#### uBreakiFix Samsung Guide Contents

Portal: In-Warranty Portal Flow	1
Systems: Samsung Guides	1
Process: How to Keep Credentials Active (Daily Checklist)	1
GD Tool: Common Resolutions	2
Process: Generating MOTP	3
Process: Policy and Check-in Procedure	8
Process: In-Warranty Validation Talking Points	43
Process: Flip / Fold Screen Protector Guide	
GD Tool: Service Issue IQC Guide	50
GD Tool: Common Resolutions	54
GD Tool: Blue WRT Test	54
GD Tool: Uninstalling and Reinstalling	
GSPN: Finding Samsung Software	56
GSPN: SAW Request	
Process: Ticketing Overview	63
Process: GSPN & Portal Work Order Errors	64
Process: GSPN Errors & Resolutions	
OJT: Flip / Fold Hall IC Calibration	96
OJT: IMEI Cloud	
OJT: FRP Unlock with IMEI Cloud	113
OJT: Main PBA QR Codes.pdf	119
OJT: mmWave Calibration	129
OJT: OCTA QR Codes	138
OJT: Using Fenrir	156
Samsung Systems: MFA Device Setup	164

#### Portal: In-Warranty Portal Flow

Pricing Website > Samsung > Guides > Samsung Guides > IW Portal Flow

#### Systems: Samsung Guides

Pricing Website > Samsung > Guides > Samsung Guides > Samsung Guides SharePoint

This has TONS of information regarding Samsung common errors, work order flow, credentials management, ect. This SharePoint is maintained by corporate, and thus is always the most up-to-date resource.

#### Process: How to Keep Credentials Active (Daily Checklist)

- Generate OTP on GSPN on Slvl account
  - GSPN > Knowledge > Hover over Engineer > Mobile Authorization (under Mobile SVC)
  - o Enter the Certificates Password on the left side and login
    - The "Plugin Error" messages can be IGNORED; close it out by clicking OK and Done
  - Click the Reissue button to generate your OTP
- o Generate MOTP on GSPN on M account
  - GSPN > Admin (top right) > M-OTP Management > Generate
- Confirm Engineer on GSPN on M account
  - GSPN > Admin (top right) > M-OTP Management > Engineer Management > Enter Slvl account > Confirm
    - You must search for your **full** Slvl account name (ex. uBiFXXXSlvlO1).

#### **GD Tool: Common Resolutions**

- Confirm Fenrir and GD Tool are not both open at the same time.
  - They can both "fight" for USB permissions.
- o Try a different USB cable on a different PC port
- Confirm device has enough storage ( > 3gb)
- Unplug, revoke USB debugging authorizations, toggle USB debugging off and back on
- Use Fenrir to reinstall Samsung USB drivers.
- o Android System Web View
  - Settings > Apps > and search for "WebView". Once you find that app, tap the 3 dots on the top right and Uninstall Updates
- o Restart PC
- o Uninstall and reinstall GD Tool
- Try using #help channel on Slack
- Use chat function in lower right of ZenDesk

## OJT: MOTP GSPN

Introduction This document is intended for Admin technicians who need to set up the MOTP device. Read through this guide before attempting to create a new MOTP device. Launch date is set for 11/26/2024.

.....

Information

#### Prerequisites

- Only Admins (not regular users) can be assigned to generate the one-time password
- Multiple users can't generate the password
- Set up will delete any previous person previously able to create passwords
- Just like a user can't have multiple GSPN accounts, it's the same with MOTP
- If the MOTP Admin is not at work, a new Admin user needs to be approved and the both accounts updated

Resolution

on Set up a new MOPT user in GSPN (must already have Admin privileges)

#### New MOPT User



© 2024 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Revised October 28, 2024

#### SAMSUNG Care

#### MOTP GSPN On the Job Training

M-OTP Management	Usage Status	Er Man	ngineer agemer
ASC Code		00042769	87
Date		04.01.202	24
M-01	FP Usage	Status	5
M-O1 User	TP Usage : 0 IMEI Wr	Status iting : 0	; nt
M-OT User User ID	TP Usage : 0 IMEI Wr 7Days AVG	Status iting : 0 El Writing Cou 1Day ago	nt Today
M-O7 User User ID	TP Usage : 0 IMEI Wr 7Days AVG 1	Status iting : 0 El Writing Cou 1Day ago 0	nt Today 0
M-O1 User Vaer ID	TP Usage : 0 IMEI Wr 7Days AVG 1	Status iting : 0 El Writing Cou 1Day ago 0 0	nt Today 0 0

#### 4. Engineer Management Tab

https://gon1qsamsurgciportal.com/h	sis/admin/motp/motpMng.do/met	hodrauth A <sup>h</sup>	-
<u>M-OTP</u> lanagement	Usage Status	Engineer Management	
ASC Code	000	04276987	
		Q	Click without ID will pull out all IDs
Locked 00.00.0000			
Locked 00.00.0000			
Locked 00.00.0000			
Locked 05.25.2017			
Locked 08.23.2017			
Lockod 09.12.2019			
Locked 08.13.2020			

M-OTP Management	Usage Status	Engineer Managemen
ASC Code	0	004276987
1		Q
Normal		
04.14.2024	Con	LOCK

#### How to sign up for MOTP authority

- 1. Only one person can apply for MOTP authority
- 2. To apply

① Confirm on applying M-OTP authority

o rancouvroante ao nerver orbitelo presidence a servera e e entre 2011 e reveneron soble		0	
q.samsungcsportal.com/basis/admin/motp/motpMng.do?method=auth			A
gspn1q.samsungcsportal.com의 메시지			
You have not been granted access to the M-OTP, if you want to get Master OTP authority, please request by pressing OK button.			
	neuronal and an example of the product state of the TET 1. Here the state of the state of the state of the s	enconnected and output provide microsoft and the second large and a second large and a second large and a second large and the second l	enconstantial devocation opting (advectorial on the RET) (in Account High =



3. New Menu in CS Portal (CSP)

 $\odot$  2024 Samsung Electronics America, Inc. All Rights Reserved Revised October 28, 2024

CS Portal	× 🖻 CS Portal	×	+					~		1 ×
→ C @ csplq.sec.s	amsung.net/8031/csportal/	operate.do?cmd	-portal LoginUserCmd					e 🖈 1	• •	
Business	Adapte OTB Authorit		(MEMP				Administration + INEX Writing Authorition +	Admin CTF Author	h Manager	nert (HEV
Major Information	I Company	czia, sos		# ASC Code		# Liter Id				and
Service Network	# Status	Request	v	* Requeste Date		# Last Handled	01/30/2024 - 04/01/2024 -			-
Service Tracking							C. C. Paulo C. C. Paulo			
Service B2D Support								Delete R	eject. A	pproval
Contact Center	Company		ASC Cede	Admin	Changed By	Last Handled	Resvert Pate		Status	
Digital Service	C 5719		0004276987			04.01.2024	94.01.2024		Request	
JOC Office										
Use warupteen User Gesp Management Mattilinaal Tasouree Management Management Menu Management Mitt Des Hanagement Althouse Hanagement Admin OTP Information Management Management Management Management										
Admin OTP Authority Management (MEW)										

#### **Error Messages**

1. If you get an error message, your GSPN ID is not assigned to access MOTP. Contact your CS Portal Admin for access

https://gspn1c	samsungcsportal.com/basis/admin/motp/motp/Mng.do?method=agree		Α <sup>h</sup>	CS Portal > Administration
	gspn1q.samsungcsportal.com의 메시지			> IMEI Writing Authorization
	You have not been granted access to the M-OTP. Please check your Tracet Flag in M-OTP Master Mont of CS Portal			> Admin OTP Information Manageme
				E CS Portal - Chrome - 🗆
	확인			e csp1q.sec.samsung.net:8031/masterOTP/MasterOtpInf.
				Admin OTP Information Update Pop
				# Company C710 - SSE V
				= ASC Code 0004276
			11	# Country/Region UNITED ABAS EMRAT V
				* Admin
			1	a farget Plag
				Registered AC's Company and Country information cannot be modified. If you need to change, use IT-VOC.
				Save
			1	

2. You can't access the MOTP until access is approved



#### FAQs

#### Q. What to do if the MOTP user is absent?

A. Since only one user is authorized to create a MOTP at a time, if the main MOTP user is absent an alternative user will have to be set up.

1. CS Portal > Business > Administrator > IMEI Writing Authorization > Admin OTP Information Management

• The updated user must also be an Admin User so you have to replace that user, then request a new one > have it approved

2. When the alternate user tries to open MOTP menu, GSPN will ask the user to request the MOTP. Since this can't be done, you have to request a new MOTP authority and have it approved

 CS Portal > Business > Administration > IMEI Writing Authorization > Admin OTP Authority (New)



**Revision** The following table lists the revisions made to this OJT resource.

History

Version	Released	Revision
1	10/25/2024	• First published edition of this document.



Samsung Warranty Policy and Check In Procedure

## **Overview**

This guide will walk you through step by step on how a technician should inspect, troubleshoot and repair Samsung mobile devices with specific focus on how to accurately identify and maintain a Samsung device's warranty status based on the condition of the device.

## Index

Physical Condition – Overview Slides 4 – 6

Flip & Fold Warranty Policy and Check In Procedure

Physical Condition – Deco & P-Cap Slides 7 – 11

Physical Condition – Inner Display Cracks Slides 12 – 16

<u>Physical Condition – Inner Display Screen Defects</u> Slides 17 – 23

Physical Condition – Chargeback Avoidance Slides 24 – 25

Display Warranty Determination Flowchart Slide 26

### ubreakifix

#### A & S Series Warranty Policy and Check In Procedure

Physical Condition – Display Determination Slides 27-29

Physical Condition – Cracked Backglass Slides 30-31

Physical Condition – Chargeback Avoidance Slides 32-33

Display Warranty Determination Flowchart Slides 34

# **Physical Condition** Overview

## **Overview**

The first step in warranty eligibility is to verify that the customers device does not have any physical damage that will void their warranty status.

#### **Flip and Fold Devices**

For foldable devices you will need to take a deeper look at the device to determine if there is any physical damage that will void the device's warranty status. Similar to the Galaxy S devices, we want to ensure the back glass, outer display, camera deco, etc. are all free from damage on the outside of the device. Detailed examples found on slides 7 through 25.

Once you have inspected the outside of a foldable device, please go to slide 12 for a more in-depth analysis on the inner display inspection process.

#### **Galaxy S and A Series**

For non-foldable devices, any degree of physical damage will void the warranty. This includes cracked or broken back glass, camera deco, front glass, or the LCD being cracked underneath. Detailed examples found on slides 27 through 33.

For both repair types, techs should also be careful to not damage or break the screen during disassembly to avoid risk of chargebacks.

## **Damage Inspection Point Glossary**



Flip & Fold

# **Physical Condition** Deco & P-Cap

## **Deco & P-Cap Overview**

**IMPORTANT** – You must remove the film protector from a flip or fold device to properly inspect the display. Failure to do so will impact your ability to make the proper determination which could result in a charge back.

1. Any damage to the deco and/or p-caps will result in an out of warranty status. All examples below would be out of warranty repairs



All of the chips present on the example on the left would make the repair OOW

If the deco or p-cap has any chips, cracks, or missing pieces the repair is considered out of warranty and should be charged to the customer

# **Deco Damage**



# **Deco Damage Continued**



# P-Cap Damage

IN WARRANTY







OUT OF WARRANTY

Damage present on P-Cap (misalignment of ribbon)



P-Cap protruding out more than usual

Flip & Fold

# **Physical Condition** Inner Display Cracks

# **Inner Display Cracks Overview**

Once you have verified that there is no damage to the deco or p-cap we will need to inspect the display itself.

Assembly Lavers:	This image portrays how the different layers of a foldable display are
Protection Film (Screen Protector)	laid out and why it is so important to remove the screen protector
PL (Protect Layer)	
UTG (Ultra-Thin Glass)	Once removed, you will then be able to fully inspect the PL (protective layer) and have a better look at any potential LITC (ultra
Display Panel (LCD)	thin glass) or LCD cracks underneath.

The next few slides will help you understand the different variations of screen issues on the UTG (Ultra Thin Glass).

# Ultra-Thin Glass (UTG) Crack Identifying IW vs. OOW

Symptom	IN WARRANTY	OUT OF WARRANTY
UTG Crack Only	UTG cracks in the folding area appear as multiple inconsistent lines.	Torn surfaces are rough to the touch; stabs are not symmetrical Stabbed at cracked area
Black/Gray Spot, White Line	If the folding area has any of these or other types of damage, check for physical drop damage	Examine the deco, P CAP and hinge carefully for stabs/scratches/presses Image: Comparison of the foregram at the stabs of the stabs of the foregram at the stabs of the foreg
Damage away from the crack <b>Ubreckifix</b> .	No tear on the screen or radial cracks (a crack that spreads in multiple directions from a single impact or pressure point) No feels rough when touched. No Radial cracks	Use a light source to check for radial cracks even if the damage is away from the UTG symptom. These are OOW cases even if the crack is not near the symptom

# Ultra-Thin Glass (UTG) Crack (Continued)

IN WARRANTY

OUT OF WARRANTY



ubreakifix. BY asurion

## **Identifying Types of Cracks**

There may be times that a device looks like it has a UTG crack, but it is a different layer of the display that is damaged.

Use this section as a tool to assist in troubleshooting the type of repair needed.

A device that has a crack in the Protective Film (PF) may look like it has a crack in the UTG. To determine which it is, follow these steps:

- 1. Remove the Protective Film
- 2. Remove any remaining adhesive
- 3. If the UTG is normal, recommend replacing the Protective Film

Protection Film Crack -> Replace Film Only



ubreakifix.

UTG Crack -> Follow In-Warranty Troubleshooting on slides 7 and 8



Assembly Layers:

Protection Film (Screen Protector) PL (Protect Layer) UTG (Ultra-Thin Glass) Display Panel (LCD)



Flip & Fold

# **Physical Condition** Inner Display Screen Defects

## **Inner Display LCD Defects Overview**

When determining if screen defects such as dead pixels, black spots, white lines, etc. are covered under warranty there are a few things we need to inspect. As you will see throughout the next few slides, identifying marks in the PL (protective layer) will be key in determining if the identified blemishes were a direct result on the screen malfunction.



any blemishes from the malfunction you will need

consider the repair out of warranty.

side.

## White Line

### Identifying IW vs. OOW



ubreakifix. BY asurion

# White Line (Continued)







# Black Spot

### Identifying IW vs. OOW



## **Bright Dots**

### Identifying IW vs. OOW



ubreakifix. BY asurion

## Black Screen

Identifying OOW (screen lifting)



Flip & Fold

# **Physical Condition** Chargeback Avoidance

# Flip and Fold Chargeback Common Occurrences

Once you have properly deemed a Samsung device In-Warranty we need to ensure we are using proper repair techniques. If you DIP (Damaged in Process) an In-Warranty core your location will be subject to a chargeback. Below you will see some common occurrences that resulted in chargebacks.

1. Torn or missing flex cables



2. LCD burn/damage during camera on ear speaker removal





Punctured camera window

LCD Burn

# Flip & Fold Display Warranty Determination Flowchart

Whenever a Galaxy Z series foldable device is presented for repair, it is important to complete the appropriate troubleshooting on the device **BEFORE** beginning the repair. Completing the needed troubleshooting in the correct way will help to ensure that there is no unnecessary part consumption, and that the repair is properly identified as In-Warranty or Out-of-Warranty.

#### Please utilize this warranty process below for any potential foldable display repairs:



Galaxy A & S Series

# **Physical Condition** Display Determination

## **Galaxy A and S Series Display Cracks**

For non-foldable devices, any degree of physical damage will void the warranty. This includes, but is not limited to, cracked or broken back glass, camera deco, front glass, or the LCD being cracked underneath. Below are some examples of what would be considered OW:



Even if the damage seems obvious, always be sure to thoroughly check the rest of the phone for any additional damage. In this case, the frame is chipped near the impact point.





# **Galaxy A and S Series Display Defects**

Any display defects that show no signs of physical damage that could be causing the issue should be classified as IW.



White Lines

Black Spots

Dead Pixels
Galaxy A & S Series

# **Physical Condition** Cracked Backglass

# **Galaxy A and S Series Cracked Backglass**

If the backglass of the device is cracked, the repair would be OOW.

Remember that not all cracked backglasses will be easily noticeable. Conducting a thorough inspection of the backglass will help you make a wellinformed assessment.





When repairing a device with a severely damaged backglass, be aware that components underneath, like the Main and/or Sub PBA and rear cameras, may also be affected and should be inspected thoroughly.

Galaxy A & S Series

# **Physical Condition** Chargeback Avoidance

# Galaxy A & S Series Chargeback Common Occurrences

Once you have properly deemed a Samsung device In-Warranty we need to ensure we are using proper repair techniques. If you DIP (Damaged in Process) an In-Warranty core your location will be subject to a chargeback. Below you will see some of the more common occurrences we have noticed.

1. Torn or missing flex cables



ubreakifix.

2. LCD burn/damage during camera or ear speaker removal





Punctured camera window

LCD Burn

# **A & S Series Display Warranty Determination Flowchart**

Whenever an A and/or S Series device is presented for repair, it is important to complete the appropriate troubleshooting on the device **BEFORE** beginning the repair. Completing the needed troubleshooting in the correct way will help to ensure that there is no unnecessary part consumption, and that the repair is properly identified as In-Warranty or Out-of-Warranty.

#### Please utilize this warranty process below for any potential A & S display repairs:



Use this guide when talking with a customer about the warranty determination at your store.

Remember to use soft skills and express sympathy and understanding with the customer, but maintain confidence in your decision to determine their warranty status based on condition inspection. You are the tech expert responsible for determining a device's warranty status based on condition.

#### What NOT to say to a customer:

- "We don't do in-warranty Samsung repairs"
- Mention any detailed, backend processes such as:
  - "Samsung doesn't pay us"
  - "If we don't make the right determination, we will get a chargeback"

### What TO share with a customer:

- 1. Explain the differences in how In-Warranty validation works: In-Warranty by Date versus In-Warranty based on Condition differences.
- 2. Explain how the physical inspection validation applies to the customer's device: Device condition checks can render a device out of warranty even if it is still In-Warranty by the date.

See next slides for detailed responses

### 1. Explain to the Customer How In-Warranty Validation Works

There are two types of In Warranty validations on your Samsung device.

- In Warranty by date (typically 1-year) that starts from the date you purchased your device
- In Warranty by condition your device must be free of defects/damage/imperfections to be considered In Warranty by Samsung
  - Samsung can't determine physical condition of a device over the phone or chat and relies on us as to determine whether a device's condition should be In Warranty

### Note for the tech (not customer-facing):

Because our stores are Samsung Authorized Service Centers, Samsung commonly refers customers to our stores. However, it is important to note that Samsung agents should only validate with a customer whether a device is in warranty by date, not based on condition.

A customer's device can be In Warranty by date, but Out of Warranty based on condition.

\*\*Warranty condition validation can only be performed by the Service Center the customer is getting their device fixed at.\*\*

2. Explain to the Customer How the Validation Applies to Their Device

- "[Customer Name] Unfortunately, even though your device is In Warranty based on date of purchase, based on the current condition of your device, this device cannot be covered as an In-Warranty repair. (Show the customer the device, point to areas of designation and explain)."
- "We are happy to repair your device still, but it would not be covered Under Warranty."
- "I understand that this is probably upsetting and confusing, but my warranty determination decision is based off the condition of the device today, as outlined based on the checkpoints we are given from Samsung."



### 3. If a Customer Pushes Back on the Out of Warranty Decision

- "I understand your disappointment and frustration."
- "While your device is covered from the purchase date, it is not covered based on its current condition. We consider this decision carefully based on the device's appearance and state. Unfortunately, due to [Damage/Condition], this device is not covered. "

#### If a Customer mentions Samsung Reference #

 "Thank you for this information. I can share it with the Samsung team to make them aware of your situation. However, the Samsung customer service team can only confirm your warranty by device date, not current condition."



# Samsung Warranty Determination: Validation Point Information

### Note for the tech (not customer-facing):

Two primary validation points will assist you with determining the correct warranty status:

- 1st validation point is the inspection of the deco and p-caps on the device.
  - If the device has any damage to the deco or damage to the p-caps, regardless of what symptom the device is experiencing warranty determination by the store should always be Out of Warranty.

If the device does NOT have any damage to the deco or NO damage to the p-caps – the store should proceed with an inspection of the display itself.

- 2nd validation point will be inspecting the display itself, which will involve two considerations.
  - o Cosmetic imperfections examples
    - Ex) Fingernail indents, pitting, scratching, etc.
  - Symptoms of the device
    - Ex) No touch on the display, black splotches on the LCD, missing image, etc).

If the devices' symptoms are on or near the cosmetic imperfections, the warranty determination should be considered Out of Warranty.

If the cosmetic imperfections <u>are separate</u> from the device symptoms (EG: no touch on the upper portion of the display, but fingernail indent on the bottom half of the display) then the warranty determination should be <u>considered In Warranty</u>.

## Fold / Flip Screen Protector Quick Reference Guide

This guide is intended to be a trimmed down version of the full guide which can be found here: <u>https://portal.ubif.net/kbase/article/10509</u>. The full guide is recommended for those who are new to using Portal and checking-in devices.

### Collect the customer information and check-in the device as OOW (Out-of-Warranty)

- Before you begin, <u>verify</u> if the customer's device is **In-Warranty by date**.
  - Customers <u>outside the warranty date</u> should be charged \$19.99 MSRP for the protector replacement.
- Run IQC with the customer in store to share the results for transparency before check-in
- Once you've verified the customer is within their <u>warranty period</u>, you will *still* need to check-in the device as <u>OOW (Out-of-Warranty)</u>
- **<u>DO NOT</u>** ever check-in screen protector replacements as IW (In-Warranty)!
- Click on <u>Select Device Symptoms</u> and choose the following **Symptom Codes** 
  - L1 Screen Protector
  - 14 Screen Protector
  - Symptom 3 can be <u>any choice</u> relevant to the status of the protector
- Under the "<u>Reason for Out of Warranty Status</u>" menu, select Protection File
- Click on the Out of Warranty button to proceed

### Add Protection Film SKU to Portal WO and Create GSPN Ticket

- o It's important to add the parts to the Portal WO before GSPN Ticket creation
- Once parts are attached and IQC is complete you can create the GSPN Ticket
  - It's <u>recommended</u> to only start the GSPN ticket when beginning the screen protector replacement

### Submit the FOC (Free-of-Charge) SAW Request

- On the <u>right side</u> of the Portal WO, open the "<u>Work Order Actions</u>" menu and select **Open** SAW Tools
- Under the "<u>Select SAW Type</u>" menu, click on **FOC** 
  - If the option for "FOC" is missing, please ensure the device was checked in as OOW!
- After you <u>select FOC</u>, click on the **Submit SAW button** 
  - Portal should confirm with a <u>pop-up</u> stating "SAW request was created successfully"
- Next, click on the View SAW Requests button to confirm the <u>SAW was attached</u>
- The SAW status *should* read as **"Pending**" which indicates a Sprinklr ticket will need to be submitted in order to receive approval.
  - o <u>Issue Type</u>: Process Requests > SAW > [VOID] Warranty Cost Full Cover
  - After submitting the ticket, monitor your email for a response from FSS
  - Once <u>FSS confirms</u> the SAW was approved, move to the next step

If the SAW Status shows "Approved" right after attachment, there is no need to submit a Sprinklr ticket.

### Attach the Samsung In-Warranty Company

- On the Portal WO, open the "<u>Work Order Actions</u>" menu and select **Open SAW Tools**
- Click on the View SAW Requests button
- Here you can see the <u>status of your SAW Request</u> which should be marked **Approved** If SAW still shows "Pending" please <u>resubmit or reply back</u> to the Sprinklr Ticket
- Click the green check box that says "Convert to IW" to attach the <u>Samsung In-Warranty</u> company

### Moving the WO to Repaired-RFP

- After completing the Screen Protector replacement, you need to complete Fenrir SVC and OQC
  - When running OQC, you can select "External" since the phone was NOT opened
- Proceed to moving the WO to Repaired-RFP status using the following Defect Codes
  - Check "OOW" Box
  - o Protection File
  - o Cosmetic
  - Protect Film Defect OOW

If you receive an error when moving the WO to Repaired-RFP, submit a JIRA Ticket right away!

## Frequently Asked Questions

# Q: Can I facilitate more than one screen protector replacement for the customer?

A: Samsung allows one free protective film replacement during the manufacturer's warranty period. Customer's are also eligible for a free replacement within 7-days of a previous film replacement. Devices outside the warranty will need to be charged for the screen protector.

# Q: How much should I charge the customer for a screen protector if the device is outside the warranty period?

A: MSRP is \$19.99 (plus tax)

### Q: I do not see the option for "FOC" in the SAW Tools menu, how do I proceed?

A: The most common cause for this is due to the device being checked-in as In-Warranty. Screen protector replacements must always be checked in as Out-of-Warranty, even if the customer is

within the warranty period. If you accidentally checked the device in as In-Warranty, mark the Portal Work Order as "Declined-RFP" and recreate the work order.

# Q: Do I need to submit a Sprinklr ticket if the SAW Status already shows "Approved"?

A: No. In some cases, the SAW may be auto-approved for various reasons. It's recommended to always check the SAW status right after attachment to check if a Sprinklr ticket is needed.

### Q: What if FSS declines the FOC SAW request?

A: If the customer is out of warranty by date, then the customer should be charged for the screen protector. If this is a customer escalation, please let FSS know of the situation. FSS can check the customer notes to see if a screen protector was promised by Samsung customer service. In which case, the SAW can be approved.

# Q: Why are we attaching the "Samsung In Warranty" company if the repair is Out of Warranty?

A: While the protector is covered by Samsung, it's tracked as an Out-of-Warranty repair. If the customer returns with an IW issue (blank screen, connection issues, etc.), then the IW ticket will NOT be tracked as a bounce. This is why it's important to ensure these are checked in correctly according to the guide. This will not void the customer's device warranty.

## Q: What does the error "Work order cannot be changed to this function" mean? How do I resolve it?

A: This error indicates that there is a Warranty Error on the GSPN ticket that needs to be resolved internally. The quickest way to resolve this is to submit the appropriate JIRA Ticket using the link below. The support agents will provide direction on how to clear the error.

## GD Tool: Service Issue IQC Guide

When customers are coming into the store because they are experiencing service issues on Samsung devices, below are the steps to pull the call/SMS and data drops. This allows us to show the customer whether the issue is carrier-related or hardware. This is all done in IQC, and we can either print or show the customer the results depending on where your IQC computer is located.

		61	laxy Diagnostics 3.0.186 202302010114 5		* .
agnostics IQC					1 2 3
	Smartphore/	Takket Watch (Android)	Wotch (Tizen) Buds	SVC Validation	
		Please	check the device settings.		
		Crice the USB debugging	setup is complete, you can proceed to the next step.		
C		2	3		4
	\$ .A 751121:0	11년 월 · # 75월 21	1:10 22 19 1	.#7%8.21:11 E 🗢	\$ at 763 1111
< ABOUT DEVICE	Q	< SOPTWARE INPO	< DEVELOPER OFTIONS	Q < PRV	ELOPER OPTIONS
My phone number this evaluation.		Android version	ON VALUE AND AN ADDRESS OF A DRESS OF A DRES	CN Service To	
Status Vew the SMI coad status, de information.	srice INE Land other	Basepand version Graphouseque	Enable Bluetooth HCI snoop log Capare at Investor ICIparies in a fee	COD Enable	luetooth HCI is recipileg
Legal information		Kernel version 3106-10/20240 4/2/2020/00/2020 at	Putning services View and consolid currently remains service		reas unsugging :
Device name Rolery Re		Build number	WebView implementation Chierre stable	is: 88:4 00:9	1063A3E CA445E C17A2E: 18600:E6
Model number ser-extor		SE for Android status	Enable multi-process WebView Rus WebView renderers is an induced process.		weys allow from this computer
Software info Vew the surrently installed berebind version, kernel le	Antrodiversion, nikrubaliki manbacato,	SUPF_SITHOBLE_7.0_0005 Stat Feb 2519 Solid 2017	Auto upcate system		CANCEL OK
Battery i afo View year deviatio lost ter ye and other information	talan, estando inggeseen.	Security 30 flware version 800 VIC Felexie 1 VIC Millor O Calesce 3 VIC VIC Felexie 3	Demo mode	Ceno n	ade
LOOKING FOR SOIVEFI	HNG ELSE'	Knox version Knox 277	US3 debagging Dabugmode when USB is deminated	C LS8 del	ungging Constant Vice Constant
Select [About shrine] from t	he settings, then 'Software	From the list in [Software info] tan [Build nu	imber) five Go to (Developer options) and select	[USE debuoxing] Tap "Always a	ow from this computer" then FOK
					and a second second

Open IQC from GSPN and follow the steps to get the device ready.

MUST 🚑	=	Galaxy Diagnostics 3 0 186 202302010114 S	* . e X
Samunay 044100 St	Galaxy Diagnostics IQC		114952223 SN-Carrent
🔉 🔊	SM-G998U	How to Use the Diagnostic Tool	Auto Diagnostic Test 91
Sough Plack Norm: Summing	S/N R3CR20FSLLA S0 4169572373	Select the customer symptom/maincategory) from the left panel.	Manual Diagnostic Test 9 Start
🕀 📕	O Power 02	Detailed symptoms (maincategory) associated with that symptom (subcategory) are also available for selection.	
slash samanay Sacabishin	🛱 Display 🗖	The selected symptoms (subcategory) are added to the right panel. Click once more on the selected symptoms (maincategory or subcategory) to deselect them.	
	Charging or Discharging	Select customer symptoms that require inspection and press the "Diagnosis Start" button to perform a default diagnosis + a corresponding diagnosis for the selected symptoms.	
terosole Samurany I Stige month	Camera (83)	If no symptoms are selected and the "Start Diagnostics" button is pressed, only the default diagnosis is performed.	
9 -	t(]) Sound or	The default set of diagnostic entries follows the preset values in the server or setup file and varies by country, by service center.	
nan a danitaga	R <sup>ts</sup> <sub>O</sub> Communication and	As the symptom is selected/canceled, diagnostic items corresponding to the relevant symptom are automatically added/deleted internally in the diagnostic tool.	
	Input/Cosmetic 018	The type and number of diagnostic items according to the selected symptoms can be found at the top of the right panel. Diagnosis is divided into automatic and manual diagnostics, and manual diagnostics must be performed by the engineer directly following the puide displayed on	
allener SantiSanti	ିଲ୍ଲୀ Connectivity ରଙ୍କ	the device and input results (some manual diagnostics are automatically entered by the tool).	
	S Faulty operation	Manual diagnosis, which was not performed because symptoms were not initially selected, can be performed separately on the result screen after completion of diagnosis.	
	Select all	Automatic diagnosis is carried out in the background during manual diagnostics, so there is no need for an engineer to perform it separately.	
		Some auto-diagnostic items may take a long time to perform depending on the performance of the device and PC, as you may need to read and analyze large amounts of data depending on the device usage patterns.	

Connect device and follow prompts on the screen to start IQC testing. Select "Connectivity" on the right-hand side.

≡	Galaxy Diagnostics 3 0.186 202502010114 S	🖈 _ o X
Goloxy Diagnostics IQC		1 2 3 4 CHES72373 CHECK
SM-699811	Communication	Auto Diagnostic Test 96
S/N R3CR20FSLLA		Manual Diagnostic Test 10
SO 4169572373	Able to select detailed symptoms.	Start
O Power 02	Control Data Video call failure	Incoming/Outgoing call
Display 0/8	Tailure	Incoming/Outgoing SMS
Charging or 0/4		Pig message failure Communication
Camera 0/3	No service Call drop <u>P</u> GPS Failure <u>A</u> <sup>®</sup> No Network registration <u>URS</u> Airplane mode	communication
(1) Sound		Communication
Q ← Communication 10/10		Communication
Input/Cosmetic 0/8		Roaming not working Communication
(1) Connectivity 0/4		O No service Communication
Eaulty operation		Call drop Communication
Select all		B <sup>a</sup> GPS Failure Communication
		A® No Network registration
		Airplane mode Communication
E $\mathcal{P}$ Type here to search	h 🔜 🗄 🛤 🧔 🧔 🚳 🚳 📤 16'' Coudy ^ Ö	🔹 🕼 🔛 🔩 1238 PM 2/3/2023 🖥

Select all tests under "Connectivity" and press "Start"

=		Galaxy Diagnostics 3.0.186 202302010114 S								
Galaxy Diagnostics IQC						4				
2023.2.3 4:53 PM	Basic inform	ation Common check items(Communicati	ons) Call and Message Send/Receive issues	Data (Internet) connection issue No Service	GPS Failure Airplane Mode Issue					
SM-F926U						^				
SO Number Not for S/N R3CRC068	Basic i	nformation								
Auto Diagnostic Test Manual Diagnostic Test	96	Settings								
Diagnosis time 00 Log time for EWP	49	Settings	Initial status	Current status	Setting change					
Latest S/W version Unkne SKU Code SM-F926UZGA	wn	5G Priority Mode	Not supported	Not supported						
O Power PAS		Mobile Hotspot	Off	Off						
🔯 Display		Call volume (1 - 5)	4	4						
Charging or Discharging	3	HD Voice	On	Unable to confirm						
Camera PAS	U	ser-defined call sound quality settings	Disable	Unable to confirm						
(1) Sound CHE	Camera       Koo         A fif the customer has experienced a battery drain, check the settings for Screen timeout, Wi-Fi, Bluetooth, Location, Battery mode, UHQ upscaler, Dolby, and Video enhancer.         Please reset the settings under the customer's consent.									
Input/Cosmetic PAS (W) Connectivity PAS	Comm	on check items(Communica	tions)							
Faulty operation	No is	nmWave module	PASS		PASS					
				Diagnostics for RF Module						
				No issues found						

Most tests should run automatically on my devices. Just watch the device and follow any prompts that appear. At the Results Screen make sure to select "Connectivity" on the left hand side and at the top you will see quick links to the info we need.



Under those tabs will be all the information we need. Most importantly will be "No Service", "Data Connection issue" and "Call Drop Data". This will tell you if the issue is with the carrier or with the device.

≡			Galaxy Diagnostics 3.0.186 202302010114 S						• X	
Galaxy Diagnosti								1 2 FAIL	3	4
2023.2.3 4:53 PM	* 🖷	Basic information	Common check items(Communications)	Call and Message Send/Receive issues	Data (Internet) connection issue	No Service	GPS Failure	Airplane Mode Issue		
SM-F926U SO Number S/N Auto Diagnostic Test Diagnosts time Log time for EWP Latest S/W version	Not found R3CRC06853L 96 10 00:49 Unicecum	Data (Inter <sup>®</sup> Å <sup>®</sup> Data Show histo Cellular ne	met) connection issue communication error diagnostic: ry of restricted data usage on device, or twork (36, LTE, 56, etc) data communic	5 data icon disappearing. ation status diagnostics did not herd a	Any Data Issues w listed here just like No Service if there data issues.	vill be e the e are			PASS	
SKU Code Power Display Charging or Discharging Camera	SM-F926UZGAATT PASS PASS CHEOK PASS	Data showing hi * DNS(Don * Domain r No history	communication unavailable (DN story of communication error due to DN nain Name System) name converted to IP address for ease o of data communication error due to DN	S error) IS server or AP(wifi). f understanding, and domain name is S error found.	; often compared to "phone book"				PASS	
Sound     Sound     Sound     Input/Cosme     (     Connectivity	CHECK check fail pass pass	From the list	restricting data usage t of apps installed on device, show data restric t data for diagnostic on cellular network	ting app and contents of toast popup. c (3G, LTE, 5G, etc) data communicatio	on status.				N/A	
Faulty opera	tion CHECK	Ji Data Display his This is caus	Call Diagnostics tory of when data transfer stalled for ov eed when data transfer is stalled for ove	er1 minute during internet usage. r1 minute due to network or environr	nental reasons, and it is not due t	to faulty device			PASS	



You can either print the results with the printing icon on the left side of the results screen. Make sure to **ONLY** print the pages needed. If not, you will get 20-30 pages printed out.

### **GD Tool: Common Resolutions**

- Confirm Fenrir and GD Tool are not both open at the same time.
  - They can both "fight" for USB permissions.
- o Try a different USB cable on a different PC port
- Confirm device has enough storage ( > 3gb)
- o Unplug, revoke USB debugging authorizations, toggle USB debugging off and back on
- Use Fenrir to reinstall Samsung USB drivers.
- o Android System Web View
  - Settings > Apps > and search for "WebView". Once you find that app, tap the 3 dots on the top right and Uninstall Updates
- o Restart PC
- o Uninstall and reinstall GD Tool
- Try using #help channel on Slack
- Use chat function in lower right of ZenDesk

### GD Tool: Blue WRT Test

- o Turn on and pair sensor
- o Verify o-ring is sealed with p-sensor inside
- Put syringe in down position
- o Start test
  - o If the test does not start, select restart. If you cannot select restart, then restart GD testing
- While sealing the end of tube with your finger, put syringe in upward position and wait with your finger on the end of the tube

## GD Tool: Uninstalling and Reinstalling

### Step Action

- 1. Navigate to Start > Control Panel > Programs and Features on the GD PC
- 2. Select the previous installation of Galaxy Diagnostics
- 3. Click the "Uninstall" button at the top of the window to uninstall the application
- 4. Navigate in Windows Explorer to C:\ and DELETE the GalaxyDiagnostics folder
- 5. Reboot the GD PC
- 6. Log in to G-SPN
- 7. Navigate to Knowledge > Others > SVC Tool

### Click Search

Note: There is no need to enter any search criteria to load results.

## **GSPN: Finding Samsung Software**

### **Galaxy Diagnostics**



#### Hover over "SVC Partner" and click "SVC Tool"

Service knowledge Fortal - Internet Explore	}	- 1
SKP Service Knowledge Portal	Engineer Customer SVC Partner	$\equiv$ Q $4$ 💽 Confidentia
I my Page my Knowledge my Favorite Contents	SVC tool - List	Home > SVC Partner > SVC tool  ALL      Enter a model code (ove      Search
SVC Partner > SVC tool Engineer > Service Bulletin Engineer > Mobile SVC > Mobile Authorization	Date 08.31.2017	- 08.31.2020 🖽 🛞
I my Quick Category 🌣 Other Products > Other Products Other Products	↓↑         Model         Catego Type ↓ Sull           ★         ♥ 48         Oth         Oth         Oth           ★         ♥ 8         Oth         Oth         Oth         Oth	b typ         Subject 1 (Create Last up Hits 1)           h         Galaxy Diagnostics (V2.5.0.2)         08.0         08.0         530         N           th         Galaxy Diagnostics (V2.5.0.2)         08.0         08.0         79         N
I Recent Model STE SM-G930 MUST SM-G970UZKEXAA	★ ♥ 25 Oth Oth Oth	h Galaxy Diagnostics (V2.5.0.0 08.0 07.2 17111 N ∨
Support (?)		

Search "galaxy" in the subject and select the latest version and date.

### Fenrir/Daseul

🦉 Service Knowledge Portal - Internet Ex	plorer			—
SKP Service Knowledge Portal	Engineer Customer	SVC Partner	≡	Q 🗸 Confidential
Engineer	Service Manual     Install Guide	Exploded View	Service Bulletin	Service Bulletin-Local
	I Training Manual	Technical Training Manual	l.	
	Service Tip	Service Tip-Local		
	l Driver	Firmware	Software	
	Repeated Repair Tip			
	Mobile SVC ~	CMS Contents v	Other	~

Navigate to Engineer - Service Bulletin

🥌 Service Knowledge Portal - Internet Explore	er							- 🗆
SKP Service Knowledge Portal	Engineer Cust	tomer SV0	Partner			= Q 4		Confidential
my Page my Knowledge my Favorite Contents	Service Bulletin	- List   <mark>Mobile</mark>	e (English)			A Home 💚 Engined	er > Servi	ce Bulletin
I my Menu 🌣	Title + Keyworc ♀ Reg/Updated Date	08.31.2017 📖	- 08.31.2020 ::::				Se	arch
Engineer > Service Bulletin SVC Partner > SVC tool Engineer > Mobile SVC >	Urgency Type1	All	~	User Level Type2	LevelS2(Security	r+Level2) ~		
Mobile Authorization	Modified	All	~					
STE SM-G930 MUST	Total Count 4							
SM-G970UZKEXAA	No Completed Translation	Need Translation Modi	fied Title	Type1	Type2	Reg/Updated Date	Views	Downs
Support (?)	1 N	N N	[GalaxyMust]	Guide	SW Tool	2020.07.28 08:35	216705	833489
	2 N	N N	Traning mate	Guide	Training Material	2018.08.16 18:49	2515	2100
	3 N	N N	(Daseul & Gal	Guide	Common	2018.06.18 12:58	7958	6318
	4 N	N N	(18-03) Impor	Bulletin	All models	2018.01.25 09:51	6280	4133

Select "Mobile English" when you do this you will get moved to enter your certificate tool password as full level S2 is required to obtain these. In the yellow field "Title" you will enter MUST, Fenrir, Daseul, etc.

### **PBA Files**

Service Knowledge Portal	Engineer	Customer SVC Partner		= 🤉 🗳 💽 🚥
ineer	Service Manual Install Guide	Exploded View	Service Bulletin	Service Bulletin-Local
	Training Manual	Technical Training Ma	nual	
	Service Tip	Service Tip-Local		
	Driver	Firmware	Software	
	Repeated Repair T	ip		
	I Mobile SVC	<ul> <li>CMS Contents</li> </ul>	<ul> <li>Other</li> <li>Policy</li> <li>Manuals</li> <li>Tools</li> <li>PRL Software</li> <li>Handset Software</li> <li>Adjust Software</li> <li>Compliance Software</li> <li>Label Software</li> <li>Label Software</li> <li>Product Support Tool</li> <li>Special Use</li> <li>Driver</li> <li>Firmware</li> </ul>	~
		Navigate to Engi	neer - Other -	
/lulti Software	- List		▲ Home > Enginee	r 💈 Other 🚿 Tools 🚿 Multi Software
ALL	✓ ALL	~ ALL	V INSERT FULL MODEL HE	RE Search
Date Subject	08.31.201 Enter key	7 :::: - 08.31.2020 ::::		
		^		
otal Count <b>0</b>				Create
↓↑ ↓↑	Model ↓↑	Category Type ↓↑ SubType	Subject ↓↑ Added o Las	t upda <sup>.</sup> Hits ↓1 Added by
		No data fo	und.	

Tools and then either Multi or Clear, usually the files will be in Multi-Software.

Insert FULL model code here. Ex: SM-G950UZKAVZW

### (SAW) SERVICE ACTION WORK ORDER

#### PURPOSE

To reduce the OOW (out of warranty) judgement criteria for customer satisfaction in cases where the customer raises escalation concerns. There is a high chance of customer escalation being raised from these cases:

- Unit is recently OOW by purchase date or production date
- Unit determined OOW by condition but difficulties in finding customer fault

### WHEN TO REQUEST SAW

The following customer escalation cases qualifies for reduction of OOW judgement criteria for customer satisfaction.

- One-time warranty allowance (warranty extension)
- Minor Physical damage
- Minor Liquid damage

#### PROCESS

1. One-time warranty allowance: Warranty grace period 3 months

Customer escalating a scene at your ASC location requesting warranty extension

- Device under repair must be in-warranty by physical condition (no cracks/no liquid damage)
- Device must be within 3 months of expiration of warranty by Purchase/Manufacturing Date.
- POP required if using Purchase Date
- ASC to educate the customer that device is OOW and requires approval from Samsung Head Office
- ASC to email/notify SECA (Samsung working hours only 8am-6pm) that device on hand requires One-time warranty allowance – Grace period and provide detailed reason for request
- Once SECA Acknowledge, ASC to create GSPN service order
- SECA MUST CREATE SAW, ASC IS NOT TO CREATE SAW
- Device warranty status updated to L/P, follow normal warranty repair (Fenrir/QR code scanning/U-Class Label)

### 2. Minor physical damage

Customer escalating a scene at your ASC location requesting relaxation of OOW judgement with physical damage

- Device must be under Manufacturer's warranty
- ASC to educate the customer that device is OOW and requires approval from Samsung Head Office
- ASC to create GSPN service order then set WTY Exception: VOID1 Impact Damaged Warranty Term: OW
- ASC to take picture and upload to GSPN service order
- ASC to request SAW category: [VOID] WTY COST Full Cover
   SAW Request

SAW Reques	save Print List	
AW Request		
Request Information		Save
Request Information # Request Category	[VOID] Wty Cost Full Cover	Save

- ASC to email SECA with detailed reason for request that device on hand requires SAW approval
- SECA must approve SAW request before ASC can update service order to repair completed
- Follow normal warranty repair (Fenrir/QR code scanning/U-Class Label)
- Use Defect code: F46

Conditions that qualify as minor physical damage/unable to determine customer fault. <u>SECA</u> review pictures before SAW request approval.







### 3. Liquid damage

End-user escalating a scene at your ASC location requesting relaxation of OOW Judgement for Liquid damage

- Device must be under Manufacturer's warranty
- ASC to Educate the end-user that Defect is OOW that requires approval from Samsung Head Office
- ASC to take picture and upload on GSPN before repair of Liquid damaged area
- ASC to create GSPN SO ticket then set WTY Exception: VOID2 Liquid Damaged Warranty Term: OW
- ASC to request SAW category: [VOID] WTY COST Full Cover SAW Request

Home > Service Tra	dáng > Sen	vice Orde	r Deta
SAW Request	Save	Print	List

#### INTERNAL LIQUID DAMAGE REQUEST

SAW Request		×
Request Information		Save
* Request Category	(VOID) Why Cost Full Cover	V
* Request Comment	F46 - internal liquid damage - VOC Enducer escalating to management disputing the OOW cost. One time warranty exception for customer satisfaction.	3

### EXTERNAL LIQUID DAMAGE REQUEST

SAW Request					
Request Information		Save			
* Request Category	[VOID] Wity Cost Full Cover	V			
* Request Comment	FD6 - External liquid damage on the IF connector. VOC <u>Enduser</u> escalating to management disputing the OOW cost. One time exception approved for customer satisfaction.	Ĵ			

- ASC to email SECA with the detailed reason for request that device on hand requires SAW approval for Liquid damage
- Defect code: F46 (Liquid damaged device)
- Defect code: FD6 (IF Connector/charging port only)



 SECA must approve SAW request before ASC can update SO ticket status to repair completed

<ul> <li>Fol</li> </ul>	ow normal warranty	repair (	Fenrir/QR	code scanning	/U-Class label)
-------------------------	--------------------	----------	-----------	---------------	-----------------

ASC Findings	Physical Condition	Disposition	Action	
Color change on litmus liquid damage indicators on device and/or battery.		Warranty void - OOW Take pictures as evidence of Liquid Damage	ASC determines the cost of repair	
No color change on litmus liquid damage indicators on device and/or battery. ASC observes sign of possible liquid damage or corrosion on device	Device DO NOT exhibits dents/No point of impact (maintained in good appearance condition)	GSPN SO ticket set to WTY Exception: VOID2 Liquid Damaged Warranty Term: OW ASC to request SAW category: [VOID] WTY COST Full Cover	Take pictures as evidence of Liquid Damage Take pictures as evidence of physical condition of device Take pictures of litmus liquid damage indicator Defect code: F46	
No color change on litmus liquid damage indicators on device and/or battery. ASC observes sign of possible liquid damage or corrosion on device	Device EXHIBITS dents/ point of impact/deep scratches	Warranty void - OOW Take pictures as evidence of Liquid Damage	ASC determines the cost of repair	
No color change on litmus liquid damage indicators on device and/or battery. ASC observes sign of possible liquid damage or corrosion on IF connector/USB charging PORT only (external LD only)	Device DO NOT exhibits dents/No point of impact (maintained in good appearance condition)	GSPN SO ticket set to WTY Exception: VOID2 Liquid Damaged Warranty Term: OW	Clean Defect code: FD6	PASS – Complete Repair
		ASC to request SAW category: [VOID] WTY COST Full Cover		FAIL – Replace Sub PBA or IF connector

### **Process: Ticketing Overview**

### Is this a JIRA / Support / Help Desk ticket or an FSS / ZenDesk ticket?

Zendesk is run by the Samsung FSS (Field Service Support). The FSS team can approve error requests and Exception requests and is the only team capable of doing so. Please keep in mind that depending on the error you receive, the FSS team/agent may require you to do basic troubleshooting and/or have you provide screenshots of the errors, the about menu of the device, proof of purchase, etc.

JIRA is run by UBIF Asurion ServiceDesk team and can be escalated to the Samsung Partnership team when necessary. Stores first step should be to reach out to the ServiceDesk team if you get a portal error. You can file a ticket using the support tab on portal. The ServiceDesk team is capable of applying requests and determining warranty errors (WERs). The ServiceDesk team is also capable of answering basic troubleshooting questions.

## Process: GSPN & Portal Work Order Errors

[Fenrir] [#] There is no history of FENRIR connection in FUS server.

[Fenrir] [2]There is no history of FENRIR connection in FUS server.

[Fenrir] [3]There is no history of FENRIR S/W update in FUS server.(The Phone does not have the latest S/W binary) [Fenrir] [6]There is no history of FENRIR S/W update in FUS server.

[Fenrir] [4]There is no history of FENRIR S/W update in FUS server.(No S/W binary is available in the PC)

### Description

This error occurs when Fenrir was not executed on the device. Work Orders with this error cannot proceed to Repaired-RFP until SVC Connection is executed on the device or having a Fenrir Exception approved. Fenrir [4] and Fenrir[8] are the only 2 errors eligible for Fenrir Exceptions.

### Causes

- The device was disconnected from **Fenrir** prematurely; ensure that Fenrir has finished processing the **SVC connection** before disconnecting the cable.
- The device was **not recognized** by FENRIR. This can occur from a **dirty or damaged charging port** or **bad charging cable**. In rare cases, it's the device failing to send data to the PC.
- If the error is **[Fenrir] [4]** that means the **binary** is not downloaded onto the PC so the update could not be installed. This is only seen on **In-Warranty repairs** only.

### Solution

Execute Fenrir on the device again. Use "SVC Connection" for BOTH OOW & IW repairs. "S/W Update" is also required for all IW repairs.

If Fenrir cannot be executed on the device or the customer refused a software update, you can submit a Fenrir Exception via ZenDesk Ticket Request. Please note that FSS will NOT approve exceptions for Fenrir if you did not run "SVC Connection" on the device. You will need a screenshot of "SVC Connection" being run on the device in order to receive approval for this request.

If FSS declines this exception request, you can try reaching out to your designated Samsung rep for a one time exception.

### [Fenrir] [8] The PBA UN in Phone is not matched to PBA UN in MPTS.



### Description

This error occurs when GSPN believes there is a non-OEM motherboard on the device.

### Causes

- The device is an "End-of-Life" device. EoL devices are considered to be S7 series and older.
- The PBA is non-OEM (or being detected as such).

### Solution

You can submit a Fenrir Exception via ZenDesk Ticket Request. Include a full screenshot of the error and ensure the WO is visible in the screenshot.

### [GCIC] GD Error



### Description

This error occurs when Portal has detected a FAIL or MISSING GD Tool Result. Work Orders with this error cannot proceed to Sale Complete without retesting the device or requesting a GD Exception.

### Causes

- IQC was not executed based on the defect code selected upon check-in.
- **OQC** is showing a **FAIL result**; OQC will need to be executed on device again
- **OQC** showing **NO GD result**. This can occur if the GSPN Ticket was not created when testing was executed. This can also occur if the WO has not been set to **Repair-in-Progress** status.
- The WO was not set to **Sale Complete** before 14 days. It's important to not let tickets sit unresolved or opened for more than 24 to 48 hours if possible.

### Solution

Execute GD Tool on the device again.

If you cannot resolve this error using the step above, you need to reach out by creating a ZenDesk Ticket Request. If FSS does not resolve the issue, you can try reaching out to your designated Samsung rep for a one time exception.

\* Help Desk and JIRA Support cannot help with GD Tool/OQC Exception approval. \*

## [GCIC] [OCTA:F]



### Description

This error occurs when Portal has detected a FAIL or MISSING GD Tool Result. Work Orders with this error cannot proceed to Sale Complete without retesting the device or requesting a GD Exception.

### Causes

- **Fenrir** was executed before the OCTA was replaced on the device; execute Fenrir again to resolve the error.
- Fenrir failed to send the logs to the FUS server; ensure the device is not prematurely disconnected from Fenrir.
- Fenrir was executed on a **previous ticket** that was marked **Repaired** or **Sale Complete** (even if the part is no longer attached to the WO).
- The previous ticket is still **open/not canceled**; if the previous GSPN ticket is **not set to Repaired**, cancel the ticket that had this part attached (even if the part is no longer attached to the WO).
- Part was **removed from the WO** after the status was **changed to Repaired-RFP**.
- Part was **returned into inventory** after processing a **refund**, then reused on another device.

### Solution

Execute Fenrir again. If the error persists, replace the OCTA and RMA the current one. After OCTA replacement, execute Fenrir again to clear the error.

If the above does not resolve the issue, reach out to your Samsung rep to get clarification as to why the error is occurring. You can also submit a JIRA ticket for clarification on the reasoning behind the error here: Samsung General Question.

\* Outside of the above solutions, there are no workarounds to this error. If the device was released before this error was resolved, you need to mark this Declined-RFP and absorb the cost of parts used \*

[GCIC] Not created new job.



## There was an error creating the Repair Ticket.

[GCIC] Not created new job.

### Description

The error occurs when a pending ticket for the device exists on GSPN. The GSPN Ticket can be linked to UBREAKIFIX or another Samsung service provider.

### Causes

- There's an open ticket on Portal with the device attached. You can validate this by searching the IMEI in Portal.
- A pending ticket could have been created via 1-800-SAMSUNG if they were contacted prior to the device arriving.
- A pending ticket may exist under another Samsung Authorized Service Center or Partner.

### Solution

You can first contact Help Desk if you cannot find the open ticket in Portal.

If it can not be resolved by Help Desk, you can submit a ZenDesk Ticket Request and ask FSS to cancel any pending tickets on their end.

If FSS cannot help, submit a JIRA Ticket.

[GCIC] Ticket is locked, the other user is using this ticket.



## There was an error creating the Repair Ticket.

[GCIC] Ticket is locked, the other user is using this ticket.

### Description

The error occurs when the GSPN Ticket is being used on the GSPN side by another user.

### Causes

- The GSPN ticket is currently being edited at the time of the error.
- The GSPN Ticket could be in an opened internet browser tab. Most of the time, it's someone on the Samsung side.

### Solution

Wait and try again. This will likely resolve itself within the hour.

Submit a JIRA Ticket if the issue continues.

ASC Job No already exists.



# There was an error creating the Repair Ticket.

ASC Job No already exists.

### Description

This error occurs when GSPN detects that the WO number (ASC Job No) has a GSPN Ticket already attached.

### Causes

- This is usually caused by a **miscommunication/disconnect** between the **Portal WO and GSPN Ticket** while attempting to create the GSPN Ticket; this is at no fault of the store.
- There may have been a slight disruption in the **internet connection** while creating the ticket.

### Solution

Submit a JIRA Ticket to have this resolved.

### Cannot be accepted - status ST025



### Description

This error occurs when the GSPN Ticket attached to the Portal Work Order has been canceled.

### Causes

 GSPN Tickets can be canceled by the Samsung Field Support Team due to inactivity. Tickets that go unresolved for more than 72 hours without an attempt at resolution end up in LTP (Long Pending Ticket) status. This typically only affects In-Warranty repairs.

### Solution

If the ticket has been canceled on an In-Warranty repair, you will need to recreate a new WO to properly get reimbursed for the repair. Canceled tickets cannot be reopened via the old WO. Exceptions are not guaranteed for the new WO depending on the circumstances.

If the WO needs to be closed due to no repair being completed, you can submit a Work Order Issue Form.

### DelayReason is required for the status - ST030



### Description

This error occurs when the GSPN ticket is in "Pending" status with no "Reason" selected.

### Causes

• This could happen if the Portal WO is moved to "Awaiting Device/Awaiting Customer" status.

### Solution

Try to move the WO to "Repair in Progress" status. This will usually resolve the issue.

Submit a JIRA Ticket if the above does not work.
## Invoice is Invalid. Check the format of Invoice number.



## Description

The error occurs when a part attached to the Work Order has an invalid OEM Invoice number.

#### Causes

• Distro's OEM invoice for the Part does not match the invoice number on GSPN. This is at no fault of the store.

#### Solution

Reach out to Help Desk to resolve this issue.

#### PBA/OCTA parts data is not valid.



#### Description

This error occurs when an OCTA or PBA QR code does not match its respective part. Items that require QR scans are: OCTA Kits, Batteries, Camera Modules, and Main PBAs.

#### Causes

- Scanning the wrong QR code. It can be confusing since there are multiple QR codes on some parts.
- Running IQC after replacing the parts. **Do NOT ever do this under any circumstance**.

#### Solution

Execute GD Scan the proper QR codes. If you are absolutely certain you scanned the correct QR codes, take pictures of both QR codes on both old and new parts. You will need to submit these for a SAW (Service Action Work) request for a Parts S/N exception. Please double and triple check the QR codes on the part before reaching out to support as most of these are resolvable without support.

# \* If you are rescanning the parts, ensure Portal is updating the codes correctly. If you have issues with Portal updating the scans, please remove the part from the WO and add it back with the proper scans. \*

If the above does not resolve the issue, you can use the SAW Tools module under "Work Order Actions" within Portal. A guide on how to use this tool can be found here: SAW Tool Guide

Once the SAW is attached, you then will need to submit a ZenDesk Ticket Request. For Issue Type select "Process Request" > "SAW" > "Parts and S/N" along with the appropriate WO information. Once approved, you can proceed the WO.

### Service request cannot be created.



## There was an error creating the Repair Ticket.

Service request cannot be created. Please direct the customer to contact the carrier for repair concerns.

#### Description

This error occurs when attempting to create a GSPN Ticket for a device with a Carrier not Supported by Samsung.

#### Causes

- The device carrier may be **TracFone**, **Straight Talk**, or another unsupported carrier.
- The device may be an **International Model**. Please check the model code.

#### Solution

The current resolution is to use International Samsung Work Flow. After the WO is created, submit a request to have the Samsung International Company attached.

This should only be used for Out-of-Warranty repairs. In-Warranty will need to be directed to the device's carrier. Please note that you will only receive GRADED CREDIT for these devices.

## The work order status cannot be changed from this function!

The work order status cannot be changed from this function!

### Description

This error usually appears for In-Warranty GSPN Tickets that have a Warranty Error (WER). WOs cannot proceed until these are resolved.

#### Causes

• The GSPN ticket has a Warranty Error (WER). You can review This Guide for more information on these.

## Solution

Submit this JIRA Ticket for WER for help resolving these errors.

## Warranty bill number is already created.



## Description

This error occurs when a confirmation number for a closed (Goods Delivered) GSPN ticket already exists.

## Causes

• This is usually caused by a **miscommunication/disconnect** between the **Portal WO and GSPN Ticket**; this is at no fault of the store.

## Solution

Reach out to Help Desk to resolve this issue.

## You can't change the status of the cancelled ticket.



This error is also a variation of "Cannot be accepted - status ST025"

## Description

This error occurs when the GSPN Ticket attached to the Portal Work Order has been canceled.

#### Causes

- GSPN Tickets can be canceled by the Samsung Field Support Team due to inactivity. Tickets that go unresolved for more than 72 hours without an attempt at resolution end up in LTP (Long Pending Ticket) status. This typically only affects In-Warranty repairs.
- GSPN desync. Although it's rare, it's possible that GSPN did not properly communicate with the active WO and needs to be synchronized.

## Solution

If the ticket has been canceled on an In-Warranty repair, you will need to recreate a new WO to properly get reimbursed for the repair. Canceled tickets cannot be reopened via the old WO. Exceptions are not guaranteed for the new WO depending on the circumstances.

If the WO needs to be closed due to no repair being completed, you can submit a Work Order Issue Form.

## Process: GSPN Errors & Resolutions

## **GSPN - Account Lock**



## **Error Message**

"We detect that you have not used your ID in GSPN for more than 6 days. Please contact to your ASC admin in order to extend your ID."

## Cause

The GSPN account was not logged in for at least 6 days.

#### Solution

Submit a ZenDesk Ticket: <a href="https://ubifsupport.zendesk.com/hc/en-us/requests/new">https://ubifsupport.zendesk.com/hc/en-us/requests/new</a>

Issue Type: Systems Credentials Support > Expired or Locked GSPN

Description: Explain that your account is locked and include the GSPN account name.

Prevention Measures: Log into your GSPN accounts every day.

## **GSPN - Account Deleted**



#### **Error Message**

"User ID is Not Authorized. Please contact your system administrator"

"Your account has been deleted. Please contact the administrator."

#### Cause

The GSPN account was not logged in for at least 30 days.

#### Solution

Submit a ZenDesk Ticket: <a href="https://ubifsupport.zendesk.com/hc/en-us/requests/new">https://ubifsupport.zendesk.com/hc/en-us/requests/new</a>

Issue Type: Systems Credentials Support > New GSPN Account

Description: Explain you need a new account to access GSPN. You may need to request both accounts be reactivated (both SIvI and M accounts)

Prevention Measures: Log into your GSPN accounts every day.

## GSPN - GD Certificate Approval



## Error Message

"The certificate has not been approved yet. Please run GalaxyDiagnostics after the certificate is approved. [530]"

#### Cause

GD Tool was accessed on another PC. GD Tool can only run on 1 PC per GSPN account. You can request additional accounts via a ZenDesk ticket if you need GD Tool on another computer.

This can also happen if the main Samsung computer was wiped or the hard drive was replaced

### Solution

A guide already exists for this process here: <u>Samsung Systems & Credentials Setup</u>

Go to the GALAXY DIAGNOSTIC SETUP section and scroll down to Step 3.

Prevention Measures: Do not attempt to access GD Tool on another PC if possible.

## SKP - Knowledge Tab Lock



## Error Message

"No register login user. This system is not available."

#### Cause

Attempting to access the "Knowledge" tab without entering the certificates password in over 14 days.

#### Solution

Submit a ZenDesk Ticket: <a href="https://ubifsupport.zendesk.com/hc/en-us/requests/new">https://ubifsupport.zendesk.com/hc/en-us/requests/new</a>

Issue Type: Systems Credentials Support > Knowledge Tab Access Request

Description: Explain that you no longer have access to the Knowledge Tab in GSPN

**Prevention Measures**: Enter the certificate password everyday in the Mobile SVC section in the Knowledge Tab

SKP - Unlock the 1-Month lock



## Error Message

"You haven't logged into your account for more than a month. Please unlock the account by using 'Other request' in Mobile SVC."

## Cause

Not generating the OTP code under Mobile SVC within the GSPN Knowledge tab.

#### Solution

- Access Knowledge Tab on your main <u>GSPN Account</u> (SLVL Account)
- Navigate to Engineer > Mobile SVC > Other Request
- For <u>Request Type</u> select Unlock the 1-month lock

equest Information		
Request Type *	Select	
	Unlock the certificate	
	Unlock the 1-month lock	
	Unlock the ESN/IMEI Writing	
	Delete IP Address	
	Request the temporary permission of other country	
	Update the User Information	

o <u>Create</u> a new ESN/IMEI Writing Password (and take note of it)

Request Information			
Request Type *	Unlock the 1-month lock	~	
ESN/IMEI Writing P/W *	CREATE NEW PASSWORD!		
ESN/IMEI Confirm P/W *	CONFIRM NEW PASSWORD!		

- o Click on the Request button and then click the Go to Request Page button
- o <u>Take a screenshot</u> of Mobile SVC Request Status page
- o Submit a ZenDesk ticket: <u>https://ubifsupport.zendesk.com/hc/en-us/requests/new</u>
  - Issue Type: System Credentials Support > Unlock the 1-Month Lock
  - o <u>Screenshots Required</u>: 3
  - o Screenshot of Mobile SVC Request Status Page
  - o Screenshot of <u>IP Address</u> from whatismyipaddress.com
  - o Screenshot of MAC Address from Windows Command Prompt

**Prevention Measures:** Enter the certificate password and reissue the OTP code everyday in the Mobile SVC section in the Knowledge Tab

SKP - Unlock the certificate / Login Failed.



## Error Message

"Login failed for more than five times. Please unlock the account by using 'Other request' in Mobile SVC." "Certificate validation failure. Account will be locked with many failed login attempts."

#### Cause

Too many failed login attempts using the Certificates Password.

## Solution

- Access Knowledge Tab on your main <u>GSPN Account</u> (SLVL Account)
- Navigate to Engineer > Mobile SVC > Other Request
- For <u>Request Type</u> select Unlock the Certificate

equest Information		
Request Type *	Select	
	Unlock the 1-month lock	
	Unlock the ESN/IMEI Writing	
	Delete IP Address	
	Request the temporary permission of other country	
	Update the User Information	

- Click on the Request button and then click the Go to Request Page button
- o <u>Take a screenshot</u> of Mobile SVC Request Status page
- o Submit a ZenDesk ticket: <u>https://ubifsupport.zendesk.com/hc/en-us/requests/new</u>
  - <u>Issue Type</u>: System Credentials Support > Unlock the Certificate
  - o <u>Screenshots Required</u>: 1
  - Screenshot of Mobile SVC Request Status Page

**Prevention Measures:** Please ensure your passwords are up to date and properly noted somewhere for easy access.

## **MOTP - Approval Request**



### **Error Message**

"Your access authority is in the status of request."

#### Cause

The physical MOTP device needs to be approved for mobile GSPN usage. This error should only occur when first setting up the device.

#### Solution

Submit a ZenDesk Ticket: <u>https://ubifsupport.zendesk.com/hc/en-us/requests/new</u>

Issue Type: Systems Credentials Support > MOTP Approval Request

Description: Explain that this device needs access to mobile GSPN. Attach a screenshot of the error.

## **MOTP - Target Flag**



#### **Error Message**

"You have not been granted access to the Master OTP. Please check your Traget Flag in MasterOTP Master Mgmt of CS Portal"

#### Cause

The mobile GSPN account has not been assigned to this device. This can happen if you had a new account created due to your previous account being deleted.

Example: Your account may have been named uBiF123**M01** but the new account is now named uBiF123**M02**. This can only be changed by submitting a ZenDesk ticket.

#### Solution

Submit a ZenDesk Ticket: <a href="https://ubifsupport.zendesk.com/hc/en-us/requests/new">https://ubifsupport.zendesk.com/hc/en-us/requests/new</a>

Issue Type: Systems Credentials Support > Target Flag

Description: Explain that the account is not assigned to this MOTP device. Attach a screenshot of the error.

## MOTP - Not Mapping between G-SPN ID and BP No



## **Error Message**

"It is not mapping between G-SPN ID and BP No (Engineer Code) Please contact your administrator"

#### Cause

The mobile GSPN application type is not configured correctly.

#### Solution

- Open the Mobile GSPN app
- o Click the gear icon in the top right corner to access the Options menu
- o Under the Application section, click the drop-down and select Master OTP
- Exit the Options menu by clicking the SAVE button



Options	MGSPN	$\bigcirc$	
Language			
English	CarryIn Service	$\bigcirc$	
Date fromat Select your favorite date format.	SPDS	$\bigcirc$	
Application For selecting applications such as M-GSPN, MOTP, Carry-In.	HASS	$\bigcirc$	
MGSPN	Master OTP		
Favorite page       Select your start page in M-GSPN.       Index	Cortex Scan	0	

## MOTP - Data Not Found



#### **Error Message**

"Data not found. Please check your engineers in MasterOTP Engineer Mgmt in CS Portal"

#### Cause

Your Level S2 access on your main GSPN account has been revoked or expired.

#### Solution

A guide already exists for this process here: Samsung Systems & Credentials Setup

Go to the LEVEL S2+ REQUEST section and complete the entire section.

Submit a ZenDesk Ticket: <u>https://ubifsupport.zendesk.com/hc/en-us/requests/new</u>

Issue Type: Systems Credentials Support > New Certificate / Level S2

Description: Explain that this device needs access to mobile GSPN.

**Prevention Measures**: Enter the certificate password and reissue the OTP code everyday in the Mobile SVC section in the Knowledge Tab

## **MOTP - Engineer Expired**

Master OTP Management	Engineer Management	Message Management
ASC code	0003868490	
Use Wild card (EX )	ASC*)	Q
UBIF SLVL0	1	
Expired		
09/11/2021		

## **Error Message**

"Engineer Management - Expired"

#### Cause

You have not clicked "Confirm" under the Engineer Management Tab in over 14 days.

#### Solution

Submit a ZenDesk Ticket: <u>https://ubifsupport.zendesk.com/hc/en-us/requests/new</u>

Issue Type: Systems Credentials Support > Engineer Extension (MGSPN)

Description: Explain that your Engineer access has expired on the MOTP device

**Prevention Measures**: Click the "Confirm" button under the Engineer Management tab on the MOTP device.

MFA - Already registered App.

Message	$\times$
Already registered App.	
	Ok

## **Error Message**

"Already registered App."

#### Cause

The device and app is already registered to another GSPN account. The Authentication ID you typed in can only be used once per account.

## Solution

- Ensure you are logging into the correct account.
- It's worth noting that you need an separate MFA device (a total of two devices) for <u>both</u> GSPN accounts
  - <u>One device</u> and app is needed for your **main account** (SLVL account)
  - <u>One device</u> and app is needed for your **MOTP account** (M account)
    - The MOTP device can have the MFA app installed on it as well
    - The <u>2nd device</u> can be either an iOS or Android device of your choice

**Prevention Measures:** You need an MFA device for each GSPN login. You can also review the MFA setup guide here: <u>https://portal.ubif.net/kbase/article/10216</u>

## MFA - Invalid Request



## Error Message

"An error has occurred. Please try again in a few minutes. View Detail > Invalid Request."

#### Cause

- The device is not connected to the internet.
- The device was connected to Wi-Fi after the app was opened.
- The app session has timed out.

#### Solution

- Reconnect the device to Wi-Fi and force close and reopen the app.
- o If the above does not work, log out of GSPN and log back into the account

MFA - Invalid auth code.

Message	$\times$
Invalid auth code.	
	Ok

## Error Message

"Invalid auth code."

## Cause

- The device is tied to another GSPN account.
- The device is not connected to the internet.

## Solution

- Ensure you are logging into the correct account.
- Reconnect the device to Wi-Fi and force close and reopen the app.

## OJT: Z Flip4 Digital Hall IC Calibration

Introduction

This document is intended to guide technicians in completing Digital Hall IC Calibration on Galaxy Z Flip4 devices.

Turning On the Main Display – Table Magnet If the Main Display is not turning on after Main PBA or Front Assembly repair, the Main Display can be turned on manually using the instructions in the step table below.

- A Table Magnet (GH81-18190A) is required to manually turn on the Main Display
- When the device is unfolded, the Main Display will be OFF and the Sub Display will be ON



GH81-18190A



**Note:** If the Main Display turns off after the Booting animation (Samsung & Carrier logos) have been shown through Main Display, then there is no hardware defect.

#### Step Action

1. Place the Table Magnet at the top center side of the Sub Display on the Rear

- The Magnet will be held to the Rear of the Sub Display by the embedded magnet on that side of the device
- 2. When the Table Magnet sticks in place to the Rear of the Sub Display, the Main Display will turn on

#### Turning On the keypress combination. Main Display -Kev Combination

After MR1 has been installed on Galaxy Flip4 devices, the Main Display may be enabled using a

After connecting a USB cable to the device:



- Press and hold the Power key 1.
- 2. Short-press (press and let go) Volume Up (+) once (1x)
- Short-press (press and let go) Volume Down (-) twice (2x) 3.



Use the instructions in the step table below to use Galaxy Diagnostics for Digital Hall IC

Completing **Digital Hall IC** Calibration

#### Z Flip4 Digital Hall IC Calibration On the Job Training

**Note:** There cannot be any magnetic objects around the device to complete Digital Hall IC Calibration successfully; once the device has been placed in Digital Hall IC Calibration mode, remove the Table Magnet (if used) and make sure it is placed far from the device so that it does not impact calibration.

#### Step Action

- 1. Enter Digital Hall IC Calibration mode, then remove the Table Magnet (if used) and place it far away from the device
  - 2. After the Table Magnet has been removed, press **Step 1** to start Digital Hall IC Calibration
- 3. Press Step 2 to finish calibration

**Revision** The following table lists the revisions made to this OJT resource.

History

Version	Released	Revision
1	09/13/2022	• First published edition of this document.

## OJT: IMEI Cloud Tool Pilot

Introduction

This document is intended to instruct technicians in the proper installation and usage of the IMEI Cloud Client application on the Service PC in support of the IMEI Cloud Tool pilot.

#### What is the IMEI Cloud Tool?

Samsung is excited to introduce the new IMEI Cloud Tool for use during this pilot. This tool has been designed to complete the IMEI rewrite process on supported models. The IMEI Cloud Tool is designed to serve as a streamlined, semi-automated process that will help expedite the IMEI rewrite process.

#### The IMEI Cloud Tool will:

- Reduce the setup and configuration time for IMEI rewrite
- Eliminate the need to manually download associated files (i.e. POT files)
- Eliminate the need to maintain local file directories for required files
- Decrease turnaround time for repairs requiring IMEI rewrite
- Positively impact the customer experience

The IMEI Cloud Tool has been built to reduce the amount of configuration, setup, and maintenance required for the IMEI rewrite process. The new streamlined process is designed to be intuitive, effortless, and fast.

**Prerequisites** The following are required to use the IMEI Cloud Client:

- Service PC running Fenrir
  - Make sure that the most up to date binaries have been downloaded in Fenrir for the device being serviced
- Ensure that any VPN connection is disconnected prior to initializing the ImeiClient.exe
- Only certain models are supported using the IMEI Cloud Client application at this time.

# Download &Follow the instructions in the step table below to download and extract the IMEI Cloud Client:File Extraction

Step	Action				
1.	Using an Internet browser download the zip archive I	Using an Internet browser, navigate to <a href="https://api.secmobilesvc.com/client/GSPN.zip">https://api.secmobilesvc.com/client/GSPN.zip</a> to download the zip archive IMEI Client GSPN			
2.	<ul> <li>Navigate to the downloaded zip archive IMEI Client GSPN:</li> <li>Right click on the zip archive</li> <li>Select Extract All</li> <li>Select a location for file extraction</li> <li>The following items are included in the zip archive:</li> </ul>				
	AutoUpdate  FenrirAPI.dll  FenrirAPI.dll  FimeiClient  FimeiClient.exe  FimEiClientTray  Fiodin4  SystemJson.dll	2020-11-23 오후 3:22 2020-11-16 오후 7:40 2020-12-01 오전 9:03 2020-11-20 오전 11:09 2020-11-20 오전 9:50 2020-11-10 오후 2:24 2017-07-19 오전 10:01	응용 프로그램 응용 프로그램 확장 응용 프로그램 XML Configuration F 응용 프로그램 응용 프로그램 응용 프로그램 확장	35KB 3,938KB 723KB 1KB 515KB 724KB 45KB	

Using IMEI Cloud Client via	Follow <sup>-</sup>	the instructions in the step table below to configure and use the IMEI Cloud Client:
the USB Method (Page 2-6)	Note:	When changing from one model to another, the IMEI Cloud Client tool does not require that the user exit and restart the tool.



2. Using Windows Explorer, navigate to the location of the extracted IMEI Cloud Client, and run ImeiClient.exe to start the IMEI Cloud Client

**Required:** If the IMEI Cloud Client tool needs to be updated, please update as prompted:

IMEIClient updates are available $ imes$	ent Updater	_	×
IMEIClient updates are available Do you want to start update program now?			
Yes No			

3.	Enter tl login so	ne following information into the IMEI Cloud creen:	C Login – – X		
	•	G-SPN User ID Service Tool Password OTP Master OTP	Login USER ID *		
4.	Click th	e <b>Login</b> button to log in to the tool			
	Note:	After successfully logging in, users won't be re Cloud Client tool has been closed or the OTP ha	quired to login unless the IMEI as expired		
5.	Set the	COM Port for the mobile device based on step 1	for the USB method.		
	lf unabl Anyway <u>Anyway</u>	le to use the USB method, proceed using the y Jig ( <u>Using the IMEI Cloud Client via the</u> <u>y Jig</u> ).	Setting -      X     Setting     SETTING		
	•	Configuration is not required after the first time the IMEI Cloud Client is used	PORT * COM4 ~ JO		
	Note:	The COM Port assigned to the mobile device may change if the USB cable is moved to a different port and/or if the Service PC is rebooted	JIG PORT COM4 Confirm Cancel		

Ensure you are using a compatible Samsung authorized USB cable when utilizing the USB method.

6. Input the device IMEI and the G-SPN Ticket NO:



Note: You can input the IMEI via the barcode scanner or by manually typing in the IMEI.7. Click the IMEI Write button to complete the IMEI write.

**Note:** The IMEI Write should be completed followed by the Fenrir D/L option prior to completing the IMEI check.

GSPN PORT/COM40 IIG/COM	42) 11304			
<ul> <li>O</li> </ul>	⊠ IMEI	ß 1	Ficket NO	
	No	Process	Result	
IMEI W/C				
• IMEI Write				
• Fenrir D/L				
•IMEI Check				
Select • Run SEQ NO Run				
•				

© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021

8. The IMEI Cloud Tool will automatically complete the IMEI rewrite process. A pass message will be displayed once completed successfully.



## 9. Ensure the required factory binary has already been installed and is available prior to this step.

After successfully completing the IMEI Write process in the IMEI Cloud tool, use the Fenrir D/L button within the IMEI Cloud tool to complete a factory binary on the customer's device.

**Note:** After clicking the Fenrir D/L option, the connected device will automatically be restarted in download mode.



 $\circledast$  2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021

10. Select the correct model, carrier, and S/W version using the three provided drop down fields and click **OK**.



The factory binary will automatically initialize and complete, the device will restart.Click the IMEI Check button to complete the IMEI check.

C INTERCEMENT (CODINE) 2.1			- <b>D</b> X
Invest Client (GSPN)1.3.1			- U X
	IN DL Fixed Size IMEI C	lient GSPN V1.3.1	Logout 🔯
GSPN, PORT(COM4),JIG(COI	M2),U30A		
	C IMEI	🕑 Tici	cet NO
	No	Process	Result
IMEI W/C     IMEI Write			
÷ Fenrir D/L			
=IMEI Check			
SEQ NO Run			
Complete Wa normal.	arranty Validatio	n using Fenrir and	proceed with closi

------

Using IMEI Cloud Client via the Anyway Jig (Page 6-11) If the USB method is unstable, you can alternatively use the Anyway Jig to complete the IMEI Rewrite process using the IMEI Cloud Tool. Use the steps below to complete the IMEI Write and IMEI Check process using the Anyway Jig method.

© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021

#### Step Action

1. Turn on the S103 Anyway Jig and connect the Anyway Jig to the 5V power supply. Connect the Anyway Jig to the Service PC using the serial to USB cable.

Note: Do not connect the device to the Anyway Jig

 Verify the COM port number of the Anyway Jig in the Device Manager (Launch Device Manager > Select arrow beside Ports to reveal devices > Note the Port beside the Prolific USB-to-Serial Comm Port option, i.e. COM11):



3. Using Windows Explorer, navigate to the location of the extracted IMEI Cloud Client, and run ImeiClient.exe to start the IMEI Cloud Client

**Required:** If the IMEI Cloud Client tool needs to be updated, please update as prompted:

IMEIClient updates are available	×	r		
		😸 IMEIClient Updater	-	$\times$
IMEIClient updates are available Do you want to start update program now?				
Yes No				

- 4. Enter the following information into the IMEI Cloud login screen:
  - G-SPN User ID
  - Service Tool Password
  - Master OTP
  - OTP



\_

 $\times$ 

🕥 Login

© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021

- 5. Click the **Login** button to log in to the tool
  - **Note:** After successfully logging in, users won't be required to login unless the IMEI Cloud Client tool has been closed or the OTP has expired
- 6. Set the COM Port for the Anyway Jig based on step 2. The port setting for the Anyway Jig should be entered in the first Port drop down. Select the Jig in use (i.e. S103) under the Jig dropdown.

**Note:** The "Jig port" will be grayed out when using the Anyway Jig method. The port from the Anyway Jig should be entered using the first Port drop down.

🕥 Set	tting	-		×
1	IMEI CLOUD			_
	SETTING			
	PORT *			
	COM11		$\sim$	
	JIG			
			~	
	JIG PORT			
			$\sim$	
(	Confirm	Cancel		

IMEI Client (GSPN)1.3.1			×	
	DL Fixed Size IMEI Cli	ent GSPN V1.3.1	Logout 🔯	
GSPN, PORT(COM4), JIG(COM	12),U30A	🗷 Tic	cet NO	
	No	Process	Result	
IMEI W/C				
• IMEI Write				
• Fenrir D/L				
-IMEI Check				
Select • Run				
SEQ NO Run				
IMELCEUUD				
SAMSUNG © SAMSUNG				
Note: You car	n input the IMEI v	via the barcode so	anner or by manually	typing in th
Turn the devi	ce off and plug t	he I/F cable into t	he device, wait for th	e device to t
hoot on				

7. Input the device IMEI and the G-SPN Ticket NO

9. Click the IMEI Write button to complete the IMEI write.

**Note:** The IMEI Write should be completed followed by the Fenrir D/L option prior to completing the IMEI check.



10. The IMEI Cloud Tool will automatically complete the IMEI rewrite process. A pass message will be displayed once completed successfully.



 $\circledast$  2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021
11. Do not close the IMEI Cloud Rewrite Tool.

Ensure the required factory binary has already been installed and is available prior to this step.

After successfully completing the IMEI Write process in the IMEI Cloud tool, use the Fenrir D/L button within the IMEI Cloud tool to complete a factory binary on the customer's device.

**Note:** After clicking the Fenrir D/L option, the connected device will automatically be restarted in download mode.



12. Select the correct model, carrier, and S/W version using the three provided drop down fields and click **OK**.



The factory binary will automatically initialize and complete, the device will restart.

0 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021

13. Turn off the device and plug the I/F cable into the device, wait for the device to fully boot on.

Click the IMEI Check button to complete the IMEI check.

TIMEI Client (GSPN)1.3.1			- 0	×
IMEICLOUD USER BIN I	DL Fixed Size IMEI Cli	ent GSPN V1.3.1	Logout	\$
GSPN, PORT(COM4), JIG(COM2	1),U30A	(2) Tie	ket NO	
	No	Process	Result	
IMEI W/C				
# IMEI Write				
• Fenrir D/L				
IMEI Check				
Select • Run				
SEQ NO Run				
IMEI CLOUD				
SAMSUNG & SAMSUNG				
Complete Wa	rranty Validation	ucing Fonrir and	h procood with cl	00
normal				.03

#### Troubleshooting

ting Q: I've seen a message on my service PC advising an IMEIClientUpdate as available, what should I do?

**A:** This message indicates there is an update required for the IMEI Cloud Tool. To initialize the update, please click the notification and complete the update wizard. Updates ensure that the tool is running the latest version to ensure the supported processes function correctly.



**Q:** I'm being prompted to enter a CAPTCHA, why is this occurring?

**A:** If you've failed to enter the correct login information when trying to access the IMEI Cloud Tool, you may be required to enter a CAPTCHA to validate your login attempt. To complete, type the CAPTCHA in as requested and click OK.

IMEIClientCaptchaDlg	-		×
ce828		_	
Type the image word			
ок	Cane	el	

**Q:** I've received an error E1016 advising an invalid username or password has been entered. What should I do?

© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised April 16, 2021

A: Ensure you've entered the proper credentials and try to login again. Your login credentials are:

Username – G-SPN Username Password – Service Tool password OTP – OTP generated in G-SPN

Master OTP – Master OTP generated using Mobile GSPN tool

(E1016)
OF

Q: Which devices are supported by the IMEI Cloud Tool during the initial pilot? A: The initial list of devices supported by the IMEI Cloud Tool during the pilot include the A21 (SM-A215U), Note10 (SM-N970U), Note10+ (SM-N975U), Note10 Ultra (SM-N976U), Note10 Ultra (SM-N976V)

In the event that an unsupported device/IMEI is detected, an error will be displayed.

MEI W/C Model sequence not found : SM2N970UZKAXAA	×
ОК	

Q: What else should I know about error codes and the IMEI Cloud Tool?A: The IMEI Cloud Tool uses the same error code types used in Dasuel.

**Q:** When I use Device Manager to detect the COM port number for the device, I am having trouble validating which port is associated with my device.

**A:** In the event that you are unable to use the Device Manager to validate the port number of the device you are using, you may need to use the Phone and Modem setting within the Control Panel to validate.

Launch the Control Panel > Type in Phone and Modem in the search field > Once the Phone and modem option launches, if prompted enter your local 3 digit area code > Click the Modems tab > Connect your device > Note the "attached to" column for your device to verify the COM port.

In the event that 20 or more Samsung Mobile USB modem options are displayed, you may need to remove devices that are not in use.

#### IMEI Cloud Tool Pilot On the Job Training

The following modems are installed:	
Modem	Attached To
SAMSUNG Mobile USB Modem	Not present
SAMSUNG Mobile USB Modem #2	Not present
SAMSUNG Mobile USB Modem #3	Not present
SAMSUNG Mobile USB Modem #4	Not present
SAMSONG MODIE OSE MODELLAS	twor present
SAMSUNG Mobile USB Modem #6	COM10
🛛 Add	Bemove Properties

**Q:** When running the IMEI Write and IMEI Check function via the Anyway Jig method, how should the configuration of the equipment appear?

**A:** Remember to follower the steps of the <u>Anyway Jig</u> method to ensure the process functions correctly.



**Q:** When attempting the Fenrir D/L option, I'm getting an unexpected error or failure, what should I check?

**A:** Remember the required factory binary must be downloaded in Fenrir prior to using the Fenrir D/L option in the IMEI Cloud Tool.

......

## OJT: FRP Unlock Tool Migration

This document is intended to educate technicians about migration to the new FRP Unlock Introduction function built into the IMEI Cloud Client tool. About FRP Effective August 19, 2024, Samsung is migrating FRP Unlock functionality into the IMEI Cloud Client tool. This is a part of ongoing system consolidation effort to simplify Samsung Repair Unlock Tool Process. This migration of FRP Unlock to IMEI Cloud will allow technicians to use the IMEI Cloud Migration Client tool to complete FRP Unlock on devices operating on Android OS. There are several benefits: Elimination of Galaxy Must log-in requirement • No change in IMEI Cloud Client log-in process • Using an existing tool with an existing process means there should be a guick • learning curve for the new method Use the instructions in the step table below to use the IMEI Cloud Client tool to complete FRP Using IMEI Unlock: **Cloud Client** Tool - FRP Unlock

> Step Action 1. Open the IMEI Cloud Client using either the IMEICLIENT icon or by running "ImeiClient.exe" 이를 수정한 날짜 유형 37 ImeiClient.exe 2024-06-18 오전 11:28 응용 프로그램 1,273KB ImeiClient.exe.config 2020-11-26 오전 8:35 CONFIG 파일 2KB LOG\_2024-06-18.txt 2024-06-18 오전 10:02 텍스트 문서 15KB Registry\_PortFix\_V004.reg 2022-12-15 오전 10:29 등록 항목 4KB System.Json.dll 2020-11-26 오전 8:35 응용 프로그램 확장 45KB Run IMEI Cloud Tool N 0 Ø Ð  $\odot$ 6 MEICLIE 6 ß ^ 口 🗤

© 2024 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Revised August 13, 2024



<ol> <li>Select the Job Type (FRP Unlock to complete FRP Unlock)</li> </ol>	<ul> <li>✿ Login - □ ×</li> <li>▲ IMEICLOUD</li> </ul>
	Login
	USER ID *
	Password *
	OTP *
	Master OTP
	Login Cancel
3. Log in with the following information:	🕥 Login — 🗆 X
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTD</li> </ul>	O Login - □ ×     MEICLOUD     MEICLOUD
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	<ul> <li>Togin - □ ×</li> <li>IMELCLOUD</li> <li>Login</li> </ul>
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	<ul> <li>Ingin - □ ×</li> <li>IMELCLOUD</li> <li>Login</li> <li>USER ID *</li> </ul>
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin – ¬ × IMEI CLOUD Login USER ID * GSPN ID
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin – ¬ × IMEICLOUD Login USER ID * GSPN ID Password * IMEI/ESN Writing PW
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin – ¬ × IMEICLOUD Login USER ID* GSPN ID Password* IMEI/ESN Writing PW OTP*
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin –    Imercloud   Login   USER ID *   GSPN ID   Password *   IMEI/ESN Writing PW   OTP *
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin –  Keicloud Login USER ID * GSPN ID Password * IMEI/ESN Writing PW OTP * OTP Master OTP
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin
<ul> <li>3. Log in with the following information:</li> <li>GSPN ID</li> <li>IMEI Write Password</li> <li>OTP</li> <li>MOTP</li> </ul>	Ingin   Image: Cloud in the second s





#### Changing the COM Port

To change the COM port being used by the IMEI Cloud Client tool:

- 1. Click the **Settings** button at the top right of the UI
- 2. Select the desired COM port number, then click **Confirm**

1 IMEI Client (GSPN)1.7.2				- 0	×
	IMEI Client GSP	N V1.7.2		Logout	鐐
PORT : COM24 MAC : 9883899BE010	🖒 imei	🖄 Ticket NO			_
No IMEI Write RUN SMART IMEI Check FRP Unlock Select Run SEQ NO Run Model Model MECLOUD		Process	Result		
SAMSUNG © SAMSUNG		0%			
TIMEI Client (GSPN)1.7.2				- 0	×
MEICLOUD USER BIN DL	IMEI Client GSP	N V1.7.2		Logout	ô
PORT : COM24 MAC : 9983899BE010	🖄 імеі	🖄 Ticket NO			
No	Setting     IMEI CLOUD	>	Result		
<ul> <li>IMEI Write</li> </ul>	SETTING				
RUN SMART	COM24 COM3	~			
• IMEI Check	COM17 COM18 COM24				
• FRP Unlock	JIGFORT	~			
Select Run SEQ NO Run Model IMEI CLOUD	Confirm	Cancel			
SAMSUNG © SAMSUNG		0%			

.....

© 2024 Samsung Electronics America, Inc. All Rights Reserved Revised August 13, 2024

RevisionThe following table lists the revisions made to this OJT resource.History

Version	Released	Revision
1	08/07/2024	• First published edition of this document.

# OJT: Scanning Main PBA QR Codes

Introduction

This document is intended to guide agents on where to find and scan QR codes on the Main PBA. Knowing where to locate and scan the QR codes will enable more accurate parts management during and after repairs.

.....

Topic

The Main PBAs for Samsung devices feature an embedded QR code that enables the part to be scanned during repairs. Utilizing the QR code allows the unique identifying information for each Main PBA to be tracked and managed effectively. Scanning the QR code helps to reduce the impact of human error when managing parts, and increases the speed at which parts can be tracked and shipped via U-Class.

The following device series are listed:

- Galaxy S Series
- Galaxy Note Series
- Galaxy Z Series
- Galaxy A Series
- Additional Devices

.....

## **Galaxy S Series**







#### Galaxy Note Series



.....

## **Galaxy Z Series**



© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened. Revised August 15, 2023

SAMSUNG Care





.....

## **Galaxy A Series**

Galaxy A01	Galaxy A10e
Galaxy A11	Galaxy A12
Galaxy A21	Galaxy A20

© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened.

SAMSUNG Care



### Additional Devices



© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened. Revised August 15, 2023

SAMSUNG Care

### The following table lists the revisions made to this OJT.

### Revision History

Version	Released	Revision
1.0	2/28/2020	Initial OJT created
1.1	10/14/2020	New models added
1.2	12/3/2020	New models added
1.3	1/25/2021	New models added
2.0	8/18/2021	<ul> <li>Updated document tables/design, added new models, added hyperlinks</li> </ul>
3	2/10/2022	New models added
4	8/17/2022	New models added
5	02/14/2023	New models added
6	07/31/2023	New models added

© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened.

Revised August 15, 2023

## QRG: mmWave Calibration - No Power Supply

Introduction	This document is intended to guide repair technicians in performing mmWave Calibration without an ODA2CH power supply.
About mmWave Calibration	mmWave Calibration is performed using Daseul, and must be completed when the following kinds of repair are done on 5G mmWave capable devices: IMEI Rewrite (Main PBA Replacement) 5G mmWave Antenna Module Replacement
	Following successful calibration, Galaxy Diagnostics will test the integrity of each mmWave Module; if any instances fail, the module with the failing instance must be replaced, and mmWave Calibration repeated.
	<b>Note:</b> mmWave Calibration is NOT OPTIONAL, and must be completed with these repair types on 5G mmWave capable devices.
Hardware	The following equipment is required to complete mmWave Calibration without an ODA2CH

#### Hardware Configuration

The following equipment is required to complete mmWave Calibration without an ODA2CH power supply:

Category	ltem	SVC Jig Code	QTY
Shield Box	AS 3.1, 5G (mmWave) AUTO CAL Shield Box	GH81-17197A	1
Anyway Jig and Cable	<ul> <li>Anyway Jig</li> <li>Anyway Jig Adaptor</li> <li>25pin Serial Cable</li> <li>USB to Serial Cable</li> </ul>	GH81-12520B GH81-14495A GH81-17200A GH81-13470Z	1 1 1 1
I/F Cable	Туре-С	GH81-17202A	1
Common	<ul> <li>Comm.Radiation JIG_Main Base</li> <li>Comm.Radiation JIG_Mounting(Variable)</li> </ul>	GH81-19033A GH81-19033B	1 3
Jig	<ul> <li>Comm.Radiation JIG_Mounting(Fixed)</li> <li>Comm.Radiation JIG_LM Unit</li> <li>PACK HOLDER)Slim Molding Pack Assy)</li> </ul>	GH81-19033C GH81-19033D GH81-17204A	2 1 1

Follow the instructions in the step table below to complete mmWave Calibration when an ODA2CH power supply is not available:

**Note:** mmWave RF Calibration can be performed without the use of a Power Supply; however, device battery should be charged over 50% before executing the calibration. If the state of charge is less than 50%, the calibration will not start.

Step	Action
1.	<ul> <li>Connect the Anyway Jig to the Service PC:</li> <li>Connect the serial side of the USB to Serial Cable to the serial UART port on the Anyway Jig</li> <li>Connect the USB side of the USB to Serial Cable to an open USB port on the Service PC</li> </ul>
	Note: Connecting the Anyway Jig to the Service PC will generate a COM Port for the Anyway Jig, which can be found in the Windows Device Manager
2.	<ul> <li>Connect the Anyway Jig to the Shield Box:</li> <li>Connect one end of the 25 pin Serial Cable to the Test Pack port on the Anyway Jig</li> <li>Connect the other end of the 25 pin Serial Cable to the Anyway Jig Adapter</li> <li>Connect the 25 pin Serial Cable with the attached adapter to the port on the Shield Box door</li> </ul>
3.	<ul> <li>Configure the Common Model Jig for the device model being calibrated:</li> <li>Remove the screws from the holder(s) to be moved</li> <li>Move the holder(s) to the coordinates labeled for the device model to be tested <ul> <li>Make sure that the screws are facing away from where the device will be positioned</li> <li>The upper variable holder should be secured so that the device does not move after securing the lower side variable holder</li> <li>(x, y) are the coordinates on the pegboard where the screws should be fastened</li> </ul> </li> </ul>
	The points will be listed in sets of two in the format $(x, y)/(x, y)$

© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised March 16, 2021

- 4. Insert the Common Model Jig into the Shield Box:
  - Pull open the Shield Box chamber and place the Common Model Jig in the center
  - Align the notches on the Common Model Jig to the pegs on the Shield Box to secure the Common Model Jig in place

- Note: Do not pull the chamber drawer all the way out; this will derail the chamber from its sliding tracks
- 5. Connect the Common Model Jig to the Shield Box using the I/F Cable:
  - Connect and secure the I/F cable to the Shield Box port located behind the chamber of the shield box
  - Slide the I/F plug into the Common Model Jig; be careful not to lift and damage the clip

Downloading, Configuring Daseul & Calibration

- There are three (3) files required to complete mmWave Calibration:
  - Daseul Launcher (.exe)
  - Calibration Runtime (.cab)
  - Model File (SM-GXX.cab)

Follow the instructions in the step table below to download the required files from SKP and configure Daseul:

Step Action

1. Log in to G-SPN, and click on **Knowledge** from the top menu bar

@ 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised March 16, 2021

Type the device model numb <b>Code</b> search field, and click o	ber in the <b>Model</b> on <b>Search</b>	Search Res	ults	
		Model Code	e 🗸 9	5M-G977U
Scroll the scroll bar left unti <b>Software</b> column, and click of the Compliance Software co	il you reach the <b>Comp</b> on the hyperlinked nu olumn	liance Imber in	Compliance Software	
Select the file to download a Service PC	and click <b>Download S</b> v_CALIBRATION epps (06.03.2019) vMMW_CALIBRATION.zip (164.33 N	elected to down	load the .zip f	ile to the
Extract the .zip file contents	into a folder that wil	l contain all thre	e files	
Navigate to and open the fol containing the extracted file the Daseul Launcher • With all of the fi	lder Claucher es, then No. Proc iles in the	uncher Ver 3.0.30 Katus > essing Kart, Normal Mode :::	Status Complete	launch same
folder, Daseul L should automat MMW_Calibrati • Check the box n Calibration • Click Extract & F	Auncher cically load on file hext to Run Run Seiet Edr Run Seiet Edr Run Solor Coll an Preal 2n BT	Int Process  DASEUL_Runtme_Ver_3.1.426.0  T  T  T  T  T  T  T  T  T  T  T  T  T	D.CAB BRATION_Ver_3.1.421.7.CA	the
	Type the device model num Code search field, and click Scroll the scroll bar left unt Software column, and click the Compliance Software co Select the file to download a Service PC Extract the .zip file contents Navigate to and open the for containing the extracted file the Daseul Launcher With all of the f folder, Daseul L should automat MMW_Calibrati Check the box r Calibration Click Extract & I	Type the device model number in the Model Code search field, and click on Search Scroll the scroll bar left until you reach the Comp Software column, and click on the hyperlinked nut the Compliance Software column Select the file to download and click Download Se Service PC	Type the device model number in the Model Code search field, and click on Search       Search Res         Model Code       Model Code         Scroll the scroll bar left until you reach the Compliance Software column, and click on the hyperlinked number in the Compliance Software column       Model Code         Select the file to download and click Download Selected to down Service PC       Image: Column Col	Type the device model number in the Model Code search field, and click on Search

- 7. Once the extraction process is completed, the **Select Sequence Files & Login** window will appear:
  - Click and check off CAL
  - Click the ... button next to the CAL dropdown
  - Navigate to and select the Model File, then click **Open**
  - Click **Start** in the bottom right corner of the window

Sect The Sequence Depty Petri 990 Pt 990 Pt 900 Pt	Iect Sec sequence files & File C-(DIST)DAGU. Open Look In: Desktop Desktop Desktop The PC Wetwork	SMC	STUL_MMW_CALIBR	& Login ne permission, Join IATION_Ver_3.1.4 • RATION_Ver_3.1.4 • RECT Seque sequence files. & the set SH-097U_VPH/r_CALER [SH-097U_VPH/r_CALER	, etc	X Type File folder ENC File & LOC the permissi	gin ion, Join, et v v	
Resolution : 102415	This PC	< File nam Files of t	Select the Sequence F Deploy Path SMOD L SMO F/T PEAF/T PEAF/T CAL CAL2nd FINAL MANUAL FINAL MANUAL MEL WAAN GPS ST	ie crystpaseu.	ATION_Ver_3.1.421.7.deq		× × × × × × × × × × × × × × × × × × ×	
			Skip Cofiguration ( Resolution : 1024 x 7	Dialog Permission 58 💌 Change Pe	rmission Exi	t -	🛟 Start	

- 8. The **Set System Configuration** dialog window will open:
  - In the Test Process section, select Calibration
  - Select Operation Condition and ensure Prevent Process Secession (NV) is unchecked; click OK
  - Click Hardware Config to continue

	Max. Re-Test on Fail	Trouble Shoot Mode(1P Cell)	
S Set	Consecutive Test Fail Alarm Fire this alarm Syst After processing at least 5 phon	Cone Fail Block Use One Fail Block Add es Delete	
Test Process     [M       [Process]     [M       SMD DL     [M       SMD F/T     [M       PBA F/T     [Calibration	Test Fail Alarm Fire this alarm S When fail rate exceeds 20.0 % After processing at least 10 phon	Prevent Process Secession(W)	Mode Informa Hardwa Confi
Calibration 2ND Final Auto Final Auto 2ND Final Auto 2ND Final Manual IMEI Write MILE Check MDL +2nd Check MDL Rework MDL Rework Final Auto 2ND Final Auto 2	Power Supply Voltage Check:	Cell Cable Type KJ Flat Cable Cell Cable Loss Check Cable Loss MSTS Return After CAL Code Boxues (MF (1987)	Signal L Confi
IMEI Read STA Write STA Check STA Reset	Lower Spec(+) 3.000000 mJ Upper Spec(+) 3.000000 mJ	Save ALL TOK Cancel	MST
GPS T	Test Mode : WLan	SubpartsLife	Settin End Ba
WLAN Power Off-On before Bluetooth	WLAN Use Second PC Save ODS Merge Felica Cal	Operation Condition Operation Condition RUN SeeLog	Engine

 $\odot$  2021 Samsung Electronics America, Inc.. All Rights Reserved Revised March 16, 2021



- 10. Congifure DBMS and Save:
  - In the Server section, select Home(GUMI)
  - In the Type section, select N/A
  - Click **SAVE** to save the hardware configuration

Phone	MSTS Sharing Controller	DBMS	PBA F/T
Count 1	Count 0	Server HOME(GUMI) -	Function Test IIo Port Setting
I/F - 1 Type Serial COM		Type N/A 💌	NI-DAQ
		Barcode Reader	aron setting
I/F - 2 Type N/A	I/F Type Serial COM	Type N/A 👻	Detector Port Setting
I/F - 3 Type N/A	Terminal Port Setting	] I/F Type Serial COM +	HDMI Type
I/F - 4 Type N/A	·		HDMI JIG
Port Setting	Switch Box Port Setting	Port Setting	SMD F/T
( ron sening	Robot / ShieldBox	LCIA ShieldBox	Type N/A
IF Jig Type AnyWayJig	Control Type N/A	I/F Type Serial COM	B'd Address 5
	I/F Type Serial COM	Port Setting	
with the Cable Turne UMPT Line	- (ShieldBox)	MES PN Sender	PortSetting
	Type Port Setting	Type N/A 👻	AP(2.4G) SSID
✓ Use Portable ID Check JIG	Power Supply	Port Setting	AP(5G) SSID
	ODA2CH		GPS Generator
MSTS	I/F Type Serial COM	I/O Type Serial COM V	-WIAN
Count jo			Count 0 💌
I/F Type  GPIB	Port setting	Port Setting	I/F Type Serial COM 💌
Port Setting	g Control Turne In	Power Amp	
UWB	Control type Inone	Count 0	Port Setting
Count 0	✓ I/F Type Serial COM	I/F Type Serial COM	

© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised March 16, 2021

## SAMSUNG Care

- 11. Once hardware has been configured, you will return to the Set System Configuration window:
  - To save your settings and proceed to Daesul, click **OK**
  - You may encounter a MSTS pop-up notification upon clicking OK; disregard this notification and proceed to launching Daseul

Set Sys Set System Con		n	
Test Process         [Master] [Slave]           [Process]         [Master] [Slave]           SMD DL         [           SMD F/T         [           PBA F/T         [           PBA F/T         [           Calibration         [           Calibration 2ND         [           Final Auto 2ND         [           Final Auto 2ND         [           Final Manual         [           IMEI Urite         [           IMEI Check         [           MDL +2nd Check         [           STA Check         [           STA Check         [           STA Reset         [           WLAN         [	Test Condition SMD FT Test Mode : SMD_Function Calibration Real CAL Cycle: on every 20 Calibration Mode : PDT CAL 2nd Mode : PDT Final Supply RF Signal by Conduction Reset Loss Correction Count Test Mode : Signaling WLAN Test Mode : WLan	System Config. Language English Line Name LINE(temp) Line Type Block Cell TOP Cell Smart Cloud Cell # of Phone 1 Start Number of UI 1 Start Number 1 Of UI 1 Start Number 1 IP Address 172.31.98.37 SKD Mode MultiSharing(CMWS) Developer Mode Advanced Separating(ADS) SubpartsLife	Model Informatio Hardware Config Signal Los Config. Signal Los Config. MSTS Calibratio Setting
BT WLAN Power Off-On before WLAN Bluetooth LCIA Merge 2G3G Block Rad.	IMEL       Use RFSM       Use Second PC       Save ODS       Merge Felica Cal       OQC Reset       Bl Reset	Operation Condition Operation Condition IMEL SVC&Repair Option	Engine Fre

- 12. Configure Daseul:
  - Click on the Test Item option within Daseul, and then select the SVC Opt. (only SVC PBA) option in red font
  - Save and close your settings by selecting the left **??** option below the **CAL Test Option** settings window



© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised March 16, 2021

13.

Select Start :
Place the powered off device in the Common Model Jig and connect it to the IF Port
Hold the Power Key to turn the device on

- Close the chamber while the device is booting up, making sure that the Shield Box is closed and locked by pulling **down** on the handle
- **Note:** If the calibration fails, do not stop the tool; allow Daseul to retest, then power the device off, reconnect it to the IF Port, hold the Power Key to turn the device on and close the chamber again while the device is booting up
- 14. When calibration completes successfully, Daseul will display **<Test Pass>** in the **Result** section

PGMV	er DASEU	tion(M) / [ShieldBox-AN L v3 1 421 0 / Calibratio	TENNA n(r00734 KR	190424)							
			Phone	01				CUR CHK			
	Status	Wait Test Start Sig	nal						_		
	Result	<test pass=""></test>									
	Time	201.6 second (Avera	ge : 201.9 sec	cond)							
	Fail(%)	Total Test: 1, Test Fi	ail: 0 (Rate: 0.)	0%)							
U/N :							2DBCR : NONE				
NR_F NR_F NR_F EFS 10 DM ter After Soft F	DRSB_Cal_1 DRSB_Cal_1 DRSB_Cal_1 DRSB_Cal_1 DRSB_Cal_1 Sync o AT Change AVE CAL_EN P Write Delay AL RESULT [ ge Phone Ba Power Off	Tata Inter 2004Hz FreqBin3 2004Hz FreqBin3 2004Hz FreqBin3 2004Hz FreqBin5 2004Hz FreqBin5 200	Type - N/A)	Minister (2000)	L.Cov	High 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PASS PASS PASS PASS PASS PASS PASS PASS	Binn 189, 891 191, 297 194, 062 196, 559 199, 406 199, 516 200, 516 200, 516 200, 516 201, 625			Start
5	2		B	-7		¢	¢	0	ł		Stop Pause

**Troubleshooting** If the tool fails, Daseul will display **Alarm !!!** in the **Result** field; a pop up window will provide details of the failure:

Error	Troubleshooting Steps
Tool failing for "Booting	1. Check Anyway Jig COM Port
Completed Msg Error"	Mapping/Settings
Tool failing for "StartCalibration	1. Ensure the device does not
Fail to Read Test Items All"	have Screen Lock turned on
Tool failing for "Erase Fail	1. Click Abort on the Alarm
History"	Screen and let the tool reset

It is important to make sure that the Fail History is erased manually when a failure occurs; double click on the failure line to view the Alarm Detail, and click the Abort button to clear the failure history. **DO NOT** click Retry, as this will only cause the tool to fail again.

-							- 0	
odel	SM-G977U	H/W Ver	REV0.1	SKU	SM-G977U	DB Serv HO	ME(GUMI) Cell Type Block	k Cell
cess (	Calibration(M)			000	don'n			
M Ver D	ASEUL_v3.1.444.0 / Calibra	ation(r00758)						
		D	1					
			Ala	rm Detail In	fomatio	n		
-	Message	DUI						
-/	Enter Test Mode Error	TestMana	Name :	Common		Test Item :	Erase FAIL HISTROY	
			(a (a)					
			Unit :	TestManager_1		Severity :	Fatal	
			1					
			Enter Test Mod	de Error				
			2019-	09-10		4 × 4	UStartCalibration:"P	PollA
			Time : 15:45:	52.09 File : usta	rtcalibration.cp	p 3116 Fu	ion	· · · ·
			15					
			- Unit Log					
			Unit Log	JT ID Time	Severity	Log Message	e	^
			Unit Log	JT ID Time 15:45:52.090	Severity [1-Error]	Log Message UAlarmTestS	e Step Enter Action	^
			Unit Log	JT ID Time 15:45:52.090 15:45:52.090	Severity [1-Error] [1-Error]	Log Message UAlarmTestS UStartCalibra	e Step Enter Action ation Leave Action	^
			Unit Log No. DU 1 1 2 1 3 1	JT ID Time 15:45:52.090 15:45:52.090 15:45:52.089	Severity [1-Error] [1-Error] [1-Error]	Log Message UAlarmTestS UStartCalibra No Data Rec	e itep Enter Action ation Leave Action eived	^
			Unit Log No. DU 1 1 2 1 3 1 4 1	JT ID Time 15:45:52.090 15:45:52.089 15:45:42.102	Severity [1-Error] [1-Error] [1-Error] [1-Error]	Log Message UAlarmTestS UStartCalibra No Data Rec 30 0D 0A	e itep Enter Action stion Leave Action :eived 0.	^
			Unit Log No. DU 1 1 2 1 3 1 4 1 5 1	JT ID Time 15:45:52.090 15:45:52.089 15:45:52.089 15:45:42.102 15:45:42.102	Severity [1-Error] [1-Error] [1-Error] [1-Error]	Log Message UAlarmTestS UStartCalibra No Data Reci 30 0D 0A 41 54 28 46 4	e itep Enter Action stion Leave Action seived 0 41 49 40 48 49 53 54 3D 30 20 1	20
			Unit Log No. DU 1 1 2 1 3 1 4 1 5 1 5 1	JT ID Time 15:45:52.090 15:45:52.089 15:45:42.102 15:45:42.102 15:45:42.102	Severity [1-Error] [1-Error] [1-Error] [1-Error] [1-Error]	Log Message UAlarmTestS UStartCalibra No Data Rec 30 0D 0A 41 54 28 66 4 (COM 221 Be	e itep Enter Action ition Leave Action reived 0 11 49 4C 48 49 53 54 3D 30 2C 41 49 4C 48 49 53 54 3D 30 2C 11 18 18 Read	30 in
			Unit Log No. DU 1 1 2 1 3 1 4 1 5 1 6 1 7 1	JT ID Time 15:45:52.090 15:45:52.089 15:45:42.089 15:45:42.102 15:45:42.102 15:45:42.102	Severity [1-Error] [1-Error] [1-Error] [1-Error] [1-Error] [1-Error]	Log Message UAlarmTestS UStartCalibra No Data Rec 30 0D 0A 41 54 2B 64 [COM 22] Re 30 0D 0A	e <mark>tep Enter Action</mark> ation Leave Action eived 0. 41 49 4C 48 49 53 54 3D 30 2C : ead Success : [19] Byte Rea	30 in
			Unit Log No. Du 1 1 2 1 3 1 4 1 5 1 6 1 7 1 7 1	UT ID Time 15:45:52.090 15:45:52.090 15:45:45:20.089 15:45:42.102 15:45:42.102 15:45:42.102 15:45:42.089 15:45:42.089 15:45:42.089	Severity           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]	Log Messag UAlarmTestS UStartCalibra No Data Rec 30 0D 0A 41 54 2B 46 4 [COM 22] Re 30 0D 0A	2 3tep Enter Action seived 0 11 49 4C 48 49 53 54 3D 30 2C 1 22 25 54 3D 30 2C 1 23 35 54 3D 30 2C 1 24 40 4C 48 49 53 54 3D 30 2C 1 11 40 4C 48 49 55 54 50 50 50 50 50 50 50 50 50 50 50 50 50	30 in
			No.         DI           1         1           2         1           3         1           4         1           5         1           6         1           7         1           8         1	UT ID Time 15:45:52.090 15:45:52.089 15:45:42.102 15:45:42.102 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089	Severity           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]           [1-Error]	Log Message UAlarmTest5 UStartCalibra No Data Rec 30 0D 0A 41 54 28 46 4 [COM 22] Re 30 0D 0A 41 54 28 46 4 (COM 22] Re	2 tep Enter Action teived 11 49 4C 48 49 53 54 3D 30 2C 12 ad Success : [19] Byte Read 0. 41 49 4C 48 49 53 54 3D 30 2C 12 teit (502)R 40 50 54 3D 30 2C 12 14 54 54 54 54 54 54 55 54 3D 30 2C 12 14 54 54 54 54 54 54 54 55 54 3D 30 2C 12 14 54 54 54 54 54 54 55 54 3D 30 2C 12 14 54 54 54 55 54 3D 30 2C 12 14 54 54 55 54 3D 30 2C 12 14 54 55 54 55 54 3D 30 2C 12 14 55 55 55 55 55 55 55 55 55 55 55 55 55	30 in 30
			Unit Log No. 04 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 9 1	JT ID Time 15:45:52.090 15:45:52.089 15:45:42.102 15:45:42.102 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089	Severity           [1-Error]	Log Messag UAlarmTest5 UStartCalibr No Data Rec 30 0D 0A 41 54 28 46 4 (COM 22 Rec 30 0D 0A 41 54 28 46 4 (COM 22 W	2 tep Enter Action teived 0 11 49 4C 48 49 53 54 3D 30 2C 2 ad Success : [19] Byte Read 0 41 49 4C 48 49 53 54 3D 30 2C 1 trite [19]Byte Success	30 in 30
			Unit Log No. DU 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10 1	UT ID Time 15:45:52.090 15:45:52.090 15:45:52.089 15:45:42.102 15:45:42.102 15:45:42.102 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089	Severity           [1-Error]           [1-Error]	Log Message UAlamTest5 UStartCalibra No Data Rec 30 0D 0A 41 54 28 46 4 [COM 22] Re 30 0D 0A 41 54 28 46 4 [COM 22] W [COM 22] Ch	2 3tep Enter Action ation Leave Action seived 0 11 49 4C 48 49 53 54 3D 30 2C 1 3tad Success : [ 19 ] Byte Read i 0 41 49 4C 48 49 53 54 3D 30 2C 1 irite [19]Byte Success ear : PURGE_TXABORT   PURG	30 in 30 GE_ V
			Unit Log No. DI 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10 1 <	UT ID Time 15:45:52.090 15:45:52.090 15:45:42.102 15:45:42.102 15:45:42.102 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089 15:45:42.089	Severity           [1-Error]	Log Message UAlarmText5 UStartCalibr No Data Rec 30 0D 0A 41 54 28 46 4 (COM 22) Re 30 0D 0A 41 54 28 46 4 (COM 22) With COM 22 OK (COM 22) CM	tep Enter Action tey Enter Action teived 0 11 49 4C 48 49 53 54 3D 30 2C 3 ad Success : [19] Byte Read 0 11 49 4C 48 49 53 54 3D 30 2C 3 rite [19]Byte Success ear: PURGE_TXABORT   PURG	30 in 30 SE_ ~
			Unit Log No. 04 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10	JT ID         Time           15:45:52.090         15:45:52.089           15:45:52.089         15:45:42.102           15:45:42.102         15:45:42.102           15:45:42.089         15:45:42.089           15:45:42.089         15:45:42.089           15:45:42.089         15:45:42.089           15:45:42.089         15:45:42.089	Severity           [1-Error]	Log Message UAlamTest5 UStarCalibre No Data Rec 30 0D 0A 41 54 28 46 4 (COM 22) Re 30 0D 0A 41 54 28 46 4 (COM 22) W (COM 22) Ch	2 tep Enter Action teived 0 11 49 4C 48 49 53 54 3D 30 2C 2: ad Success : [19] Byte Readi 0 11 49 4C 48 49 53 54 3D 30 2C 2: rite [19]Byte Success ear : PURGE_TXABORT   PURGE 1000	30 in 30 GE_ ~
			Unit Log No. DU 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10 1 < Select Remedy Ac	UT ID Time 15:45:52.090 15:45:52.089 15:45:42.102 15:45:42.102 15:45:42.102 15:45:42.089 15:4	Severity           [1-Error]	Log Message UAlamTest5 UStarCalibra No Data Rec 30 0D 0A 41 54 28 46 4 [COM 22] Re 30 0D 0A 41 54 28 46 4 [COM 22] NU [COM 22] CL [COM 22] CL	2 tep Enter Action ation Leave Action .eived 0 11 49 4C 48 49 53 54 3D 30 2C 1 ad Success : [19] Byte Read i 0 11 49 4C 48 49 53 54 3D 30 2C 1 rite [19]Byte Success ear : PURGE_TXABORT   PURG ETXABORT   PURGE	30 in 30 5E_ ~
Auto	Recipe	Test Kom	Unit Log No. DU 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10 1 Select Remedy Ac	UT ID Time 15:45:52.090 15:45:52.089 15:45:42.102 15:45:42.102 15:45:42.102 15:45:42.089 15:4	Severity           [1-Error]	Log Message UAlamTest5 UStartCalibra No Data Rec 30 0D 0A 41 54 28 464 (COM 22] Re 30 0D 0A 41 54 28 464 (COM 22] Re (COM 22] VL (COM 22] Ch	2 140 Enter Action 141 49 4C 48 49 53 54 3D 30 2C i 141 49 4C 48 49 53 54 3D 30 2C i 143 4C 48 49 53 54 3D 30 2C i 141 49 4C 48 49 53 54 3D 30 2C i 141 40 40 40 40 40 40 40 40 40 40 40 40 40	30 in 30 SE_ ~

Once the failure history has been cleared, click the **Auto** option and allow Daseul to retest the device:

Model	SM-G977U	H/W Ver S/W Ver	REV0.1 SM-G977U	SKU	SM-G977U G977U	DB Serv HOME Buyer A	(GUMI) Cell Type Block Cell L PC NO. NONE
Process (	Calibration(M)					All second and a second s	
PGM Ver	DASEUL_V3.1.444.07 Callbr	auon(r00758)	aukla aliala an it		- detaile af the als		
	100	U	buble click an it	em to view th	e details of the ala	rm.	
	Message	DUT	ID Nam	e ID	Severity File	Name Line	Function
•							
2			THE	*** <b>-</b>		7	
Auto	Recipe Setting	Test Item	HW Setting Se	etting(Etc.)	Func Data		Alarm Help
:: [One Step] :	: [ Machine Freq : 100 ms]	DBMS Type : N/A	1			Level: [01-Error]	🔒 🛃 🦷 R 2019-09-10 15:48:

 $\odot$  2021 Samsung Electronics America, Inc.. All Rights Reserved Revised March 16, 2021

## OJT: Scanning QR Codes on Display Modules

#### Introduction

This document is intended to guide agents on where to find and scan QR codes on display modules (OCTA). Knowing where to locate and scan the QR codes will enable more accurate parts management during repairs.

.....

Topic

The OCTAs for Samsung devices feature an embedded QR code that enables the part to be scanned during repairs. Utilizing the QR code allows the identifying, unique information for each OCTA to be tracked and managed effectively. Scanning the QR code helps to reduce the impact of human error when managing parts and increases the speed at which parts can be tracked and shipped via U-Class.

The following device series are listed:

- Galaxy S Series
- Galaxy Note Series
- Galaxy Z Series
- Galaxy A Series
- <u>Galaxy Tablets</u>
- Additional Devices

.....

### **Galaxy S Series**



© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened. Revised August 15, 2023

SAMSUNG Care







SAMSUNG Care

142

#### Galaxy Note Series



.....

## **Galaxy Z Series**




145



Revised August 15, 2023



Revised August 15, 2023



------

SAMSUNG Care

148



.....

© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened.

SAMSUNG Care

## **Galaxy A Series**



© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened. Revised August 15, 2023

SAMSUNG Care







## **Galaxy Tablets**



© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened. Revised August 15, 2023

SAMSUNG Care

# Additional Devices



.....

© 2023 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened.

SAMSUNG Care

# **QRG:** Using Fenrir

Introduction	This document is intended to act as a quick reference guide to technicians when using Fenrir.
About Fenrir	Fenrir is a Samsung repair system used for these parts of the repair process:
	<ul><li>Warranty Validation</li><li>Software Flash (Android OS installation)</li></ul>
	This document will outline the following topics related to Fenrir:
	<ul> <li><u>PC Hardware Specifications</u></li> <li><u>Binary Management</u> <ul> <li><u>New Models</u></li> <li><u>Binary Selection</u></li> </ul> </li> <li><u>Using Fenrir: Home Software Recovery with Fenrir A</u></li> <li><u>Using Fenrir: SVC Connection</u></li> <li><u>Performance Tips &amp; Tricks</u></li> </ul>
	<b>Note:</b> It is important to make sure that no other repair tools (e.g. GD) are in use when using Fenrir.
PC Hardware Specifications	<ul> <li>These are the required system specifications for use with Fenrir:</li> <li>PC running Windows 7/8/10 operating system</li> <li>At least 3TB available storage for device binaries <ul> <li>More storage allows for more binary storage</li> <li>It is recommended to set up the hard disk drive (HDD) as a single partition</li> </ul> </li> <li>At least 5Mbps high-speed Internet connection (&gt;7Mbps recommended)</li> <li>Firewall open to the following FUS server URLs: <ul> <li>Required for binary download and device connection history upload to FUS servers</li> <li>http://cloud-neofussvr.sslcs.cdngc.net</li> <li>http://cloud-neofussvr.sslcs.cdngc.net</li> </ul> </li> <li>Data Cable connected directly to the USB Port on the Mainboard of the Service PC (back ports)</li> <li>USB hub with external power source (e.g. Belkin F4U041 or similar) for multiple devices connected directly to the USB Port on the Mainboard of the Service PC (back ports)</li> </ul>
	<b>Note:</b> The following page includes samples of tables and informational blocks (warnings, cautions, tips and notes) in case you need to use them.

.....

© 2021 Samsung Electronics America, Inc. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Other company names, product names and marks mentioned herein are the property of their respective owners and may be trademarks or registered trademarks. Screen images simulated. Appearance of phone may vary. Application sequences shortened. Revised December 2, 2021

### Binary Management

In order to use Fenrir with a device, the most up to date binary for that device must be loaded into Fenrir.

There are two (2) types of binary used in Fenrir:

- H (Home) Attempts to save customer user data
  - **Cannot** be used for IMEI Write/Check processes
  - **Cannot** be used on Tizen devices
- F (Factory) Erases all customer user data, and sets the device to factory defaults
  - **Required** for use with IMEI Write/Check processes
  - Main screen can be used to flash Tizen watches as well as for the Phone Recovery software option

Fenrir A (All) is an option which combines both the Home and Factory binaries into a single program; this option requires twice the storage and network traffic as the individual components, and allows more room for human error because it is possible for the wrong binary to be applied to the device accidentally, which may cause customer user data to be permanently lost. Tizen watches will not work on the Fenrir A Home screen, but can still be flashed using the Phone software recovery option.

It is important to make sure that the correct binary is used for the wanted outcome.

Use the instructions in the step table below to manage Fenrir binaries:

Note: Using out of date binaries with Fenrir may cause device repair systems (e.g. IMEI Cloud Client) or the device software to malfunction, and may render the device inoperable; DO NOT attempt to recover a rooted device with Fenrir.

### Step Action

1.	Launch Fenrir, and access Administrator Home by pressing Alt + F10; enter	Administrator home	×
	smart100 as the password, then click OK	Input a password to access administrator home	
		Password:	
		ОК Сапсе	

⊙ Fenrir	<b>,</b>	Mena 🔻 💷 🖬 🗆
Administrator home		de Main Screen
*	Phone Software recovery option Emergency recovery option can be used when phone upgrade failed.	>
	Phone software management Download and manage the upgrade software from the web according to phone model.	>
\$	Other settings The software download options for phone upgrade and the upgrade screen configuration can be set up.	>
23	Customer management Manage customers and store related status information.	>

## 2. Select **Phone software management** to download and manage binaries by phone model

### 3. The Upgrade software download manager will display:

- Select the check box next to the device model binaries to update
- Use the drop down menus to narrow the options down to a specific device model, country code, or regional code
- Click Begin download to download the selected binar(ies)
- Click Delete download file to delete the stored binar(ies)

Upgi	rade softv	vare dov	nload m	anagem	ent							Admini	istrator
The so	ftware upgra	de options	can be set u	o according	to each model.								
Benin	download D	alata downlos	4 104										
Cregits	Commond	elete demilio			12				100				
Model N	lame: Whole m	iodel 📑	Country	ode Whole	nodel	Download history	Whole model	Regional code Whole mod	el 💌				
D.	Model name	Buyer c	Name	Regiona	Upgrade/downl	Support settings	The last date used	Download history	OS	S/W version	Size	Download d	F
~	SM-G975U	т-мо	Galaxy S1	TMB	ON STOP OFF	H A F		Latest version	Pie(Android 9)	G975USQS2BSIX/G	5.84 G	2019-11-1	
11	GT-N9013	STA(U		XAR	ON STOP OFF	H A F		Download function is					
5	SGH-1337	ATT		ATT	ON STOP OFF	H A F		Download function is					
a	SM-A102U	T-M0		ТМК	ON STOP OFF	H A F		Download function is					
a l	SM-A102U	SPRINT		SPR	ON STOP OFF	H A F		Download function is					
T	SM-A102U	T-MO		TMB	ON STOP OFF	H A F		Download function is					
3	SM-A102U			VMU	ON STOP OFF	H A F		Download function is					
T	SM-A102U			BST	ON STOP OFF	H A F		Download function is					
7	SM-A102U	ATT		ATT	ON STOP OFF	H A F		Download function is					
1	SM-A102U			XAS	ON STOP OFF	H A F		Download function is					
	SM-A102U	Verizon		VZW	ON STOP OFF	H A F		Download function is					
a.	SM-A102U			СНА	ON STOP OFF	HAF		Download function is					
-	SM-A102U	US C		USC	ON STOP OFF	H A F		Download function is					
i.	SM-A102U			AIO	ON STOP OFF	H A F		Download function is					
	SM-4102U1			AIO.	ON STOP OFF	H A F		Download function is					
a.	SM-A102U1	Verizon		VZW	ON STOP OFF	H A F		Download function is					
i.	SM-4102U1	т-мо		ТМК	ON STOP OFF	H A F		Download function is					
	SM-410211			VMI	ON STOP OFF	H A F		Download function is					
-					ON STOP OFF	H A F							

4. Once the selected binar(ies) have been downloaded, set Fenrir to automatically download updated binar(ies):

		Web download	S/W Update	Comments
Stop (Orange)	ON STOP OFF	Ongoing	Not Possible	Set by default (Temporary)
OFF	ON STOP OFF	Not Possible	Not Possible	
ON	ON STOP OFF	Possible	Possible	
-XX- NOTE: SI	top (Orange) will auto	matically switch to <b>ON</b> upon comp	letion of binary download	

Use the instructions in the step table below to complete a Phone Software recovery on a device: Using Fenrir: Software Note:

# Recovery

Do not perform software recovery or update on a rooted device.

#### Action Step

1.	Launch Fenrir, and access Administrator Home by pressing Alt + F10; enter	Administrate	or home	×
	smart100 as the password, then click OK	Input a passwor	d to access administrator home	
		Password:		
			OK Can	cel

2. Select **Phone Software recovery option** to perform a software recovery:

👚 Administrator home		Go Main Screen
*	Phone Software recovery option Emergency recovery option can be used when phone upgrade failed.	>
	Phone software management Download and manage the upgrade software from the web according to phone model.	>
•	Other settings The software download options for phone upgrade and the upgrade screen configuration can be set up.	>
R	Customer management Manage customers and store related status information.	>

Select phone that failed to upgrade	Input S/N	Direct model selection	
Remove battery, and ch before pressing the new Errors may occur while res	neck if the proper mo at button. toring if the selected in	del name and regional formation is not accurate.	odes have been selected
S/W version	Home F	actory	
Regional code S/W version	TMB(T-MOBILE (US))	50USQS2BQL 1/G950UOYN2BQL 1	G950USQS2BQL1/G950USQS2E

4. Select the following options to install the Home binary to the device, then click **Forward** to continue:

Select phone that failed to upgrade	Input S/N	Direct model selection	
Remove battery, and ch before pressing the nex Errors may occur while res	teck if the proper mode tt button. toring if the selected inforr	I name and regional cod nation is not accurate.	es have been selected
S/W version	Home     Factor	згу	
Model name	SM-G950U		
Regional code	TMB(T-MOBILE (US))	•	
S/W version	Nougat(Android 7.0) (G950U	SQS2BQL1/G950UOYN2BQL1/G95	0USQS2BQL1/G950USQS2E -
		Previous	Forward Cano
S/W Version: H	ome		

• S/W version: The current, up to date binary in Fenrir

5.	Select <b>1</b> continue	<b>EA</b> to recover one d e:	levice at a time	(recomn	nended),	then clic	k <b>Forwar</b> o	<b>d</b> to
		Phone Software recovery optic	on					
		Select phone that failed to upgrade	Input S/N	Direct mode	el selection			
		<ul><li>1 EA</li><li>4 EA</li></ul>						
					Previous	Forward	Cancel	

## 6. Review the selections made before proceeding:

Select phone that failed to upgrade	Input S/N	Direct model selection	
Model name : SM-G955U Regional code : TMB			
SW version : G955USQU2CRB9/G955UO	YN2CRB9/G955USQU2CRB9/	G955USQU2CRB9	
		Previous	Forward Car
<ul> <li>Press Previous</li> </ul>	to go back and	make changes	
- <b>-</b> -			

Phone Software recovery option	ļ.			
Select phone that failed to upgrade	Input S/N	Direct model selection		
Confirm the next matters before co	ontinuing.			
<ol> <li>Detach the battery aft</li> <li>Make sure that the details and the connect the cable a Recovery mode, press the Bixby button. Once the Bixby button.</li> </ol>	ter disconnecting th vice is turned off. after converting the he Power button wh the device has turne	e cable from the phone device to recovery mo ille pressing and holdir ed on, press the ▲ butt	e. Ig the ▼ button and ion to continue.	
		Confi	rm all information.	
		Previous	Forward Cance	•
• Make sure the de	vice is charg	ed to <b>at least 3</b>	0%	
Check the Confirm	m all informa	<b>ation</b> box		

### Using Fenrir: SVC Connection

When completing a repair, the device needs to be connected to Fenrir to perform a Warranty Validation, also known as SVC Connection. SVC Connection is required for every repair, whether it is in warranty or out of warranty.

Fenrir needs to log every component used during a repair to FUS. If FUS does not see the components used in the GSPN Service Order for the device, GSPN logic will assume parts were never used. This will stop the GSPN Service Order from being marked Goods Delivered. If this happens, no Warranty Claim will be generated, and the location will not be paid for the repair.

To perform Warranty Validation after a repair, connect the device to PC via USB cable and wait for Fenrir to recognize the device. Once device has been recognized, select SVC Connection and wait for SVC Connection to log the IMEI to the FUS server.



© 2021 Samsung Electronics America, Inc.. All Rights Reserved Revised December 2, 2021

## Performance Tips & Tricks

To ensure optimal performance when using Fenrir:

- Make sure that the Service PC meets all minimum system requirements outlined above
- Make sure to use a Samsung charging/data cable to ensure a proper connection between the device and the Service PC
- Make sure that all needed binaries are updated daily to prevent device detection or connection errors
  - ¬ Fenrir will not recognize a device if the binary for it has not been downloaded
- Do not use a USB hub to connect the device to the Service PC; this may have negative impacts on data transfer speeds
- Make sure to use the **rear** USB ports on the Service PC for a direct connection to the system BUS
- Make sure to use either the BLUE (USB 3.0) ports on the Service PC, or a USB Type-C port
- Make sure that the cables being used to connect the device to the Service PC are in good condition and working properly
- Make sure to leave the Service PC powered on and logged in so that automatic software downloads can take place as scheduled (The screen may be locked)
- Make sure that the Service PC has a stable connection to the Internet

.....

# NEW MFA APP SETUP FOR GSPN LOGIN

Beginning on Tuesday October 22, 2024, GSPN is expected to switch their MFA App over to the **SingleID Authenticator App**. This short guide is meant to be a very brief overview of how to switch the app once the change goes live in GSPN. The steps in this guide assume you already have an MFA device setup for **both GSPN logins** (*SlvI for main account and M0x for MOTP account*). **This process should be completed on both of your GSPN accounts!** 

# \*\*\*If you are using an iOS/Apple device, you must first setup a 6-digit passcode BEFORE attempting to register it as an MFA device\*\*\*

1. Download the SingleID Authenticator App from App Store (iOS)/Play Store (Android).



- 2. Log into GSPN as you normally would to begin setup using the on-screen instructions.
  - a. WARNING: DO NOT SUBMIT AN MFA DELETION REQUEST !!!
  - b. If the User Consent page prompts, check "Accept all" to continue
- 3. At the verification option page, select "SingleID Authenticator PIN"
- 4. Click the "Get started" button on the Enroll SingleID Authenticator page
- 5. You should now be prompted to install the SingleID Authenticator app
  - a. For Android devices search the app on the Google Play store (or use the on screen QR)
  - b. For **iOS** devices search the app on the **App Store** (or use the on screen QR)
- 6. Open the app once it's downloaded to your device and configure it as instructed below
  - a. In the App Permissions pop-up, click the "OK" button
    - i. Enabling Push notifications is ideal for authenticating
    - b. Press the "Start" button at the bottom to be sent to the Home page
- 7. Back on the PC prompt, click the "Next" button on the Install mobile app page
- 8. You should be at the Service registration page with 2 options to register (QR or Manual)
  - a. Scanning the QR will send you right to the next step (Step 9 see below)
  - b. To activate the Manual Code, use the app to enter the PIN code
- 9. In the pop-up that says, "Would you like to register the following service?" click "Registration"
  - a. It should say GSPN/secdx or something similar in the message box as well
- **10.** You will then be asked to create a 6-digit PIN. Create a PIN and take note of it somewhere.
- 11. A pop up will appear saying "Please register your biometrics/Face ID", be sure to click "Cancel"
  - a. This will bypass the biometric requirements
- **12.** GSPN should take you to the **Enrollment completed** screen; at this point you should be able to log into GSPN using the PIN method!

If you are having any issues with the MFA setup, <u>DO NOT SUBMIT AN MFA DELETION REQUEST!!!</u> Instead, please submit a JIRA Ticket using this form to troubleshoot first: <u>https://ubreakifix.atlassian.net/servicedesk/customer/portal/6/group/69/create/330</u>

Please include screenshots of the errors you encounter to speed up the process!

# <mark>FAQ</mark>

## Forgot your Password? -

When requesting a password reset, make sure you are entering your STG ID and not your UBIF/Asurion email. Password reset can only be initiated by entering your STG ID. If you do not know your STG ID, please reach out to your Franchise Consultant or Corporate District Manager.

## I submitted "Forgot your Password?" with my STG ID but still not receiving an email -

Your account may have been deactivated. Submit a Sprinklr ticket for System Credential Support > STG Support and explain the situation. If your account was deactivated, it will take 1-3 days to resolve.