

IMEI Rewrite Cloud

Migrating the IMEI to a New PBA



What are we learning?

When replacing the PBA on a customer's device, how do you ensure the customer's IMEI is not impacted? What is the IMEI and why is this process important? This training will introduce you to the IMEI Rewrite Cloud tool and the process supported through this software.

This module will cover:

- An introduction to IMEIs
- An overview of the PBA swap process
- Initial review of the IMEI Cloud Tool
- Step-by-step Instructions for the Process

So how does this help me?

This module will help you understand the IMEI rewrite process holistically and enable you to successfully complete an IMEI rewrite using the IMEI Cloud Rewrite tool.



Overview of the IMEI Rewrite Process

What is an IMEI?

An IMEI, or International Mobile Equipment Identity number, is a unique identifier included on all mobile devices. This unique identifier serves as the phone's fingerprint and is unique to every device.

Devices that feature IMEIs include:

- Smartphones
- Tablets
- Smart Watches
- Hotspots

Note: All mobile devices feature an IMEI.

Why are IMEIs Important?

IMEIs help mobile network operators like Verizon, T-Mobile, or AT&T identify and connect mobile devices to their networks. The IMEI ensures appropriate provisioning of the customer's device.

The IMEI:

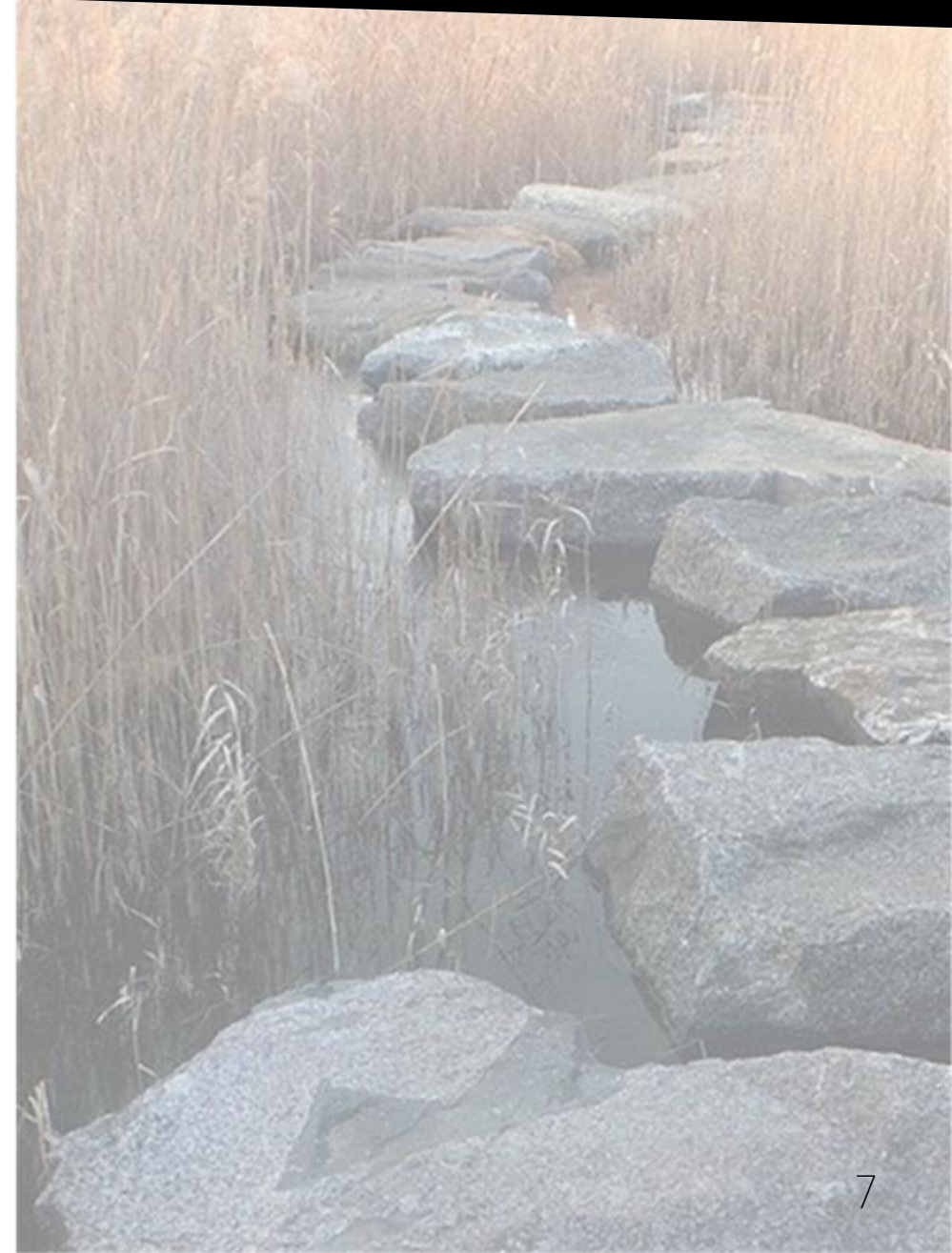
- Assigns the correct mobile device number to the device
- Properly provisions the device to the appropriate network
- Enables the appropriate features connected to the customer's account
- Gives added security to prevent unauthorized uses (i.e. carrier black lists)
- Helps Samsung identify the customer's device

Understanding the PBA

In the course of both in warranty and out of warranty repairs, a PBA replacement may be necessary. The PBA, or printed board assembly, serves as the brain of the customer's device.

The PBA includes:

- The device's IMEI
- Personal/saved information (storage)
- Important hardware components (processor, camera, etc.)
- The device's operating system



The PBA Replacement

During the repair process if it is determined that a PBA replacement is necessary, there are a few important reminders that will help you prepare for the process.

Remember:

- Replacing the PBA will result in a loss of all customer data
- After a PBA swap, you are required to perform an IMEI rewrite
- As a part of the PBA swap after IMEI rewrite you are required to flash the device with a factory binary

Note: The IMEI Rewrite copies the IMEI from the prior PBA to the new/replacement PBA.



IMEI Cloud Rewrite Tool Overview

The IMEI Rewrite Cloud Tool has been designed to provide a more streamlined approach to the PBA replacement/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





Initial Setup for IMEI Rewrite

Setup Prerequisites

Before you can begin an IMEI rewrite using the IMEI Rewrite Cloud tool, you need to download and configure the software.

Before proceeding with the setup:

1. Confirm the device is compatible with the IMEI Rewrite Cloud tool or if it requires Dasuel
2. Complete the repair and re-assembly of the device
3. Download and extract the IMEI Rewrite Cloud tool



Device Compatibility

The new IMEI Rewrite Cloud tool is compatible with select devices. Devices that are not compatible with this tool will still require Dasuel to perform IMEI rewrite.

Compatible devices include:

A015	A526	Galaxy S20 5G
A115	A716	Galaxy S20+ 5G
A125	F707	Galaxy S20 Ultra 5G
A215	F900	Galaxy S20 Ultra 5G
A326	F916	GS10e
A426	Note10	GS10e
A505	Note10+	GS10
A515	Note10 Ultra	GS10+
A516	Note10 Ultra	GS10 5G



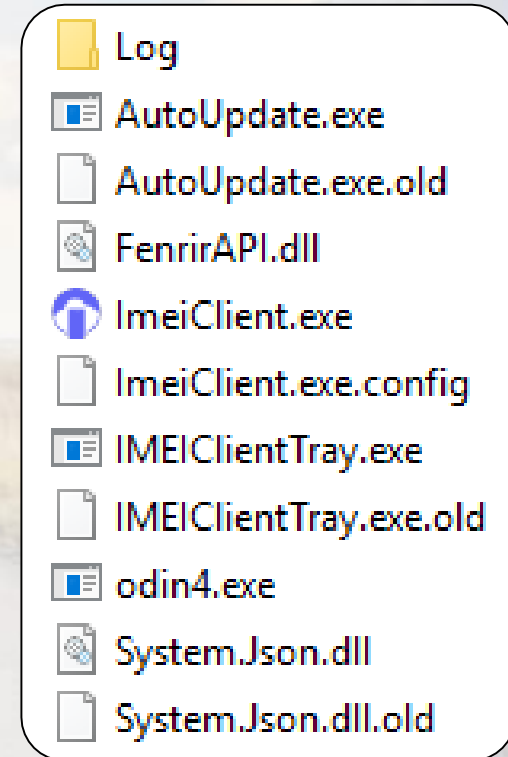
Software Download and Setup

Once you've confirmed all the appropriate prerequisites have been completed, it's time to download and configure the IMEI Rewrite Cloud tool.

To download the IMEI Rewrite Cloud tool:

1. Visit <https://api.secmobilesvc.com/client/GSPN.zip> to download the IMEI Rewrite Cloud zip file
2. Navigate to the folder where the ZIP file was downloaded
3. Right click on the ZIP file and select Extract All
4. Complete the ZIP file extraction
5. Launch the ImeiClient.exe file

Note: When using the “Extract All” option, extract the ZIP file to the desktop for easy access to the tool.



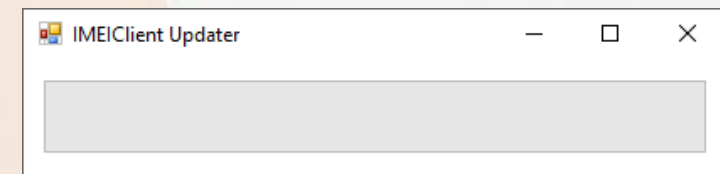
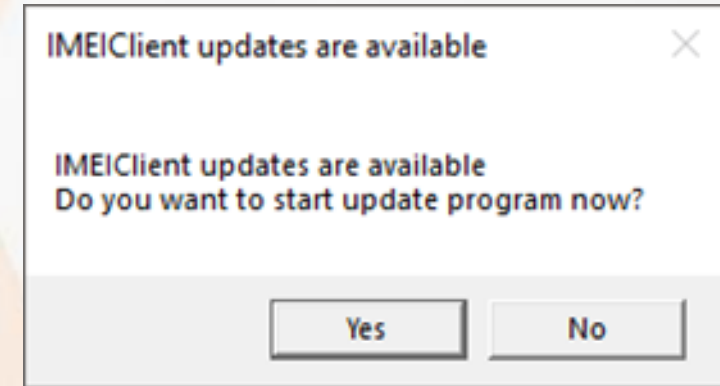
Program Updates

After launching the IMEI Rewrite Cloud tool, the program will automatically check for any new updates. Before launching the tool, updates must be completed.

To complete the required updates:

1. Select “Yes” when prompted with the “IMEIClient updates are available” prompt
2. The IMEIClient Auto Updater will display
3. Allow updates to complete uninterrupted

Note: Once updates are complete, the program will launch for configuration.

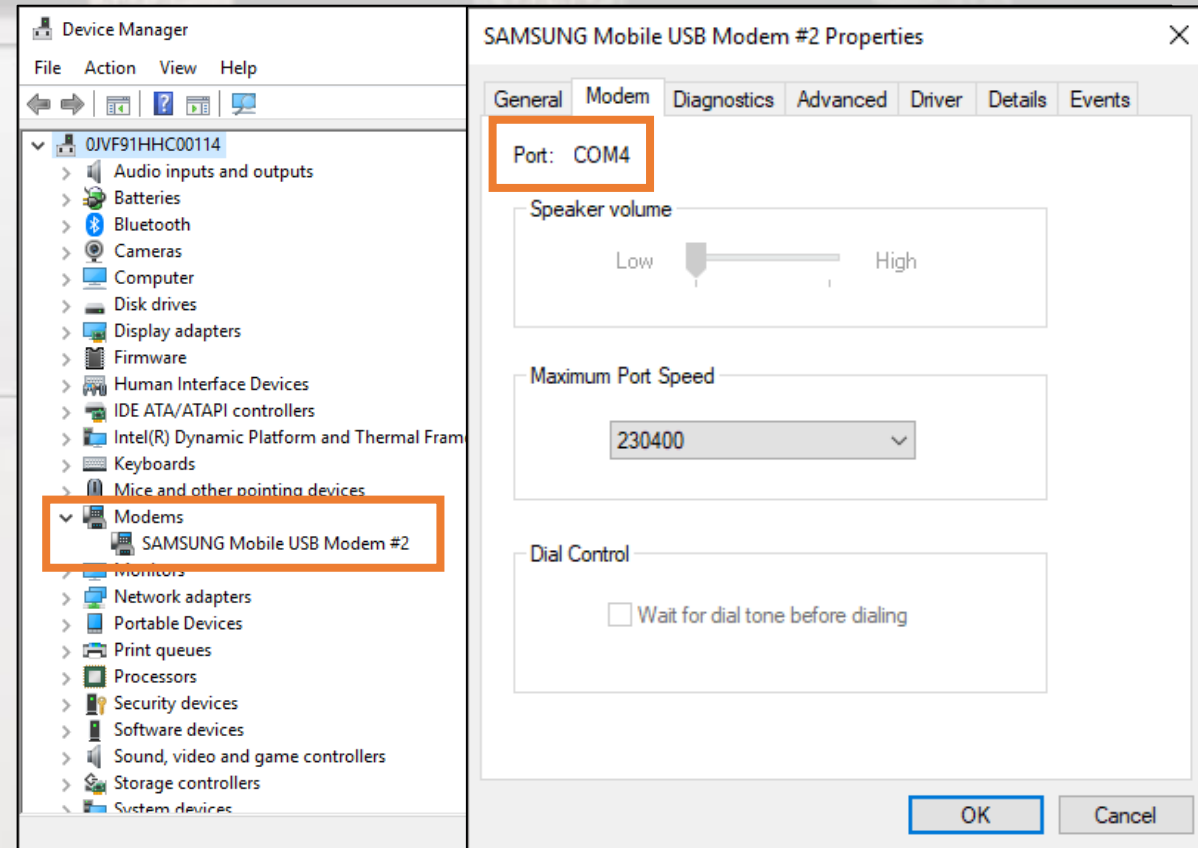


Initial Port Detection

Before beginning an IMEI rewrite using the tool, you need to detect the proper port information to use within the IMEI Cloud Rewrite tool.

To detect/configure the port:

1. Connect the device via a Samsung authorized USB cable to the service PC
2. Launch the Device Manager (Windows + X)
3. Find and select the Modems drop down
4. Right click on the SAMSUNG Mobile USB Modem option
5. Select Properties
6. Select the Modem Tab and make a note of the Port COM number



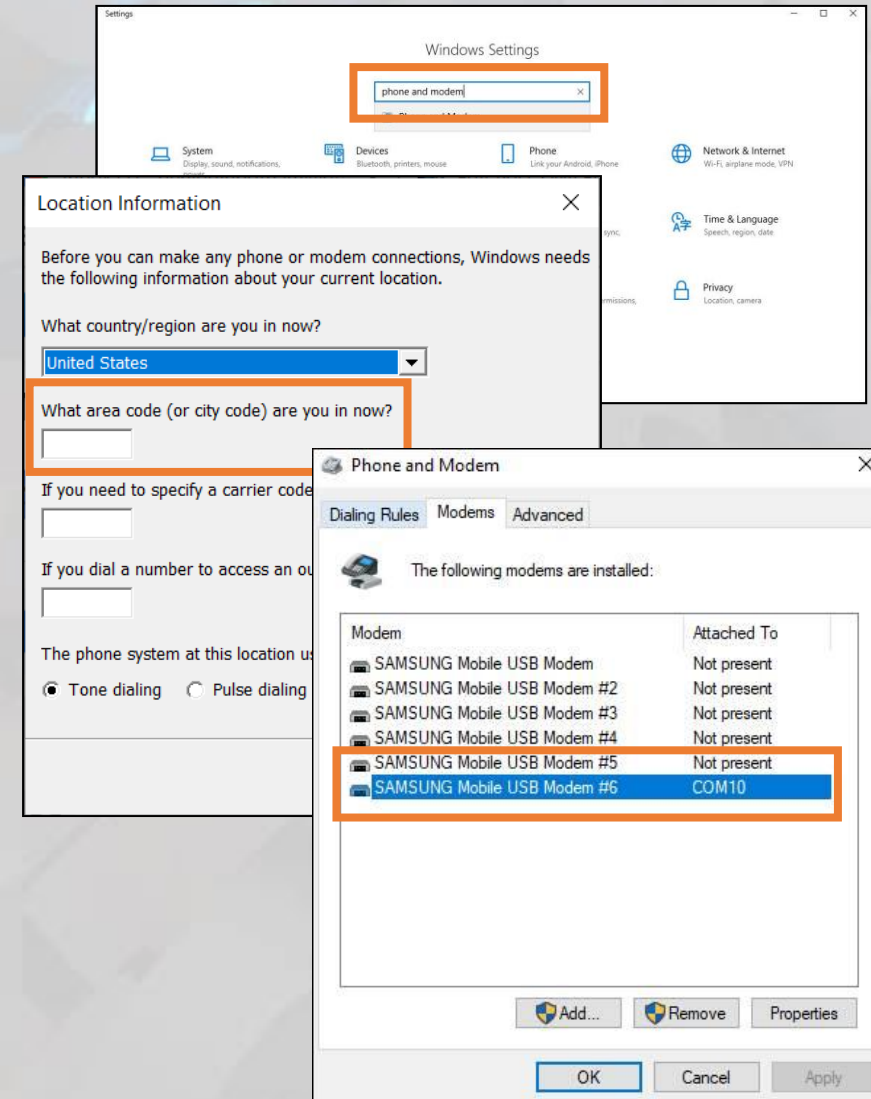
Validating the Port

In the unlikely event that you are able to determine the correct port for use with the IMEI Rewrite Cloud tool using Device Manager, you can use the “Phone and Modem” setting on the service PC to assist you in this process.

To detect the port using the Phone and Modem setting:

1. Access the Phone and Modem setting from the control panel
2. If prompted, enter your local 3 digit area code (i.e. 678)
3. From the Phone and Modem menu, click the Modems tab
4. Connect your device to the service PC
5. Note the “attached to” column (i.e. COM10)

Note: In the event that there are more than 20 Samsung devices listed as modems, you may remove devices not in use.



Configuring the Ports

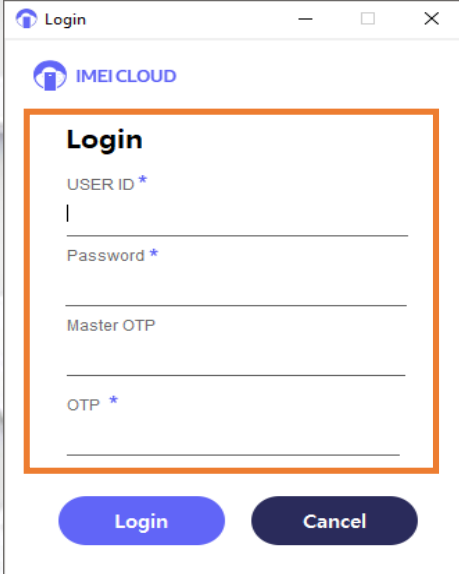
After detecting the ports using Device Manager, it's time to select the appropriate ports within the IMEI Rewrite Tool.

To configure the ports:

1. Login to the IMEI Cloud Rewrite Tool
 - G-SPN User ID
 - Service Tool Password
 - Master OTP
 - OTP
2. When prompted, select the detected PORT in the PORT drop down box

If you are unable to use the USB connection and require the UART, ensure you select the JIG being used and the port for the JIG.

Note: In the event that you need to change the COM port, select the Settings gear icon beside the “Logout” button within the tool.



IMEI CLOUD

Login

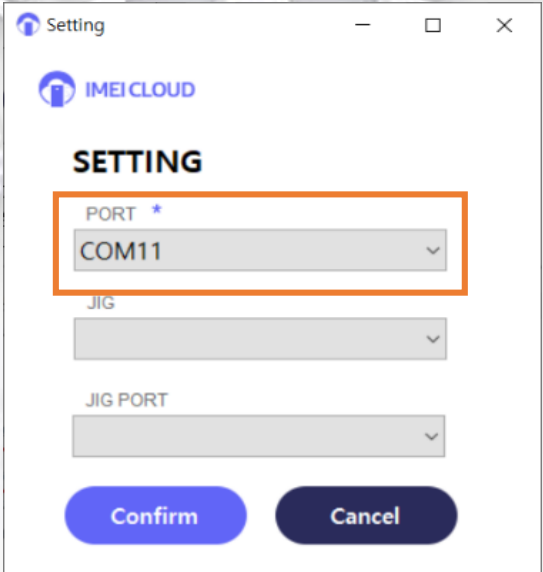
USER ID *

Password *

Master OTP

OTP *

Login Cancel



IMEI CLOUD

SETTING

PORT *

COM11

JIG

JIG PORT

Confirm Cancel



Performing the IMEI Rewrite

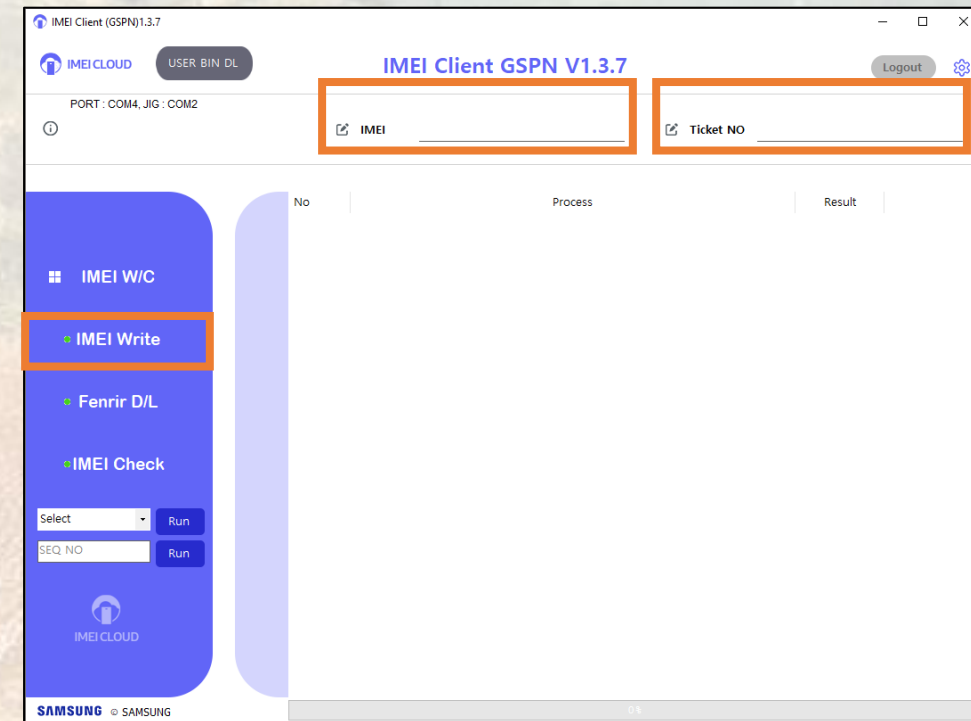
The IMEI Write Process

After completing all required prerequisites and initial setup steps, it's time to begin the IMEI Write process.

To begin the IMEI Write:

1. Enter the IMEI and GSPN ticket number
2. Select IMEI Write to complete the initial IMEI write to the new PBA
3. The IMEI Rewrite Cloud tool will automatically perform all the desired functions to copy the customer's IMEI to the new PBA

Note: Once an IMEI Write has been successfully completed, a factory binary must be flashed on the device using the Fenrir D/L option.

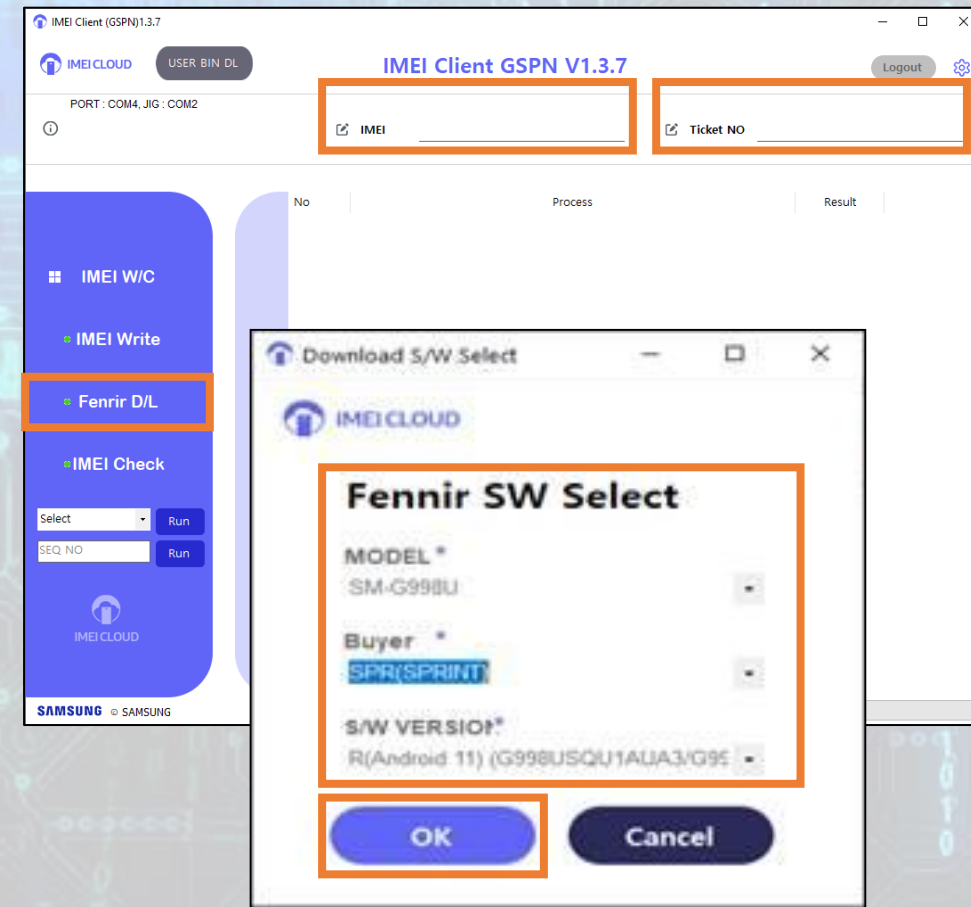


The Fenrir D/L Process

After the IMEI write process has been successfully completed, its time to flash the PBA with a factory binary.

To begin the Fenrir D/L process:

1. Download the most current factory binary in Fenrir
2. Enter the IMEI and GSPN ticket number
3. Select the Fenrir D/L option
4. Select the correct model, buyer, and S/W version
5. Once confirmed, select OK
6. The Fenrir D/L process will automatically complete a factory binary on the device
7. The device will restart

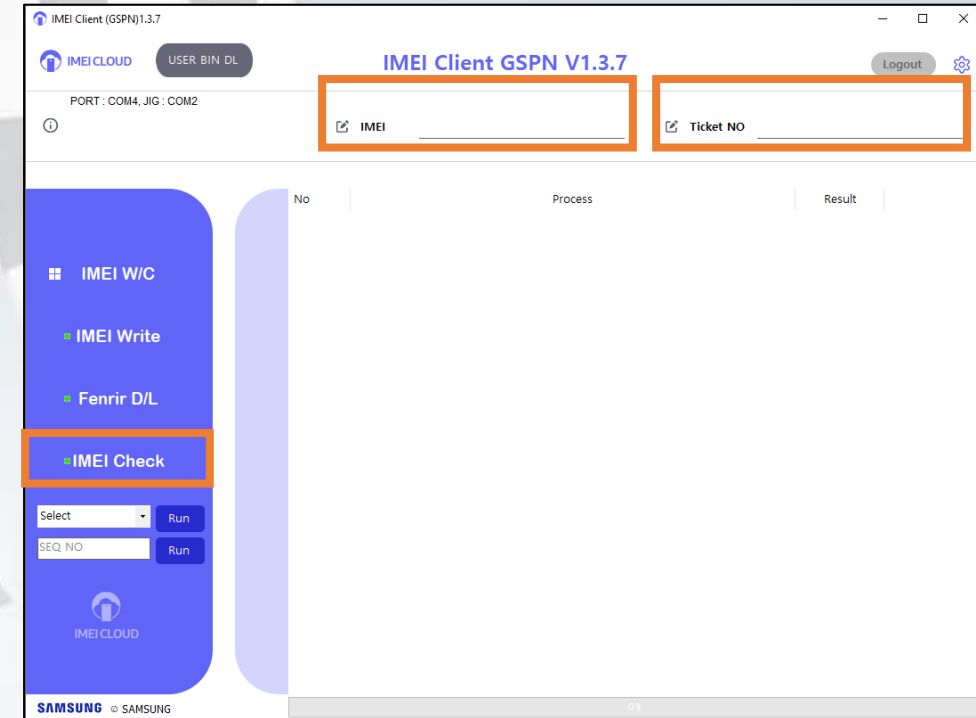


The IMEI Check Process

After you've completed the IMEI Write function and performed a factory binary using the Fenrir D/L option, its time to complete the IMEI Check to finalize the IMEI rewrite process.

To complete an IMEI Check:

1. Input the IMEI and the GSPN ticket number
2. Select IMEI Check to validate the IMEI has been successfully copied to the new PBA
3. Complete the required OQC process
4. Complete the warranty validation (SVC connection) in Fenrir
5. Close the ticket as normal in G-SPN





The Anyway Jig Method

The Anyway Jig Method

In the event that a USB connection is unstable and the IMEI rewrite process is not able to be completed, you can use the Anyway Jig (S103) to complete this process.

To begin the Anyway Jig method, with the device disconnected from the Anyway Jig:

1. Turn on the Anyway Jig and connect the 5V power supply
2. Connect the Anyway Jig to the service PC using a serial to USB cable
3. Select the correct COM using the PORT option that is associated with the Anyway Jig
4. Select S103 in the “Jig” drop down
 - If the IMEI Rewrite Cloud program is already open, click the Settings gear to reconfigure for the Anyway Jig method
5. Click on IMEI Write or IMEI Check option
6. After the sequence is complete, turn the device off and plug the I/F cable into the device, allow the device to fully boot on
7. Complete the IMEI write, Fenrir D/L, and the IMEI Check as with the USB method

Video Overview

Now that we've reviewed the IMEI Rewrite Cloud process, let's watch a video of this process from start to finish.



Summary

You should now be able to:

- Explain what IMEIs are and why they impact the PBA replacement process
- Describe the important components related to the PBA and its importance in the device
- Highlight the steps to download and configure the IMEI Rewrite Cloud tool
- Complete the IMEI rewrite process using the IMEI Rewrite Cloud tool



SUMMARY