Blue Prism

Robotic Automation – Testing Approach

blueprism®
Robotic Process Automation Software

Delivering the **world's most successful digital workforce.**

Testing Approach – Summary Overview

	Development Phase		Test Phase			Pilot
	Build & Unit Testing	Configuration Testing	Validation Testing	Verification Testing	UAT Testing	Pilot Mode
BP Environment	Development	Development	Development	Development	Test	Production
BP Area	Process Studio Object Studio	Process Studio Control Room	Process Studio Control Room	Process Studio Control Room	Control Room	Control Room
Data	Dummy	Dummy	Dummy	Live	Live	Live
Resources						
Developer	●	●	●	●		
Tester			●	●	●	
SME				●	●	
Controller						●
Summary	Testing of individual objects and processes	Integration and non-functional testing	Testing against process definitions using model scenarios	Testing performed against live scenarios by Tester. Review by SME.	End to End testing of the solution by Tester with SME providing QA.	Process in Production

Blue Prism – Configuration Testing

Integration Testing

Proving the process flow and mapping of data through the process and underlying objects and sub-processes.

Non-Functional Testing

Recoverability – Test the ability of the solution to restart the target systems in the event of system failure or unexpected system responses and pick up a case previously in flight and recover processing at the point the failure occurred.

Resilience -Test the ability of the process to retry specific parts of the process solution where a system exception has been thrown by an underlying object. This may require backing out of screens, returning to specific menus etc. to enable a retry of that intended functional piece.

Performance – Test the process at full speed across all paths to identify areas that require additional waits for elements or where performance can be improved.

	Configuration Testing
BP Environment	Development
BP Area	Process Studio Control Room
Data	Dummy
Resources	
Developer	●
Tester	
SME	
Controller	

Blue Prism – Validation Testing

Test Approach

In this phase the tester and the developer work together to prove that the solution conforms to the captured process definition (PDD).

Scenarios are created by the tester, which are tested in the Development environment, that validate the process along the various process paths.

Testing is initially executed in Process Studio with breakpoints on exception stages allowing issues to be identified as they occur. These can usually be fixed while the process is paused before allowing processing to re-continue.

Finally testing is executed in Control Room until all scenarios have been successfully confirmed.

	Validation Testing
BP Environment	Development
BP Area	Process Studio Control Room
Data	Dummy
Resources	
Developer	●
Tester	●
SME	
Controller	

Blue Prism – Verification Testing

Test Approach

Process is exposed to live data for the first time to expose and accommodate previously unseen scenarios.

Tester executes the processes in the presence of an SME who reviews and provides confirmation.

As in the previous phase testing begins in Process Studio before graduating to Control Room

This phase may evolve into a cycle of testing and fixing as the tester, SME and developer find and apply corrections to the solution.

	Verification Testing
BP Environment	Development
BP Area	Process Studio Control Room
Data	Live
Resources	
Developer	●
Tester	●
SME	●
Controller	

Blue Prism - UAT

Test Approach

Process is deployed to Test environment in a controlled manner where 'black box' testing is performed in, Control Room, on live data by Tester with assistance from the SME.

Testing of end-to-end solution including scheduling.

Limited number of cases processed at a time with results verified by SME.

Testing exposes the process to increasing volume of real scenarios to identify any remaining scope or development defects.

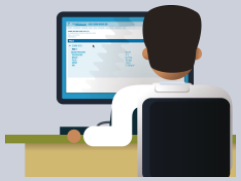
Following sign off by the business the process will run as per the production schedule.

	UAT Testing
BP Environment	Test
BP Area	Control Room
Data	Live
Resources	
Developer	
Tester	●
SME	●
Controller	

Blue Prism - UAT

UAT Phases

NB. Cases per session and acceptance criteria are indicative and will be dependant on the size and complexity of the solution



	Cases Processed	Cases Processed	Quality Assurance	Acceptance Criteria
Phase 1	5 cases per test session	All cases not processed by Robot & Exception cases	100%	5 successful sessions without defect.
Phase 2	10 cases per test session	All cases not processed by Robot & Exception cases	100%	3 successful session without defect.
Phase 3	20 cases per test session	All cases not processed by Robot & Exception cases	50% spot checking	2 successful sessions without defect.

Testing Approach – Live Data Only

	Development Phase			Test Phase		Pilot
	Object Build	Process Build	Assisted Development	Verification Testing	UAT Testing	Pilot Mode
BP Environment	Development	Development	Development	Development	Test	Production
BP Area	Object Studio	Process Studio	Process Studio Control Room	Process Studio Control Room	Control Room	Control Room
Data	Live	No data required	Live	Live	Live	Live
Resources						
Developer	●	●	●	●		
Tester				●	●	
SME			●	●	●	
Controller						●
Summary	Read stages completed. Write stages partially developed	Process developed using partially completed object layer	Write stages and process completed in presence of SME whilst stepping though live cases.	Testing performed against live scenarios by Tester. Review by SME.	End to End testing of the solution by Tester with SME providing QA.	Process in Production