

TEAM 2

Software Verification and Validation Report

Authors of this document:

Måns Andersson
Hanna Autio
Moa Eklöf
Oskar Fällström
Ulf Hörndahl
Jonathan Lundholm

Version History

Version	Date	Responsible	Description
1.0	2015-10-14	OF	Baseline

Contents

1	Known Bugs	1
1.1	Back End	1
1.2	Other	1
2	Functional Tests	2
2.1	MyDevices View	2
2.2	Sensor View	5
2.3	Light Bulb View	8
3	System Tests	11
3.1	Tests for Use Cases	11
3.2	Quality Tests	14
4	Review Protocols - Informal	15

Reference Documents

1. PUSS154212 - System Requirements Specification v1.2
2. Programvaruutveckling för Stora System - Projekthandledning v2.2
(*Institutionen för datavetenskap*, Lunds Univeritet 2015)
3. PUSS154213 - Software Verification and Validation Specification v1.4
4. PUSS154253 - Test Matrices for SVVS v1.1
5. PUSS154215 - Software Verification and Validation Instruction v1.4

1 Known Bugs

Here we list all known bugs with the back end and the MVD. The bug listed as 1 in the back end is responsible for the majority of the errors.

1.1 Back End

1. There is no way of telling which devices are active or nearby via the MVD. This means that, for example, you get a 200 code (successful operation) when trying to change the color of a light bulb even if there is no light bulb connected.
2. The back end database is not in sync with the actual status of the light bulb. E.g. if you manually disconnect the light bulb while it is on, the back end will report its status as still on, even though the light bulb is off.
3. Setting the color of the light bulb to FFFFFFFF causes the light bulb to turn off, and then on, and then disconnecting itself from the MVD. This requires a restart of both Scan App and Publish App to continue.

1.2 Other

1. When the phone hosting the MVD goes to “locked mode”, Scan App and Publish App stops working and thus, needs to be restarted.

2 Functional Tests

Below are the test protocols from the function tests.

2.1 MyDevices View

Tests performed 2015-10-05

The protocol below correspond to the tests in PUSS154213 v1.2. They were performed as specified in PUSS154215 v1.0.

Testcase	Pass/No Pass	Comment
A.1.1	Pass	
A.1.2	Pass	
A.1.3	No Pass	The list is not scrollable with the available devices
A.1.4	Pass	
A.1.5	Pass	
A.1.6	Pass	
A.1.7	No Pass	Wrong name of sensor
A.1.8	Pass	
A.1.9	Pass	
A.1.10	Pass	
A.1.11	Pass	
A.1.12		Postponed

Tests performed 2015-10-08

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.3.

Testcase	Pass/No Pass	Comment
A.1.1	Pass	
A.1.2	Pass	
A.1.3	Pass	
A.1.4	Pass	
A.1.5	Pass	
A.1.6	Pass	
A.1.7	Pass	
A.1.8	Pass	
A.1.9	Pass	
A.1.10	Pass	
A.1.11	Pass	
A.1.12		Postponed

Tests performed 2015-10-14

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.5.

Testcase	Pass/No Pass	Comment
A.1.1	Pass	
A.1.2	Pass	
A.1.3	Pass	
A.1.4	Pass	
A.1.5	Pass	
A.1.6	Pass	
A.1.7	Pass	
A.1.8	Pass	
A.1.9	Pass	
A.1.10	Pass	
A.1.11	Pass	
A.1.12		Postponed

2.2 Sensor View

Tests performed 2015-10-05

The protocol below correspond to the tests in PUSS154213 v1.2. They were performed as specified in PUSS154215 v1.0.

Testcase	Pass/No Pass	Comment
A.2.1	Pass	
A.2.2	Pass	
A.2.3	No Pass	The status light of the sensor is off (postcondition 2)
A.2.4	Pass	
A.2.5	Pass	
A.2.6	Pass	
A.2.7	Pass	
A.2.8	No Pass	Even without internet connection the app displays a value (postcondition 1)
A.2.9	No Pass	(postcondition 1)
A.2.10	Pass	
A.2.11	Pass	
A.2.12	No Pass	In landscape mode: failed on instructions 3,4 and 5 (items not visible).

Tests performed 2015-10-08

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.3.

Testcase	Pass/No Pass	Comment
A.2.1	Pass	
A.2.2	Pass	
A.2.3	No Pass	Status lamp does not correspond to the device status.
A.2.4	Pass	
A.2.5	Pass	
A.2.6	Pass	
A.2.7	Pass	
A.2.8	No Pass	Wrong error message.
A.2.9	No Pass	Status lamp does not correspond to the device status.
A.2.10	Pass	
A.2.11	Pass	
A.2.12	Pass	
A.2.13	No Pass	Wrong error message.

Tests performed 2015-10-14

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.5.

Testcase	Pass/No Pass	Comment
A.2.1	Pass	
A.2.2	Pass	
A.2.3	Pass	
A.2.4	Pass	
A.2.5	Pass	
A.2.6	Pass	
A.2.7	Pass	
A.2.8		Postponed
A.2.9	Pass	
A.2.10	Pass	
A.2.11	Pass	
A.2.12	Pass	
A.2.13		

2.3 Light Bulb View

Tests performed 2015-10-05

The protocol below correspond to the tests in PUSS154213 v1.2. They were performed as specified in PUSS154215 v1.0.

Testcase	Pass/No Pass	Comment
A.3.1	Pass	
A.3.2	Pass	
A.3.3	Pass	
A.3.4	No Pass	It is not possible to input capital letters (postcondition 2)
A.3.5	Pass	
A.3.6	Pass	
A.3.7	No Pass	Failed on configuration 1,2,3,4,5
A.3.8	No Pass	Capital letters not recognized, fail on all configurations
A.3.9	Pass	
A.3.10	Pass	
A.3.11	No Pass	No error message
A.3.12	Pass	
A.3.13	Pass	
A.3.14	No Pass	In landscape mode: fail on instructions 3,4 and 5 (items not visible).

Tests performed 2015-10-08

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.3.

Testcase	Pass/No Pass	Comment
A.3.1	Pass	
A.3.2	Pass	
A.3.3	Pass	
A.3.4	Pass	
A.3.5	Pass	
A.3.6	Pass	
A.3.7	No Pass	Failed on configuration 6
A.3.8	Pass	
A.3.9	Pass	
A.3.10	Pass	
A.3.11	Pass	
A.3.12	Pass	
A.3.13	Pass	
A.3.14	Pass	

Tests performed 2015-10-14

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.5.

Testcase	Pass/No Pass	Comment
A.3.1	Pass	
A.3.2	Pass	
A.3.3	Pass	
A.3.4	Pass	
A.3.5	Pass	
A.3.6	Pass	
A.3.7	Pass	
A.3.8	Pass	
A.3.9	Pass	
A.3.10	Pass	
A.3.11	Pass	
A.3.12	Pass	
A.3.13	Pass	
A.3.14	Pass	

3 System Tests

Below are the test protocols from the system tests.

3.1 Tests for Use Cases

Tests performed 2015-10-05

The protocol below correspond to the tests in PUSS154213 v1.2. They were performed as specified in PUSS154215 v1.0.

Testcase	Pass/No Pass	Comment
B.1.1	Pass	
B.1.2	No Pass	Failed on postconditions 1,2.
B.1.3	Pass	
B.1.4	Pass	
B.1.5	Pass	
B.1.6	Pass	
B.1.7	Pass	
B.1.8	Pass	
B.1.9	No Pass	Impossible to determine the status of the sensor device.
B.1.10	No Pass	Impossible to determine the status of the sensor device.
B.1.11	Pass	
B.1.12	Pass	
B.1.13	No Pass	Wrong error message.
B.1.14	Pass	
B.1.15	Pass	
B.1.16	Pass	
B.1.17	Pass	
B.1.18	Pass	
B.1.19	No Pass	Failed on postcondition 1.
B.1.20	No Pass	Failed on postcondition 1.
B.1.21	Pass	
B.1.22	Pass	
B.1.23	Pass	
B.1.24	Pass	
B.1.25	No Pass	Wrong error message.

Tests performed 2015-10-08

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.3.

Testcase	Pass/No Pass	Comment
B.1.1	Pass	
B.1.2	Pass	
B.1.3	Pass	
B.1.4	Pass	
B.1.5	Pass	
B.1.6	Pass	
B.1.7	Pass	
B.1.8	Pass	
B.1.9	Pass	
B.1.10	Pass	
B.1.11	Pass	
B.1.12	No Pass	Does not display the correct values after pressing get.
B.1.13	Pass	
B.1.14	Pass	
B.1.15	No Pass	Wrong error message.
B.1.16	Pass	
B.1.17	No Pass	Wrong error message
B.1.18	Pass	
B.1.19	No Pass	No error message
B.1.20	No Pass	No error message
B.1.21	Pass	
B.1.22	Pass	
B.1.23	Pass	
B.1.24	Pass	
B.1.25	Pass	

Tests performed 2015-10-14

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.5.

Testcase	Pass/No Pass	Comment
B.1.1	Pass	
B.1.2	Pass	
B.1.3	Pass	
B.1.4	Pass	
B.1.5	Pass	
B.1.6	Pass	
B.1.7	Pass	
B.1.8	Pass	
B.1.9	Pass	
B.1.10	Pass	
B.1.11	Pass	
B.1.12	Pass	
B.1.13	Pass	
B.1.14	Pass	
B.1.15	Pass	
B.1.16	Pass	
B.1.17	Pass	
B.1.18	Pass	
B.1.19	No Pass	Back end bug no. 1.
B.1.20	No Pass	Back end bug no. 1.
B.1.21	Pass	
B.1.22	Pass	
B.1.23	Pass	
B.1.24	Pass	
B.1.25	Pass	

3.2 Quality Tests

Tests performed 2015-10-05

The protocol below correspond to the tests in PUSS154213 v1.2. They were performed as specified in PUSS154215 v1.0.

Testcase	Pass/No Pass	Comment
B.2.1		Postponed
B.2.2	No Pass	Failed at step 7.
B.2.3	No Pass	No error messages generated.

Tests performed 2015-10-08

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.3.

Testcase	Pass/No Pass	Comment
B.2.1		Postponed
B.2.2	No Pass	Failed in instructions: 2 and 7
B.2.3	No Pass	Failed to generate error messages in instructions: 2,4,5,6,7

Tests performed 2015-10-14

The protocol below correspond to the tests in PUSS154213 v1.4. They were performed as specified in PUSS154215 v1.5.

Testcase	Pass/No Pass	Comment
B.2.1		Postponed
B.2.2	Pass	
B.2.3	No Pass	Fail on all instructions due to back-end bugs. Responsible bug is 1 in back end.

4 Review Protocols - Informal

Here is a collection of the protocols from the informal reviews of the following documents:

- SDP (Review conducted 2015-09-10)
- SRS (Review conducted 2015-09-11)
- SVVS (Review conducted 2015-09-11)
- STLDD (Review conducted 2015-09-24)
- SVVI (Review conducted 2015-09-24)
- SDDD (Review conducted 2015-10-04)

The informal review for SVVR, SSD and PFR was cancelled due to the unforeseen event in 2015-10-12. Instead the reviewers sent in their comments by email and the team members responsible for these documents made appropriate changes according to these comments.

GRANSKNINGSPROTOKOLL

Granskningsdokument: SDPDatum: 9/10/2015Version: 0.1

Granskningsbeteckning: _____

DEL A: Totalt antal fel:**A****B****C****DEL B: Granskningstyp**Granskningstyp: ☐ Formell ☒ Informell☒ Ordinarie☐ Omgranskning av _____**DEL C: Deltagare**

Roll	Namn
Granskare	Madeleine Boström, Ulf Hörndahl, Oscar Axelsson
Moderator	Emma Albertz
Sekreterare	Linnéa Claesson
Författare	Emma Albertz, Linnéa Claesson

DEL D: Underskrift & beslutOmgranskning ☐ Datum Åtgärdas, därefter godkänd ☒ Senast Godkänd utan åtgärd ☐

Protokolljustering

Underskrift för godkännade

Linnea Claesson

DEL E: Granskningsanmärkningar

Löpnr.	Position	Feltyp	Grad	Beskrivning	PR nr.
1	1	12	C	Hårdkoda inte referenser	
2	2	13	B	Sensor device, inte sensor	
3	3	19	B	Förtydliga mål	
4	4.1	11	B	Agility -> Agile	
5	4.1	11	C	Waterfall, beskriv varför	
6	4.1	16	B	Varför är antal begränsade?	
7	5.1	16	A	Vem är Section Manager?	
8	5.2	16	A	Vilka är reviewers?	
9	5.3	16	A	Vilka är experter?	
10	5.4	16	A	Vilka ingår i projektorganisationen?	

GRANSKNINGSPROTOKOLL

[illegible]

GRANSKNINGSPROTOKOLL

Granskningsdokument: SRS

Datum: 9/11/2015

Version: 0.1

Granskningsbeteckning: _____

DEL A: Totalt antal fel:**A**

1

B

15

C

17

DEL B: GranskningstypGranskningstyp: ☐ Formell ☒ Informell☒ Ordinarie☐ Omgranskning av _____**DEL C: Deltagare**

Roll	Namn
Granskare	Oscar Fällström, Måns Andersson, Moa Eklöf, Jonathan Lundholm
Moderator	Linnéa Claesson
Sekreterare	Emma Albertz
Författare	Daniel Olsson, Oscar Axelsson, Jacob Mevik, Madeleine Boström, Carl Rynegardh David Cartbo, Niklas Ovnell, Marcus Hilliges, Filip Månson, Fredrik Månsson, Daniel Dornlöv

DEL D: Underskrift & beslutOmgranskning ☐ Datum 9/11/2015Åtgärdas, därefter godkänd ☒ Senast _____Godkänd utan åtgärd ☐

Protokolljustering

Underskrift för godkännade

Linnéa Claesson

DEL E: Granskningsanmärkningar

Löpnr.	Position	Feltyp	Grad	Beskrivning	PR nr.
1	2	16	C	Lägg till referens	
2	3.1	18	C	Stavfel	
3	3.2	18	C	Formulering mening	
4	4	18	C	Formulering av sista mening	
5	4	18	C	MVD, syftning, formulering	
6	4	18	C	Formulering, Sensor Device	
7	4	18	C	MVD, layout som de andra styckena	
8	4	16	C	Avsaknad av MAC-adress	
9	5.1.1	18	C	Omformulering: temperature sensor-sensor device	
10	5.1.1	21	B	Lägg till postcondition	

GRANSKNINGSPROTOKOLL

[illegible]

GRANSKNINGSPROTOKOLL

Granskningsdokument: SVVSDatum: 9/11/2015Version: 0.1

Granskningsbeteckning: _____

DEL A: Totalt antal fel:**A****B****C****DEL B: Granskningstyp**Granskningstyp: ☐ Formell ☒ Informell☒ Ordinarie☐ Omgranskning av _____**DEL C: Deltagare**

Roll	Namn
Granskare	Filip Månsson, Fredrik Månsson, Jacob Mejvik
Moderator	Emma Albertz
Sekreterare	Linnéa Claesson
Författare	Oscar Fällström, Måns Andersson, Moa Eklöf, Jonathan Lundholm Hanna Autio, Ulf Hörndahl

DEL D: Underskrift & beslutOmgranskning ☐ Datum Åtgärdas, därefter godkänd ☒ Senast Godkänd utan åtgärd ☐

Protokolljustering

Underskrift för godkännade

Linnéa Claesson

DEL E: Granskningsanmärkningar

Löpnr.	Position	Feltyp	Grad	Beskrivning	PR nr.
1	1	11	C	SVVI - Instrucions	
2	1	18	C	Förtydliga "main document"	
3	1, 2	13	B	Ändra ordning	
4	2	11	C	Stora bokstäver i "stora system"	
5	3	13	B	Software -> System	
6	4	18	C	Expectation -> Specification	
7	6	18	B	Otydlig förklaring	
8	A.1.6	46	B	Lägg till ID	
9	A.1.7	46	B	Lägg till ID	
10	A.2.6	19	C	Förtydliga vilka devices	

GRANSKNINGSPROTOKOLL

[illegible]

GRANSKNINGSPROTOKOLL

Granskningsdokument: STLDDDatum: 150924Version: 0.9

Granskningsbeteckning: _____

DEL A: Totalt antal fel:**A****B****C****DEL B: Granskningstyp**Granskningstyp: ☐ Formell ☒ Informell☒ Ordinarie☐ Omgranskning av _____**DEL C: Deltagare**

Roll	Namn
Granskare	David Cartbo, Niklas Ovnell, Carl Rynegardh
Moderator	Linnéa Claesson
Sekreterare	Emma Albertz
Författare	Daniel Olsson, Oscar Axelsson, Jacob Mejvik

DEL D: Underskrift & beslutOmgranskning ☐Datum Åtgärdas, därefter godkänd ☒Senast Godkänd utan åtgärd ☐

Protokolljustering

Linnéa Claesson

Underskrift för godkännade

Linnéa Claesson

DEL E: Granskningsanmärkningar

Löpnr.	Position	Feltyp	Grad	Beskrivning	PR nr.
1	1	13	C	Form. koppla och sen kontr., lägg till MVD	
2	3	61	C	Formulering lägg till grafiskt interface	
3	3	16	B	Det ska finnas förklaringar till publika metoder	
4	3.3	61	C	Lägg till vilka som är pub. resp. priv. met. i bilden	
5	3	18	C	Referera till sekv.diag. och UML tydligare förklaring	
6	3.1	18	B	Förklara mer ingående	
7	3.2	16	B	Förklarande text, mer om innehåll	
8	2	13	B	Referenserna likadana som i andra dokumenten	
9	2	12	B	Lägg till referens till UML-pilarna	
10	3.3	16	B	I NetworkManager lägg till callback	

GRANSKNINGSPROTOKOLL

[illegible]

GRANSKNINGSPROTOKOLL

Granskningsdokument: SVVIDatum: 9/24/2015Version: 0.9

Granskningsbeteckning: _____

DEL A: Totalt antal fel:**A****B****C****DEL B: Granskningstyp**Granskningstyp: ☐ Formell ☒ Informell☒ Ordinarie☐ Omgranskning av _____**DEL C: Deltagare**

Roll	Namn
Granskare	Jacob Mejkvik, Daniel Dornlöv, Marcus Hilliges
Moderator	Linnéa Claesson
Sekreterare	Emma Abertz
Författare	Oscar Fällström, Måns Andersson, Moa Eklöf, Jonathan Lundholm Hanna Autio, Ulf Hörndahl

DEL D: Underskrift & beslutOmgranskning ☐ Datum Åtgärdas, därefter godkänd ☒ Senast Godkänd utan åtgärd ☐

Protokolljustering

Linnéa Claesson

Underskrift för godkännade

Linnéa Claesson

DEL E: Granskningsanmärkningar

Löpnr.	Position	Feltyp	Grad	Beskrivning	PR nr.
1	A, B	48	B	Namn på testfallen	
2	A.1.1	45	C	Kontrollera duplicerade testfall	
3	A, B	17	B	Konsekvent precondition	
4	A.1.7	53	C	Postcondition ska göras om till checkar?	
5	A.1.9	18	B	Vagt formulerad, vi hittar det vi scannar efter	
6	A.1.11	18	B	Kan kombineras med annat test fall eller förtydligas	
7	A.2.1-2	45	C	Kan slås ihop	
8	A.2.4	45	C	Kan kombineras med annat testfall	
9	A.2.5	13	B	Antingen siffror eller text	
10	A.2.5	48	C	Göra om "for-loopen"	

GRANSKNINGSPROTOKOLL

[illegible]

GRANSKNINGSPROTOKOLL

Granskningsdokument: SDDD

Datum: 151004

Version: 0.9

Granskningsbeteckning:

DEL A: Totalt antal fel:**A**

1

B**C**

16

DEL B: GranskningstypGranskningstyp: ☐ Formell ☒ Informell☒ Ordinarie☐ Omgranskning av**DEL C: Deltagare**

Roll	Namn
Granskare	Daniel Olsson
Moderator	Jacob Mejvik
Sekreterare	Jacob Mejvik
Författare	Carl Rynegardh, Daniel Dornlöv, Fredrik Månsson, Filip Månsson Marcus Hilliges, Niklas Ovnell, David Cartbo, Madeleine Boström

DEL D: Underskrift & beslutOmgranskning ☐

Datum 151004

Åtgärdas, därefter godkänd ☒

Senast

Godkänd utan åtgärd ☐

Protokolljustering

Linnéa Claesson

Underskrift för godkännade

Linnéa Claesson

DEL E: Granskningsanmärkningar

Löpnr.	Position	Feltyp	Grad	Beskrivning	PR nr.
1		15	C	Ta bort ActivityTwo och tillhörande xml	
2		15	C	Ta bort example-paketet och tillhörande xml	
3		15	C	Ta bort BaseActivity	
4		15	C	Ta bort alla borttagna aktiviteter från manifestet	
5		15	C	Ta bort allt relaterat till menyn	
6		75	C	En ny toast bör ej visas varje gång den visas	
7		15	C	Ta bort bortkommenterad kod	
8		13	C	Bryt ut kod till metoder, init() mm	
9	MyDeviceAc	75	C	createCallback() skapar ett nytt objekt varje gång	
10	MyDeviceAc	15	C	Rad 158, onödig return	

GRANSKNINGSPROTOKOLL

[illegible]