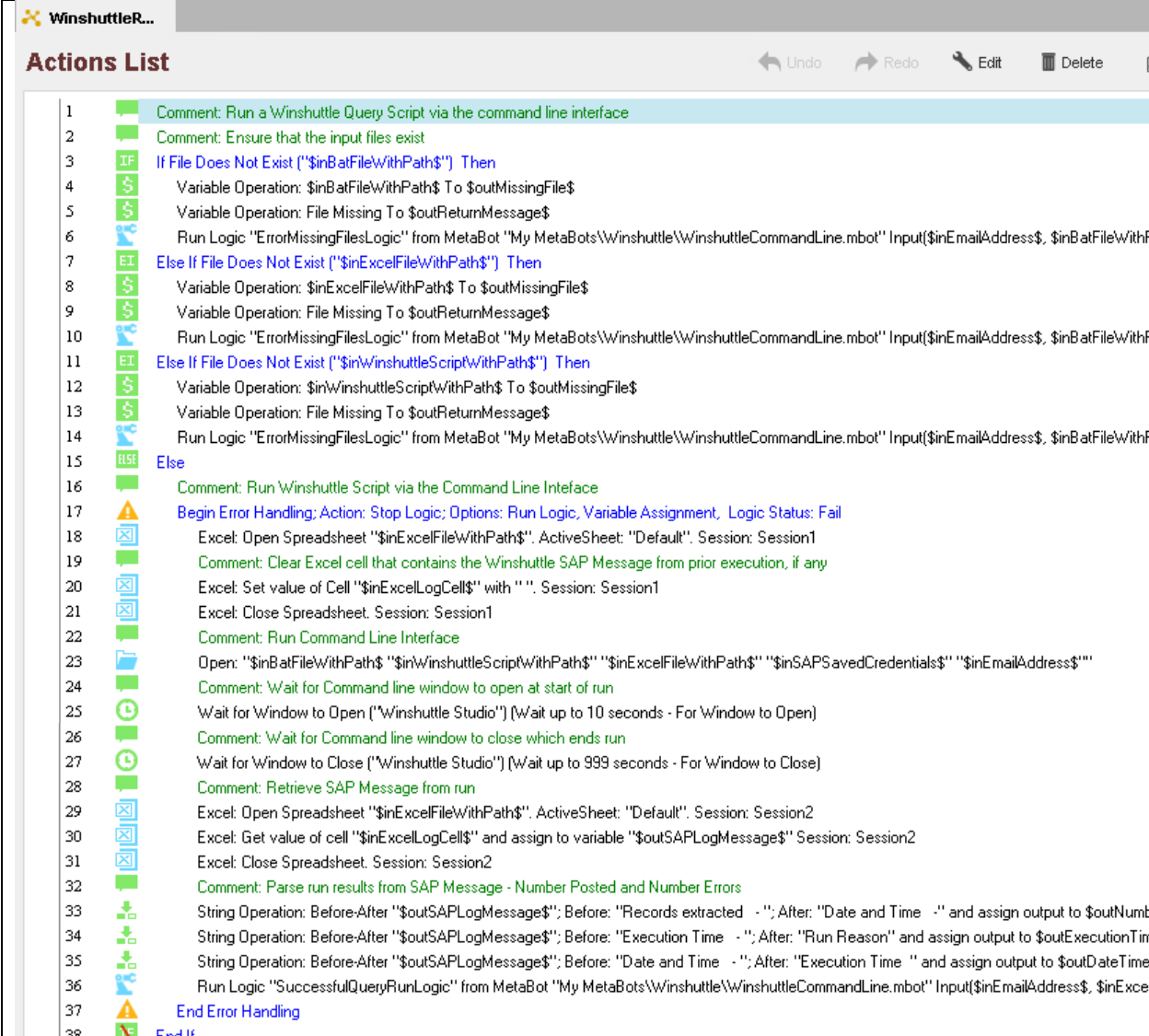
1. Install Automation Anywhere 11.3, or compatible version
2. Install Winshuttle version 12.x Studio. See system requirements here: <https://winshuttle-help.s3.amazonaws.com/studio/en/connect-sap/help/12/system-requirements.htm>
3. Ensure you have the appropriate Winshuttle Function module installed on the non-production SAP system you are testing against. See the Winshuttle documentation here: <https://winshuttle-help.s3.amazonaws.com/Winshuttle-function-module/EN/12/wfm-compatibility.htm>
4. Ensure you have a compatible version of the SAP GUI installed. See the Winshuttle documentation here: <https://mysupport.winshuttle.com/hc/en-us/articles/360023688031-Which-SAP-GUI-versions-are-supported-by-Winshuttle->
5. Ensure you are using a supported version of SAP (listed in the pre-requisites – see #2 above).
6. Create Winshuttle scripts using Winshuttle Studio against a non-production SAP system, typically Transaction or Direct scripts.
7. Place the Winshuttle Script and Excel file (including data), in a centralized directory accessible by Automation Anywhere, or have an Automation Anywhere process do so.
8. Ensure you fill in the parameters that will be passed to the Command Line Interface.

Metabot Logic



ErrorMissingFilesLogic	Sends the requestor an email notifying them of the missing file. This can be swapped out for other types of error handling. Called from WinshuttleRunQueryScriptLogic and WinshuttleRunTransactionScriptLogic
ErrorRunningScriptLogic	Sends the requestor an email notifying them of an issue running a Winshuttle Script. This can be swapped out for other types of error handling. Called from WinshuttleRunQueryScriptLogic and WinshuttleRunTransactionScriptLogic
SuccessfulQueryRunLogic	Sends the requestor an email notifying them of a successful Winshuttle Query Script run. This can be swapped out for other types of success notification/tracking. Called from WinshuttleRunQueryScriptLogic.

Winshuttle command-line interface Integration with Automation Anywhere

SuccessfulTransactionRunLogic	Sends the requestor an email notifying them of a successful Winshuttle Transaction Script run. This can be swapped out for other types of success notification/tracking. Called from WinshuttleRunTransactionScriptLogic
	
WinshuttleRunQueryScriptLogic	Runs a Winshuttle Query script. It checks for the required files and then attempts to run the Query script. If successful, it extracts the results from the Query SAP Log message and returns it to the Taskbot.
	

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WinshuttleRunTransactionScriptLogic	Runs a Winshuttle Transaction script. It checks for the required files and then attempts to run the Transaction script. If successful, it extracts the results from the Transaction SAP Log message and returns it to the Taskbot.
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WinshuttleR...

Actions List

Undo

Redo

Edit

Delete

1

Comment: Run a Winshuttle Transaction Script via the command line interface

2

Comment: Ensure that the input files exist

3

IF If File Does Not Exist ("inBatFileWithPath\$") Then

4

Variable Operation: \$inBatFileWithPath\$ To \$outMissingFile\$

5

Variable Operation: File Missing To \$outReturnMessage\$

6

Run Logic "ErrorMissingFilesLogic" from MetaBot "My MetaBots\Winshuttle\WinshuttleCommandLine.mbot" Input(\$inEmailAddress\$, \$inBatFileWithPath\$)

7

Else If File Does Not Exist ("inExcelFileWithPath\$") Then

8

Variable Operation: \$inExcelFileWithPath\$ To \$outMissingFile\$

9

Variable Operation: File Missing To \$outReturnMessage\$

10

Run Logic "ErrorMissingFilesLogic" from MetaBot "My MetaBots\Winshuttle\WinshuttleCommandLine.mbot" Input(\$inEmailAddress\$, \$inBatFileWithPath\$)

11

Else If File Does Not Exist ("inWinshuttleScriptWithPath\$") Then

12

Variable Operation: \$inWinshuttleScriptWithPath\$ To \$outMissingFile\$

13

Variable Operation: File Missing To \$outReturnMessage\$

14

Run Logic "ErrorMissingFilesLogic" from MetaBot "My MetaBots\Winshuttle\WinshuttleCommandLine.mbot" Input(\$inEmailAddress\$, \$inBatFileWithPath\$)

15

Else

16

Comment: Run Winshuttle Script via the Command Line Interface

17

Begin Error Handling: Action: Stop Logic; Options: Run Logic, Variable Assignment, Logic Status: Fail

18

Excel: Open Spreadsheet "\$inExcelFileWithPath\$". ActiveSheet: "Default". Session: Session1

19

Comment: Clear Excel cell that contains the Winshuttle SAP Message from prior execution, if any

20

Excel: Set value of Cell "\$inExcelLogCell\$" with "". Session: Session1

21

Excel: Close Spreadsheet. Session: Session1

22

Comment: Run Command Line Interface

23

Open: "\$inBatFileWithPath\$""\$inWinshuttleScriptWithPath\$""\$inExcelFileWithPath\$""\$inSAPSavedCredentials\$""\$inEmailAddress\$""

24

Comment: Wait for Command line window to open at start of run

25

Wait for Window to Open ("Winshuttle Studio") (Wait up to 10 seconds - For Window to Open)

26

Comment: Wait for Command line window to close which ends run

27

Wait for Window to Close ("Winshuttle Studio") (Wait up to 999 seconds - For Window to Close)

28

Comment: Retrieve SAP Message from run

29

Excel: Open Spreadsheet "\$inExcelFileWithPath\$". ActiveSheet: "Default". Session: Session2

30

Excel: Get value of cell "\$inExcelLogCell\$" and assign to variable "\$outSAPLogMessage\$" Session: Session2

31

Excel: Close Spreadsheet. Session: Session2

32

Comment: Parse run results from SAP Message - Number Posted and Number Errors

33

String Operation: Before-After "\$outSAPLogMessage\$"; Before: "Records Uploaded - "; After: "Date and Time" and assign output to \$outNumber

34

String Operation: Before-After "\$outSAPLogMessage\$"; Before: "Number of Errors - "; After: "Records Uploaded" and assign output to \$outNum

35

String Operation: Before-After "\$outSAPLogMessage\$"; Before: "Execution Time - "; After: "Run Reason " and assign output to \$outExecutionTi

36

String Operation: Before-After "\$outSAPLogMessage\$"; Before: "Date and Time - "; After: "Execution Time " and assign output to \$outDateTim

37

Run Logic "SuccessfulRunLogic" from MetaBot "My MetaBots\Winshuttle\WinshuttleCommandLine.mbot" Input(\$inWinshuttleScriptWithPath\$, \$

38

End Error Handling

39

End If

Input Parameters

Parameter	Opt/Req	Description
inBatFileWithPath	Required*	Name of bat file with path, example: C:\AutomationAnywhere\BATFiles\WinshuttleCLI.bat There are differing BAT file examples available for Transaction/Direct scripts and Query. *Note you can skip the bat file and call the executable directly, but you will need to pass in all of the appropriate parameters from Automation Anywhere. Please refer to the link to the documentation above to view and select the parameters
inEmailAddress	Required	Email address of the person you want to notify on the completion of the Taskbot run, example: myemail.company.com
inExcelFileWithPath	Required	Name of Winshuttle Excel Data file with path, example: c:\mypath\myfile.xlsx
inExcelLogCell	Required	Excel cell that contains the Winshuttle Log message, example: A1
inSAPSavedCredentials	Required	Winshuttle saved SAP credentials, example: PRD-mysapid-100, where PRD is you SAP system mysapid is your SAP user id 100 is your SAP client See screen shot below
inWinshuttleScriptWithPath	Required	The Winshuttle script name with path, example: C:\mypath\myscript.Txr C:\mypath\myscript.Qsq

Save SAP Credentials in Winshuttle Studio

Instructions to create saved SAP credentials in Winshuttle Studio

1. Open Winshuttle Studio
2. Click Account on left-hand side
3. Click Authorization Check
4. Click Credentials and enter SAP system, client, user name and password
5. Click the checkbox to "Save as auto logon credentials"
6. Click "Save Auto Logon", noting the Auto logon name

SAP login at

Credentials

Enterprise Portal

Auto Logon

User Credentials

SAP system: CRM - CRM Add System

Client: 100

User name: mysapid

Password:

Language: en

☒ Save as auto logon credentials

Auto logon name: CRM-mysapid-100

Save Auto Logon Cancel

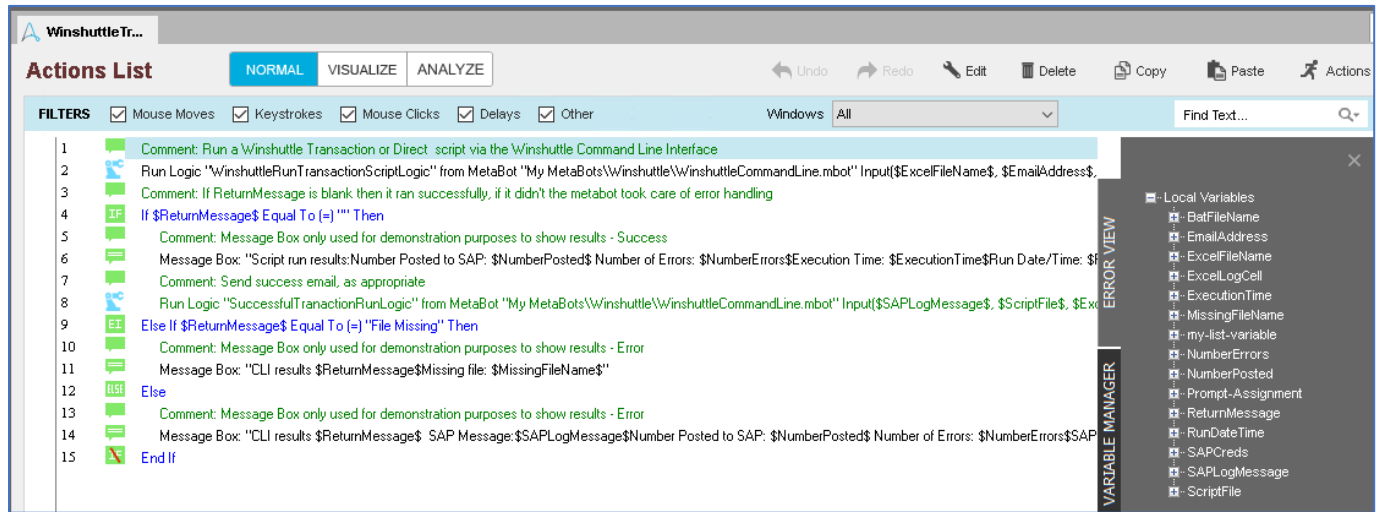
Output Parameters

Parameter	Description
OutNumberPosted	Number of Items posted to SAP from a Transaction or Direct Script, which is extracted from the Winshuttle Log message
outNumberErrors	Number of errors in the attempt to post to SAP from a Transaction or Direct Script, extracted from the Winshuttle Log message
outNumberExtracted	Number of records extracted from SAP from a Winshuttle Query script, extracted from the Winshuttle Log message
outReturnMessage	A return message from the Winshuttle Command Line Metabot.
outSAPLogMessage	Winshuttle Log Message is read from the Excel file after the Script is run via the Winshuttle Command Line Interface

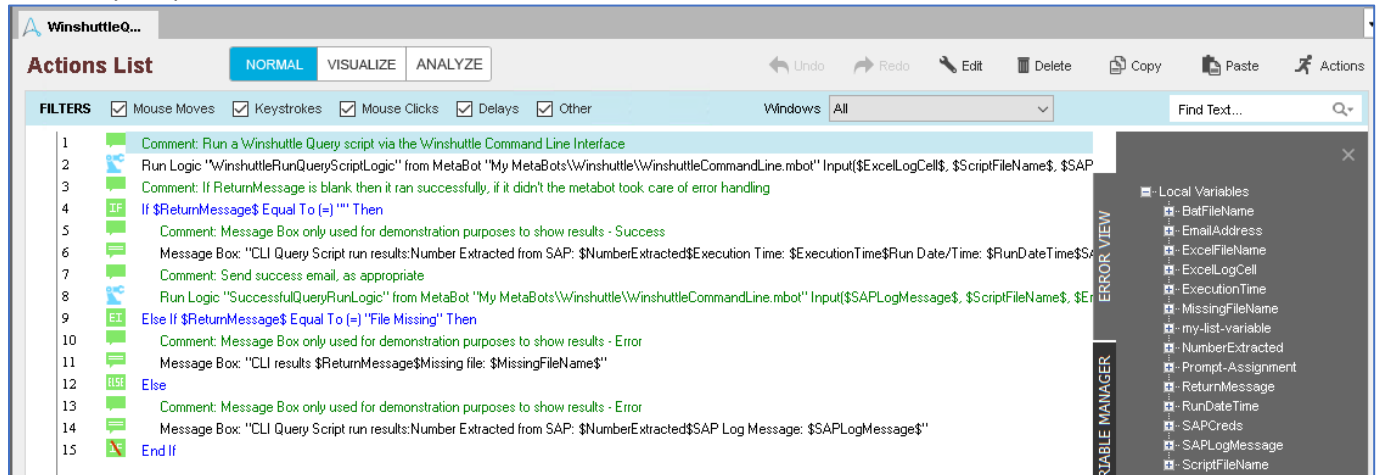
Winshuttle command-line interface Integration with Automation Anywhere

Taskbot Examples

For Transaction or Direct scripts below:



For Query script below:



Who to Contact

Support: As stated in the Terms of this guide, this Process is provided solely as an example demonstrating how to integrate Winshuttle CLI activities with Automation Anywhere and the use of the Process is not included in Winshuttle's standard support and maintenance plan. If you need help and you are evaluating Winshuttle and its integration with Automation Anywhere with the goal of implementing into a production system, please contact Winshuttle Sales or Winshuttle partnership contacts also provided below. For existing Winshuttle customers and partners, you can post your questions on the Winshuttle Online Community here: <https://community.winshuttle.com/home>

Sales: Contact your Winshuttle sales representative with questions related to Winshuttle software and EULAs. If you don't have a Winshuttle sales representative, please contact Winshuttle here: <https://www.winshuttle.com/contact-us/>

Automation Anywhere Partnership: For questions about the Winshuttle and Automation Anywhere partnership, please contact Richard Rogers at the Winshuttle corporate office: +1 (800) 711-9798 or +1 (425) 368-2708 or partners@winshuttle.com. For questions about Automation Anywhere, please contact your Automation Anywhere representative or visit the Automation Anywhere website: www.automationanywhere.com

About Winshuttle

Winshuttle software empowers business teams to make an impact through solutions that make it quick and easy to exchange data with SAP using Excel, streamline SAP business processes using forms and workflows, and improve data quality using data stewardship capabilities.

Its business led, IT-enabled solutions enable users to automate processes and solve problems without compromising security or governance. Business teams can author solutions across lines of business and the SAP landscape, speeding product launches and financial accounting processes, streamlining customer and vendor onboarding, improving plant maintenance efficiency, tackling data migration projects, and much more.

Winshuttle offers two flexible data management platforms. Winshuttle Studio enables business teams to author Excel-based solutions that eliminate manual data entry in SAP and accelerate master and transactional data tasks. Winshuttle Foundation is an enterprise workflow solution with deep SAP integration capabilities built in, enabling business teams to streamline SAP processes and extract more value from your ERP system.

Both platforms are certified for use with SAP ECC and SAP S/4HANA and enable business teams to enhance and protect one of your most valuable strategic assets—your data.

Learn more about Winshuttle's SAP data management solutions by visiting www.winshuttle.com.