



Emtech Group, Inc

QMT Release Notes

Version 2.1



QMT

Emtech QMT is a high-performance model-based quality engineering software for validating the insurance value chain. QMT automatically generates test cases and test data along with test scenario execution. By testing the end-to-end process of insurance systems, and the integrations between them, Carriers, Insurtechs and software vendors can drive quality into product launches and eliminate embarrassing errors experienced by distributors and customers post-launch. QMT allows the development team to shift-left by finding defects earlier, thereby reducing the QA cycle. QMT takes the guess work out of test scenario creation, allowing QA to automate end-to-end business flow testing, speeding product launch delivery & driving cost efficiency.

What's New in Version 2.1.0

QMT Version 2.1 features new capabilities to handle a wider selection of conditional flows and new nodes to enhance the model creation and management of the key interactions in the testing process.

Conditional Flows

Business processes with conditional or reflexive flows can be modeled with QMT's Enable IF and Flow IF nodes. Enable IF groups conditional nodes in the model and manages the flow to these nodes based on the result, True or False, of an evaluated criterion. Flow IF is as a conditional branching node that can be used when two or more possible paths exist. Flow IF allows test scenarios to follow a specific path (of n possible paths) based on the result, True or False, of an evaluated criterion.

Enable IF and Flow IF nodes now support conditions containing one or more "i/" or "/n" node references. Conditions can also be constructed as formulas with multiple variables and multiple operators. A value table can be used to add variables that can be referenced in formulas using {} notation.

Flow IF nodes can support up to 32 paths and can be modeled sequentially (chained).

Nodes

The following nodes are now available when creating and/or updating models in QMT.

- Get Element Attribute: extracts the value of a web attribute when the XPath and attribute name are specified.
- Text Concatenation: combines up to 5 individual text values into a single text structure

- Open Email: opens an email matching the search criteria in a new tab
- Element Enabled/Disabled: verifies the specified element is accessible or not
- Expected Condition (w/ AST functionality): evaluates a formula that results in a true or false value and returns the corresponding value based on the result.

Example:

Formula: /i=Open URL : url == http://google.ca and /i=Text : value == "Apple"

If True: "Google Apple"

If False: "No Google Apple"

Result: "Google Apple" if the Open URL step's url is "http://google.ca" and the Text step's value is "Apple", otherwise "No Google Apple"

- Expected Result (w/ AST functionality): evaluates a formula and returns (outputs) the result of the evaluation.

Example:

Formula: "Google" if /i=Open URL : url == "http://google.ca" else "Facebook" if /i=Open URL : url == "http://facebook.ca " else "Other"

Result: Returns "Google" if the Open URL step's url is "http://google.ca" or "Facebook" if the Open URL step's url is "http://facebook.ca", otherwise "Other"

Formulas in Expected Condition and Expected Result nodes can be constructed using Abstract Syntax Tree (AST) functionality with the following supported operators:

+	addition
-	subtraction
*	multiplication
/	division
**	exponentiation
<	less than
>	greater than
<=	less than or equal to
>=	greater than or equal to
==	equality
!=	inequality

and logical and
or logical or
() grouping order of operations

Resolved Issues:

Closing the application

- Pressing escape while running test Generation will immediately close the application. It will not save any work in progress and will not ask the user to confirm that they want to close the application.
- Closing the application using Close Project will immediately close the application and the Project Home Page will be displayed. It will not save any work in progress and will not ask the user to confirm that they want to close the application.

Test Execution

- If the user uses the Advanced Settings to select specific test cases to execute, report generation will fail if test case 1 is not included in the list of test cases. The workaround is to modify the query to include the test case with "tc_id=1"

Known Issues:

Closing the application

- Closing the application using X or any other option (beside close project and the above escape) will ask the user to confirm that they want to close the application, if execution is running, the user will then be asked if they want to stop execution, if they say no, execution will continue but the editor will close. If the user says yes, then execution will stop gracefully (writing the results of the most recently completed test case) and QMT will close.
- Closing the application using X or any other option (beside close project and the above escape) will, if the user chooses to close the application also close the Project Home Page. The user must restart the application in order to open a different project.

Nodes

- If the formula in an Expected Condition/Expected result node starts with a space, it may be treated as a syntax error
- Scrolling screenshot may not work depending on the user's file access permissions due to an issue storing the temporary images. The work around is to use the other screenshot types.
- Screenshots behave differently on different browsers and web pages. Three screenshot types are offered so that the user can choose the screenshot that produces the best image.
- The Enable If group will allow one to reference, as the Value to Check or the Value Check, the value of a node inside the group. Such a reference should not be allowed and the option will be removed. Supplying such a reference may result in a test suite with

inappropriate test coverage. Avoid referencing nodes that are contained in an Enable If group from the Enable If's Value To Check or Value Check parameters.

- The Enable IF group will allow a Flow IF node to be passed as a node reference in its formula. This is considered an illogical configuration. Avoid referencing Flow IF nodes in Enable IF groups.

Sleep/Suspend Behaviour

- If the editor is left idle for a significant amount of time and the computer is allowed to sleep/suspend, then the editor will be slow to refresh itself when the computer is woken. It may also not respond correctly to user input. If this happens, it is best to close the application. The user may have to force quit the application via the Task Manager.
- Test execution cannot proceed while a computer sleeps or is suspended as QMT needs to access the network and interact with external websites. External web sites may also time out or data transfer may be corrupted due to the sleep/suspend cycle. This is not a bug or known issue. Adjust your sleep/suspend settings so that the computer will not sleep during test execution.

Test Execution

- If the user closes the browser during test execution, QMT will hang.
- If the user clicks on the cancel execution or the x button on the execution while test execution is shutting down, the confirmation dialog box is presented, and the user will have to click OK again.
- In some cases, test execution completes and the report has been created successfully, but the console indicates that it is waiting for report to be written. The work around is to click stop execution (or the X); if the confirmation window does not appear, then test execution has completed. If the confirmation window appears, click OK, wait a short while (it should be less than a minute) and try again.