

SM-DP+ Simulator

Download and install profiles in non-removable eSIM in a device

Overview

SM-DP+ Simulator is essential for anyone in the mobile industry who wants to load eSIM profiles onto GSMA Consumer eSIM devices with non-removable eSIMs, when they do not have access to a real SM-DP+.

Verify that the device, its LPA and the eUICC are interoperable with the eSIM profile.

SM-DP+ Simulator supports functions on GSMA ES8+ and ES9+ interfaces. Configure the SM-DP+ Simulator via a simple UI or configure and automate testing via a REST API exactly as you need it.

How it works

The tool loads eSIM profiles onto GSMA Consumer eSIM devices via Wi-Fi to verify that the device, its LPA and the eUICC are interoperable with the eSIM profile and associated metadata using custom SM-DP+ certificates and keys or with GSMA SGP.26 test certificates and keys used in SGP.23.

Fime can help you at any stage of your project lifecycle.

Define

Design

Deliver

Test



eSIM profile, eSIM and device interoperability testing

Key benefits

- Eliminate need to book test time on your real SM-DP+ platform.
- Automate and integrate the test tool with your own test environment using REST API.
- Quickly verify and evaluate interoperability between profiles, handsets and eSIMs.
- Download multiple profiles concurrently on different devices with non-removable eSIM.
- Support for GSMA Consumer SGP.22.x.x and/or SGP.3.x profile download, installation, and notification procedures.

Key features

- Supports the functions on GSMA ES8+ and ES9+ interfaces.
- Create your own test network using DNS server.
- Provides detailed logs for ES9+ (including TLS) and ES8+ for profile download.
- Supports eSIM profile download via Activation Code/QR code and Default DP+ Address with or without Confirmation Code.
- Use Fime's proprietary mechanism or REST API to load profiles into the tool, schedule profile availability and set retry attempts.

Libraries

Support for GSMA Consumer SGP.22.x.x and/or SGP.3.x interfaces for profile download, installation, and notification procedures.

GSMA interfaces	GSMA's ES8+ interface to download the profile between the SM-DP+ simulator and the eUICC in the device.
	GSMA's ES9+ interface to download the profile between the SM-DP+ simulator and the device LPA via Wi-Fi.
	Does not currently support ES2+ functionality, but may in the future.
	Logging of all TLS and RSP layer traffic on ES8+ and ES9+
Secure channel support	Support for TLS and Protocol for Profile Protection (PfPP) via GSMA's ES9+ interface.
	Support for GSMA's SCP03t via GSMA's ES8+ interface.
TCA Interoperable Profile Format	Support of TCA eUICC Profile Package: Interoperability Functional Requirements specification.



What's in the box

REST API for simulator management.

- Start and stop the simulator.
- Check whether the simulator is running.
- List, add and remove profiles.
- Reset the profile download counter.

Proprietary profile loading mechanism.

- Manually add profiles and profile metadata using our proprietary mechanism.
- Manage GSMA ES2+ profile ordering via a simple UI.

DNS Server.

- A DNS Server is provided to specify custom domain name (FQDN) to IP address mapping.

Technical specifications

- Load the profile and its associated metadata with your own custom SM-DP+ certificates and keys, or with GSMA SGP.26 test certificates and keys used in SGP.23.
- Support for GSMA SGP.22 Profile Download Initiation (equivalent behavior), Common Mutual Authentication, Profile Download and Installation and Notification procedures related to all profile management activities.
- Customers only need their own laptop hotspot or Wi-Fi router to perform testing.

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