

Appvance IQ

Release 5.2.0

Release Summary

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About Appvance

Appvance is the technology leader in and inventor of AI-driven autonomous testing, which has revolutionized software testing.

Visit us at <u>Appvance.ai</u>.

Support

Contact our support team to request technical help, report an issue, or suggest a new feature. See the <u>Appvance Support</u> page for more information.

Visit the Appvance Service Desk to submit a request.

Online Documentation

Visit the <u>Appvance Documentation</u> site for AIQ product documentation.

Training and Certification

Your journey to Autonomous Testing Engineer Certification (ATEC) starts here. Take our classes and be among the very first to use and deploy the world's only Level-5 Autonomous software testing technology.

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News

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Events

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See where you can meet up with the Appvance team.

Blog

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Appvance IQ 5.2.0 Release

The Appvance IQ (AIQ) 5.2.0 release includes a significant leap forward in the world of AI-native automated testing. This release introduces Generative AI V3, a comprehensive update that enhances performance, reporting, visual object recognition, and bug-finding accuracy.

About this Document

This document contains information on the following functional enhancements and functional changes in the AIQ 5.2.0 release.

- "AI Script Generation in AIQ 5.2.0" on page 9
- "Mobile Application Testing" on page 32
- "Desktop Application Testing" on page 63
- "API Testing" on page 94
- "Functional Changes" on page 101
- "AIQ 5.0.x Enhancements" on page 105
- Bepending on what AIQ release you are upgrading from to AIQ 5.2.0, there may be additional functional enhancements included in this release. For your convenience, information about the enhancements in the AIQ 5.0.0 release has been added to this document. See "AIQ 5.0.x Enhancements" on page 105 for more information.

Accessing AIQ 5.2.0

Appvance customers can access the <u>5.2.0 release page</u>. The release page includes a link to the AIQ 5.2.0 installer, the list of fixes included in the release, information on upgrading from a previous release of AIQ and other implementation considerations.

See the "Upgrading your Controller and Test Nodes" section of the <u>5.2.0</u> release page for upgrade information.

See "About Appvance" on page 5 for contact information.

Al Script Generation in AlQ 5.2.0

User Interface and Terminology Changes

The AIQ 5.0.x menu option **Blueprint Designer** has been renamed to **AI Script Generation** in AIQ release 5.2.x.

Home	^		C		1 n.t	
Web Testing	>					
-	>	Record a Designer Script	Build a Scenario	Play a Scenario	Analyze	AI Driven
Mobile Testing	<u> </u>	Tutorials / References				
Desktop Testing	>					
Autonomous Testing	~					₽
Al Script Generation		About Web Application	About Mobile Application	About the Scenario Editor	About Reports	About Autonomous Testing
Coverage Map		Testing	Testing			
	-	Testing	Testing			
API Test Designer				cent tests performed	System Status	
API Test Designer Services Workbench		Statistics	₽ Re	cent tests performed mancescenario Testing.scenario	System Status	C:\AIQ\aiq_distribution\
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API Test Designer Services Workbench Scenario Editor Run Scenario		 Statistics Last Test Summary Iteration Name Success 	Beratort 6 Snap 4 ETL_	mancescenarioTesting.scenario	Location	

In addition to this change, the terms "AI Exploratory Testing" and "AI Blueprinting" are no longer used. Those functions are now referred to as "Autonomous Testing" and "AI Script Generation" (AISG). The user interface and documentation will be updated to reflect these changes.

The term "Blueprint" is still used to refer to the Blueprint (.abpt) file that is created during an AISG execution.

New Features and Enhancements

In addition to the following new features and enhanced functionality, there were also extensive improvements to the AI Engine that powers AISG.

- "New Coverage Map Types" on page 12
- "Search and Filtering Improvements on the Coverage Map" on page 15
- "Visual Accessors in AISG" on page 19
- "AI Training Enhancements" on page 25
- "SmartTag Visual Details" on page 28
- "AWS Instance Test Node" on page 29

Upgrade Considerations

- "Updating 5.0.x AISG Files to AIQ 5.2.0" on the facing page
- "Considerations for Custom Actions and SmartTags" on page 30

Updating 5.0.x AISG Files to AIQ 5.2.0

For the new features introduced in AIQ 5.2.0 such as the new Coverage Map types and Visual Accessors you must rerun any existing 5.0.x executions on 5.2.0 to take advantage of these new features.

For example, while you can open a 5.0.x Blueprint file (.abp) in AIQ 5.2.0, the new Coverage Map types will not be available automatically. The new Coverage Maps will only be available after the AISG execution is run using AIQ 5.2.0.

You can either add a new execution or export a Blueprint file to a template and create a new AISG from the template.



See <u>Add an Execution</u> or <u>AI Script Generation Templates</u> for more information.

New Coverage Map Types

AIQ 5.2.0 contains significant improvements in the AISG Coverage Maps. You can now select from three different dynamic visualizations of the Coverage Map.

- Original
- Extended Potential
- <u>Actual Path</u>

You can use these Coverage Maps to effortlessly track the AISG execution's journey through the application being tested, leverage AI hints more effect-ively, and generate precise test scripts to replicate issues.

To take advantage of the new Coverage Map types you must rerun any existing 5.0.x executions on 5.2.0. You can open a 5.0.x Blueprint file (.abpt) in AIQ 5.2.0 but the new Coverage Map types will not be available automatically.

How are the types of coverage maps different?

- The Original and Extended Potential coverage maps show you where the AI can go from one page to another, however it does not mean that the AI followed that exact path.
- The Extended Potential coverage map is an enhanced version of the Original coverage map. It shows more information such as more page states and page relationships. This can show you relationships that the AI did not actually navigate, but learned about during the execution.

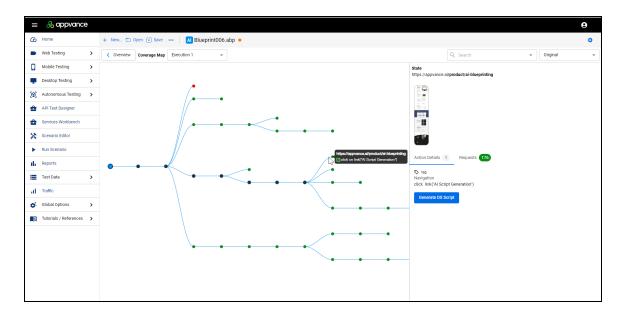
You will see more states and page relations on the Extended Potential coverage map than on the Actual Path coverage map. This is because

even though the AI didn't explore this, it is aware that those relationships exist.

• The Actual Path coverage map shows you the exact path that the AI followed through the application. This will let you track the AI training process and help you make further decisions on training the AI.

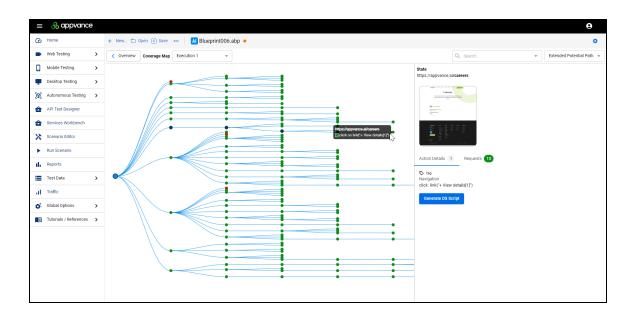
Original

This is the default visualization of the coverage map. It is the view that has been used in previous versions of AIQ.



Extended Potential

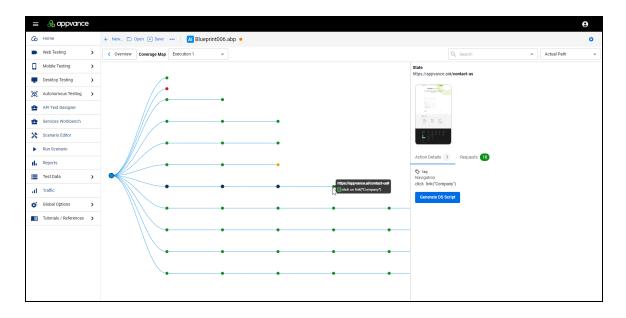
The Extended Potential view of the Coverage Map shows you the potential path the AI traveled to reach a particular page state. This view is similar to the Original view of the Coverage Map, but contains more states and page relationships.



Actual Path

The Actual Path view of the Coverage Map shows the actual path that the AI took when navigating the application under test. You can use this to track the AI training process and help you make further decisions on training the AI.

From the Actual Path Coverage Map, you can now accurately generate DS scripts that will contain the exact paths followed by the AI.



Search and Filtering Improvements on the Coverage Map

Improvements have been made in the Coverage Map to allow you to search and filter the results so you can explore the data more easily and efficiently.

Searching the Coverage Map

You can search the URLs in the Coverage Map. Click on a result to see the page state details.

Q News
URL: /news Action: link("News")
URL: /news Action: link("info@appvance.ai")

Filtering Requests

You can now filter out specific requests or errors (404 errors, etc) from the Coverage Map. This action will be saved to the Blueprint (.abpt) file so that the requests will not display when the Blueprint is executed in the future.

When you hide a request on a particular node, that request will also be hidden for every other node that also has the same request.

Hiding a Request

To hide a request on a node, right click on it from the list and select Hide
 URL. The request is filtered out of the list and added to the Hidden
 Requests list.

200 get https://demosit jpeg?1527769339
200 get https://demosit jpeg?1527769342
200 get https://demosit jpeg?1527769325
200 get https://demosit 230920145353.js
404 vet https://demosit jpeg?1527769324
://demosit jpeg?1527769324
Hide URL s://demosit =hcknujxx&end=1
200 get nttps://demosit 5318b67ceff.css
200 get https://demosit 9be4363ddc1.png
200 get https://demosit c040ef11c.woff2
200 get https://demosit jpeg?1527769343
200 get https://demosit pvance.net:443/
200 get https://demosit jpeg?1527769327
200 get https://demosit jpeg?1527769328

• To hide a request from the **Requests** list, select **Hide Request** from the **Action** menu (the three dots).

< Overview	Request All Reached Domains Ignored URLs Hidden Requests			
Method	Request	↓ Status	Duration	Action
GET	https://demosite.appvance.com/443/spree/products/21/mini/ror_tote.jpeg/?1527769324=&	404	36 ms	b .
POST	https://demosite.appvance.com/443/orders/populate/?	302	221 ms	Hide URL
POST	https://demosite.appvance.com/443/orders/populate/?	302	191 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	217 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	154 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	165 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	250 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	260 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	249 ms	
POST	https://demosite.appvance.com/443/orders/populate/?	302	197 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	210 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	160 ms	
POST	https://demosite.appvance.com.443/orders/populate/?	302	241 ms	
POST	https://demosite.appvance.com:443/orders/populate/?	302	237 ms	

Viewing Hidden Requests

You can always choose to display all requests for a node have been hidden, or a list of all requests for the AISG execution that have been hidden.

• To view hidden requests on a selected node:

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	149 149	1				
	510 10 10 10 10 10 10 10 10 10 10 10 10 1	810.99	82.19	\$13.90	811.00	
	nyana nyan lan	- 13 -	1			
		810.83	0.0.40	\$1.00	\$11.30	
		n	1	1		
		810.00	810.00	0.5.00	\$22.06	
						1.00
						0
All H	idden Re	equest	S			
200 get ht	ttps://den	nosit	t?variar	nt_id=1	1	
200 get ht	tps://den	nosit	jpeg?15	527769	340	
200 post						
302 post					late	
200 get ht			·			
200 get ht						
200 post 1						
200 get ht						
200 get ht						
200 get ht						
200 get ht						
200 get bt						
200 get ht 200 get ht						

1. On a node, click the **Requests** tab.

2. Click Hidden Requests.

			# REPORT # 1010	The pass	
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		0.0.0			
Hidden R get https://der get https://der					

• To view all hidden requests for the AISG execution, navigate to the **Requests** page, and click **Hidden Requests**.

-[< Overview R	equest All Reached Domains Ignored URLs Hidden Requests			
-	Method	Request	↑ Status	Duration	Action
-	GET	https://demosite.appvance.com:443/spree/products/21/mini/ror_tote.jpeg/?1527769324=&	404	36 ms	
-	GET	https://demosite.appvance.com:443/spree/products/21/product/ror_tote.jpeg/?1527769324=&	404	62 ms	

Visual Accessors in AISG

AIQ 5.2.0 has significant improvements in element-bounds for visual hints and the addition of Visual Accessors. Visual Accessors will be automatically captured when elements have fewer than four fallback accessors. In addition to the automatically captured Visual Accessors you have the option to manually create Visual Accessors for any element. You can also manually create them from scratch if needed.

For general guidelines on using Visual Accessors see <u>When to</u> <u>use Visual Accessors?</u>

Enabling Visual Accessors in AISG

Enable the **Visual Accessors** toggle in the **Advanced Setup** in the Al Script Generation configuration for the Al execution.

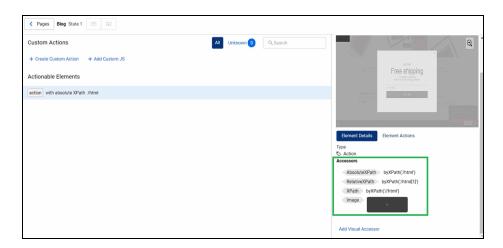


See the Advanced Setup Options section for more information on the available options.

Example

This example shows a situation where only three fallback accessors were identified, so a Visual Accessor was automatically added by the AI.

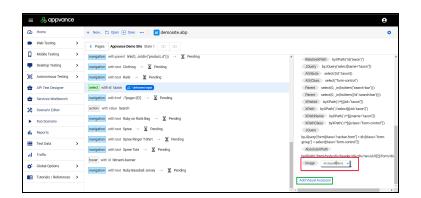
Visual Accessors are added at the end of the list of fallback accessors. This is for performance reasons. If AISG is able to match an element ID, it prefers to use that over a Visual Accessor. Using a Visual Accessor will slow down AISG, so it is used as a fallback accessor not as a primary accessor.



Manually Adding a Visual Accessor

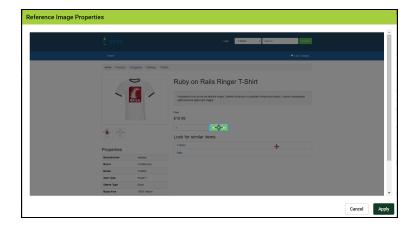
Visual Accessors can be manually added. Here is a basic example of the process.

1. Navigate to a page state and select the element for which you want to add a Visual Accessor.



2. Click Add Visual Accessor.

3. The **Reference Image Properties** window opens. From here, use the cursor to select your Visual Accessor.



4. Click **Apply** when you are done. The Visual Accessor is added.

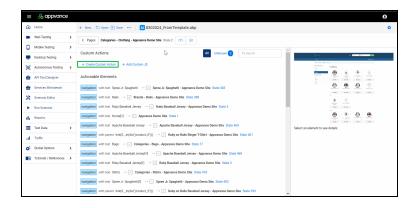
Adding a Visual Accessor to a Custom Action

Visual Accessors can be added to Custom Actions. This is for situations where If you want to create a Visual Accessor for an element that was not identified by AISG.

Here is a basic example of the process.

See <u>Creating Custom Actions</u> for general information on adding Custom Actions to resolved failed actions in AISG executions.

- 1. Navigate to the Page State for which you want to create a Custom Action.
- 2. Click Create Custom Action.



3. Select Visual Accessor and click Next.

<	Pages Categories - Clothing - Appvance Demo Site State 2
	nanganon martext ours (Empty)
	form with text All departments Bags Mugs Clothing
	action with value Search
	navigation with text Spree Ringer T-Shirt
	navigation with parent link(0, _in(div("product_4")))
	navigation with text Clothing[1]
	navigation with text Apache
	navigation with text Spree
	navigation with text Ruby on Rails Jr. Spaghetti[1]
	select with id taxon 🛃 Unknown input
	navigation with text Spree Baseball Jersey
	navigation with text Home
	Process SQL
	Execute JavaScript
	Visual Accessor
С	ancel Next

4. Click Select Visual Accesor.



5. The **Reference Image Properties** window opens. From here, use the cursor to select your Visual Accessor.

			Dags v Search	Scarch	
Home				e Cat. (Cripty)	
Home / Products / Categorie	is / Clothing				
Shop by Categories	Clothing				
Mags Clubbing			< <u>n</u> >		
Shop by Brands	Ruty on Rais Basecan Jerray	Ruby on Ralis Jr. Spagneta	Ruby on Rails Ringer T- Shat	Spree Jr. Spagnets	
Apacho Spane	\$19.99	\$19.99	\$19.99	\$19.99	
Rats	Apache Baseculi Jersey	Raty Executivesey		Spree Rager T-Stert	
	\$19.99	\$19.99	\$19.99	\$19.99	
	Storts				
	Ruby on Rails Jr. Spagnett	Spree .X. Spaghets			
	\$19.99	\$19.99			

you are done.

6. In the **Set Value** drop down, select **Click**.



7. Enter a name for the new Custom Action.

ew Custom Action ck the order in which actions should be done	d correction and the second se		-	10 100	
	internet in the second s	Cathing			
Click Ruby On Rails Baseball Je	100 100 100 100 100	<u>^</u>		- B -	
Description (Optional)			<u>^</u>		1
Visual accessor		2100 	918 ()) ()) ())	144	10.0
Add Visual Accessor Action			- <u>(</u>)- 	<u>_</u>	<u> </u>
Back Create and Execute	Select an element to	see details			

8. Click Create and Execute.

AI Training Enhancements

The following enhancements have been made to the AISG user interface to allow you to easily add additional resources and data to further train the AI on your applications.

Try All Option added to Custom Actions

The option to **Try All** has been added to Custom Actions. Custom Action can be created to resolve failed actions that occur during the AISG execution.

New Custom Action Pick the order in which actions	s should be done
New Custom Action	
Description (Optional)	
select with id taxon	Try All
	Set Value
Back Create and Exe	Assert Contains Text
	Try All

See Creating Custom Actions for more information
--

Add Additional Resources

You can add additional resources to be used by the AI during the AISG execution. For example, you can add files that are required to be uploaded during the test. You can also upload any files needed for any required SQL processing during the test.

Resource files can be added in the Advanced Setup options in the AI Script Generation configuration for the AI to use them.

See the Advanced Setup options section in the documentation.

Support for Multiple Data Sets

You can add multiple data sets. There is a drop down where you can select the type of DPL that you are adding.

Add Execution			
Datasets	Itiple browsers		•
\checkmark Default \times			
demosite_login (1). ×	Type Hash DPL 👻		
testJS.csv-93416at ×	Type Hash DPL 🔺		
+ Create New + Import Nev	Hash DPL JavaScript DPL Synthetic DPL Encrypted DPL	Cancel	Add
PL o oddod	Enorypred DF E		

You can select from:

- Hash DPL
- JavaScript DPL
- Synthetic DPL
- Encrypted DPL
- Encrypted Hash DPL

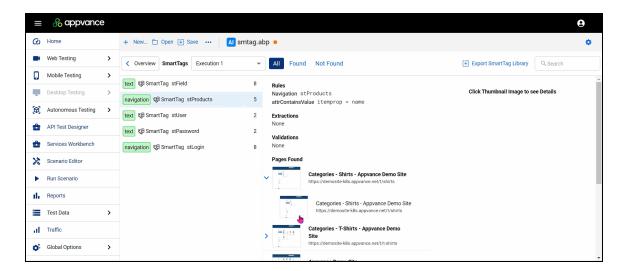
See Add an Execution for more information.

C

SmartTag Visual Details

You can now view details about the SmartTags that were found during the AISG execution.

If you click the **SmartTags** button from the Blueprint Overview, you can see details of the SmartTags within your Blueprint.



The **Click Thumbnail Image to see Details** link will show you a visual representation of where the SmartTag was found.

appvance 🔒	•					9
🙆 Home		+ New 🗅 Open 🕑 Save 🚥 🛛 🗚 sm	tag.a	• qc		0
Web Testing	>	C Overview SmartTags Execution 1		All Found Not Found	Export SmartTag Library	Q. Search
Mobile Testing	>	text @SmartTag_stField	8			
Desktop Testing	>	navigation CO SmartTag stProducts	5	Rules Navigation stProducts attrContainsValue itemprop = name	ries / Clothing / Shirts	Q
😥 Autonomous Testing	>	text 🕼 SmartTag stUser	2	Extractions		
API Test Designer		text 🕼 SmartTag stPassword	2	None	Shirts	
Services Workbench		navigation 🕲 SmartTag stLogin	8	Validations None		
Scenario Editor				Pages Found		. A same
Run Scenario				Categories - Shirts - Appvance Demo Site https://demosite-k8s.appvance.net/t/shirts		
Reports				Categories - Shirts - Appvance Demo Site		Spree Jr. Sp
Test Data	>	2		https://demosite-k8s.appvarce.net/t/shirts	\$19.99	\$19.9
II Traffic				Categories - T-Shirts - Appvance Demo		
Global Options	>			https://demosite-k8s.appvance.net/t/t-shirts		

AWS Instance Test Node

The **Add Execution** windows has a new test node option in AIQ 5.2.0. You can select an AWS instance as your test node.

Add Execution				
Execution Name Execution 1	Start with Brow	vser nrome 🔻 🔽	Headless Browser	
Test Node AWS Instance	ie net colocited 📼	Coloct File		
Cloud configuration file Required	s not selected	Select File		
Datasets	et for multiple brows	sers		
Default ×				
+ Create New + Imp	oort New			
			Cancel	Add

When you select **AWS Instance** you must select a cloud configuration file that contains a link to the Test Node on which to run the blueprint.

Considerations for Custom Actions and SmartTags

If you are using SmartTags within an AISG execution, there is a limitation for the PROP SmartTag when creating Custom Actions. The PROP SmartTag is currently designed to ignore the element on the page. This means than an element will not be picked up.

The PROP SmartTag is like "null", but it is used in parent SmartTags to create references.

Example

If you have a PROP SmartTag and you are trying to create a Custom Action with only that SmartTag, the Custom Action will fail because there are no associated elements. This is a known and expected limitation in AIQ 5.2.x. Any other SmartTag type (Navigation, Action, etc) will work as expected when creating a Custom Action in AIQ 5.2.0.

The workaround is to change the SmartTag to an action (once per app) or remove the SmartTag.

A future release of AIQ will restore the element association and remove this limitation.

AISG Repository Considerations

Git is not recommended for use with AISG. If your AISG executions are extremely large and contains a large amount of images, you may eventually see performance issues if you are using Git. The size limitation for Git is around 100MB. Once you exceed 100MB, you may want to consider using an S3 repository. This is due to Git not being designed to efficiently handle large amounts of binary files. Images are resource-consuming elements at the disk, memory, and CPU level, so using an S3 repository will yield the best performance. This is because the images will be saved with the script in your S3 repository which simplifies image management.

If you are going to use Visual Accessors, you must use a SFTP, FTP, or S3 repository. Appvance does not recommend using Git to store your images if your are using the Visual Accessor functionality. Again, this is due to Git not being designed to handle large amounts of binary files efficiently.

These guidelines were introduced with the AIQ 5.0 release. This is a reminder.

8

Mobile Application Testing

There are major changes and enhancements to the user interface for creating, maintaining and executing mobile tests in the 5.2.0 release of AIQ.

The new Mobil Designer interface aligns perfectly with modern editor capabilities offering a more flexible and intuitive user experience that makes testing tasks easier and more efficient. The new Mobile Designer user interface is similar to the new Web Designer user interface that was introduced in AIQ release 5.0.0.

This document is meant as a quick start guide to help acquaint you with the new Web Designer and explain the basic components in the interface.

Going forward the Mobile Designer (Classic) user interface is frozen. All new features and functionality will only be implemented in the new Mobile Designer interface. Mobile Designer (Classic) will be depreciated and removed from AIQ in a future release.

For more information on the new Mobile Designer see the following sections:

- "Mobile Designer New User Interface Overview" on the facing page
- "Repository and File Manager in the Mobile Designer" on page 36
- "Mobile Configuration" on page 40
- "Mobile Designer Editor Options" on page 46

Mobile Designer - New User Interface Overview

See an introductory video showing the new Mobile Designer interface in use.

To access the Mobile Designer, from AIQ navigate to **Home > Mobile Testing > Mobile Designer**.

This is an example of the new Mobile Designer interface.

B Home	File	Options Edit	Scripts - Text0185.m	-		0	Device XML
Web Testing				Record Play II Pause	Stop C Step Over	0	1501 🔕 🕈 🔳 + 🔹 🚸 🕸 🖉 🕹 🕹
	No	Action	Accessor	Value	Description	<u> </u>	C Q women shirts
Mobile Testing	× 7	Set Value	byld("com.macys.android.id/s	"women shirts"			
	8	Click	byXPath("//android.w/dget.TextV	lew(@text='women shirts')")			HERE'S ALL AND A SHOP NOW
IDE	9	Click	byXPath("//android.widget.Frame	eLayout/android.widget.LinearLayo			Sportset
	10	Scroll Down					
JS Edit & Play	11	Scroll Down					Co Filters Delivery & Pickup Size
SmartTag Workbench	12	Click	byAccessibilityId("M available")				23,114 itoms 💿 Ask A Style Expert
omarriag workbench	13	Click	by/id("com.macys.android.id/pdp_bln_add_to_bag")				MEN'S FLASH SALE ENDS IN 16:58:40
Validations Workbench	14	Click	byld" com macys android id button_view_bag_button") Oly: 1'				
	15	Verify Text Present					
Mobile Config	16	Scroll Down					
	Logs	Data			🔺 Logs		
Autonomous Testing	< Step (Completed					
API Test Designer	Step I						And Provide and Pr
 An rest basigher 		Step Nait Time: 1,024 msec Step Startes: Click //android.widget.TextView[gtext='women shirts'] Step Completed					
Services Workbench	Step (Women's Collaned Women's Printed Pistuck Button-Down Shirt, XV Top, Created for Macy's
	Step 1						\$44.50 \$69.50
Scenario Editor		Step Wait Time: 4,832 nsec Step Started: click //android.widget.FrameLayout/android.widget.LinearLayout/android.widget.FrameLayout/android.widget.Linea@					New \$25.70 - \$44.50 New \$27.80
	Step (Completed					C -O. C -O. Account
Run Scenario	Step 1	Step 18				III 0 <	

Overview of Mobile Designer Controls and Icons

Icon / Control	Function
Repositories Image: Config Files > Image: Config Files > Image: Config Files	Repository pane. Displays the contents of your repository. You can sort and filter using various controls.
□ *	Repository / Quick Access toggle. Switches the File Man- ager pane between the repos- itory and quick access views.

Icon / Control	Function
Q Filter	Filter. Allows you to filter the items displayed in the File Manager.
	Sort by Name / Sort by Type. Sorts the contents of the File Manager pane by name or by type.
0	Refresh Repository. Refreshes the display of the File Manager pane.
Save D Undo C Redo •••	Editing controls menu. • Save • Undo • Redo
Save As Export to JavaScript	Additional save and export options menu. Lets you • Save as • Export to JavaScript
Tile Manager	File Manager toggle. Shows/hides the File Manager pane.
E Console	Console toggle. Shows/hides the Console
[,] "iPhone 14 Pro"	Mobile Device selection control. Controlled by the mobile con- figuration that you created for your test.

Icon / Control	Function
	See "Mobile Configuration" on
	page 40 for more information.
● ► 🔄 II ■	Test controls.
	. Decord
	Record
	• Play
	 Skip Step
	• Pause
	• Stop
•	Open Test Options menu. See
	"Mobile Designer Test Options
	Details" on page 49 for more
	information.
Mobile Config	Menu bar for interacting with a
	Mobile Configuration file.
	Select File [4] Make Relative Select File
	You can:
	Select a configuration file
	Make the file path relative
	 Preview the json con-
	figuration file
	See "Mobile Configuration" on
	page 40 for more information.

Repository and File Manager in the Mobile Designer

This section details the controls and options available in the Repository and File Manager pane (highlighted) of the Mobile Designer interface.

	BS largescripttest i	JS Skip,Profile_Add_To_Bag js [] MobileTest.mds	
Q, FISH	🕑 Same 🕤 Undo	C Redo 📖 [] Three 14 Prof. 🛩	• • • • •
a Repositories	0	Mobile Config 'REPOSETORY/PublicDemo/Config Riles/Africa-Config.json' 💼 Select File [4] Male Relative 🛛	p Proview
👻 💼 PublicDemo (master)	0	1 Click byId("Lion") // Step Description	
> 📷 Blueprint		2 Scroll Down // Disp Description	Warning: Element accessor is not specified
> 🖿 Config Files		3 Seroll Down // Step Description	Warning: Element accessor is not specified
ita 🔹 📷 Demo01		4 Scroll Down // Step Description	▲ Warning: Element accessor is not specified
IQ-4224		5 Scroll Down // Etap Description	▲ Warning: Element accessor is not specified
> 🖿 10-5203		6 Scroll Down // Step Description	Warning: Element accessor is not specified
) iii 10.5482		7 Click byId("Natcha") // Shep Description	
> 🖿 10-5680		8 Click byEd("Locations") // Shp Description	
> 💼 10-6193		9 Click byId("Callery") // Step Description	
) (in 10-6194) (in 10-6348		10 Click byId("Browse") // Step Description	
> 10-6472		11 Scroll Down // Step Description	▲ Warning: Element accessor is not specified
) IQ-6906		12 Scroll Down // Step Description	▲ Warning: Element accessor is not specified
L MobileTest.mds			
> Scripts			
SmertTags			
200.mds			
> Doctrios			
ZooScript mds			
L Zooscript mas			

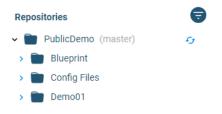
Repository / Quick Access Toggle

Switches the File Manager pane between the repository and quick access views.

•

Repository Pane

Displays the contents of your repository. You can sort and filter using various controls noted below.



File Type Icons

The following icons display before the file names to indicate the test type.

- 🛛 : Mobile test file (.mds)
- Js : JavaScript test file (.js)

The following test type icons and files are hidden in the Web Designer because the context is invalid.

• DS: Web test file (.ds)

API : API test file (.api)

Filter

Allows you to filter the items displayed based on your search criteria.

Q, Filter

Sort Toggle

Sorts the contents of the Repository File Manager pane by name or by type.

•	
✓ Sort by type Sort by name	1 2 3
All Files Web Tests Mobile Tests Desktop Tests API Tests Test Data Smart Tags Validations Scenarios	3 4
Blueprints	

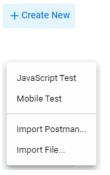
Refresh Repository

Refreshes the display of the File Manager pane.

G

Create New

Shortcut to create new test files.



Available options:

- Mobile Test
- Javascript Test
- Import Postman
- Import File

Mobile Configuration

A mobile configuration file contains all the necessary configuration information that is needed when testing a mobile application.

This topic describes the Mobile Configuration page in AIQ release 4.9.4 and later.

- 1. Navigate to AIQ > Home > Mobile Testing > Mobile Config.
 - Click New to begin creating a new mobile configuration file.
 - Click Open to open an existing mobile configuration file.

= 🔏 appvance			9
Home	+ New 🗁 Open 🕑 Save 📓 Save As 📄 New Conf	g •	
Web Testing >	Configurations MobileConfig01 ×	Platform and Service Service Platform Source Device	Capabilities
Mobile Testing V		On-Premises + Android (Native) + URL + Physical device +	Name Value
Mobile Designer	+ Create New	URL	Required
Mobile Designer (Classic)		https://www.mynewapp.com	platformVersion (Android version)
JS Edit & Play		Starting point to test your application (required)	udid (identifier)
SmartTag Workbench		Package	deviceName {model, can be any name}
Validations Workbench		Package	Extra
Mobile Config		Starting point to test your application (required)	+ Add Capability
		Activity	
Autonomous Testing >		com.example.MainActivity	
🚖 API Test Designer		Starting point to test your application (required)	
Services Workbench		Appium Server Url	
Scenario Editor		http://localhost.4723/wd/hub	
**		Use Proxy	
Run Scenario	20	Allowed Domains	
II. Reports		https://www.mynewapp.com,	
Test Data		No URLs added	
II Traffic			
Global Options			
Tutorials / References >			

Platform and Service

Use the **Platform and Service** area of the page to define the basic parameters of your mobile configuration. Some options are only available in certain configurations. The page will update to show you the available options based on what you have selected.

Service	Platform		Source	
On-Premises	✓ Android (Native)	•	Package	•
Package				
com.amazon.mShop.andr				
Starting point to test your ap	plication (required)			
Activity				
com.amazon.mShop.deta				
Starting point to test your ap	plication (required)			
Allowed Domains				
https://www.mynewapp.co	om,			Add

Service

Valid values are:

- On-Premises
- BrowserStack
- Sauce Labs
- LambdaTest

Platform

Valid values are:

- Android (Native)
- iOS (Native)

Source

Valid values are:

- Package
- URL

Device

- Physical device
- Emulated device

Start URL

• Starting point to test your application (required)

Bundle ID

• Starting point to test your application. Required.

Package

• Starting point to test your application. Required.

Activity

• Starting point to test your application. Required.

Appium Server URL

• The URL of the Appium server that you are using.

Allowed Domains

• Determines access to URLs that might normally be blocked.

Capabilities

Use the **Capabilities** area of the page to define the specific parameters of your mobile configuration. Some options are only available in certain configurations. The page will update to show you the available options based on what you have selected.

Capabilities		
Name	Value	
Required		
platformVersion	33	
udid	emulator-5554	
deviceName	device	
Extra		
noReset	true	- ×
+ Add Capal	bility	

On-Premises Capabilities

- platformVersion Version of Android or iOS installed on the device.
- udid
- deviceName

- bundleld iOS only. Application bundle ID. Application mut be installed if the value for app capability is blank.
- xcodeOrgId iOS only. Team ID.
- xcodeSingingId iOS only. IPhone developer.
- updatedWDABundleId iOS only.

BrowserStack Capabilities

- browserstack.appium_version
- os_version Version of Android or iOS installed on the device
- device Model of the mobile device
- realMobile True/False
- project
- build
- name
- app

SauceLabs Capabilities

- platformVersion Version of Android or iOS installed on the device.
- deviceName Model of the mobile device.
- deviceOrientation Orientation of the device. Portrait or Landscape.
- app URL of the Android Package Kit (apk).

LambdaTest Capabilities

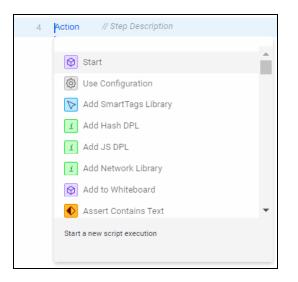
- platformVersion Version of Android or iOS installed on the device.
- deviceName Model of the mobile device.
- deviceOrientation Orientation of the device. Portrait or Landscape.
- app URL of the Android Package Kit (apk).
- isRealMobile Real device (True) or emulated device (False)
- noReset Determines if the app state will be reset the session.

Mobile Designer Editor Options

The following options are available in the Mobile Designer.

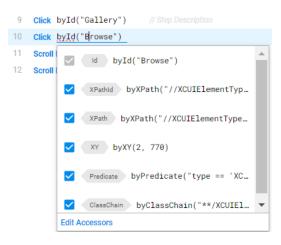
Available Actions

The auto assist feature will show you the list of available actions.



Edit Accessors

- Right-click with the accessor column to see the list of accessors for that step. You can use the individual blue check boxes to toggle individual accessors on and off.
- Click Edit Accessors to edit multiple accessors at once.



Right Click Menu

The following options are available from the right click menu in the test script editor. Your cursor needs to be in the right most column of the editor to access the right click menu.

- Show Quick Help
- Copy
- Cut
- Paste
- Extract to Included file
- Add Breakpoint
- Record From Here
- Add Step Below
- Add Step Above
- Add Description
- Disable Step
- Delete

Show Quick Help

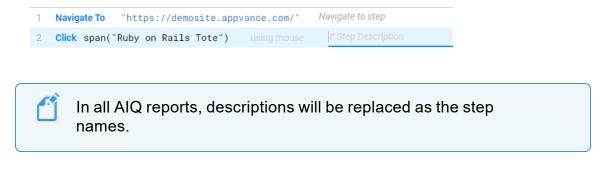
4	Navigate To "https://demosite.appvance.com/checkout/regist
5	<pre>Set Value emailbox("form-control title") = "test@ticket.com")</pre>
5 7 8 9 10	<pre>Set Value Summary Set form input value simulating text entry Declaration Set Value input("form") = "string" Description Simulates text entry into html form elements (text-box like elements and text-areas) The sequence of events performed are: Focus, Enter Text, Remove focus. The value can be static value like string, number. Or it can be previously stored variable or even result of JavaScript call.</pre>
	number. Or it can be previously stored

Extract to Included Files

You can extract the step to a separate test script.

Add Description

You can add descriptions for any and all steps in your test script. This lets you document the important details such as a specific search operation or a login details. Script descriptions are extremely useful for Appvance Support if they are called upon to help with script debugging.



Show / Hide Descriptions

When a line of the script is highlighted, you can click the Description icon to toggle the display of comments for that line.

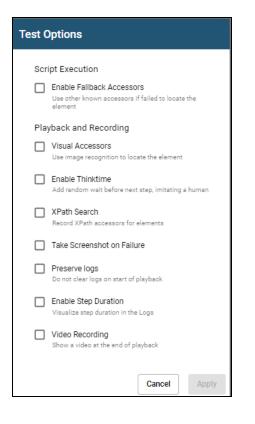
□ …

Removing Descriptions

When a line of the script that has a description is highlighted, there is a **Remove Description** option available fro the right-click menu. You can also click the three dots to the right of the Description icon and select **Remove Description** from the menu.

Mobile Designer Test Options Details

Use the Test Options screen to configure various options for your test script.



See "Mobile Designer Test Options Comparison" on page 52 for the differences in test options between Mobile Designer and Mobile Designer (Classic).

Script Execution Options

Enable Fallback Accessors

You can enable the Fallback Accessors option so that AIQ keeps test running if an accessor fails or has changed, by automatically choosing other available accessors.

- If Fallback Accessors are enabled, AIQ will try one time for each accessor. If an accessor fails then it will scroll down and again try again each accessor one time and scroll until it reaches the end of the page or reaches maximum number scrolls.
- The scrolling logic will scroll up to ten times, depending on what it locates. If it is not locating elements, it will stop before it reaches ten. If it is locating elements, it will continue until ten.
- If Fallback Accessors disabled, playback will function as it currently does. Tests may fail if an accessor fails or has changed.

Playback and Recording Options

Visual Accessors

Visual Accessors are image based accessors which can be used to enhance your test scripts in situations where traditional code-based accessors will fail.

AIQ will capture an image of the website and then crop the surrounding boundaries of the element that you are working on. During playback it takes the image and applies a feature based matching algorithm which creates a pattern from the image and uses that to locate the image on the webpage.

Using a Visual Accessors means that AIQ is not only looking at just the code elements in a page, the AI is also looking at the visual elements on the page.

See Visual Accessors for Mobile Testing for more detailed usage information.

Enable Thinktime

- Think time options can be enabled or disabled depending on the requirements. Enabling think times will add wait for statements in between every action performed from the designer script.

XPath Search

- There are several ways to identify an element on the webpage, XPath search is one among them. When you record a use case with this option enabled, under the Accessor list you will notice the XPath accessors of that particular element as well. Disabling this option will not add any Xpath references to that element being identified.

Take Screenshot on Failure

Determines if a screenshot is taken even if the script fails before we reach that step where a snapshot was to be captured..

Preserve Logs

Determines if the logs should be cleared every time a script is played. This option is diabled by default.

Enable Step Duration

Determines if step durations are noted in the logs.

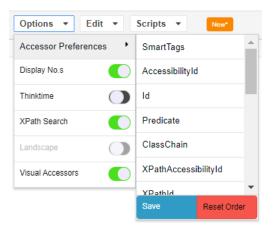
Video Recording

Determines if a video of the script is shown at the end of the script playback.

Mobile Designer Test Options Comparison

The implementation of Test Options is different between the Mobile Designer (Classic) and new Mobile Designer interfaces.

• Test Options available in Mobile Designer (Classic)



• Test Options available in the new Mobile Designer implementation

Test Options
Script Execution
 Enable Fallback Accessors Use other known accessors if failed to locate the element
Playback and Recording
Visual Accessors Use image recognition to locate the element
Enable Thinktime Add random wait before next step, imitating a human
XPath Search Record XPath accessors for elements
Take Screenshot on Failure
Do not clear logs on start of playback
Enable Step Duration Visualize step duration in the Logs
Video Recording Show a video at the end of playback
Cancel Apply

Image Injection

The Set Camera Image function allows you to set an image to be used when triggering the camera during a test. For example, you could use this to inject a QR code into your test script.

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e Manderinda Dister 13 Unde (* Role	Paramiteg .	Recent Play	II Pause	∎ Stap	O Preview	
Ann Description 1 Includence The comparison of					Constant Con	-
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Compatibility Summary

Service	iOS		Android		Requirements
	Device	Sim-	Device	Sim-	
		ulator		ulator	
On	Not	Not	Not	Sup-	Update emulator set-
Premises	sup-	sup-	sup-	ported	tings.
	ported	ported	ported		
Sauce	Sup-	Not	Sup-	Not	Add capability: sauceL-
Labs	ported	sup-	ported	sup-	abslmageln-
		ported		ported	jectionEnabled: true
Browser-	Sup-	Not	Sup-	Not	Add capability:
Stack	ported	sup-	ported	sup-	enableCam-
		ported		ported	eralmageInjection: true

Lambda-	Sup-	Not	Sup-	Not	Add capability:
Test	ported	sup-	ported	sup-	enableImageInjection:
		ported		ported	true

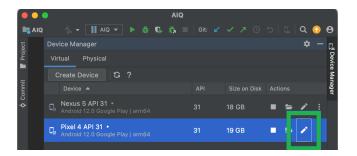
On-Premises

Available for Android emulators only when running AIQ locally.

When running AIQ on an EC2 we don't have access to JAVA_HOME environmental variable nor the local file system, hence we can't override the emulator settings.

Android Emulator Setup

- 1. From Android Studio open the Device Manager.
- 2. Click the **Edit** button for the emulator that you want to use.



3. In the Virtual Device Configuration window, click Show Advanced Settings.

• • •		Virtual Device C	onfiguration
🔥 Andr	oid Virtual Device (AVI	ור	
		~)	
Verify Configura			
	API 31		AVD Name
Pixel 4			The name of this AVD.
🎽 s			
	Portrait Landscape		
Emulated Performance	Graphics: Automatic		
Show Advanced S	ettings		
?			Cancel Previous Next Finish

4. In the **Camera** section select **VirtualScene** from the drop down.

	roid Virtual Device (AVD)	
Verify Configur	ation	
		Back Camera
Pixel 4		None - no camera installed for AVD VirtualScene - use a virtual camera in a simulated
🎽 s		environment Emulated - use a simulated camera Device - use host computer webcam or built-in camera
	Portrait Landscape	
Camera 🔽		
	∕irtualScene ▼	
Filde dvancet	rintualScene imulated Vebcam0	

5. Click Finish.

Sauce Labs

Available for Android and iOS physical devices only. There's support for native apps only.

The config file's capabilities need to include the following field:

```
"sauceLabsImageInjectionEnabled": "true"
```

Sauce Labs' App Config

- 1. Login into your Sauce Labs account.
- 2. Go to App Management.
- 3. Click the Settings button for the app you want to use.
- 4. Turn the **Image Injection** switch on.

= 5 SauceLabs				<i>p</i> .	Q	۵	(?) ·	8-	Invite	US V	/est 1 \sim
@ Get Started Guide	App Management / My Demo App										
App Management	My Demo App.ipa										
	My Demo App.ipa al.appvance.demospp.ios I 🎕 IOS										
O Automated ^ Test Results Builds	Real Device Settings Changing application settings will affect all uplo	aded versions of the application. These settings apply on	y to real device	rst							
Platform Configurator	Device Language English (United	I Kingdom) V Device Passcode Instrumentation		0							
Visual Testing New	Device orientation Default C	Drientation V Image Injection									
C Error Reporting New	Proxy Host Port	Update Biometrics Interception	n 🕲	0							
🗌 Mobile Beta Testing 🛛 🖄		Group Folder Redirect	0	0							
(n) API Testing	FILE NAME	FILE ID	VERSION ())	BUILD	D DE	SCRIPTION	ч I	IPLOADED ①			
Tunnel Proxies V Usage	My Demo App.ipa 2.4 MB	dae2bd59-d611-4ac9-bcb7-9a916a6012d4	11.0	1			L	un 21st, 2024	۲	Ŧ	٠
	My Demo App.zip 1.9 MB	cf270bdc-2826-49d0-ae99-3b56605fc6e4	11.0	1			J	un 20th, 2024	• •	Ŧ	٠

Supported APIs

Android System Camera

For Android devices, there are multiple ways to capture an image, as described in the <u>Android Camera API</u> developer documentation. AIQ supports the following:

- ACTION_IMAGE_CAPTURE Opens the system camera and notifies the calling app when the image is taken.
- <u>camera2 API</u>: Everything is configured and handled from within the app.

- <u>cameraX</u>: Leverages the capabilities of camera2, but uses a simpler, use case-based approach that is lifecycle-aware.
- <u>Camera API (deprecated)</u>: partially supported. As with camera2, everything is handled in the app itself. QR Code readers often use Camera#setPreviewCallback. We pass the injected image to this method, but the rest of this deprecated API is not supported. UI Elements will not likely display the injected image.

iOS System Camera

For iOS devices, the camera can be configured with different outputs. AIQ supports the following:

- AVCapturePhotoOutput: for capturing still images. The results are received via the AVCapturePhotoCaptureDelegateand the method captureOutput:didFinishProcessingPhoto:error: The other methods in this delegate are either deprecated or handle live photos, which we don't support.
- AVCaptureVideoDataOutput: for capturing video frames and processing them. The frames are received via AVCaptureVideoDataOutputSampleBufferDelegate and the method captureOutput:didOutputSampleBuffer:fromConnection:.
- AVCaptureMetadataOutputfor reading QR-Codes. The QR Codes are passed to the app via captureOutput:didOutputMetadataObjects:fromConnection:.
 We are detecting the AVMetadataMachineReadableCodeObject and QR Codes are part of that.

Sauce Labs documentation is available here.

BrowserStack

The config file's capabilities need to include the following field:

"browserstack.enableCameraImageInjection": "true"

Supported APIs

Camera image injection is supported for the following Camera APIs. Check with your app development team to get more details about the Camera APIs your app uses.

OS	OS ver- sion	Supported APIs
iOS	iOS 13 and above	didFinishPickingMediaWithInfo API of UIImagePick- erController iOS SDK class for capturing an image. For more details, please check <u>Apple</u> <u>documentation</u> . AVCapturePhoto iOS SDK class for receiving cap- tured photos from AVCapturePhotoOutput API. For more details, please check <u>Apple Documentation</u> . jpegStillImageNSDataRepresentation of AVCap- tureStillImageOutput iOS SDK class. For more
Android	Android 6 and above	details, please check <u>Apple documentation</u> . android.hardware.camera.PreviewCallback API for API level 1-20 android.hardware.camera2.CameraManager, android.hardware.camera2.CameraDevice, android- .hardware.camera2.CameraCharacteristics, android- .hardware.camera2.CameraCharacteristics, android- .hardware.camera2.CameraCaptureSession, android.hardware.camera2.CaptureRequest, android.media.ImageReader APIs for API level >=21

Camera Intent API



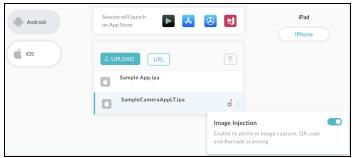
LambdaTest

The config file's capabilities need to include the following field:

```
"enableImageInjection": "true"
```

LambdaTest App Setup

- 1. Login to your LambdaTest account.
- 2. Go to App Testing under Real Devices.
- 3. Hover the Settings icon and toggle the Image Injection switch on.



Supported APIs

Below given is the list of Camera APIs which are supported by LambdaTest Image Injection tool. Please ensure that your app uses these APIs only to enable Image Injection.

OS	Devices	Supported APIs
iOS	iOS 13	didFinishPickingMediaWithInfo API of UIImagePick-
	and	erController iOS SDK class for capturing an image.
	higher	For details, please check <u>Apple documentation</u> .
		AVCapturePhoto iOS SDK class for receiving cap-

		tured photos from AVCapturePhotoOutput API. For details, please check <u>Apple Documentation</u> .
Android	Android 9 and higher	CameraX API is used. For details, please check <u>CameraX Documentation</u>
		Camera API is used. For details, please check <u>this</u> <u>link</u> .
		Camera2 API is used. For details, please check <u>this</u> <u>link</u> .
		ACTION_IMAGE_CAPTURE is standard Intent action that can be sent to have the camera applic- ation capture an image and return it. For details please check <u>this link</u> .

LambdaTest full documentation here.

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Geo Location

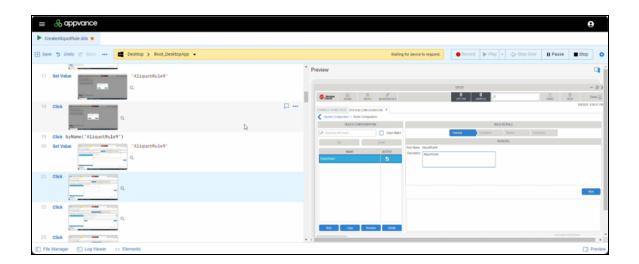
You can use Geo Location for iOS and Android phones with Browser Stack, SauceLabs, and On Premise testing. The Geo Location format is latitude and longitude in decimal format.

Save Play Undo C Redo	Mobile > Pixel 4 API 31 -		Ready to s
• • • •	O		
Config {mds}/GoogleMap	s-Android-Config 💼 Select File 💿 Preview		
Data 💼 Select File 💥	Show Options	Ν	
		63	
+ Add Resource			
1 Click byId("com.go	ogle.android.apps.maps:id/explore_tab_home_bot…		
2 Set GeoLocation	{"latitude":89.887,"longitude":-57.977}		
3 Set GeoLocation	{"latitude":55.76,"longitude":"43.67"}		
4 Set GeoLocation	{"latitude":46.54."longitude":-150}		
			ļ
🗍 File Manager 🛛 Log V	iewer <> Elements		🔀 File L
	(JSUNUDJect.java:681) 16 more		
	Step 4: setGeolocation {"latitude":46.54,"longitude":-150} [Step Completed	1	
2024-05-01 15:32:45.072	Set Client Type Android		
2024-05-01 15:32:53.539	start Starting Android Client.		
2024-05-01 15:32:56.686	Step 1: click_com.google.android.apps.maps:id/explore_tab_home_bottom	n_sheet [Step Completed]	
2024-05-01 15:32:57.602	Step 2: setGeolocation {"latitude":89.887,"longitude":-57.977} [Step Compl	leted]	
2024-05-01 15:32:58.186	Step 3: setGeolocation {"latitude":55.76,"longitude":"43.67"} [Step Complet	ted]	
2024-05-01 15:32:59.001	Step 4: setGeolocation {"latitude":46.54,"longitude":-150} [Step Completed	1	
All Output - 🕅 Download	log	Q Filter	Cl
			0.

Desktop Application Testing

Desktop Designer is a new testing interface that takes advantage of AIQ's Mobile Designer technology so that you can test desktop applications across diverse environments, including Citrix. You can use Visual Accessors to create new test scripts using simple as point-and-click. Fallback accessors and self-healing script capabilities are built-in to help make creating robust and resilient test scripts effortless.

Here is a brief introductory video on the features and benefit of Desktop Designer.



Benefits and Highlights

8

- You can your test scripts as a Scenarios and view the results on the Dashboard.
- Record a video of the test script execution.
- Easy access to all Windows keys and actions.

- Point and shoot to record your script or add the logic you need with the use of Javascript commands
- Detachable preview mode allows you to work on two monitors. You can view your test script on one monitor and the application on another monitor.

Desktop Designer currently supports Windows applications and mainframe systems. Support for Desktop Testing on other operating systems will be added in future releases of AIQ.

Desktop Designer User Interface Overview

To access the new Desktop Designer, from AIQ navigate to **Home > Desktop Testing > Desktop Designer**.

ome		<u>s</u>		1.61	æ
Web Testing >	Record a Designer Script	Build a Scenario	Dirus Cassais		Al Driven
Aobile Testing		Build a Scenario	Play a Scenario	Analyze	Ai Driven
Desktop Testing 🗸 🗸	Tutorials / References				
Desktop Designer	•	*	•	*	*
JS Edit & Play	About Web Application Testing	About Mobile Application Testing	About the Scenario Editor	About Reports	How to create an AppPenetration Test
SmartTag Workbench					1031
Validations Workbench	Statistics				
Validations Workbench Desktop Config	 Statistics Last Test Summary 	<i>B</i> R	icent tests performed	System Status	
Desktop Config		<i>∎</i> R	cent tests performed	System Status	C:\AIQ\aiq_distribution\
Desktop Config Autonomous Testing	Last Test Summary	e R	cent tests performed		_
Desktop Config Autonomous Testing API Test Designer	Last Test Summary Iteration Name Success Colored	₽ R	cent tests performed	Location	ion Read Write Execute
Desktop Config Autonomous Testing > API Test Designer Services Workbench >	Last Test Summary Iteration Name Success	₽ R	cent tests performed	Location TestNode Permiss	ion Read Write Execute
Desktop Config Autonomous Testing API Test Designer Services Workbench Scenario Editor	Last Test Summary Iteration Name Success Failures	₽ R	cent tests performed	Location TestNode Permiss Web Designer Se	ver Running
Desktop Config Autonomous Testing API Test Designer Services Workbench Scenario Editor	Last Test Summary Iteration Name Success Failures Total Users	# R	cent tests performed	Location TestNode Permiss Web Designer Se OWASP Server	ver Running
Desktop Config Autonomous Testing	Last Test Summary Iteration Name Success Failures Total Users Avg hits/sec	# R	cent tests performed	Location TestNode Permiss Web Designer Se OWASP Server DB Status	ion Read Write Execute ver Running Running

This is an example of the new Desktop Designer interface.

= 🔏 appvance		θ
Home		DesktopTest01.dds
Web Testing >	Q Filter	🕒 Save 🖱 Undo 🥂 Redo 🚥 🜉 Desktop > Citrix_DesktopApp 👻 Raady to start 🛛 <table-cell> Record 🕨 Play 🔹 🏠 Step Over 🛛 II Pause 🔳 Stop</table-cell>
Mobile Testing Mobile Testing Desktop Testing Autonomous Testing Autonomous Testing	Repositories	Config (mds)/Root234 Select File. Preview Data (mds)/DesktopTest01/NotePadDPL Select File. Show Options Preview + Add Resource
API Test Designer Services Workbench		1 Click byClassName ("TrayButton") 2 Waht 5000 3 SetValwe byAccessibilityId("SearchTextBox") Sname
Scenario Editor Run Scenario	Desktop restult.ads Desktop Test01.dds Desktop Test02.dds MobileTest01	 4 Click byHame("Notepad, Desktop app") 5 SetValue byAccessibilityId('15') \$registry 6 Wait 10000
Reports Test Data		
Global Options		
Tutorials / References >		
	+ Create New	File Manager C Log Viewer C Elements

Overview of Desktop Designer Controls and Icons

The following table provides an introduction of the various controls and icons in the new Desktop Designer interface. The various elements are controls are detailed in the following pages of this document.

Icon / Control	Function
Repositories Image: Constraint of the second seco	Repository pane. Displays the contents of your repository. You can sort and filter using various controls.
C Filter	Repository / Quick Access toggle. Switches the File Man- ager pane between the repos- itory and quick access views. Filter. Allows you to filter the items displayed in the File Man- ager.
a	Sort by Name / Sort by Type. Sorts the contents of the File Manager pane by name or by type.
6	Refresh Repository. Refreshes the display of the File Manager pane.
Save う Undo C Redo ····	Editing controls menu. • Save • Undo

Icon / Control	Function
	• Redo
Save As	Additional save and export options menu.
Export to JavaScript	 Save as Export to JavaScript. See "Desktop Designer Export to Javascript" on page 78 for an example.
Tile Manager	File Manager toggle. Shows/hides the File Manager pane.
E Log Viewer	Log Viewer toggle. Shows/hides the logs.
■ Desktop > Citrix_DesktopApp	Browser selection control. See Selecting the Browser for more information.
● Record ▶ Play - A Step Over II Pause Stop	Test controls: • Record • Play • Skip Step • Pause • Stop
Config Select File Preview	Opens the Test Options menu. See <u>Desktop Designer Test</u> <u>Options</u> for more information. Select Configuration controls.
	You must have a valid desktop configuration file selected

Icon / Control	Function
	before you can begin a desktop test. See "Desktop Designer Configuration" on the facing page for more information.
Data 🖿 Select File 🛞 Show Options 💿 Preview 🗙	Select data controls. You can attach test data to your desktop test.

Desktop Designer Configuration

All desktop tests must have a desktop configuration file associated with them. This file contains all the necessary settings in order for the test to run. Configuration files are assigned to desktop tests in the Desktop Designer. A desktop configuration file can be associated with multiple desktop test files.

Create or edit a desktop testing configuration file

1. From AIQ navigate to **Desktop Testing > Desktop Config**.

appvance			9
Home	🕇 🕂 New 🗅 Open 🕑 Save 🛂 Save As 📔 🦒 M	lew Config 🔸	
Web Testing >	Configurations	Capabilities	
Mobile Testing	Configuration name + Create New	Service Platform Source Device On-Premises v Windows v Package v Desktop v	Name Value
Desktop Testing	- order new	Package	Required
Desktop Designer		C:\Program Files\Microsoft Office\root\Office161\Excel.exe	deviceName Windows PC
JS Edit & Play		Starting point to test your application (required)	noReset true ~
SmartTag Workbench		Activity	Extra
Validations Workbench		com.example.MainActivity	+ Add Capability
		Starting point to test your application (required)	
Desktop Config		Applum Server Url	
😥 Autonomous Testing 🗲		http://localhost:4723/wd/hub	
📤 API Test Designer		Video Port	
Services Workbench		4725	
-		Use Proxy	
Scenario Editor		Allowed Domains	
Run Scenario		Allowed bornains https://www.mynewapp.com,	
Reports			
Test Data >		No URLs added	
I Traffic			
	•		

- 2. Click **Create New** and name the file.
- 3. The parameters for **Service**, **Platform**, **Source** and **Device** are set by default.

Platform and Service								
Service	Platform		Source		Device			
On-Premises 🔻	Windows	-		•	Desktop	•		

- 4. Specify the required parameters.
 - Package specify Root
 - Activity specify TEST
 - Appium Server URL specify the IP address of the desktop

machine you will be testing

=	🔏 appvance	e				9		
Ø	Home		+ New 🗅 Open 🕑 Save 🛃 Save As 📔					
	Web Testing	>	Configurations		Platform and Service Service Platform Source Device	Capabilities		
	Mobile Testing	>	DesktopConfig02	×	On-Premises v Windows v Package v Desktop v	Name Value		
	Desktop Testing	>	DesktopConfig01 + Create New	×	Package	Required		
(0)	Autonomous Testing	>			Root	deviceName Windows PC		
÷	API Test Designer				Starting point to test your application (required)	noReset true 👻		
÷	Services Workbench				Activity	Extra		
*	Scenario Editor				TEST Starting point to test your application (required)	+ Add Capability		
•	Run Scenario				Applum Server Url			
d.	Reports				http://localhost:4723/wd/hub			
	Test Data	>			Video Port			
at	Traffic				4725			
	Global Options	>			Use Proxy			
	Tutorials / References	`			Allowed Domains			
					https://www.mynewapp.com,			
					No URLs added			

5. Click **Save** to save your desktop configuration file to your repsoitory.

appvance				0
🙆 Home	+ New 🗂 Open 🕑 Save 📓 Save As 📔 New Co	nfig 🗕		
Web Testing >		atform and Service	Capabilities	
Mobile Testing	Save File As	rvice Platform Source Device	Q Filter	0
(𝔅) Autonomous Testing →	 Quick Access 	Name	Modified	Size
API Test Designer	Repositories	i 🖿		
Services Workbench	 HOME CICD 	emptyinner	11/08/2023 16:43	160.0 B
Scenario Editor	 HelloAppvance 	ExcelDemoScript	02/02/2024 11:36	672.0 B
Run Scenario	emptyInner ExcelDemoScript	Root243TestTemplate	02/06/2024 16:46	1.9 KB
I Reports	ExcelDemoscript innerFolder	RootScript	02/06/2024 09:46	160.0 B
	> Template	Excel.json	02/06/2024 15:08	1.4 KB
Test Data	RootScript BootDemoAppvance	C Root.json	02/07/2024 14:27	917.0 B
II Traffic	> mobile (master)			
Global Options >	SERVER			
Tutorials / References				
	Save As test			
	Pull		Cance	4 Save

Example Desktop Configuration File



Ľ

This is the preview of the configuration file that you can view in the Desktop Designer user interface.

Ľ

See <u>Mobile Configuration</u> for more information about Mobile Configuration files.

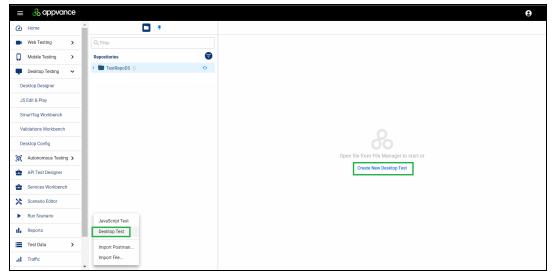
80

Creating a Desktop Test

Here are the basic steps for creating a new desktop test file in the Desktop Designer.

Prerequisite: A desktop configuration file must be created before you create the test file. See "Desktop Designer Con-figuration" on page 69 for more information.

- 1. In AIQ navigate to **Desktop Testing > Desktop Designer**.
- 2. Click **Create New** in the and select **Desktop Test**. You can also click **Create New Desktop Test** in the main portion of the screen.



- 3. Name the test file.
- 4. On the **Config** line, click **Select File** to add a desktop testing configuration to your test. This needs to be a preexisting file. See "Desktop Designer Configuration" on page 69 for more information.

				9
Desktop001.dds				
🕗 Save 🏷 Undo C Redo 🚥	Desktop > No available configurations	Ready to start	Record Play - Step Over	II Pause 🔳 Stop 🔅
Config 🖆 Select File 💿 Preview Data 👕 Select File 💥 Show Opt				
+ Add Resource				
1 Action // Step Description				

5. Browse to the location of your configuration file in your repository and click **Open**. Configuration files are .json files.

Open File				Q Filter	0
 Quick Access 		Name		Modified	Size
Repositories		💼			
 dsaiqtestrepo (main) 	Ð	DesktopTest01		04/03/2024 21:44	0 B
> Desktop01		DesktopTest02		04/03/2024 21:53	0 B
> MobileTest01		DektopConfig01.json		04/02/2024 19:08	1003.0 B
		Root234.json		04/02/2024 21:21	481.0 B
			\square		
			~		
Pull				Cancel	Open

6. You can click **Preview** to verify the details of the configuration file.



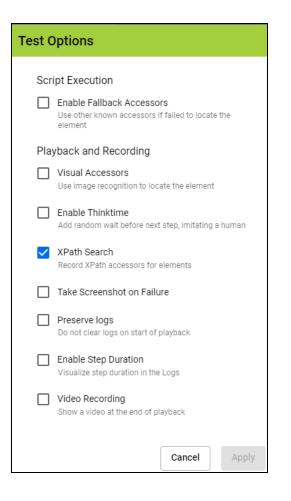
7. You can now begin recording your test. Click **Record** to begin.



See "Desktop Designer Example - Kindle Desktop App" on page 80 for an example desktop test.

Desktop Designer Test Options

The following options are available for desktop testing in the Desktop Designer.



Script Execution Options

The following options pertain to execution of scripts.

Enable Fallback Accessors

You can enable the Fallback Accessors option so that AIQ keeps test running if an accessor fails or has changed, by automatically choosing other available accessors.

- If Fallback Accessors are enabled, AIQ will try one time for each accessor. If an accessor fails then it will scroll down and again try again each accessor one time and scroll until it reaches the end of the page or reaches maximum number scrolls.
- The scrolling logic will scroll up to ten times, depending on what it locates. If it is not locating elements, it will stop before it reaches ten. If it is locating elements, it will continue until ten.
- If Fallback Accessors are disabled, playback will function as it currently does. Tests may fail if an accessor fails or has changed.

Playback and Recording Options

The following options pertain to playback and recording of scripts.

Visual Accessors

Visual Accessors are image based accessors which can be used to enhance your test scripts in situations where traditional code-based accessors will fail. AIQ will capture an image of the website and then crop the surrounding boundaries of the element that you are working on. During playback it takes the image and applies a feature based matching algorithm which creates a pattern from the image and uses that to locate the image on the webpage.

Using a Visual Accessors means that AIQ is not only looking at just the code elements in a page, the AI is also looking at the visual elements on the page.

See <u>Visual Accessors for Web Testing</u> for more detailed usage information.

Enable Thinktime

Think time options can be enabled or disabled depending on the requirements. Enabling think times will add wait for statements in between every action performed from the designer script.

XPath Search

There are several ways to identify an element on the webpage, XPath search is one among them. When you record a use case with this option enabled, under the Accessor list you will notice the XPath accessors of that particular element as well. Disabling this option will not add any Xpath references to that element being identified.

Take Screenshot on Failure

Determines if a screenshot is taken even if the script fails before we reach that step where a snapshot was to be captured..

Enable Step Time Duration

Visualize step durations in the log files.

Preserve Logs

Determines if the logs should be cleared every time a script is played. This option is disabled by default.

Video Recording

If enabled, it will show a video at the end of the playback.

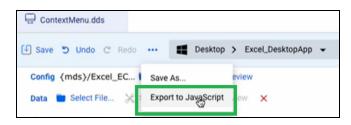
Desktop Designer Export to Javascript

You can export a desktop designer test file to javascript. This will make your test script available for web testing. The javascript file is created with the same name as your desktop designer test file.

1. For example, you have a desktop testing file named **ContextMenu.dds**.

🖶 ContextMenu dds						
[Save "> Undo ℃ Redo ···· III Desktop > Excel_DesktopApp ↓	Ready to start	Record	► Play	Step Over	Pause	🛛 Stop
Config {mds}/Excel_EC Esect File Preview						
Data 💼 Select File 💥 Show Options 💿 Preview 🗙						
+ Add Resource						
Click byAccessibilityId("4103")						
2 Send Keys "Notepad"						
3 Click byName("Notepad, Desktop app")						
4 Send Keys "Testing Context Menu"						
🚺 File Manager 🗈 Log Viewer 🔅 Elements					Preview	File Links
2024-04-05 11:31:23.138 start Starting Windows Client. 2024-04-05 11:31:23.066 Step 1: click 4103 [Step Completed] 2024-04-05 11:31:24.565 Step 2: sendKeys Notepad' [Step Completed] 2024-04-05 11:31:25.586 Step 2: sendKeys Notepad' [Step Completed] 2024-04-05 11:31:26.661 Step 4: sendKeys 'Testing Context Menu' [Step Completed]						

2. Click the additional options menu (...) and select **Export to Javascript**.



3. The file **ContextMenu.js** is created.

GontextMenu.dds	
9 Save "⊃ Undo C' Redo ··· ♥ Web ▼ > ⊕ Chrome ▼	Ready to start 🕨 Play 🔳 Stop
<pre>1 setVariablesIfMeeded''.''#asOB'.'.0); setCarlyarian('dw3)/ExceL_EC2.jon', 'ExceL_DesktopApp'); 3 starf(); clisk(byAccessibilityd("aBB")); 5 sendKeys("Hotenad'); clisk(byAccessibilityd("aBB")); 5 sendKeys("Testing Context Henw"); 8 </pre>	

Desktop Designer Example - Kindle Desktop App

Here is a basic example of creating a desktop test that interacts with the Kindle desktop application.

This example will show:

- Creating a new Desktop Designer test script
- Starting the recording
- Launching the desktop application being tested
- Interacting with the desktop application
- Creating Visual Accessors
- Creating an assert
- Exiting the application
- Editing the test script
- Playing back the recording of the test script

Example

1. In AIQ navigate to **Desktop Testing > Desktop Designer**.

≡ 🔏 appvance										
ang Home			ي م			htt		$\hat{\boldsymbol{s}}$		
Web Testing	>	<u> </u>	<i>•</i>							
Mobile Testing	>	Record a Designer Script	Build a Scenario		Play a Scenario	Analyze		AI Driven		
Desktop Testing	~	Tutorials / References								
	v									
Desktop Designer		\$	÷.					÷		
JS Edit & Play		About Web Application Testing	About Mobile Application Test	ing	About the Scenario Editor	About Reports		About Autonomous Testing		
SmartTag Workbench										
Validations Workbench		Statistics								
Desktop Config		A Last Test Summary		B Recent to	Recent tests performed			A System Status		
& Autonomous Testing	>	Recent Tests performed shows nothing no	2W				Location	C:\AIQ_Project\AIQ 5.0.0\AIQ-5.0.0-370 643\aiq_distribution\		
API Test Designer							TestNode Permission	Read I Write I Execute		
Services Workbench							Web Designer Server	Running		
✗ Scenario Editor							OWASP Server	Running		
							DB Status	Able to connect I local		
 Run Scenario 							Appium Server	Not Running		
Let. Reports							Load Runner	Not Running		
El Test Data	>									

2. Click Create New Desktop Test.



3. Name and save your new test script. In this example the file is named KindleVideo.dds.

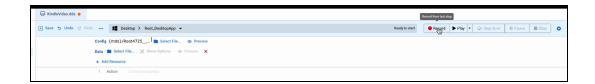
н		
Ģ	KindleVideo.dds	_
-		

. dds is the file extension for all Desktop Designer test scripts.

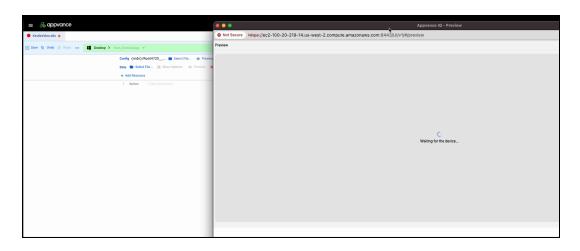
- 4. Select a Desktop Configuration file. If you have not created a Desktop Configuration file, see Desktop Designer Configuration Files for more information.
- 5. Click **Preview** to see your Desktop Configuration file.



6. Click **Record** to begin recording your test script.



7. Wait for the device to load.



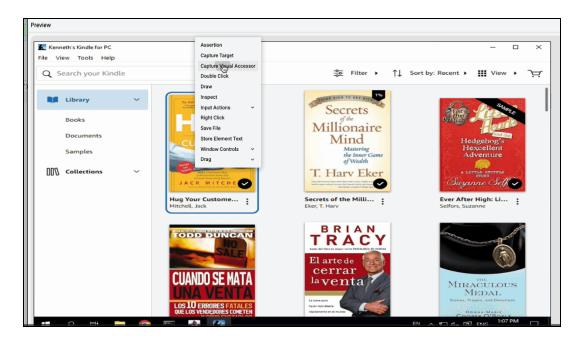
8. Right click the desktop icon for the Kindle app and select **Double Click**.

eview			
Recycle Bin I	Revin - Chrome	startup.bat - LaunchWi RDPbackgr	EC2AMAZ-ROU6BDI AC II: AMD64 Start Web Designer
Q			
	Assertion King		
	Capture Target		
	Capture Visual Accessor		
	Double Click		
License	Draw		
	Inspect		
	Input Actions ~		
	Right Click		
Git Bash	Save File		
	Store Element Text		
	Window Controls ~		
00.20.219.1	Drag ~		
			and the second s
Start Test Designer			
Designer			
iOSZooAp real	Im.prop sample1.txt		init.txt

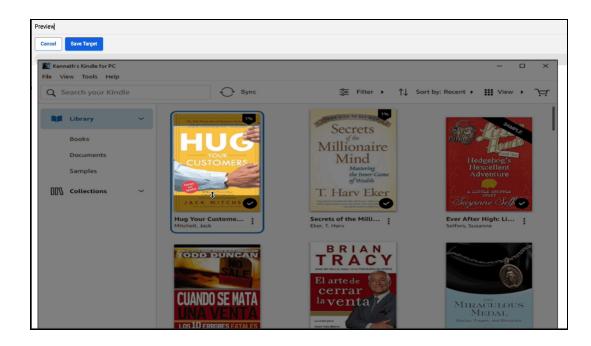
9. The Kindle desktop app starts.



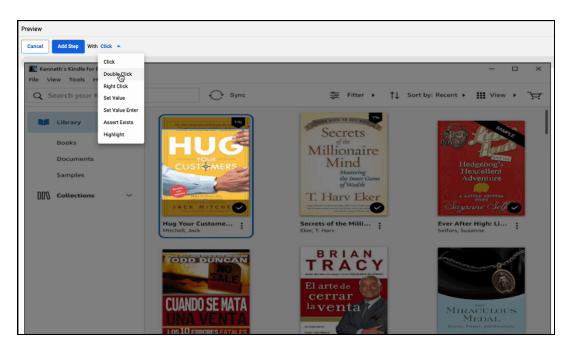
10. Hover over one of the book covers. Right click and select **Capture Visual Accessor**.



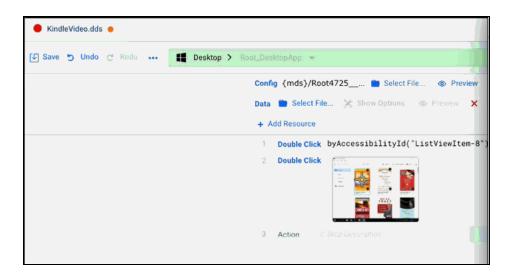
- 11. Select the boundaries of the Visual Accessor.
- 12. Click Save Target.



- 13. Click on the Visual Accessor.
- 14. Add Step with Double Click.

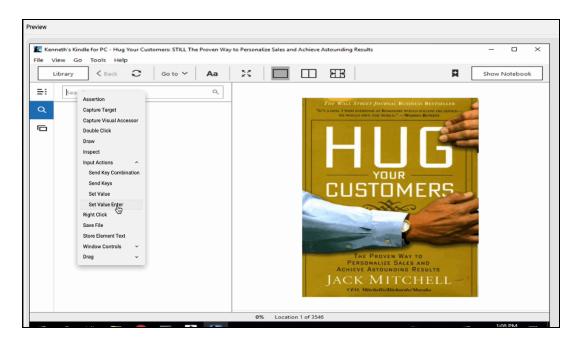


15. In the Desktop Designer window you can see that the step has been added to your test script.



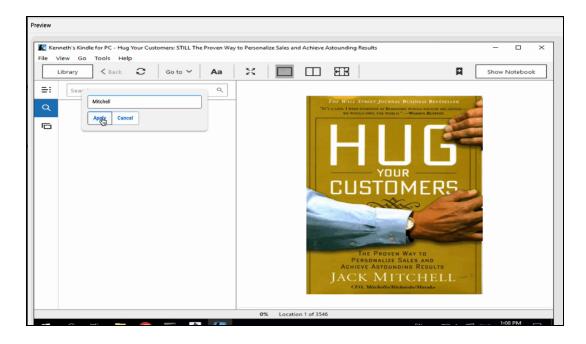
16. Click in the Search bar and then right click.

17. Select Input Actions > Set Enter Value.

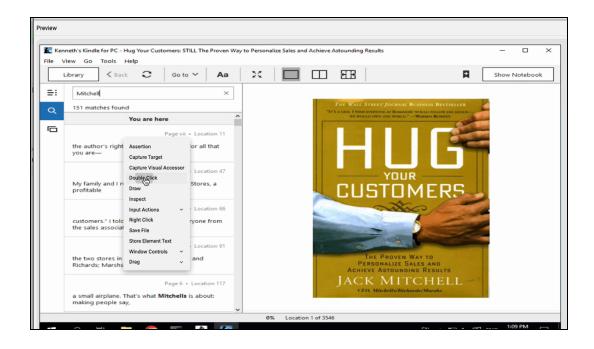


18. Enter a search string. In this example the search string will be "Mitchell".

19. Click Apply.



- 20. The search results load.
- 21. Select one of the search results and right click. Select the **Double Click** action.



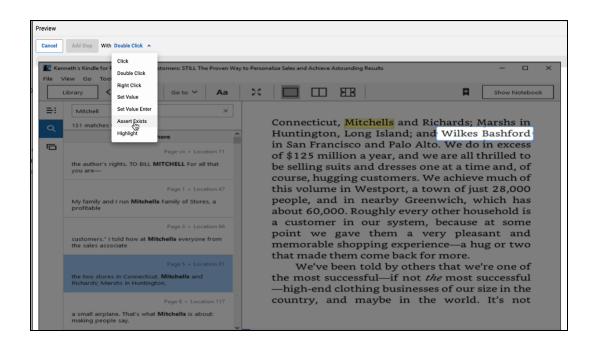
22. The page associated with the search result loads on the Kindle screen.

	neth's Kindle for PC - Hug Your Customers: STILL The Proven Way t /iew Go Tools Help	o Perso	ionalize Sales and Achieve Astounding Results —			
	Library K Back C Go to K Aa	×	Show Notebook			
	Mitchell ×					
a	151 matches found		Connecticut, Mitchells and Richards; Marshs in			
~	You were here		Huntington, Long Island; and Wilkes Bashford			
	Page vii + Location 11		in San Francisco and Palo Alto. We do in excess			
	the author's rights. TO BILL MITCHELL For all that		of \$125 million a year, and we are all thrilled to			
	you are—		be selling suits and dresses one at a time and, of			
	Page 1 • Location 47	Page 1 · Location 47 course, hugging customers. We achieve much of this volume in Westport, a town of just 28,000				
	My family and I run Mitsells Family of Stores, a		people, and in nearby Greenwich, which has			
	profitable		about 60,000. Roughly every other household is			
			a customer in our system, because at some			
	Page 3 • Location 66		point we gave them a very pleasant and			
	customers." I told how at Mitchells everyone from the sales associate		memorable shopping experience—a hug or two			
			that made them come back for more.			
	Page 5 + Location 91		We've been told by others that we're one of			
	the two stores in Connecticut, Mitchells and Richards; Marshs in Huntington,		the most successful—if not <i>the</i> most successful			
			—high-end clothing businesses of our size in the			
	Page 6 • Location 117		country, and maybe in the world. It's not			
	a small airplane. That's what Mitchells is about:					

23. Hover over the page and right click. Select **Capture Visual Accessor**.

review				Capture Visual Accession					
	nneth's Kindle for PC - Hug Your Customers: STILL The Proven Way t View Go Tools Help	to Person	nalize Sales and Achieve Astounding	Draw Inspect	×				
	Library K Back C Go to V Aa	×		Input Actions ~ Right Click	Show Notebook				
=:	Mitchell ×			Save File					
Q	151 matches found		Connecticut, Mit Huntington, Lon	Window Controle	ichards; Marshs in d Wilkes Bashford				
Ē			in San Francisco	Drag ~	o. We do in excess				
	Page vii + Location 11		of \$125 million a	a year, and w	ve are all thrilled to				
	the author's rights. TO BILL MITCHELL For all that you are—		0	ne at a time and, of Ve achieve much of					
	Page 1 + Location 47			lume in Westport, a town of just					
	My family and I run Mitchells Family of Stores, a profitable				nwich, which has other household is				
	Page 3 + Location 66	a customer in ou		our system,	because at some				
	customers." I told how at Mitchells everyone from the sales associate		memorable shop	ping experie	ery pleasant and ence—a hug or two				
	Page 5 + Location 91		that made them o We've been t		or more. rs that we're one of				
	the two stores in Connecticut, Mitchells and Richards; Marshs in Huntington,	the most successful—if not <i>the</i> most successfu —high-end clothing businesses of our size in th							
	Page 6 + Location 117			•	e world. It's not				
	a small airplane. That's what Mitchells is about: making people say,								
	×	3% Pag	ge 5 of 318 • Location 91 of 3546						
	o H: 👝 👝 🔜 💌			EN					

- 24. Adjust the Visual Accessor target. In this example it is the text "Wilkes Bashford" that is selected.
- 25. Click **Save Target**.
- 26. Add Step with Assert Exists.



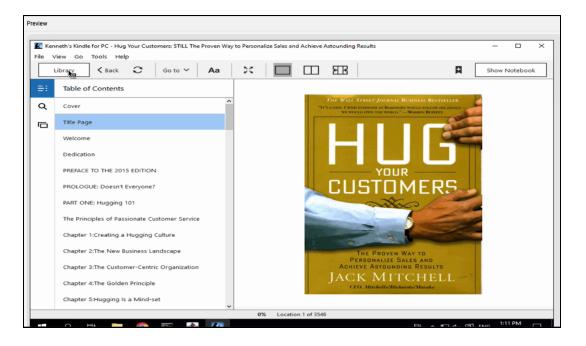
27. The test script updates in the Desktop Designer window.

Desktop > Root_De	sktopApp 👻
Con	fig {mds}/Root4725 💼 Select File 🐵 Preview
Data	Select File 💥 Show Options 💿 Preview 🗙
+ /	Add Resource
1	Double Click byAccessibilityId("ListViewItem-8")
2	Double Click
3	Click byAccessibilityId("ReaderMainWindow.cent
4	Set Value Enter byAccessibilityId("ListViewItem-8
5	Double Click byName("the two stores in Connection
6	Assert Exists
7	Action // Step Description

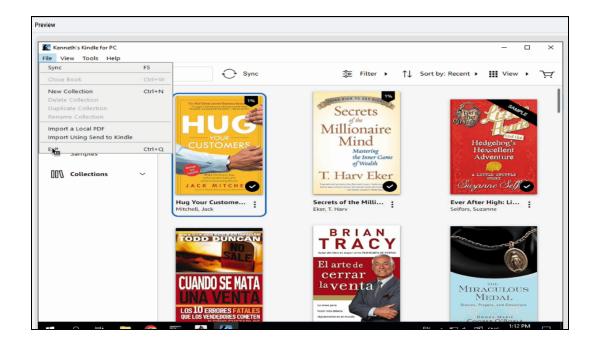
28. You can see more information in the Log Viewer tab.

LDestrisphop ★	Recording .	Record	Play 🔹 🍲 Step Over	II Pause	Stop	•
Config (mds)/Root4725, 💼 SelectFie 🐵 Preview						
Data 💼 Select File 💥 Show Options 🐵 Preview 🗙						
+ Add Resource						
Double Click byAccessibilityId("ListViewItem-8")						
2 Double Citat						
3 Click byAccessibilityId("ReaderMainWindow.centralWidget.contentW_						
4 Set Value Enter byAccessibilityId("ListViewIten-8") "Mitchell"						
5 Double Click byName("the two stores in Connecticut, Mitchells and Richa						
Asset Data						
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Desktopkyg scale fans © Complexed © Complexed U carriented U carriented U carriented Descent ansetting ansetting beg Complexed U carriented Descent ansetting ansetting beg Complexed Descent ansetting ansetting begins and beg Descent and Beg Descent ansetting ansetting begins and begins Descent ansetting begins and begins Descent ansetting begins Descent ansetting Descent ansetting begins Descent ansetting Descent ansetting						
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- 29. Click in the TOC and select **Title Page**.
- 30. The title page loads.



31. From the File menu select **Exit**.



32. The Kindle desktop app closes.



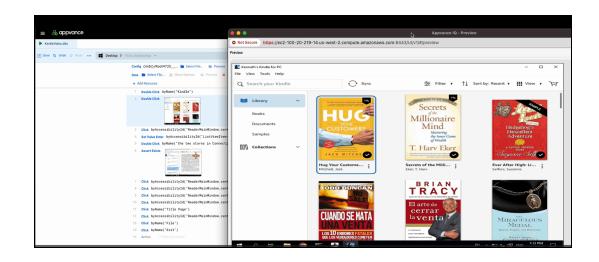
33. Click **Stop** to stop the recording.

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KindleVideo.dds					6	kep
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	12 Click byNace("File")					
	14 Click byName("Exit")					
	15 Acton // Stop Description					

34. If needed you can edit your test script. For example, reordering an accessor.

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12 Click byAccessibilityId("ReaderMainWindow.centralWidget.ToolbarR		
10 Click byName("File")		
14 Click byName("Exit")		
15 Action // Step Description		

- 35. Click **Play** to play your test script.
- 36. The **Preview** window displays the playback while the corresponding steps are highlighted in the Desktop Designer window.



API Testing

API Designer has been revamped with powerful validations, DPL support, and more. This allows you create complex test scenarios in seconds, streamlining your testing workflow and boosting productivity.

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Enhancements include:

- Enhanced OCR Text Recognition: An advanced feature to get text from an image. This is not available in in Postman.
- Support for Data Files: Added data file support (aka DPL) is available in API Designer like it is in the rest of the AIQ Designer suite.
- Global Header Section: This helps when the headers are repeated, but only need to be specified once.
- Multiple Edit Features added: You can now copy and paste API requests or import API Designer scripts.

- Locker Functionality: Allows you to use values in subsequent test cases or iterations.
- Basic Certificate Support: Now you can use Certificates for authorization purposes.

New API Testing Building Blocks

As part of the enhancements there are five new API testing building blocks.

Building Blocks Click a block to add it to flow
Import SOAP
Drag a block to add it to flow
SOAP Request
Validation
For Each
Condition
Data File
SQL
Proxy
OCR
Global Params
Include
Locker
JavaScript

The following building blocks have been added in the AIQ 5.2.0 release.

OCR Block

A new API building block is available in AIQ 5.2.0; an Optical Character Recognition (OCR) block.

00	R ocr1 =	response.body		~
			Returns String	
	lorem			
	ipsum dolor sit amet			
	consectetur			
5	adipiscing			
6	elit			
7	Aliquam			
8	volutpat			
9	auctor			

- Default name: ocr1
- Has one input, accepts body from previous responses
- When it is empty is shows the hint "Image"
- Returns string of characters, recognized text separated by a newline character

Global Parameters

This is used as a Global Header. In each block you can add one or more headers that will be added to each subsequent request blocks.

ii v GLOBAL PARAMS headers1	• : ×	SUAP Request
Parameters Header Authentication		Validation
+ Add Parameter		For Each

GLOBAL PARAMS headers1		
Parameters Header Authentication		
Authentication	No Auth	
	No Auth	
	Basic Auth	
	Bearer Token	
	OAuth 2.0 Client Credentials	

Include

You can include files with your API test.

|--|

Locker

You now have the option to store the values of the results in a locker. This can be extremely useful if you are creating scripts in one of the AIQ Designers or Services Workbench, to allow you to store the data in the locker and reuse it in any script.

:	✓ LOCKER → WHITEBOARD		0 : ×	
	key	value	-	
	+ Add Parameter			

- Whiteboard
- Parameter
 - Key
 - Value

JavaScript

Allow you to include JavaScript in your API test.

	0
--	---

Postman Conversion

AIQ introduces the ability to read Postman JSON files and convert them into Service Workbench API (.swapi) files. This allows you to integrate and utilize existing Postman tests within the Service Workbench environment for your automated testing.

Highlights

- New interface: New Interface to visualize imported API Scripts
- Import Feature to convert from Postman Scripts into SWAPI scripts
- Implemented the most common Postman commands. Other commands could be added quickly fast, in the rare case they are needed.
- Playback of SWAPI files to execute them. get them executed.
- Support for Scenarios, which means that you can add the SWAPI files into Scenarios and save results in the Dashboard

Converting Postman Files

Opening a Postman file from Services Workbench initiates the conversion process. The conversion process handles all key elements, including:

- HTTP methods
- Headers
- Body parameters
- URL parameters
- Authentication details
- Test scripts

One the Postman file is converted, you can edit the generated .swapi files within Services Workbench. From there you can execute the generated .swapi files individually or as part of larger test scenarios.

Functional Changes

These are the various small changes to functionality that were made in the 5.2.0 release of AIQ.

CICD Git Dashboard Housekeeping

Implemented a parameter to determine the maximum number of days that builds are retained. The parameter is maxDays and is shown in the below code snippet.

Removed Support for SoapUI

Support for SoapUI was removed in the 5.2.0 release of AIQ.

AISG - Creating Custom Actions

When you click on an unknown input on the actionable elements list from a state page, a custom action with the selected element will be created.

User Management - Teams

An enhancement has been made to user management so that you can now assign users to teams.

His function is only available to the Owner (appvance user).

Navigate to **Global Options > Admin Options > Teams** (tab).

ab Management	Results Network Emulation	Notifications	User Management	Teams	LoadRunner	Jira	License	Certificate	Reboot AIQ S	Services /	Activity Logs
AML Options											
earch team									Add New Team	Import Teams	Export Team
	Team Name	Da	te Created		Members			Теа	am Description		
										I	Delete Teams

Available functions:

- Add a team
- Delete a team
- Assign users to teams
- Remove users from teams
- Export teams
- Import teams

The import CSV file must contain the following five column: User Name, Role, Team, Password, Confirm Password

Delete Execution Reports

From the Reports screen you can now delete an execution report that you decide is not relevant. This improves the ability to identify relevant reports more easily by removing irrelevant reports. Deleting an execution report will remove all information and related reports for the execution.

Some situations where this could be useful is to delete empty reports that clutter up the database. Empty reports are created when a scenario fails are one such cause of empty reports. For example, sometimes during the process of setting up a scenario, the scenario may play a number of times which generates a new report. However, when you open the report, an error occurs because the scenario failed to run to completion.

API Testing Reporting

The Dashboard now shows detailed reports for API scenarios similar to DS and JS scenarios.

Timestamp Displays

The Star Session timestamp is now in human readable format. Also, a note was added to clarify that the time stamps displayed in the text log should not be used to calculate step durations.

```
Trace Logs 
Tools, prease refer to the script snapshot of the Anatyze reports.
Starting session in -> http://localhost:9090/ds/dyn/
* Note: The following text log shows start times for each step. This times should not be used to calculate durations of the steps. To check on step durat
ions, please refer to the script snapshot or the Analyze reports.
Starting session 9390246 - 05/10/2024 22:24:13
Step 1:
Navigate to https://demosite.appvance.net/
```

Iteration Summary Reports Optional

A new CICD parameter controls whether the Iteration Summary Report is generated and attached to the report.html CICD Dashboard page.

This option allows users who are only interested in the Functional Reports of their pipelines to decrease the time it take for the pipeline reports to be generated and reduce the stress on the results database. This can be a significant saving of time and resources for scenarios with multiple iterations.

The parameters is includeSummaryReports. The default value is true, which means the reports will be included. If it is set to false, the iteration

summary reports will not be attached to and attached to the report.html CICD Dashboard page.

Scenario Editor

The following functional changes in the Scenario Editor were added in AIQ release 5.2.0:

• Added option for API tests in the Script Type for Bulk Performance tests.

DataDog APM Integration

When setting up integration with DataDog the parameter live=true must be replaced with live=false otherwise DataDog will only show the last 10 minutes.

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See Integration with Datadog (APM) for more information on the integration.

AIQ 5.0.x Enhancements

Depending on what AIQ release you are upgrading from to AIQ 5.2.0, there may be additional functional enhancements included in this release.

Refer to the <u>release notes</u> for all the AIQ releases since your current release for more details.

The following enhancements and functional changes were add in update releases of AIQ in 5.0.1 and later 5.0.x releases.

Scenario Execution Data

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Scenario execution time data older than 90 days will no longer be stored. This will result in performance improvements because AIQ is no longer storing large amounts of historical data.

This change was introduced in the 5.0.1 release of AIQ.

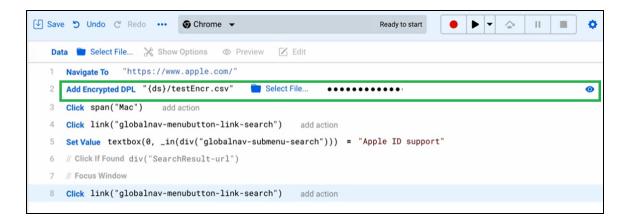
Added Support for Encryption of JavaScript DPL and Hash DPL

With this improvement, every time a Hash DPL or JavaScript DPL .CSV file is saved using AIQ, the file will be saved encrypted by default. This improvement is to increase user test data security. Existing unencrypted .csv files will continue to work within scenarios and scripts along with newly created encrypted .csv files.

This change was introduced in the 5.0.6 release of AIQ.

Added Add Encrypt/Decrypt DPL to Actions

Similar to the available actions of Added Hash DPL, Add JS DPL, and Add Synthetic DPL in a test script, you can now Add Encrypt/Decrypt DPL as well.



Improved Resource Management in Scenario Editor

Improvements have been made to resources management in the Scenario Editor. To make it clearer to users, the **Test Cases** panel has been moved and renamed to **Test Case Definitions**.

The behavior of AIQ when removing a test case definition or resources has been improved:

- If you remove a test case definition, the associated resources will only be removed if they are not being used by any other test case definition of any iteration.
- If you remove a resource, AIQ will inform you if that resource is also used in another iteration or test case definition. If that is the case, you will not be able to remove the resource.
- This change was introduced in the 5.0.6 release of AIQ.

Enable Extraction from the Whiteboard within a SQL Script

In SQL there are ways to store results in the locker, and now you can inject items from the locker.

Sample Code in a Services Workbench Script

```
addToLocalWhiteboard("DefId", -1081701662);
processSQLFile(("readFromWhiteboard.sql");
var value = getFromLocalWhiteboard("DefinitionValue");
log("Definition value is "+value); // This should print 'Testcase'
```



This change was introduced in the 5.0.6 release of AIQ.