System Test Report

(Systemtestbericht)

(TINF19C, SWE I Praxisprojekt 2020/2021)

Project: Modelling Wizard

Customer: Rentschler & Holder

Rotebühlplatz 41 70178 Stuttgart

Supplier: by Jakob Schmidt – Team 2

(Simon Jess, Timo Zaoral, Stefan Banov, Tobias Roth, Phillip Tran)

Rotebühlplatz 41 70178 Stuttgart

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1.1	24.04.2021	Jakob Schmidt	Added more tests
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1 Scope

The STR (System Test Report) is a document derived from the STP (System Test Plan) [1]. It contains the tests specified in the STP and documents the actual results of testing.

2 Definitions

AML AutomationML

TS Testsuite

TC Testcase

3 Test Objects

The following test objects must be verified.

RefId.	Product Number	Product Name	Product Description
1	Version 2.0	Modelling Wizard	Plugin for AutomationML to create devices

4 Test Equipment

The following equipment must be available for testing:

- A computer with Windows 7 or higher
- Installed AutomationML Editor (Downloadlink)
- · Installed Modelling Wizard software

The "Test Data" folder from the git repository [2]

5 References

[1] "STP," [Online]. Available: https://github.com/DekaAthlos/TINF19C-ModellingWizard/wiki/4.-Systemtestplan.

- [2] "Test Data," [Online]. Available: https://github.com/DekaAthlos/TINF19C-ModellingWizard/tree/master/PROJECT/Test%20Data.
- [3] "BUG130: saving clears added "Role Class Libraries"," [Online]. Available: https://github.com/DekaAthlos/TINF19C-ModellingWizard/issues/46.

6 Testcases

6.1 Test suite <TS-001 Basic functionality>

6.1.1 Testcase <TC-001-001> (Create device)

Testcase ID		TC-001-001				
Testcase Name		Create of	Create device			
ReqI	D.	LF10				
Descr	iption	This tes	tcase verifies that a device c	an be created and saved.		
Test S	Steps					
Step	Action		Expected Result	Actual Result		
1	Select the "File" dr and click on "new"	•	A new empty Modelling Wizard window opens.	A new empty Modelling Wizard window opens.		
2	Fill "Vendors Name" and "Device Name" in the top navbar, with data from TD-001-001.		Data is entered and automatically filled into the attributes below	Data is entered and automatically filled into the attributes below		
	Fill the red marked entries in the "Attributes" table at the bottom of the screen with data from TD-001-001.		Data is entered.	Data is entered.		
	Click on a free spot on the GUI		The current selected field in the table gets deselected (and the value is saved)	The current selected field in the table gets deselected		
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.	A dropdown of the explorer opens, and the name is prefilled.		
	Enter a name and click "save".		A popup opens and informs about the correct creation and the path of the file.	A popup opens and informs about the correct creation and the path of the file.		
	Confirm the messa	age.	The popup closes.	The popup closes.		

	AutomationML and verify		The file gets opened and under Attributes all data can be found.		The file gets opened and under Attributes all data can be found.	
Tester Jakob Schmi		dt				
Date 28.04.2021						
Testc	ase Result	Test data 1		Pass		
		Test data 2		Pass		
		Test data 3	Pass			
Test data 4		Pass				
	Test data 5		Pass		ass	
				•		

6.1.2 Testcase <TC-001-002> (Open device, save changes)

Testc	Testcase ID		TC-001-002				
Testc	Testcase Name		Open device, save changes				
Req	ReqID.		LF10				
Descr	Description		This testcase verifies that a device can be loaded with its data, that the data can be changed and that it can be saved again.				
Test Steps							
Step	Action		Expected Result	Actual Result			
1	Select the "File" dr and click on "open	-	The explorer opens, and the file can be chosen.	The explorer opens, and the file can be chosen.			
	Choose the test file from TD-001-002 and click "open"		"Vendor Name" and "Device Name" gets filled. The Name of the file will be displayed in the top right corner. All generic data, interfaces and attachments will be accessible over their tabs. (If the Modelling Wizard cannot read the file an error message will be shown, and no file will be opened.)	"Vendor Name" and "Device Name" are filled. The Name of the file is displayed in the top right corner. The tabs are accessible.			
	Fill the red marked entries with data from TD-001-002.		Data is overwritten.	Data is overwritten.			
	Click on a free spot on the GUI		The current selected field in the table gets deselected (and the value is saved)	The current selected field in the table gets deselected			
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.	A dropdown opens and the name is prefilled.			
Enter a name and click "save".		A popup opens and informs about the correct creation and the path of the file.	A popup opens and informs about the correct creation and the path of the file.				

	If the name already to explorer will ask for confirmation of the same			If the name already the explorer will ask for confirmation of the saving.	
	Confirm the message.		The popup closes.		The popup closes.
	AutomationML and verify under Attrib		The file gets opened under Attributes all can be found.		The file gets opened and under Attributes all data can be found.
Tester Jakob Schmid		t			
	Testcase Result Test data 1		Pass		
Test data 2 Test data 3		Pass Pass			
		Test data 3		Pass	

6.1.3 Testcase <TC-001-003> (Load standard libraries)

Testc	Testcase ID TC-001-003						
Testc	ase Name	Load standard libra	ries				
Req	ID.	LF10					
Descr	ription		his testcase verifies that the standard libraries can be loaded not the Modelling Wizard.				
Test S	Steps						
Step	Action			Expected Result			
1	Select the "Standard Libraries" dropdown in the top navbar.			A dropdown of the libraries opens, and one can be chosen.			
	Choose one library that is not already loaded.		The library will be loaded and can be found on the right sight under "Role Class Library" or "Interface Class Library"				
			,				
Teste	r		Jakob Schmidt				
Date			28.04.2021				
Testcase Result			Pass				

6.2 Test suite <TS-002 Generic data>

6.2.1 Testcase <TC-002-001> (Create device with attributes)

Testc	ase ID	TC-002-001					
Testc	Testcase Name		device with attributes				
Req	ReqID.		LF20				
Descr	Description		This testcase verifies that a device with data in the attributes and the header of "Generic Data" can be created and saved.				
Test S	Steps						
Step	Action		Expected Result	Actual Result			
1	Select the "File" dropdown and click on "new".		A new empty Modelling Wizard window opens.	A new empty Modelling Wizard window opens.			
2	Fill "Vendors Name" and "Device Name" in the top navbar, with data from TD-002-001.		Data is entered.	Data is entered.			
	Fill the entries with data from TD-002-001		Data is entered.	Data is entered.			
	Click on "Header" besides "Attributes"		The "Header" table opens	The "Header" table opens			
	Fill the entries with from TD-002-001	n data	Data is entered	Data is entered			
	Click on a free spot on the GUI		The current selected field in the table gets deselected (and the value is saved)	The current selected field in the table gets deselected			
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.	A dropdown of the explorer opens, and the name is prefilled.			
	Enter a name and click "save".		A popup opens and informs about the correct creation and the path of the file. If the name already the explorer will ask for confirmation of the saving.	A popup opens and informs about the correct creation and the path of the file.			
	Confirm the messa	age.	The popup closes.	The popup closes.			

	Open the file in AutomationML and verify that all data is saved.		The file gets opened under Attributes all can be found.		The file opens and under Attributes all data can be found.
Teste	Tester Jakob Schmidt		t		
Date		28.04.2021			
Testc	Testcase Result Test data 1		Pass		
	Test data 2		Pass		

6.2.2 Testcase <TC-002-002> (Create device with role classes)

Testcase ID		TC-002-002				
Testcase Name		Create of	device with role classes			
ReqI	D.	LF20				
Descr	iption		This testcase verifies that a device with loaded classes from "Role Class Library" can be created and saved.			
Test Steps						
Step	Action		Expected Result	Actual Result		
1	Select the "File" dr and click on "new"	•	A new empty Modelling Wizard window opens.	A new empty Modelling Wizard window opens.		
2	Fill "Vendors Name" and "Device Name" in the top navbar, with data from TD-002-002.		Data is entered.	Data is entered.		
	Fill the red marked entries in the "Attributes" table at the bottom of the screen with data from TD-002-002.		Data is entered.	Data is entered.		
	Click on the library "Library Name" (Data from TD-002-001) on the right side under "Role Class Library"		The entry gets highlighted.	The entry gets highlighted.		
	Drag and drop the library onto the "Generic Information" table.		The library gets added at the last position.	The library gets added at the last position.		
	Click on the library in the "Generic Information" table.		The entry gets highlighted. A label with the entry name appears underneath the table.	The entry gets highlighted. A label with the entry name appears underneath the table.		
	Click on the new label.		The label gets highlighted.	The label gets highlighted.		
	Double click on the label.		Underneath the label the "Attributes" table opens. If the class consists of sub classes, these are displayed as indented labels.	Underneath the label the "Attributes" table opens. If the class consists of sub classes, these are displayed as indented labels.		

	Fill the entri	es with data 2-002	Data is entered.		Data is entered.
	Click on the subclass.	label of the	The label gets highl	ighted.	The label gets highlighted.
	Double click on the subclass.		Underneath the labe "Attributes" table for specific subclass or	the	Underneath the label the "Attributes" table for the specific subclass opens.
	Fill the entri		Data is entered		Data is entered
	Click on a free spot on the GUI		The current selected field in the table gets deselected (and the value is saved)		The current selected field in the table gets deselected.
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.		A dropdown of the explorer opens, and the name is prefilled.
	Enter a name and click "save".		A popup opens and informs about the correct creation and the path of the file. If the name already the explorer will ask for confirmation of the saving.		A popup opens and informs about the correct creation and the path of the file.
	Confirm the	message.	The popup closes.		The popup closes.
	Open the file in AutomationML and verify that all data is saved.		The file gets opened and under Attributes all data can be found.		The file gets opened and under Attributes all data can be found.
Teste	r	Jakob Schmid	t		
Date 28.04.2021			T		
Testc	ase Result	Test data 1		Fail [3]]
		Test data 2		Fail [3]]

6.2.3 Testcase <TC-002-003> (Open device, delete data)

Testc	Testcase ID		TC-002-003			
Testc	ase Name	Open device, delete data				
Req	ReqID.		LF20			
Descr	ription	This testcase verifies that attributes and "Role Class Libraires" can be deleted from a device.				
Test S	Steps					
Step	Action		Expected Result	Actual Result		
1	Select the "File" dr and click on "open	-	The explorer opens, and the file can be chosen.	The explorer opens, and the file can be chosen.		
	Choose the test file from TD-002-003 and click "open"		"Vendor Name" and "Device Name" gets filled. The Name of the file will be displayed in the top right corner. All generic data, interfaces and attachments will be accessible over their tabs.	"Vendor Name" and "Device Name" gets filled. The Name of the is displayed in the top right corner. All tabs are accessible.		
	Clear the attributes listed in "Delete Attributes" (Data from TD-002-003)		Data is overwritten.	Data is overwritten.		
	Repeat the following two straight listed in "Delete Library" (Da		·	The two steps are repeated once for every entry		
	Select the library in the "Generic Information" table, which is listed in "Delete Library" (Data from TD-002-003)		The library gets selected in the "Generic Information" table	The library gets selected in the "Generic Information" table		
	Press the "Delete" button in the top right corner of the table.		The library gets deleted	The library gets deleted		
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.	A dropdown of the explorer opens, and the name of the file can be chosen.		
	Enter a name and "save".	click	A popup opens and informs about the correct	A popup opens and informs about the correct		

			creation and the part the file. If the name already explorer will ask for confirmation of the s	the	creation and the path of the file. If the name already the explorer will ask for confirmation of the saving.	
	Confirm the message.		The popup closes.		The popup closes.	
	Open the file in AutomationML and verify that all data is saved.		The file gets opened under Attributes all can be found.		The file gets opened and under Attributes all data can be found.	
Teste	r	Jakob Schmid	t			
Date 28.04.2021						
Testcase Result Test data 1		Test data 1	Pass		3	
Test data 2		Fail [3]]		

6.3 Test suite <TS-003 Interfaces>

6.3.1 Testcase <TC-003-001> (Create device with interfaces)

Testc	ase ID	TC-003-001				
Testc	ase Name	Create device with interfaces				
Req	ID.	LF30				
Descr	ription		This testcase verifies that a device with additional interfaces can be created and saved.			
Test S	Steps					
Step	Action		Expected Result	Actual Result		
1	Select the "File" dr and click on "new"	•	A new empty Modelling Wizard window opens.	A new empty Modelling Wizard window opens.		
2	Fill "Vendors Name" and "Device Name" in the top navbar, with data from TD-003-001.		Data is entered.	Data is entered.		
	Fill the red marked entries in the "Attributes" table at the bottom of the screen with data from TD-003-001.		Data is entered.	Data is entered.		
	Click on the "Interfaces" tab below the top navbar.		The interface view opens.	The interface view opens.		
	Click on the interface "Interface Name" (Data from TD-003-001) on the right side under "Interface Class Library"		The entry gets highlighted.	The entry gets highlighted.		
	Drag and drop the interface onto the "Interfaces" table.		The interface gets added at the last position.	The interface gets added at the last position.		
	Click on the interface in the "Interfaces" table.		The entry gets highlighted. A label with the entry name appears underneath the table.	The entry gets highlighted. A label with the entry name appears underneath the table.		
	Click on the new la	abel.	The label gets highlighted.	The label gets highlighted.		
	Double click on the label.		Underneath the label the "Attributes" table opens.	Underneath the label the "Attributes" table opens.		

	Fill the entries with data from TD-003-001.		Data is entered.		Data is entered.	
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.		A dropdown of the explorer opens, and the name is prefilled.	
	Enter a name and click "save".		A popup opens and informs about the correct creation and the path of the file. If the name already the explorer will ask for confirmation of the saving.		A popup opens and informs about the correct creation and the path of the file.	
	Confirm the message.		The popup closes.		The popup closes.	
	Open the file Automation that all data	ML and verify	The file gets opened under Attributes all can be found.		The file gets opened and under Attributes all data can be found.	
Teste	r	Jakob Schmid	t			
Date 28.04.2021						
Testcase Result Te		Test data 1	Test data 1		Pass	
		Test data 2		Pass		
		Test data 3		Pass		

6.3.2 Testcase <TC-003-002> (Open device, delete interfaces)

Testcase ID		TC-003-002			
Testc	ase Name	Open device, delete interfaces			
Req	ID.	LF30			
Descr	ription	This testcase verifies that interfaces can be deleted from a device.			
Test S	Steps				
Step	Action		Expected Result	Actual Result	
1	Select the "File" dr and click on "open	-	The explorer opens, and the file can be chosen.	The explorer opens, and the file can be chosen.	
	Choose the test file from TD-003-002 and click "open"		"Vendor Name" and "Device Name" gets filled. The Name of the file will be displayed in the top right corner. All generic data, interfaces and attachments will be accessible over their tabs.	"Vendor Name" and "Device Name" gets filled. The Name of the file will be displayed in the top right corner. All tabs are accesible	
	Click on the "Interfaces" tab below the top navbar.		The Interfaces view opens.	The Interfaces view opens.	
		•	ep one time for each entry Data from TD-003-002)	The two steps are repeated once for every entry	
	Select the interface in the "Interfaces" table, which is listed in "Delete Interface" (Data from TD-003-002)		The interface gets selected in the "Interfaces" table	The interface gets selected in the "Interfaces" table	
	Press the "Delete" button in the top right corner of the table.		The interface gets deleted	The interface gets deleted	
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.	A dropdown of the explorer opens, and the name is prefilled	
	Enter a name and "save".	click	A popup opens and informs about the correct creation and the path of the file.	A popup opens and informs about the correct creation and the path of the file.	

			If the name already the explorer will ask for confirmation of the saving.	
	Confirm the message.		The popup closes.	The popup closes.
	Open the file in AutomationML and verify that all data is saved.		The file gets opened and under Attributes all data can be found.	The file gets opened and under Attributes all data can be found.
Tester Jakob Schm		Jakob Schmid	t	
Date 28.04.2021		28.04.2021		
Testcase Result Pass		Pass		

6.4 Test suite <TS-004 Attachments>

6.4.1 Testcase <TC-004-001> (Create device with attachments)

Testc	Testcase ID		TC-004-001			
Testc	ase Name	Create device with attachments				
Reql	ID.	LF40				
Descr	ription	This testcase verifies that a device with attachments can be created and saved.				
Test S	Steps					
Step	Action		Expected Result	Actual Result		
1	Select the "File" di and click on "new"	•	A new empty Modelling Wizard window opens.	A new empty Modelling Wizard window opens.		
2	Fill "Vendors Name" and "Device Name" in the top navbar, with data from TD-004-001.		Data is entered.	Data is entered.		
	Fill the red marked entries in the "Attributes" table at the bottom of the screen with data from TD-004-001.		Data is entered.	Data is entered.		
	Click on the "Attachments" tab below the top navbar.		The attachment view opens.	The attachment view opens.		
	Click on the "Add" in the upper left co		A dropdown list opens.	A dropdown list opens.		
	Choose the "Dropdown" (Data from TD-004-001).		The name gets added to the two text fields underneath.	The name gets added to the two text fields underneath.		
	Click "Select File" button		An explorer opens.	An explorer opens.		
	Search the test File (Data from TD-004-001) and click open		The "Element Name" and the "File Path" in the "Attachable Information" table get filled with the test data.	The "Element Name" and the "File Path" in the "Attachable Information" table get filled with the test data.		
	Click on the "Add" in the upper left co		A dropdown list opens.	A dropdown list opens.		

	Choose the "Dropdown2" (Data from TD-004-001).		The name gets add the two text fields underneath.	ed to	The name gets added to the two text fields underneath.
	Paste the "Test Path" (Data from TD-004-001) into the text field besides the "Add Path" button		The path is pasted.		The path is pasted.
	Click "Add Path" button		The "Element Name" and the "File Path" in the "Attachable Information" table get filled with the test data.		The "Element Name" and the "File Path" in the "Attachable Information" table get filled with the test data.
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.		A dropdown of the explorer opens, and the name of the file can be chosen.
	Enter a name and click "save".		A popup opens and informs about the correct creation and the path of the file. If the name already the explorer will ask for confirmation of the saving.		A popup opens and informs about the correct creation and the path of the file. If the name already the explorer will ask for confirmation of the saving.
	Confirm the	message.	The popup closes.		The popup closes.
	Open the file in AutomationML and verify that all data is saved.		The file gets opened and under Attributes all data can be found.		The file gets opened and under Attributes all data can be found.
Tester Jakob Schmid		t			
Date 28.04.20		28.04.2021			
Testcase Result		Test data 1		Pass	
		Test data 2		Pass	
		Test data 3		Pass	

6.4.2 Testcase <TC-004-002> (Open device, delete Attachments)

Testc	ase ID	TC-004-002					
Testc	ase Name	Open device, delete interfaces					
Req	ReqID.		LF40				
Descr	ription	This testcase verifies that interfaces can be deleted from a device.					
Test S	Steps						
Step	Action		Expected Result	Expected Result			
1	Select the "File" dr and click on "open	-	The explorer opens, and the file can be chosen.	The explorer opens, and the file can be chosen.			
	Choose the test file from TD-004-002 and click "open"		"Vendor Name" and "Device Name" gets filled. The Name of the file will be displayed in the top right corner. All generic data, interfaces and attachments will be accessible over their tabs.	"Vendor Name" and "Device Name" gets filled. The Name of the file will be displayed in the top right corner. All tabs are accessible.			
	Click on the "Attachments" tab below the top navbar.		The attachment view opens.	The attachment view opens.			
	Repeat the following two st		ep one time for each entry ts" (Data from TD-004-002)	The two steps are repeated once for every entry			
	Select the interface in the "Attachables Information" table, which is listed in "Delete Attachments" (Data from TD-004-002)		The interface gets selected in the "Attachables Information" table	The interface gets selected in the "Attachables Information" table			
	Press the "Delete" button in the top right corner of the table.		The attachment gets deleted	The attachment gets deleted			
	Select the "File" dropdown and click on "save".		A dropdown of the explorer opens, and the name of the file can be chosen.	A dropdown of the explorer opens, and the name is prefilled.			
	Enter a name and "save".	click	A popup opens and informs about the correct	A popup opens and informs about the correct			

			creation and the path of the file. If the name already exists the explorer will ask for confirmation of the saving.	creation and the path of the file.
	Confirm the message.		The popup closes.	The popup closes.
	Open the file in AutomationML and verify that all data is saved.		The file gets opened and under Attributes all data can be found.	The file gets opened and under Attributes all data can be found.
Tester Jakob Schmid		Jakob Schmid	t	
Date 28.04.2021		28.04.2021		
Testcase Result Pass		Pass		