**SOP: Health Facility IT Physical deployment**

**Purpose and scope**

To describe the procedures for installing the local router and securing its network, installing pre-configured server and connect the tablet with the local data server at the health facility.

**Glossary/Definitions**

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| **Tablet** | Android based electronic tablets. |
| **Server** | Computer that gives services to another computers and tablets. |
| **HF** | Health facility |
| **IT** | Information technology |
| **ISP** | Internet Service Provider |
| **Router** | Network device which provide the local network and internet to another devices like computers, servers, smart phones and tablets. |
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**Responsibilities and Procedures**

1. **Router installation and configuration.**
* A router with the sim card slot will be installed near or in the room where the server will placed.
* The sim card will be pre-selected and purchased by giving first priority the ISP with highest speed internet.
* Configuring the router for the first time follow the below procedure;
* Check the sim card’s phone number
(Insert it in a phone, and, for VODACOM, call \*106# and select 1). Write it down.
* Insert the sim card in the router
* Turn on the router
* Connect your computer to the router by using the cable or wireless
* Identify the router IP address, you can find it at the bottom of the router or you can find it in your computer by looking the network properties.
* Write the IP address in the web browser url space and place enter
* Change the router admin password, Strong password is highly recommended(UserName:admin and Pwd: **Dain@m1c**)
* Set the wireless ID and its password (SSID: **Dynamic Study** and Pwd:**Dyn@m11c**)
* Save the configuration and the router will be ready for use.
* Test to connect the router network with other devices like computer, tablet and mobile phone to confirm if you can connect and get internet services.
* Recharging internet bundle in the router sim card there are two ways
1. Recharging the internet bundle using other sim card of the same ISP
* Recharge the mobile phone/smartphone with the same ISP with router sim card the money which will be enough to buy the required internet bundle.
* Follow the procedure to buy the internet bundle from the phone to another sim card number (Router sim card number)
1. Recharging the internet bundle by shifting the sim card from the router to the mobile phone.
* Shift the sim card from the router to the mobile phone
* Recharge the sim card with the money which will be enough to buy the required internet bundle.
* Follow the procedure to buy the internet bundle.
* If the distance from the local data server to where the tablet will be used is long or there are obstacles which affect the network strength the additional router and Ethernet cable will be required to extend the coverage of the network
1. **Local data Server installation and configuration.**
* The pre-installed local data server will be placed near to where the router placed.
* If the laptop is acting as a server, it should be locked with a strong lock cable to avoid easy theft.
* The local data server will be installed in the room which only authorized staffs are allowed to access.
* Setting up local Data server
* Install Ubuntu Server or Client
* Set the computer login password to be **Dain@m1c**
* Configure Static IP (192.168.0.2 is preferred).
* Install Docker
* Install Docker Compose
* Clone the liwi-local-data from https://bitbucket.org/wavemind\_swiss/ liwi-local-data.git (**run sudo clone –b develop https://bitbucket.org/wavemind\_swiss/ liwi-local-data.git)**
* Change the directory to liwi-local-data
* Move the branch to develop
* Edit .env to match the correct database and other environmental variable (edit the host name, database name and password)
* Run ***sudo docker-compose up -d***
* Run ***sudo docker-compose ps***
* Run ***sudo docker exec –it* localdata-app bash**
* Run **composer install**
* Run **php artisan key:generate**
* Run **php artisan migrate**
* Run **php artisan version:get**
* Run **exist**
* Run **sudo ufw enable**
* Run **sudo ufw allow 8000**
* To enable never sleep on the server Run **sudo systemctl mask sleep.target suspend.target hibernate.target hybrid-sleep.target**
* To disable never sleep on the server Run **sudo systemctl unmask sleep.target suspend.target hibernate.target hybrid-sleep.target**
* To do network configuration in the server follow the below procedures
* Identify the range of IP addresses which the router gives
* Select one IP address to be used by the server (192.168.0.2 is preferred).
* Configure the server static IP.
* After static IP configuration test the connection if is fine by checking if the server is getting internet service and testing other devices if they can reach the server through the network by ping.
1. **Tablet network connection.**
* Connect the tablet to the WIFI of the router (Select the router WIFI and enter the wireless pass code)
* Test if the tablet is getting internet service and if it connect to the server.
* Test if the ePOCT+ application in the tablet can synchronize with the local data server.
1. **Inventory and Maintenance**
* All IT supplies provided to the health facilities will be documented on the IT supplies accountability log.
* The Dynamic monitoring team is responsible for monitoring tablet and IT related inventory, on a regular basis.
* Any missing or broken IT supplies must be reported to the Dynamic study IT Coordinators (Peter Agrea 0752665127 or Ibrahim Mtebene 0657181624)

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**Administrative information**

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| --- | --- | --- | --- |
|  | **Name** | **Signature** | **Date** |
| **Author** | Peter Agrea |  |  |
| **Revised by** |  |  |  |
| **Approved by** |  |  |  |
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**Document change control**:

| **Version** | **Changes** | **Name** | **Date** |
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\*Note: When printing and distributing the SOP, the administrative information page does not need to be included.