



4G/5G Labkit - Quick User Guide

12/04/22 - 3.0

Versioning		
Version	Date	Comments
v0.1	14/11/21	Initial draft for feedback
v0.2	09/12/21	First Review
v0.3	18/01/22	Update format
v1.0	08/02/22	Updated scripts and virtual IPs
v1.1	18/02/22	How to add a second UE
v2.0	21/03/22	New gitlab structure
v2.1	08/04/22	sysmocom card management
v3.0	12/04/22	Add 5G-SA instructions

[Introduction](#)

[LabKit Setup for 4G](#)

[Hardware Setup](#)

[COTS UE configuration](#)

[Network Configuration](#)

[Run and Test](#)

[Network Protocol Analyzer \(Wireshark\)](#)

[Tools for Network Performance Measurement](#)

[Labkit Setup for 5G NSA](#)

[Virtual ethernet interface for RAN](#)

[eNB configuration](#)

[gNB configuration](#)

[COTS UE configuration](#)

[How to trace RRC messages on Wireshark](#)

[Run and Test](#)

[Labkit Setup for 5G SA](#)

[gNB configuration](#)

[Quectel UE configuration](#)

[Run and Test](#)

[How to use the iperf3 tool for performing network throughput measurements](#)

[ANNEX 1 Install LabKit](#)

[Install Required Dependencies](#)

[Install Packet Core \(EPC\)](#)

[Install Packet Core \(5GCN\)](#)

[Install USRP Drivers](#)

[Install RAN](#)

[Annex 2 Management SIM Card](#)

[SIM card programming prerequisites](#)

Installation of required tools

How to program SIM card

ANNEX 3 Additional Tools

Install and Run Wireshark

Display and Control your Android Device

ANNEX 4 Multi-UE Scenario

How to add users automatically

How to add users manually

ANNEX 5

Clean-up Environment

ANNEX 6

Update/Upgrade

Delivery Repository

Release Notes

To view the full version of the start guide, please contact us at contact@firecell.io or directly through our website.