System Requirements

**ST Visual Programmer** [1]

* Windows® 7 32-bit and 64-bit operating systems (for all targets)
* Windows® 8 and above operating system (for RLINK, ST-LINK targets)
* To install STVP, Windows 7, 8 and 10, users must have administrator privileges.

**RC522Manager Application** [2]

* Operating System Support: Windows 7 and above
* Hardware Requirements: Pentium 1GHz or faster, 512 MB Ram or greater
* Software Requirements: Frame 4.0

**Arduino Integrated Development Environment** [3]

* *Run-time Software Requirements*
  + Java run-time environment is requirement for installation and run-time of the Arduino IDE.
* Operating System
  + The Arduino IDE is built on processing modules and Java, both of which are cross-platform. For Windows 10, Java version 8u51 is required to run and for Macs, it requires OS X version 10.8.3 or above.
* Hardware Requirements:
  + Install and run, the system is required to have 256 MB RAM on top of the requirements for the operating system, CPU with Pentium 4 or above.
* *Network Requirements*
  + The Arduino IDE requires a network connection to check and download updates for both the IDE and libraries from <http://www.arduino.cc/latest.txt>. This adds parameters to the URL with specifics about the OS when getting the latest version number. The libraries specify their own URL for where to check for updates.

**Proxamrk3 Requirements** [4]

* A computer running Windows 7 with an available USB port.
* An USB Mini-B cable.
* HF and / or LF antenna for the Proxmark3.

**Kali Linux** [5]

* Kali Linux is distributed in [32-bit](https://en.wikipedia.org/wiki/32-bit) and [64-bit](https://en.wikipedia.org/wiki/64-bit) images for use on hosts based on the [x86](https://en.wikipedia.org/wiki/X86) [instruction set](https://en.wikipedia.org/wiki/Instruction_set) and as an image for the [ARM64 architecture](https://en.wikipedia.org/wiki/ARM_architecture). This is available on [Windows 10](https://en.wikipedia.org/wiki/Windows_10), on top of [Windows Subsystem for Linux](https://en.wikipedia.org/wiki/Windows_Subsystem_for_Linux) (WSL), the distribution can be downloaded from the [Microsoft Store](https://en.wikipedia.org/wiki/Microsoft_Store_(digital)) .
* A minimum of 20GB hard disk space for installation depending on the version, Version 2020.2 requires at least 20GB.
* A minimum of 2GB RAM for i386 and AMD64 architectures.
* A bootable CD-DVD drive or a USB stick.
* Recommended with Intel Core i3 or an AMD E1 processor for good performance.
* 50 GB of hard disk space, SSD preferred
* At least 2GB of RAM

**SIM900 GSM Module** [6]

* Main chip: SIM900
* External supply voltage: 5-12V DC (Recommend 9V power supply)
* I / O Voltage: 5V TTL
* Low current consumption: 1.5mA (sleep mode)
* Four GSM / GPRS bands: 850,900,1800,1900 MHz
* Works only with 2G Technology

# **References**

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| [4] | "Proxmark3 Wiki," 20 June 2022. [Online]. Available: https://github.com/Proxmark/proxmark3/wiki/Windows. |
| [5] | "Installing Kali Linux," Kali, 19 December 2022. [Online]. Available: https://www.kali.org/docs/installation/hard-disk-install/. |
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