Happy flow en Failure states (unhappy flow)

Happy Flow - Sequence diagram:

IRMA as a Service SAML bridge
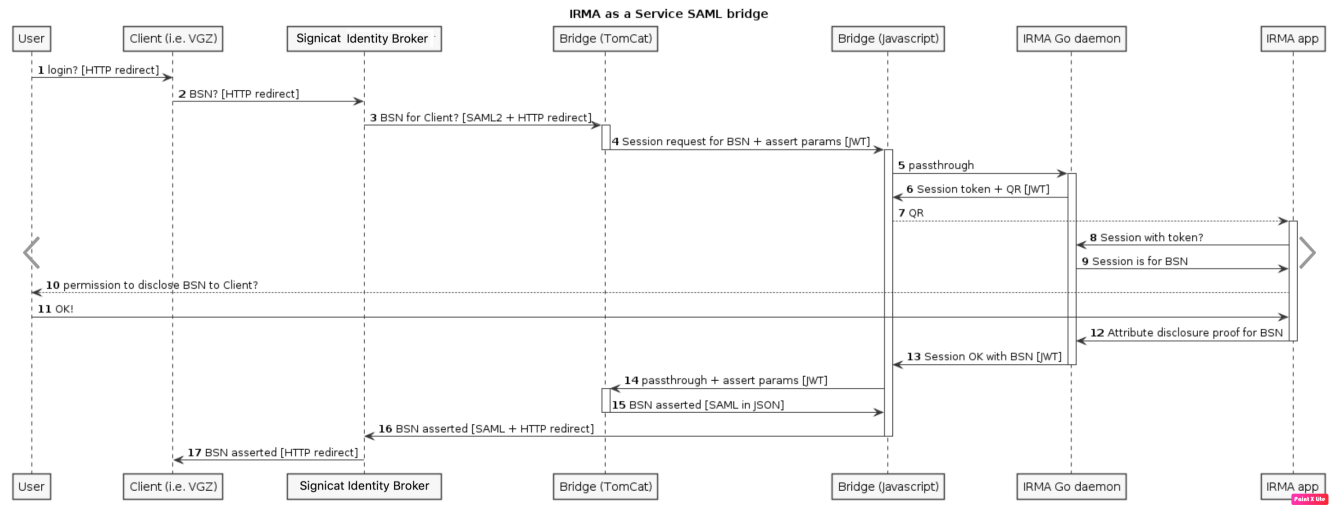
Failure modes

FAILURE MODE	DESCRIPTION	RELEVANT STEPS
Programming / configuration failure hard **(error hard)**	No mitigation possible, javascript is no longer or not capable of executing. Should be excluded by testing. Examples: a. Failed to start due to syntax error in configuration file. b. An incompatible browser is used. c. Javascript is not enabled.	N.V.T.
Programming / configuration failure soft **(error soft)**	mitigation possible, if **Connection failure (partial)** occurred, redirect with 'BSN not asserted' on sequence step 16. Moderately unlikely. Should be excluded by testing. Should be able to log message to Bridge. Subsequent messages are not logged. Examples: a.Configured incorrect JWT public key for IRMA go server. (sequence step 5) b. Not an authorized SAML Service Provider for this IRMA SAML bridge. (sequence step 3) (i.e. testing and production mixed up, malicious parties)	5,3,16
Connection failure (complete)	i.e. phone lost connectivity. Significant frequency. Should be able to show 'failed to connect' message. If failure occurs during sequence steps 3 or 16 possibly hard browser error is shown.	3,16
Connection failure (partial)	one of the services is down, but general connectivity is still available. Moderately likely. Should show 'failed to connect' message in all cases and be redirected back to client with 'BSN not asserted'. a. Not able to show anything when Bridge (TomCat) is down. In that case sequence step 3 fails. b. Not able to redirect (sequence step 16) when SIB is down. c. Not able to redirect (sequence step 17) when client is down. d. Timeout or connection rejected for IRMA Go (sequence steps 5, 6, 13) e. Timeout or connection rejected because phone is not able to connect to IRMA Go (sequence steps 8, 9, 12)	3,5,6,8,9,12,13,16,17
User unresponsive	significant frequency. a. Failed to scan QR (sequence step 7) because user does not have app installed. b. User is interrupted during flow. (sequence steps 7, 10, 11)	7,10,11
User cancellation	significant frequency. I.e. user decides half-way that organisation should not know BSN. a. By pressing *cancel*-button in BridgeClient, somewhere after sequence step 4. b. By pressing *cancel*-button in IRMA Go app, after sequence step 10 but before sequence step 11. c. By not having correct credential loaded in app. (yes, this is a cancellation)	4,10,11

Happy flow and failure state (responses) matrix :

		-	Happy flow	error hard	error soft	complete conn failure	partial conn failure	user unresponsive	user cancellation
						<--FAILURE MODES-->			
SEQUENCE STEPS	**1.**	-		NOR	NOR	NOR	NOR	-	-
	2.	-		NOR	NOR	NOR	NOR	-	-
	3.	-		z	g	z	-	-	-
	4.	-		y	g	-	-	-	h
	5.	a		-	g	d → i	d → (i)	-	h
	6.	a		-	g	d → i	d → (i)	-	h
	7.	b→ c		-	NOR	-	-	f → h	h
	8.	-		-	x (→ f → h)	x → f → h/i	x → f → h	-	h
	9.	-		-	x (→ f → h)	x → f → h/i	x → f → h	-	h
	10.	v		-	-	-	-	f → h	h / e → h
	11.	-		-	-	-	-	f → h	h / e → h
	12.	-		-	x (→ f → h) / x → e → h	x → f → h/i	x → f → h	f → h	h / e → h
	13.	-		-	g	d → i	d → (i)	-	h
	14.	-		-	g	d → i	d → (i)	-	h
	15.	-		-	g	d → i	d → (i)	-	h
	16.	h		z	g	d → i / z	d → (i) / z	-	-
	17.	-		NOR	NOR	NOR	NOR	-	-

- **NOR** = *Not Our Responsibility*.
- **-** = Not applicable.
- example**: "X" → "Y"**= X followed by Y.
- example: **"X" → ("Y")** = X possibly followed by *Y*.
- example: **"X"/"Y"** = X or Y depending on the failure state

Uitleg : Happy flow and failure state responses

Response	titel	melding (NL)	melding (EN)	waar getoond?
a	**connecting**	We starten een sessie voor u, een moment geduld...	Starting an IRMA session for you...	javascript
b	**pleaseScan**	Scan om in te loggen de onderstaande QR-code met de IRMA app	In order to login please scan the following QR code with your IRMA app.	javascript
c	**pleaseFollow**	Volg de aanwijzingen in de IRMA app.	Please follow the instructions in your IRMA app.	javascript
d	**errorConnection**	We konden geen verbinding krijgen met IRMA.	We were unable to connect to IRMA.	javascript
e	**errorCancelled**	U heeft het verzoek geweigerd.	You have cancelled the session request.	javascript
f	**errorTimeout**	Uw sessie met IRMA is verlopen.	Your IRMA session has expired.	javascript
g	**errorUnknown**	Het is helaas niet gelukt om in te loggen	Unfortunately the login was not successful	javascript
h	**returning**	We verwijzen u terug naar de website waar u met IRMA wilt inloggen. **	You will be returned to the website where you wish to login with IRMA.	javascript
i	**returnFailed**	We konden u niet terug verwijzen.	We failed to return you	javascript
v	-	"<irmaserver>* vraagt u onderstaande attributen vrij te geven:"	"<irmaserver> asks you to disclose the following attributes:"	IRMA app
x	-		appropriate error message	IRMA app
y	-	u ondersteunt geen javascript ??	For the use of this application you need to enable Javascript.	browser
z	-		connection failed	browser

* <irmaserver> = "klant.irmaconnect.nl" bijv VGZ.irmaconnect.nl

** = Response "h" wordt getoond wanneer het terugzenden duurt langer dan 3 seconden