System Test Report

AAS Digital Nameplate Generator

Customer: Rentschler & Holder

Company address: Rotebühlplatz 41, 70178 Stuttgart

Supplier: Team 2

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Version Control

Version	Date Author		Comment	
1.0	06.05.2023	Janin Ahlemeyer	Initialized the STR and created a first version	
2.0	10.05.2023	Janin Ahlemeyer	Made final improvements	

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1. Scope

The System Test Report (STR) of the project "AAS Digital Nameplate Generator" contains the details and results of the test cases defined in the System Test Plan (STP). It contains the test cases combined with their actual results from executing the test plan.

2. Reference Material

The sources cited below are utilized as a reference for this document.

- TINF21C_STP_Team_2_1v5
- IEEE Standard 829-1998, Standard for Software Test Documentation

3. Definitions and Acronyms

STP System Test Plan

SRS Software Requirements Specification

DNG Digital Nameplate Generator

TS Test Suite

TC Testcase

AAS Asset Administration Shell

STR System Test Report

API Application programming interface

4. Test Equipment

It mentions the available hardware and software for testing the application.

Testir	Testing Tools				
No.	Resources	Descriptions			
01	Computer	HP EliteBook 850 G7 Notebook			
		Operating system: Windows 10 Home 64			
02	Computer	MacBook Pro 13"			
		Operating system: MacOS			
03	Smartphone	Galaxy S20 Ultra 5G			

The following software are used in addition to client-specific software.

- Firefox 111.0
- Microsoft Edge 110.0
- Google Chrome 111.0
- Application Camera to scan the QR code
- Application Clock to measure time

5. Results of Testsuite <TS.INST: Access via Link>

5.1. Results of <TC.INST.001.F>: Access front end on local machine

	Test case					
ID: <tc.inst.001.< td=""><td>.F></td><td></td></tc.inst.001.<>			.F>			
Name:		Access front er	nd on local machine			
ReqID):	DNG.GUI.007				
Description: The test case the web application ternet connection GitHub page browsers, son The test case the test			verifies the correct function as well as the devication. It verifies the forwal The test case verifies cover sizes and operating synuses the test data from take consists of a computer, verifies to consists of a computer, verifies the test data from the consists of a computer, verifies the test data from the consists of a computer, verifies the test data from the consists of a computer, verifies the devication as the de	e's configuration and in- rding from the project's impatibility with relevant estems. ble TD.001 and TD.002.		
			Test steps			
Step	Action		Expected result	Actual result		
1	Go to pr	oject's GitHub	Display project's GitHub page	Display project's GitHub page		
2	Click on the Link for the Digital Nameplate Generator in the ReadMe file		Display home page; no connection to the Internet or a misconfigured network lead to no access	Display home page; no connection to the Internet or a miscon- figured network lead to no access		

Test	TD.001					
data:						
Da-	Device	IP address	Default	Net mask	Ex-	Ac-
taset			gateway		pected	tual
					result	result
01	Win-	192.168.0.254	192.168.0.1	192.168.0.1	PASS	PASS
	dows					

02	Mac	192.168.0.254	192.168.0.1	192.168.0.1	PASS	PASS	
03	IPhone	192.168.0.254	192.168.0.1	192.168.0.1	PASS	PASS	
04	Win-	192.168.0.254	192.168.0.0	192.168.0.1	FAIL	FAIL	
	dows						
05	Mac	192.168.0.254	192.168.0.0	192.168.0.1	FAIL	FAIL	
06	IPhone	192.168.0.254	192.168.0.0	192.168.0.1	FAIL	FAIL	
Tester		Janin Ahlemey	Janin Ahlemeyer				
Date		03.05.2023					
Testcas	e Result	PASS					

Test	TD.002	TD.002					
data:							
Dataset	Browser		Screen size	Operating	Ex-	Actual	
				system	pected	result	
					result		
01	Google	Chrome	1920 x 1080	Windows 10	PASS	PASS	
	111.0						
02	Google	Chrome	3840 x 2160	Windows 10	PASS	PASS	
	111.0						
03	_	Chrome	3088 x 1440	macOS	PASS	PASS	
	111.0						
04	Micros	oft Edge	1920 x 1080	Windows 10	PASS	PASS	
	110.0						
05	Micros	oft Edge	3840 x 2160	Windows 10	PASS	PASS	
	110.0						
06	Micros	oft Edge	3088 x 1440	macOS	PASS	PASS	
	110.0						
07	Firefox	111.0	1920 x 1080	macOS	PASS	PASS	
08	Firefox	111.0	3840 x 2160	macOS	PASS	PASS	
09	Firefox	111.0	3088 x 1440	Windows 10	PASS	PASS	
10	Safari	16.1	1920 x 1080	macOS	PASS	PASS	
11	Safari	16.1	2340 x 1080	iOS	PASS	PASS	
	•				•		
Tester		Janin Ahlem	eyer				
Date		03.05.2023					
Testcase F	Result	PASS					

6. Results of Testsuite <TS.CON: Connect to AAS-Server>

6.1. Results of <TC.CON.001.F>: Connect to AAS-Server via search bar

Test case							
ID: <tc.< td=""><td colspan="4">.CON.001.F></td></tc.<>			.CON.001.F>				
Name: Conr			ect to AAS-Server via search	bar			
			GUI.001; DNG.GUI.003; DNG	G.GUI.007			
Description: The all the are recovered to the area.			est case verifies the correct functionality of the search bar. ifies the connection to AAS-Servers. Links missing https:\\ot supported. The test case verifies compatibility with relebrowsers, screen sizes and operating systems. est case uses the test data from table TD.002 and TD.003. est set up consists of a computer, which is connected to the net.				
			Test steps				
Step	Action		Expected result	Actual result			
1	Go to ho	me	Display home page	Display home page			
2	Click on search b	ar	Search bar is selected. A drop-down list of search suggestions is opened.	Search bar is selected. A drop-down list of search suggestions is opened.			
3	Enter a string into search bar		For each character the suggestion of the dropdown list is filtered.	For each character the suggestion of the drop-down list is filtered.			
4 Click on search button		outton	All assets from the server are loaded. The asset list is displayed; missing images are replaced with default image; invalid parameters produce the display of an error message.	All assets from the server are loaded. The asset list is displayed; missing images are replaced with default image; invalid parameters produce the display of an error message.			

Test data:	TD.002				
Dataset	Browser	Screen size	Operating system	Ex- pected result	Actual result
01	Google Chrome 111.0	1920 x 1080	Windows 10	PASS	PASS
02	Google Chrome 111.0	3840 x 2160	Windows 10	PASS	PASS
03	Google Chrome 111.0	3088 x 1440	macOS	PASS	PASS

04	Microsoft Edge		1920 x 1080	Windows 10	PASS	PASS
	110.0					
05	Micros	oft Edge	3840 x 2160	Windows 10	PASS	PASS
	110.0					
06	Micros	oft Edge	3088 x 1440	macOS	PASS	PASS
	110.0					
07	Firefox	111.0	1920 x 1080	macOS	PASS	PASS
08	Firefox	111.0	3840 x 2160	macOS	PASS	PASS
09	Firefox	111.0	3088 x 1440	Windows 10	PASS	PASS
10	Safari '	16.1	1920 x 1080	macOS	PASS	PASS
11	Safari '	16.1	2340 x 1080	iOS	PASS	PASS
Tester Janin Ahleme		eyer				
Date		03.05.2023				
Testcase F	Result	PASS				

Test	TD.003	TD.003						
data:								
Dataset	AAS ser	ver link	API	Ex-	Actual			
				pected	result			
				result				
01	https://a	dmin-shell-io.com/5001	V1	PASS	PASS			
			API					
02	https://co	cae4836-001e-48c2-a4f9-	V3	PASS	PASS			
	235554f	9400b.ma.bw-cloud-instance.org/	API					
03	http://aa	s.murrelektronik.com:4001/aas	V3	PASS	PASS			
			API					
04	ccae483	6-001e-48c2-a4f9-	V3	FAIL	FAIL			
	235554f	9400b.ma.bw-cloud-instance.org/	API					
Tester		Janin Ahlemeyer						
Date		03.05.2023						
Testcase	Result	PASS						

6.2. Results of <TC.CON.002.F>: Connect to suggested AAS-Server via search bar

Test case			
ID:	<tc.con.002.f></tc.con.002.f>		
Name:	Connect to suggested AAS-Server via search bar		
ReqID:	DNG.GUI.001; DNG.GUI.003; DNG.GUI.007		

		T		
and its so The test screen siz The test o			uggestions. It verifies the case verifies compatibilizes and operating systems case uses the test data fror	nctionality of the search bar connection to AAS-Servers. Ity with relevant browsers, and table TD.002 and TD.003. The er, which is connected to the
			Test steps	
Step	Action		Expected result	Actual result
1	Go to home page		Display home page	Display home page
2	Click on search bar		Search bar is selected. A drop-down list of search suggestions is opened.	Search bar is selected. A drop-down list of search suggestions is opened.
3	Enter a string into search bar		For each character the suggestion of the dropdown list is filtered.	For each character the suggestion of the dropdown list is filtered.
4	Click on one of the suggested server addresses		All assets from the server are loaded. The asset list is displayed; missing images are replaced with default image; invalid parameters produce the display of an error message.	All assets from the server are loaded. The asset list is displayed; missing images are replaced with default image; invalid parameters produce the display of an error message.

Test	TD.002				
data:					
Dataset	Browser	Screen size	Operating system	Ex- pected result	Actual result
01	Google Chrome 111.0	1920 x 1080	Windows 10	PASS	PASS
02	Google Chrome 111.0	3840 x 2160	Windows 10	PASS	PASS
03	Google Chrome 111.0	3088 x 1440	macOS	PASS	PASS
04	Microsoft Edge 110.0	1920 x 1080	Windows 10	PASS	PASS
05	Microsoft Edge 110.0	3840 x 2160	Windows 10	PASS	PASS

06	Microsoft Edge		3088 x 1440	macOS	PASS	PASS
	110.0					
07	Firefox	111.0	1920 x 1080	macOS	PASS	PASS
08	Firefox	111.0	3840 x 2160	macOS	PASS	PASS
09	Firefox 111.0		3088 x 1440	Windows 10	PASS	PASS
10	Safari 16.1		1920 x 1080	macOS	PASS	PASS
11	Safari 1	16.1	2340 x 1080	iOS	PASS	PASS
	·					
Tester Janin Ahleme		eyer				
Date 03.05.2023		03.05.2023				
Testcase F	Result	PASS				

Test	TD.003	TD.003				
data:						
Dataset	AAS ser	ver link	API	Ex- pected result	Actual result	
01	https://a	dmin-shell-io.com/5001	V1 API	PASS	PASS	
02	•	cae4836-001e-48c2-a4f9- 9400b.ma.bw-cloud-instance.org/	V3 API	PASS	PASS	
03	http://aa	s.murrelektronik.com:4001/aas	V3 API	PASS	PASS	
04	ccae483	6-001e-48c2-a4f9-	V3	FAIL	FAIL	
	235554f	9400b.ma.bw-cloud-instance.org/	API			
Tester		Janin Ahlemeyer				
Date		03.05.2023				
Testcase	Result	PASS				

7. Results of Testsuite <TS.NAV: Navigation>

7.1. Results of <TC.NAV.001.F>: Navigation bar

	Test case			
ID:	<tc.nav.001.f></tc.nav.001.f>			
Name:	Navigation bar			
ReqID:	DNG.GUI.001; DNG.GUI.004			
Description:	The test case verifies the correct forwarding of the navigation bar.			
	It verifies compatibility with relevant browsers, screen sizes and			
	operating systems.			
	The test case uses test data from table TD.002.			

		The test set u	p consists of a computer,	which is connected to the		
		internet.				
	Test steps					
Step	Action		Expected result	Actual result		
1	Go to ho	me page	Display home page	Display home page		
2	Click on menu button		Open menu	Open menu		
3	Click on "About" row		Forwarding to about	Forwarding to about		
			page	page		
4	Click on	menu button	Open menu	Open menu		
5	Click on	"Home" row	Forwarding to home	Forwarding to home		
			page	page		
6	Click on	menu button	Open menu	Open menu		
7	Click on	"GitHub" row	Forwarding to project's	Forwarding to project's		
			GitHub page	GitHub page		

Test data:	TD.002	002				
Dataset	Browser		Screen size	Operating system	Ex- pected result	Actual result
01	Google 111.0	e Chrome	1920 x 1080	Windows 10	PASS	PASS
02	Google 111.0	e Chrome	3840 x 2160	Windows 10	PASS	PASS
03	Google 111.0	e Chrome	3088 x 1440	macOS	PASS	PASS
04	Microsoft Edge 110.0		1920 x 1080	Windows 10	PASS	PASS
05	Micros 110.0	oft Edge	3840 x 2160	Windows 10	PASS	PASS
06	Micros 110.0	oft Edge	3088 x 1440	macOS	PASS	PASS
07	Firefox	111.0	1920 x 1080	macOS	PASS	PASS
08	Firefox	111.0	3840 x 2160	macOS	PASS	PASS
09	Firefox	111.0	3088 x 1440	Windows 10	PASS	PASS
10	Safari	16.1	1920 x 1080	macOS	PASS	PASS
11	Safari	16.1	2340 x 1080	iOS	PASS	PASS
Tester		Janin Ahler	meyer			
Date		04.05.2023	·			

Testcase Result	PASS

7.2. Results of <TC.NAV.002.F>: Browser's navigation buttons

	Test case					
ID: <tc.nav.002.f< td=""><td>F></td><td></td></tc.nav.002.f<>			F>			
Name:		Browser's navi	gation buttons			
ReqID):	DNG.GUI.001;	DNG.GUI.004			
Descrip	tion:	The test case	verifies the correct function	tionality of the browser's		
		navigation but	tons. It verifies compatib	ility with relevant brows-		
		ers, screen siz	es and operating systems	S.		
		The test case t	uses test data from table	TD.002.		
		The test set up	The test set up consists of a computer, which is connected to the			
		internet.	t.			
			Test steps			
Step	Action		Expected result	Actual result		
1	Go to ar	asset view	Display asset view	Display asset view		
2	Click on	back button	Back to asset list	Back to asset list		
3	Click on back button		Back to home page	Back to home page		
4	Click on "about"		Display about page	Display about page		
5	Click on	back button	Back to home page	Back to home page		
	•					

Test	TD.002				
data:					
Dataset	Browser	Screen size	Operating system	Ex- pected result	Actual result
01	Google Chrome 111.0	1920 x 1080	Windows 10	PASS	PASS
02	Google Chrome 111.0	3840 x 2160	Windows 10	PASS	PASS
03	Google Chrome 111.0	3088 x 1440	macOS	PASS	PASS
04	Microsoft Edge 110.0	1920 x 1080	Windows 10	PASS	PASS
05	Microsoft Edge 110.0	3840 x 2160	Windows 10	PASS	PASS
06	Microsoft Edge 110.0	3088 x 1440	macOS	PASS	PASS

07	Firefox 111.0		1920 x 1080	macOS	PASS	PASS
08	Firefox 111.0		3840 x 2160	macOS	PASS	PASS
09	Firefox 111.0		3088 x 1440	Windows 10	PASS	PASS
10	Safari 16.1		1920 x 1080	macOS	PASS	PASS
11	Safari 16.1		2340 x 1080	iOS	PASS	PASS
	·					
Tester	Tester Janin Ahleme		eyer			
Date 04.05.2023						
Testcase F	Result	PASS				

8. Results of Testsuite <TS.OV: Overview>

8.1. Results of <TC.OV.001.F>: Choose asset of asset list

	Test case					
ID:		<tc.ov.0< td=""><td>001.F></td><td></td></tc.ov.0<>	001.F>			
Name:	Name: Choose asset of asset list					
ReqID):	DNG.GUI	.001; DNG.GUI.007			
Descript	tion:	The test of	case verifies the correct fund	ctionality of the asset list. It		
		verifies th	at the images of the product	and markings are adjusted.		
		The test	case verifies compatibility	with relevant browsers,		
			zes and operating systems.			
			case uses the test data fro	om table TD.002, TD.004,		
			nd TD.006.			
			set up consists of a computer	r, which is connected to the		
		internet.				
	Test steps					
Step	Action		Expected result	Actual result		
1	Go to as		Display asset list	Display asset list		
3	Click on		Search bar is selected	Search bar is selected		
	bar with					
	box text	"Asset				
	Name"			_		
		string into	For each character the	For each character the		
	search b	oar	assets are filtered match-	assets are filtered match-		
			ing the string.	ing the string.		
2	Hover on a table		Currently selected asset	Currently selected asset		
	row		appears in another color.	appears in another color.		
3	Click on table row		The asset view of the	The asset view of the		
	of specif	ic asset	specific asset is opened.	specific asset is opened.		
			Product image, name-	Product image, name-		
			plate and asset details	plate and asset details		
			are displayed; missing	are displayed; missing		

		submodel details produce a corrupted overview	submodel details produce a corrupted over-
			view
4	Click on collapse	Further details of cate-	Further details of cate-
	item	gory are expanded	gory are expanded

System Pected result	Test	TD.002					
System Pected result	data:						
01 Google Chrome 11920 x 1080 Windows 10 PASS PASS PASS 111.0 02 Google Chrome 111.0 3840 x 2160 Windows 10 PASS PA	Dataset	Browse	er	Screen size	Operating	Ex-	Actual
01 Google Chrome 11920 x 1080 Windows 10 PASS P					system	pected	result
111.0 3840 x 2160 Windows 10 PASS PASS 111.0 3088 x 1440 macOS PASS PASS 111.0 3088 x 1440 macOS PASS PASS 111.0 1920 x 1080 Windows 10 PASS PASS 110.0 3840 x 2160 Windows 10 PASS PASS 110.0 3088 x 1440 macOS PASS PASS 110.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS						result	
02 Google Chrome 111.0 3840 x 2160 Windows 10 PASS PASS 03 Google Chrome 111.0 3088 x 1440 macOS PASS PASS 04 Microsoft Edge 110.0 1920 x 1080 Windows 10 PASS PASS 05 Microsoft Edge 110.0 3840 x 2160 Windows 10 PASS PASS 06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS	01	Google	Chrome	1920 x 1080	Windows 10	PASS	PASS
111.0 3088 x 1440 macOS PASS PASS 111.0 3088 x 1440 macOS PASS PASS 111.0 Microsoft Edge 1920 x 1080 Windows 10 PASS PASS 110.0 Microsoft Edge 3840 x 2160 Windows 10 PASS PASS 110.0 Microsoft Edge 3088 x 1440 macOS PASS PASS 110.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS		111.0					
03 Google Chrome 111.0 3088 x 1440 macOS PASS PASS 04 Microsoft Edge 110.0 1920 x 1080 Windows 10 PASS PASS 05 Microsoft Edge 110.0 3840 x 2160 Windows 10 PASS PASS 06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS	02	Google	Chrome	3840 x 2160	Windows 10	PASS	PASS
111.0 111.0 Windows 10 PASS PASS 04 Microsoft Edge 110.0 3840 x 2160 Windows 10 PASS PASS 05 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS		111.0					
04 Microsoft Edge 110.0 1920 x 1080 Windows 10 PASS PASS 05 Microsoft Edge 110.0 3840 x 2160 Windows 10 PASS PASS 06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS	03	Google	Chrome	3088 x 1440	macOS	PASS	PASS
110.0 3840 x 2160 Windows 10 PASS PASS 05 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS		111.0					
05 Microsoft Edge 110.0 3840 x 2160 Windows 10 PASS PASS 06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS	04	Microsoft Edge		1920 x 1080	Windows 10	PASS	PASS
110.0 3088 x 1440 macOS PASS PASS 110.0 110.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS		110.0					
06 Microsoft Edge 110.0 3088 x 1440 macOS PASS PASS 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS	05	Microsoft Edge		3840 x 2160	Windows 10	PASS	PASS
110.0 110.0 07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS		110.0					
07 Firefox 111.0 1920 x 1080 macOS PASS PASS 08 Firefox 111.0 3840 x 2160 macOS PASS PASS	06	Micros	oft Edge	3088 x 1440	macOS	PASS	PASS
08 Firefox 111.0 3840 x 2160 macOS PASS PASS		110.0					
	07	Firefox	111.0	1920 x 1080	macOS	PASS	PASS
00 Firefox 111 0 2000 x 1140 Windows 10 DACC DACC	80	Firefox	111.0	3840 x 2160	macOS	PASS	PASS
09	09	Firefox 111.0		3088 x 1440	Windows 10	PASS	PASS
10 Safari 16.1 1920 x 1080 macOS PASS PASS	10	Safari 16.1		1920 x 1080	macOS	PASS	PASS
11 Safari 16.1 2340 x 1080 iOS PASS PASS	11	Safari 16.1		2340 x 1080	iOS	PASS	PASS
Tester Janin Ahlemeyer	Tester		Janin Ahlem	eyer			
Date 04.05.2023	Date						
Testcase Result PASS	Testcase R	Result	PASS				

Test	TD.004				
data					
Dataset	Asset	AAS server	Product	Expected	Actual
			image	result	result
01	Norgren	Test server	Width: 400px	PASS	PASS
	_B84G_4GK_AP3_R		Height: 600px		
	ME				

02	TestAsset_PI-		Test server	None	PASS	PASS
	None_M	_None				
03	TestAsse	et_PIBro-	Test server	Broken	PASS	PASS
	ken_MI_	Broken				
04	TestAsse	et_PiSmaller	Test server	Smaller than	PASS	PASS
				max size		
05	TestAsset_PiBigger		Test server	Bigger than	PASS	PASS
				max size		
06	TestAsset_Many		Test server	More than	PASS	PASS
				one picture		
Tester Janin A		Janin Ahlem	eyer			
Date 04.05.2023		04.05.2023				
Testcase	e Result	PASS				

Test	TD.005						
data:							
Da-	Asset		Server	Marking	Expected	Actual	
taset				image	result	result	
01	Norgren		Test server	None	PASS	PASS	
	_B84G_4GK_AP3_RME						
02	AAS_Type_VUVS-L25-		Test server	One	PASS	PASS	
	M52-AD-G14-F8-1C1						
03	AAS_Demo_CytroPac		Test server	Many	PASS	PASS	
Tester		Janin Ahlemeyer					
Date (04.05.2023					
Testcas	se Result	PASS					

Test data:	TD.006	TD.006				
Dataset	Asset		Server	Nameplate	Expected	Actual
					result	result
01	Norgre	n	Test	Adequate	PASS	PASS
	_B84G_4GK_AP3_RME		server			
02	Examp	leMotor	Test	None	PASS	PASS
			server			
Tester		Janin Ahlemeyer				
Date		04.05.2023				
Testcase Result		PASS				

9. Results of Testsuite <TS.NP: Nameplate>

9.1. Results of <TC.NP.001.F>: Download nameplate in SVG

	Test case				
ID: <tc.np.001< td=""><td>.F></td><td></td></tc.np.001<>			.F>		
Name:		Download n	ameplate in SVG		
ReqID):	DNG.GUI.00 DNG.GUI.00)1;	GUI.005; DNG.GUI.006;	
Description: The test case verifies the correct functionality of downloading a nameplate in SVG format and scanning its QR code with a smartphone. It verifies the decryption of the complete nameplate submodel details as a string. The test case verifies compatibility with relevant browsers, screen sizes and operating systems. The test case uses the test data from table TD.002 and TD.006. The test set up consists of a smartphone with scanning function and a computer, which is connected to the internet. Test steps					
Stop	Action			Actual result	
Step 1		set view	Expected result Asset view is displayed	Asset view is displayed	
2		"Download	Nameplate in SVG for-	Nameplate in SVG for-	
	SVG" bu		mat is downloaded	mat is downloaded	
3	Open th		Nameplate in SVG format is displayed	Nameplate in SVG for- mat is displayed	
4	Open scan application on device		Camera to scan a QR- Code is opened	Camera to scan a QR- Code is opened	
5	Scan QF	R code	Response with a string containing all name-plate submodel information is displayed; failed scanning produces the display of an error message.	Response with a string containing all nameplate submodel information is displayed; failed scanning produces the display of an error message.	

Test	TD.002				
data:					
Dataset	Browser	Screen size	Operating system	Ex- pected result	Actual result

01	Google Chrome 111.0		1920 x 1080	Windows 10	PASS	PASS
02	Google Chrome		3840 x 2160	Windows 10	PASS	PASS
03	Google 111.0	e Chrome	3088 x 1440	macOS	PASS	PASS
04	Micros 110.0	oft Edge	1920 x 1080	Windows 10	PASS	PASS
05	Microsoft Edge 110.0		3840 x 2160	Windows 10	PASS	PASS
06	Microsoft Edge 110.0		3088 x 1440	macOS	PASS	PASS
07	Firefox	111.0	1920 x 1080	macOS	PASS	PASS
08	Firefox	111.0	3840 x 2160	macOS	PASS	PASS
09	Firefox	111.0	3088 x 1440	Windows 10	PASS	PASS
10	Safari 16.1		1920 x 1080	macOS	PASS	PASS
11	Safari 16.1		2340 x 1080	iOS	PASS	PASS
Tester Janin Ahlem		eyer				
Date		06.05.2023				
Testcase Result PASS						

Test data:	TD.006	TD.006				
Dataset	Asset		Server	Nameplate	Expected	Actual
					result	result
01	Norgre	n	Test	Adequate	PASS	PASS
	_B84G_4GK_AP3_RME		server			
02	ExampleMotor		Test	None	PASS	PASS
			server			
Tester		Janin Ahlemeyer				
Date		06.05.2023				
Testcase R	tesult	PASS				

9.2. Results of <TC.NP.002.F>: Download nameplate in PNG

Test case				
ID:	<tc.np.002.f></tc.np.002.f>			
Name:	Download nameplate in PNG			
ReqID:	DNG.GUI.001; DNG.GUI.002; DNG.GUI.005; DNG.GUI.006;			
	DNG.GUI.007			

		ı						
Description:		The test case verifies the correct functionality of downloading a						
		nameplate inf PNG format and scanning its QR code with a						
		smartphone	. It verifies the decryption to	o the complete nameplate				
		submodel d	submodel details as a string. The test case verifies compatibility					
		with relevan	with relevant browsers, screen sizes and operating systems.					
		The test cas	se uses the test data from t	able TD.002 and TD.006.				
		The test set	The test set up consists of a smartphone with scanning function					
		and a comp	and a computer, which is connected to the internet.					
			Test steps					
Step	Action		Expected result	Actual result				
1	Go to as	set view	Asset view is displayed	Asset view is displayed				
2	Click on "Download		Nameplate in PNG for-	Nameplate in PNG for-				
PNG" button		utton	mat is downloaded	mat is downloaded				
3	Open the file		Nameplate in PNG for-	Nameplate in PNG for-				
			mat is displayed	mat is displayed				
4	Open scan applica-		Camera to scan a QR-	Camera to scan a QR-				
	tion on device		Code is opened	Code is opened				
5	Scan QR code		Response with a string	Response with a string				
			containing all nameplate	containing all name-				
			submodel information is	plate submodel infor-				
			displayed; failed scan-	mation is displayed;				
			ning produces the dis-	failed scanning pro-				
			play of an error mes-	duces the display of an				

Test	TD.002				
data:		_	_		
Dataset	Browser	Screen size	Operating	Ex-	Actual
			system	pected	result
				result	
01	Google Chrome	1920 x 1080	Windows 10	PASS	PASS
	111.0				
02	Google Chrome	3840 x 2160	Windows 10	PASS	PASS
	111.0				
03	Google Chrome	3088 x 1440	macOS	PASS	PASS
	111.0				
04	Microsoft Edge	1920 x 1080	Windows 10	PASS	PASS
	110.0				
05	Microsoft Edge	3840 x 2160	Windows 10	PASS	PASS
	110.0				

sage.

error message.

06	Microsoft Edge		3088 x 1440	macOS	PASS	PASS	
	110.0						
07	Firefox 111.0		1920 x 1080	macOS	PASS	PASS	
08	Firefox 111.0		3840 x 2160	macOS	PASS	PASS	
09	Firefox 111.0		3088 x 1440	Windows 10	PASS	PASS	
10	Safari 16.1		1920 x 1080	macOS	PASS	PASS	
11	Safari 16.1		2340 x 1080	iOS	PASS	PASS	
Tester		Janin Ahlemeyer					
Date		06.05.2023					
Testcase Result		PASS					

Test data:	TD.006						
Dataset	Asset		Server	Nameplate	Expected	Actual	
					result	result	
01	Norgren		Test	Adequate	PASS	PASS	
	_B84G_4GK_AP3_RME		server				
02	ExampleMotor		Test	None	PASS	PASS	
			server				
Tester		Janin Ahlemeyer					
Date		06.05.2023					
Testcase Result		PASS					

10. Results of Testsuite <TS.PERF: Performance>

10.1. Results of <TC.PERF.001.F>: Performant under expected or peak loads

	Test case					
ID:		<tc.perf.001.f></tc.perf.001.f>				
Name:		Performant under expected or peak loads				
ReqID:		DNG.GUI.003; DNG.GUI.007; DNG.PERF.001				
Description:		verifies of The test The test	test case verifies fast website loads below seven seconds. It es the time fetching data from the server and displaying it. test case uses the test data from table TD.003. test set up consists of a timer and a computer, which is conted to the internet.			
			Test steps			
Step	Action		Expected result	Actual result		
1	1 Go to home		Display home page	Display home page		
page						

bar drop-down list of search drop-down I	is selected. A list of search
suggestions is opened. suggestions	
	s is opened.
3 Enter a string For each character the For each ch	aracter the
into search bar suggestion of the drop-suggestion	of the drop-
down list is filtered. down list is	filtered.
4 Click on search All assets from the server All assets fr	om the server
button are loaded. The asset list are loaded.	The asset list
is displayed; missing im- is displayed	l; missing im-
ages are replaced with ages are re	placed with de-
default image; invalid pa- fault image;	invalid param-
rameters produce the dis- eters produce	ce the display
play of an error message. of an error r	nessage.
5 Click on one of All assets from the se- All assets fr	om the se-
the suggested lected server are loaded lected server	er are loaded
server ad- below seven seconds. below sever	n seconds. The
dresses and The asset list is dis- asset list is	displayed; in-
measure time played; invalid parame- valid param	eters produce
ters produce the display the display	of an error
of an error message. message.	

Test	TD.003						
data:							
Dataset	AAS ser	ver link	API	Expected	Actual		
				result	result		
01	https://a	dmin-shell-io.com/5001	V1	PASS	PASS		
			API				
02	https://co	cae4836-001e-48c2-a4f9-	V3	PASS	PASS		
	235554f	9400b.ma.bw-cloud-instance.org/	API				
03	http://aa	s.murrelektronik.com:4001/aas	V3	PASS	PASS		
			API				
04	ccae483	6-001e-48c2-a4f9-	V3	FAIL	FAIL		
	235554f	235554f9400b.ma.bw-cloud-instance.org/					
				•			
Tester		Janin Ahlemeyer					
Date		06.05.2023					
Testcase Result		PASS					

11. Conclusion

Since every test case passed, the criteria that denote a successful completion of a test phase is met. Therefore, the test phase is completed without suspension. The main functionality to receive a nameplate with a scannable QR code of any asset from an AAS-Server is guaranteed.