

# ARGOS RPA Release Notes

Release notes for the official ARGOS LABS releases. Each release note will tell you what's new in each version, and will also describe any backwards-incompatible changes made in that version. These release notes summarize the new features, resolved and known issues, and compatibility. Need help? Contact to [tech@argos-labs.com](mailto:tech@argos-labs.com)

- 'Scenario Studio'(a.k.a 'STU') is a build tool for a RPA bot.
- 'Process Automation Module(a.k.a 'PAM') is a software agent to run a bot.

## Latest Version

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- **STU: R20.0330**  

- **PAM: R20.0330**  


## Release Notes

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### New Features

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- **ADDED** 'Click Text' option to 'OCR' Op  
A function that recognizes a character in a range specified by OCR and clicks when the corresponding character exists
- **ADDED** an option that save return value of 'JavaScript' Op

### Changes

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- **CHANGED** 'Send Log' UI (Calendar UI)

Before	After
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Send Logs

◀ 2020년 1월 ▶

일	월	화	수	목	금	토
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

Log files of the selected dates will be sent to server.  
2020-01-31 ~ 2020-01-31

Send logs

Send Logs

◀◀ **March 2020**

Sun	Mo	Tue	We	Thu	...
23	24	25	26	27	...
1	2	3	4	5	...
8	9	10	11	12	...
15	16	17	18	19	...
22	23	24	25	26	...
29	30	31	1	2	...

3/30/2020 5:28:40 PM Clear

Log files of the selected date sent to server.  
2020-03-30

Send Logs

Send Logs

Notation	Description
◀ / ▶	1 month backward /
◀◀ / ▶▶	3 month backward /
Clear	Clear date selection
Today	Go to today
<b><i>Bold</i></b> style date	Date with log files Ex) <b>19</b>

- CHANGED plugin name to display only 2 lines (Tooltip support on mouse over)

## Fixed

- FIXED an issue that caused bots to stop running in 'RunProgram'.  
Moved to the next operation whether the results status of 'RunProgram'

## Changes

- CHANGED 'Drag&Drop' to 'Context Menu' when copying / moving operations  
*When :*
  - Copy / move operation to another step
  - Make a duplication(copy) of operation
- CHANGED Variable setting UI
- CHANGED Results window UI of 'Test run'
- CHANGED The arrow for displaying 'Loop' is displayed only when the relevant operation is selected.
- CHANGED If a plug-in execution result fails, the plug-in error message is displayed on the result screen of 'Test Run'.

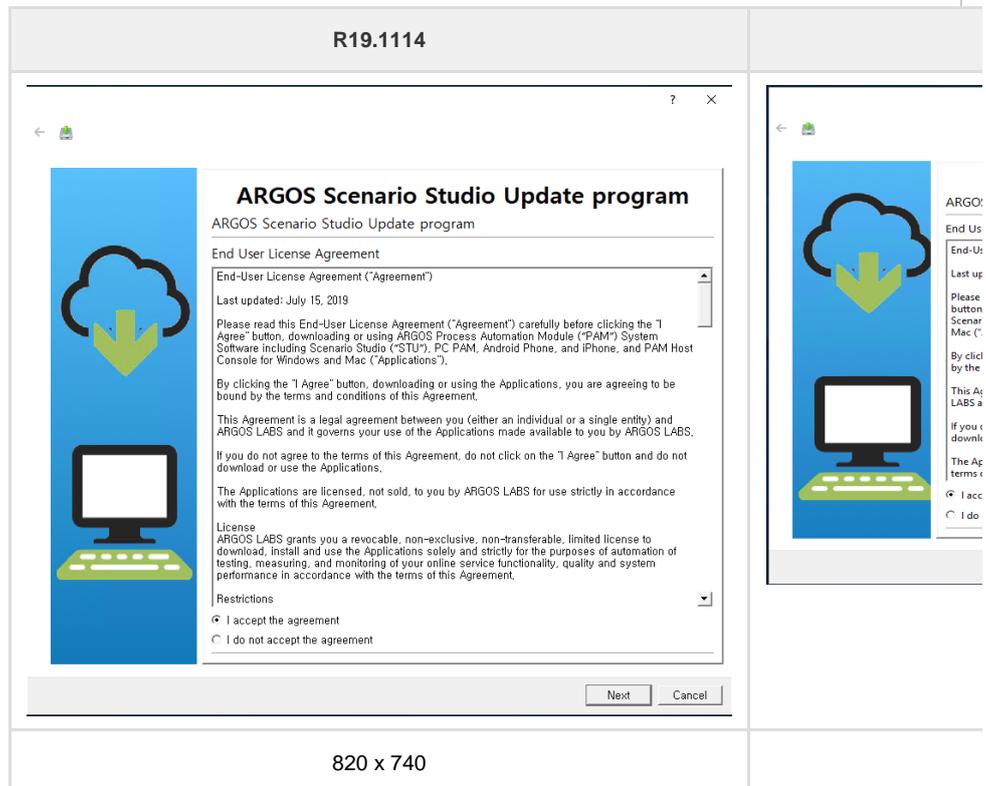
# Fixes

- **FIXED** Fixes a problem where an error occurs when importing a step with no step selected
- **FIXED** Fixes an issue with the 'PAM Manager' where the PAM process terminates unexpectedly or the next bot is not running.
- **FIXED** Fixes a problem where a bot created on a screen whose 'Scale' is not 100% does not work properly
- **FIXED** Fixed images to be saved only once in 'Repeat' loop
- **FIXED** Fixes the problem of PAM version synchronization with PAM version displayed by Supervisor

## Release Notes (Previous Versions)

### Changes

- **CHANGED** Reduced bot start time for "On-Demand" by Supervisor.
- **CHANGED** Change scenario status to 'Failure' when plug-in fails
- **CHANGED** Reduced the launcher screen size to make it easier to see on small screen resolutions



- **CHANGED** Delete the function of saving and uploading screenshots by step (reduced the free disk space required for PAM)
- **CHANGED** Write image file count on a log before uploading verification image

### Fixes

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- **FIXED** Fixes a problem where an error occurs when test run without setting a value in the plug-in.

(Scenario does not work and an empty result screen is displayed immediately.)

- **FIXED** Fixed an issue where a 'Test Run' or On-Demand task would be killed before completion when running the PAM manager service.
- **FIXED** Fixed a problem where SelectWindow is used as 'Web' type when using http: // or https: // for App Name.
- **FIXED** Fixed a problem where PAM agent being killed by PAM Manager during plugin installation
- **FIXED** Fixed an issue where an error occurred when Pam Tray was not connected to the server.

new "**Can't connect to server**" message pop-up appears.

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## New Features

- **ADDED** Mouse Triple click ( Select entire sentence ) to 'Windows Object'



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## Changes

- **CHANGED** Changed to the latest version of plugin management module (aka '**PPM**')
- **CHANGED** '**ARGOS RPA Service Tray**' (aka '**PAM**') registered as '**Auto started application**' and always running for '**On-Demand by CHIEF**'
- **CHANGED** Remove '**Watcher service**' from PAM tray menu
- **CHANGED** In 'Excel Advance', 'Variable for file' changed to 'Filepath variable (required)'

Plugin ▼ (P)Excel Advan... ▼  
 Operation name   
 Plugin version 1.1113.1107

**Properties**  
 Excel/CSV File  ...  
 Read-fr sheet   
 Read-fr range   
 ▶ Advanced 

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**Return value**  
 Result type  ▼  
 File name  ...  
(File needs not exist)  
**Filepath variable (required)**  ▼ ?

## Fixes

- FIXED In "**File / Folder OP**", an error that occurred when only '**Source File / Fol ...**' was specified in the '**remove**' option and '**Target File / Folder**' was not specified.
- FIXED an error caused by incorrectly using 'UserParams' message name as a variable name
- FIXED an error that the input value will be unusable when the '**Value**' of '**TextInput**' or '**Parameter**' of '**HtmlAction**' is encrypted

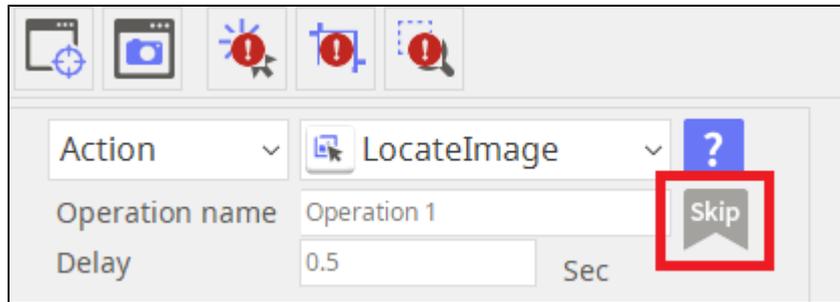
## New Features

- ADDED Mouse Triple click ( Select entire sentence )

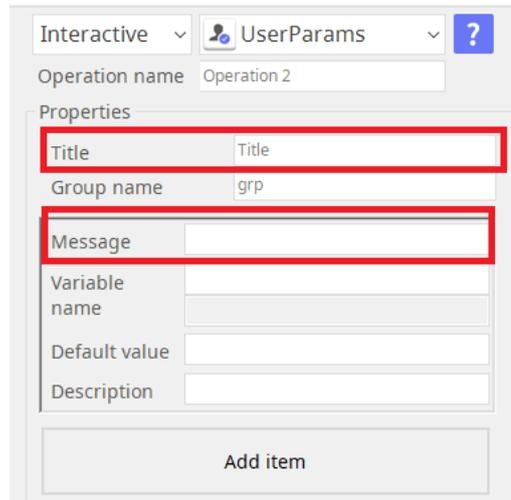


## Changes

- CHANGED '**Skip**' icon moved under '?'.



- **CHANGED** New UI of 'User Params' ( added 'Title' & 'Message' input box )



- **CHANGED** Editing a variable in 'Set Variables'
- **CHANGED** New Pop-up windows - After the STU terminates unexpectedly due to a crash,
- **CHANGED** restarting the STU will display a popup asking if the old bot should be loaded.  
(If you have a temporary bot file)

## Fixes

- **FIXED** Bug fixed: Disappearing image clip & search area box in 'Locate Image'
- **FIXED** **SelectWindow** issue where only the taskbar area flickers without focusing when measuring schedule.

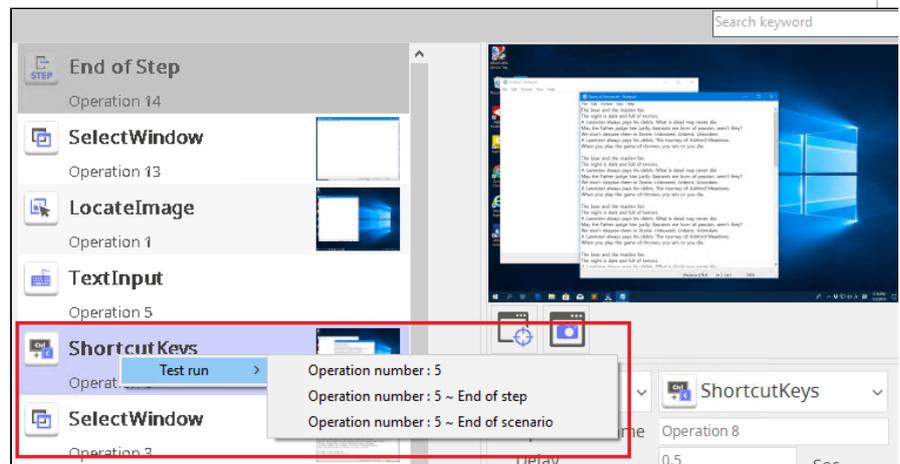
## New Features

- **ADDED** **POT** ( Python-to-Operation Tools on the Cloud ), Newer plugin management feature in ARGOS RPA+.

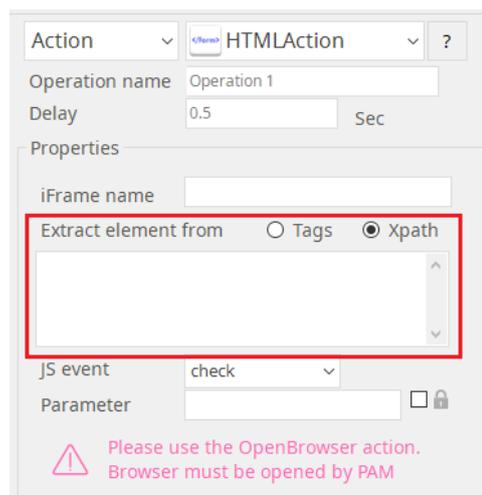
RPA Plugins are managed on the Cloud repository. User can select plugins which they want to use their Bot. Under the new system, user can build their own Plugin and share on RPA marketplace or manage it in their private POT repository more freely. You can find all available and new plugins in 'Plugins' menu of **CHIEF**.

- **ADDED** Test run by Operation ( Right click on a mouse at the Operation list ).  
There are 3 options:

- Operation Number: <Op No.> : 'Test run' runs <Op No.> only.
- Operation Number: <Op No.> ~ End of Step : 'Test run' runs from <Op No.> to the end of step
- Operation Number: <Op No.> ~ End of Scenario : 'Test run' runs from <Op No.> to the end of scenario



- **ADDED** 'XPath' to 'HTML Action'.



- **ADDED** OCR image enlargement function added
- **ADDED** 'First row contains column header' option to all plugin when using 'CSV' as a result type  
The first row of CSV result type is a header line by default. But, sometimes it has to be removed to use as an input data of the next operation.  
Now, user can select to use/remove the header line from the CSV results.
- **ADDED** 'Send Logs' menu to 'ARGOS RPA Service Tray' menu

## Changes

- **CHANGED** Default location for saving scenario files to '**Documents**' ( previously %appdata% )

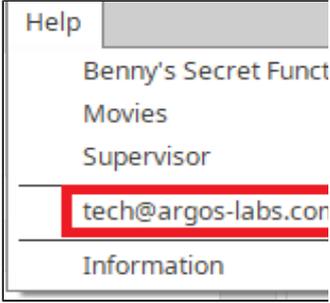
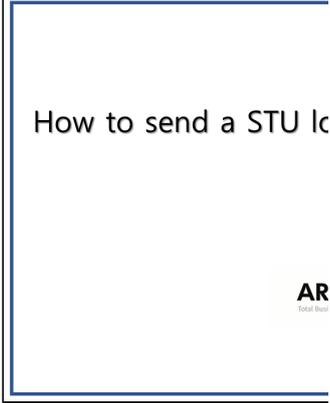
- **CHANGED** Variable selection combo box to remain unselected
- **CHANGED** Whenever the plugin result processing type is changed, the variable selection is initialized.
- **CHANGED** The default extension **JSON** has been changed to **BOT** when saving bots to local disk. BOT is an all-in-one file containing scenario files and screenshot images.

Fixed

- **FIXED** A problem that sometimes the item list can not be updated when moving the step
- **FIXED** Terminate all child processes of PAM when 'Test Run' ends

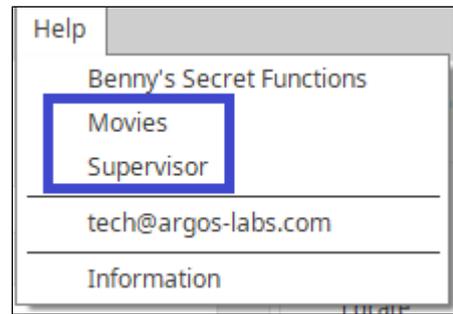
## New Features

- **ADDED** Sending a STU log to Tech Support via E-Mail or from the launcher menu.

Method	How to Send	De
via E-Mail	"Help > tech@argos-labs.com" in Top menu	User must have an e-mail client that supports the e-mail message editor window application. 
From Launcher	1) Click the right button of mouse on the Launcher icon,  2) Choose 'Send Logs' 3) Select a date you want to send (A date where the log file exists is displayed as <b>Bo</b> <b>Id</b> ) 4) Click 'Send logs'.	The log file will be sent to the log client and then to Tech Support for further analysis. 

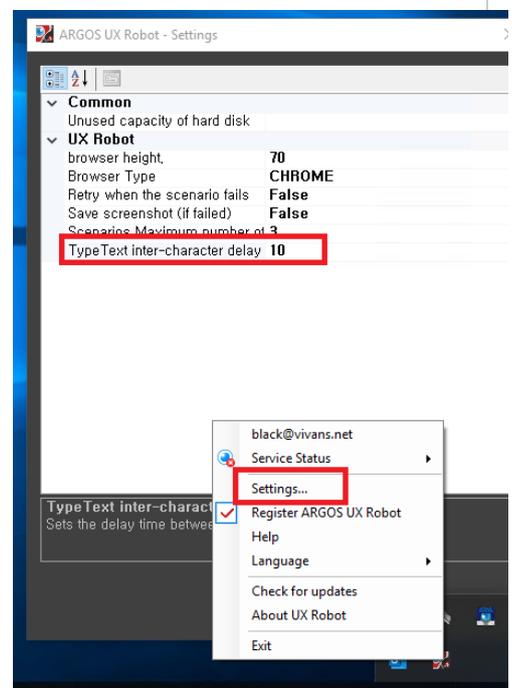
## Changes

- **CHANGED** Removed the default 0.5 sec pre-operation delay in **Delay** action.
- **CHANGED** Reduced the file size 30% and above when saving bots.
- **CHANGED** '**Movie**' menu moved under '**Help**' and links to new movie library.
- **CHANGED** "**Open RPA supervisor page**" to "**Supervisor**" in '**Help**'



## Fixed

- **FIXED** User can control the inter-character delay by using '**TypeText inter-character delay**' value of PAM in '**Text Input**' action. If the default value (100 ms) of '**Text Input**' is not fit in your bot, you can control the text typing speed by using increase or decrease the delay.
- **FIXED** Even if the STU Launcher is terminated, child processes still remain.
- **FIXED** **SelectWindow** could not move a focus on 'CMD (prompt window)'.



## New Features

- **ADDED** **Mobile CHIEF** (Android App) released. You can download from **Google Play** store. iOS version is also coming soon.
- To download, click here, '**ARGOS CHIEF**'

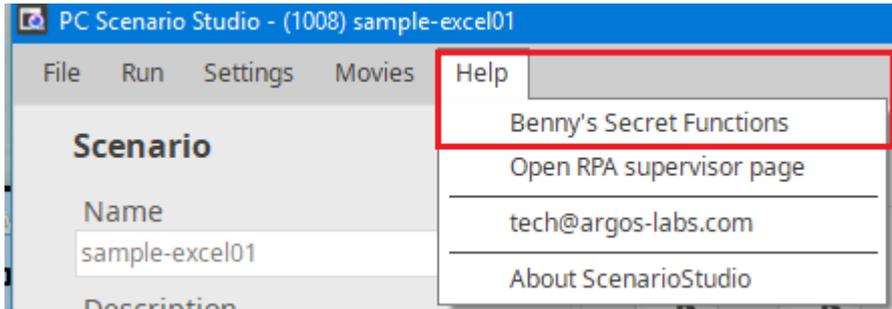


ARGOS CHIEF provides:

- Real-time monitoring – Provides Active and Completed Bots(Live Status)

- Bot analytics – For higher Bot utilization & efficiency
- Cloud or Premises
- Bot Schedule management
- Log activity management
- Alarms management

- **ADDED** 'Search keyword' in Top menu bar. You can search a keyword related documents from Wiki.
- **ADDED** 'Benny's Secret Function (aka BSF)' added under 'Help'. It explains a variable system of ARGOS RPA+.



## Changes

- **CHANGED** Renew the code signing certificated. If you install from the scratch, please, read this, "What is 'Windows Protected your PC' message?".
- **CHANGED** the progress popup UI when starting STU. Also, the starting message has been further refined to 'Initializing' and 'Downloading Plugin'.

## Fixed

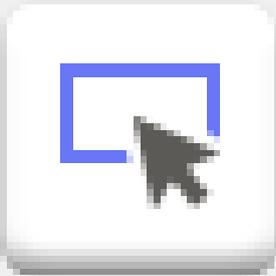
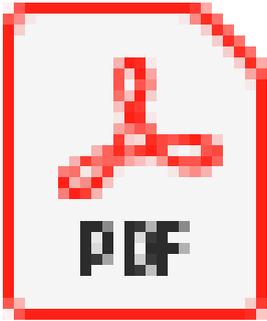
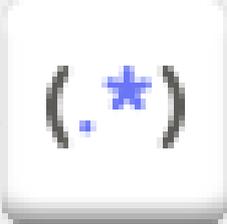
### STU

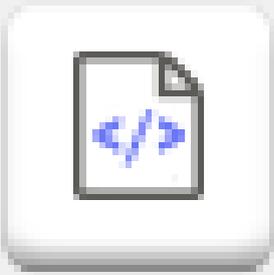
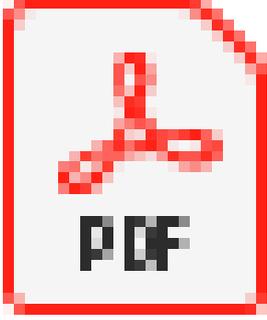
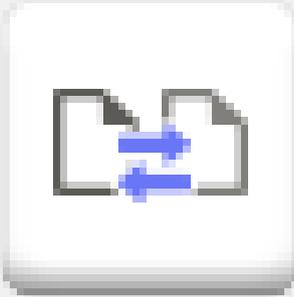
- **FIXED** an invisible problem when private plugin property values were saved and loaded
- **FIXED** 'Object...' related error when saving without 'STEP' selection

## New Features

- **ADDED** New actions by Plug-in

Action Name	ICON	Guide	Descriptions

<p>Window Object</p>	 <p>Window Object</p>		<ul style="list-style-type: none"> <li>• find a specific windows object and do 'click' on that object. Its operation is very similar to 'SelectWindow' but this is more useful when images or object location to be compared often change.</li> </ul>
<p>GoTo</p>	 <p>GoTo</p>		<ul style="list-style-type: none"> <li>• Unconditional Go To</li> <li>• Jump to the specific Step and Operation</li> </ul>
<p>String Manipulation</p>	 <p>String Manipula...</p>		<ul style="list-style-type: none"> <li>• Find/Replace/Support operations: Find, Replace, and Split</li> <li>• Find/Relace/Support a word in a string or a text file with 'Regular Expression'</li> </ul>

Web Extract	 <p>Web Extract</p>		<ul style="list-style-type: none"> <li>• scrap(extract) the web contents.</li> </ul>
Data Conv	 <p>Data Conv</p>		<ul style="list-style-type: none"> <li>• convert a file format among JSON, XML, CSV.</li> <li>• Supports CSV-to-TSV, CSV-to-_SV, JSON-to-XML, XML-to-JSON</li> <li>• csv2tsv: converts CSV TSV (Tab-separated values) format</li> <li>• csv2_sv: converts CSV a character separated values which you specify as 'Target separator'</li> <li>• json2xml / xml2json: converts JSON to XML format vice versa</li> </ul>

**IMPORTANT NOTE**

**If you are updating from a version earlier than R19.0513, please do not use STU immediately after**

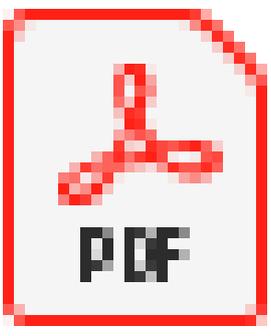
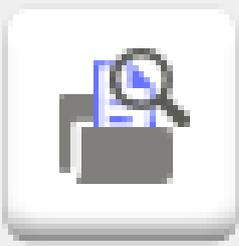
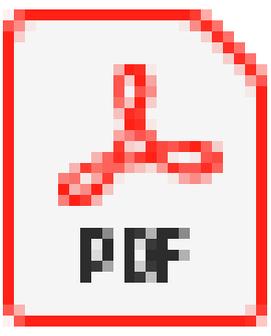
the update and restart STU completely and update to PAM as follows.

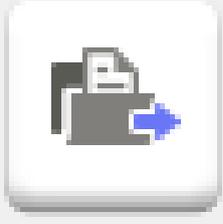
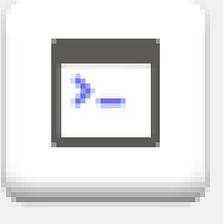
1. Close the sign-in window to end STU execution
2. Terminate 'STU Launcher' from Tray menu
3. Restart STU
4. Update a PAM if you see the update pop-up
5. Enjoy RPA life with new STU & PAM !

Thanks

## New Features

- **ADDED** New actions by Plug-in - *TTS, File Monitor, File/Folder Op, SSH Command*

Action Name	ICON	Guide	Descriptions
Text to Speech	 Text to Speech		<ul style="list-style-type: none"><li>• Text-To-Speech support using Google TTS engine</li></ul>
File Monitor	 File Monitor		<ul style="list-style-type: none"><li>• Monitor the state changes of folders by file operations such like create/delete/rename. This is used to create a workflow that is triggered by file creation.</li><li>• Get a file list and iterate process each file. This is used to create a list of files and use 'Repeat' to iterate through files in the list.</li></ul>

File/Folder Op	 <p>File/ Folder Op</p>		<ul style="list-style-type: none"> <li>• Operation target file or folder</li> <li>• Available operations: copy / move / remove</li> <li>• All operations include subfolders by default.</li> <li>• Advanced options <ul style="list-style-type: none"> <li>• Preserve: will preserve the times of source file/folder while copying / moving.</li> <li>• Symlink: will overwrite when the timestamp of source file/folder is newer than the destination</li> </ul> </li> </ul>
SSH Command	 <p>SSH Command</p>		<ul style="list-style-type: none"> <li>• Connect to a server using SSH</li> <li>• Run a simple command and the results</li> <li>• The returned results can be saved as an environment variable, and used in next operations</li> </ul>

## ARGOS STU

- **ADDED** PAM update check right after STU update
- **ADDED** New stop hot-key (**CTRL+ALT+C**) for the "Auto Recording"
- **ADDED** Default bot file name when saving bot.
- **ADDED** New 'Import Step' under 'File' menu. This is used to copy a bot from another one.
- **ADDED** New 'SKIP' operation.

Replacement for the **DISABLED** stamp / new icon & color, multiple operation selection

support.

## ARGOS CHIEF

- **ADDED** 'search keyword filter' to 'Schedule', 'Scenario-PAM status', and 'Job History' in dashboard.

## Changes

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- **CHANGED** In 'Scenario' menu, 'Update date' is the default order.

## New Features

- **ADDED** 'CompareValues' action (*if-then-else*)
  - compare to return values or user variables and jump to another Operation or Step.
- **ADDED** 'Paste' option in 'TextInput' action
  - Mark on 'Check box' to use 'Paste' action.
- **ADDED** Improved 'Excel Advanced' action
  - Added 'n x n' selection & can use an excel formula

You can run in background mode without real MS Excel installation.

'Excel' action runs on OS X, Linux, also.

(ex) n x n data range selection, n x n data reverse, read/write from/to CSV format.

MS Excel is still needed when a user wants to use 'Excel formula'.

To support 'Excel formula', we need more time. For now, we have a half solution.

### New Options

- sheet: Name of the sheet to read (Default: the last saved-active-sheet is selected)

- range: the range to read

- reverse: redirect (convert vertical data to landscape)

- big: All data in the selected sheet (not available with reverse option at the same time)

- write: the file path to write to

- write\_sheet: the name of the sheet to write (Default: Sheet1)

- write\_cell: cell start position to write (Default: A1)

- **ADDED** Japanese language pack renewal
- **ADDED** 'Rossum' API Support

## ARGOS STU

- **CHANGED** 'Excel' to 'Excel Basics'
- **DROPPED** The 'User Module' obsoleted by the plugin system

## ARGOS PAM

- **CHANGED** Re-fixed duplicate line feed when pasting using 'TextInput'.
- **CHANGED** Improved 'JSON Select' to select a data

## New Features

- **ADDED** SQL support: MySQL, MSSQL, Oracle
- **ADDED** 'REST API' action for RESTful API support.  
User can integrate their bot with various external REST API servers.
- **ADDED** 'JumpToStep' to 'Verifications' group and 'Dialogue' action.  
With the ability to jump between steps, users can design workflow more freely.
- **ADDED** 'JSON Select' for JSON data format support of SQL, REST API actions

## ARGOS PAM

- **FIXED** Removed the duplicate Line Feed when pasting sentences using 'TextInput'
- **FIXED** An issue where the value of 'UserVariable' could not be edited in TextInput.  
User can add(edit) an index to the array variable.  
ex) Original value '{{Global.second}}' could be re-written like '{{Global.second.index}}' to specify the index array variable.

## ARGOS STU

- **CHANGED** Version mismatch alert type between PAM and STU from a countdown pop-up to a sim information popup.  
User can close the window more faster.

## ARGOS PAM

- **FIXED** : RunProgram fails to execute if the file path contains more than one space.
- **FIXED** : Run OpenBrowser chrome with actual chrome's language settings.  
( Bug fixed - The language in the field when accessing the site is displayed in a different

language from the scenario. )

- **FIXED** : Fixed to save a file with .xlsx extension in 'My Document' when specifying only filename instead of writing full path to file name when do 'write' operation in Excel.  
( ex ) filename.xlsx
- **CHANGED** : Improved 'Excel' action performance  
When read / write, the method of opening and processing the Excel file for each item in the Excel operation is opened and processed once.
- **CHANGED** : When you run Excel Read, the cell reads as the formatted value.  
If formatting is applied to the cell at the time of Excel Read, it is corrected to read the formatted value.  
( ex ) Displayed cell value: 100 (format: %) => 'Read' as '100%'

'R19.0226' is the public release name.

Previous being used 'R19.0218' is the alpha version for internal testing.

## ARGOS STU

- Package name: R19.0226.10
- **CHANGED** the links of 'Movie' menu
- **CHANGED** 'Sign-In' screen from IE to Chrome
- **CHANGED** 'Main menu'

### Details...

Menu	Status	Desc
Scenario	Removed	<ul style="list-style-type: none"><li>• Changed 'User variables setting' to 'User variables in Scenario' and moved it to 'Settings' menu</li></ul>
Tools	Removed	<ul style="list-style-type: none"><li>• Moved the Recored related sub-menus to 'RUN' menu</li><li>• Moved 'Options / SMTP' to 'Settings' menu</li></ul>
Help	New	<ul style="list-style-type: none"><li>• Added 'About ScenarioStudio' to check out the current version easily</li></ul>

- **CHANGED** 'Test run' to run in user-specific folder
- **ADDED** License checking logic in the closed network environment (On-Prem Only)

## ARGOS PAM

- Package name: R19.0218
- **CHANGED** Dropped 'Administration' permission for running PAM
- **CHANGED** a schedule time based on UTC
- **CHANGED** 'Test run' results file location to user-specific folder
- **CHANGED** 'TextMatch' to use a variable at 'text' parameter
- **CHANGED** SendEmail, If you specify a folder in the attachment, the file in the folder will be attached (not included a sub folder)
- **CHANGED** a mouse button action when LEFT-RIGHT button setup is swapped
- **FIXED** a schedule time calculation logic
- **FIXED** 'SelectWindow' title would fail when it contained a regular expression symbol (ex. +).
- **FIXED** a bug where SendEmail contained a blank address if there was a semicolon (;) at the end of the email recipient.

## Common

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- Changed the specific version name format: **R18.<release date>**

## ARGOS STU

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### Changes

- Click action integrated with SelectWindow
- Changed the default delay to 500ms between actions.

### Fixed

- Fixed a bug of TypeKeys (interval time issue)
- Fixed a bug where Repeat action behavior would run once when the time exceeded 32768 seconds.
- Fixed the problem that the item is specified incorrectly when using goto in Dialogue event (jump, backjump, not yet developed)"
- Fixed theme related UI issues

## ARGOS STU

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### Fixed

- Crash due to 'Shortcut Key' event hooking
- Fixed an error when adding a new Action to an older scenario with no Item name

## Common

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### changes

- Add **TextMatch** verification function
- Index can be used in **LocateImage** - image index
- Index can be used in **LocateImage** - Loop matching image

## ARGOS STU

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### New Features

- Enhanced Excel Action
- Ability to use Scenario Studio as license file without login (for on-Prem or closed network)

## ARGOS Chief

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### Changes

- Modify license purchase / authentication / activation function

## How to update STU & PAM

### How to update of STU & PAM

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#### 1. Run STU

If your STU (Scenario Studio) is running, please, stop it including 'Scenario Studio Launcher' in tray menu.

#### 2. Do update of STU when shows up a popup

About STU updating, it will takes about **2~3 min** to create a runtime environment in your PC at first run.

#### 3. Do update of STU when shows up a popup.

If the sign-up windows of STU appears, please, close it first and terminate STU launcher at tray menu.

#### 4. Check out the version of STU and PAM

**Location of version information**

STU: You can find a version in '**Help > About Scenario Studio**' menu.

Or, Select '**Windows Key > Settings > App & Features**' and input 'ARGOS' in the search box.