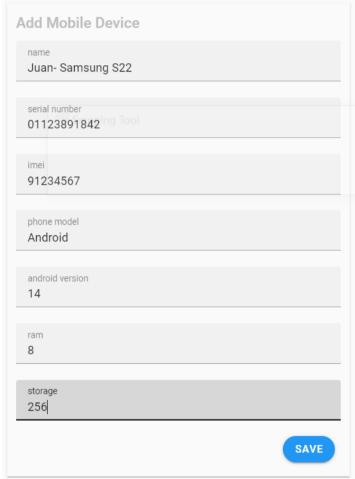


ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE

NetMesh Mobile Application (Android & iOS) - User manual

How to use NetMesh 3.0

- 1. As an Admin, Register the device of the field tester
 - 1.1 Register the device to the NetMesh website
 - 1.1.1 Enter device information



Provide all the necessary information. This information will be used to uniquely identify the device and its user

Postal Address : ASTI Bldg., U.P. Technology Park Complex, CP Garcia Ave., Diliman, Quezon City 1101

Website : www.asti.dost.gov.ph

Email : info@asti.dost.gov.ph

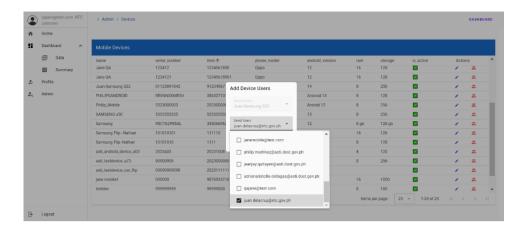
ASTI - FM 03-06 REV 2 / 13 January 2020

+632 8426-9755;

Tel No.: +632 8249-8500

Fax No.: +632 8426-9764

1.2 Assign the registered device to the Field tester



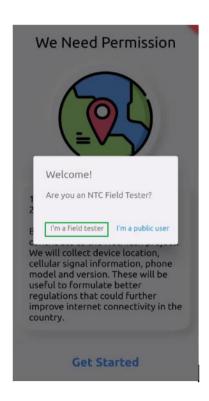
1.3. Install the NetMesh app



After installation, the onboarding screen will be launched. After reading, simply tap 'Next

1.4. Activate the device

1.4.1. Tap "I'm a field tester" when asked if "NTC Field Tester"



1.4.2. Login admin credentials



Enter the admin account, which has access to register and activate a device.

1.4.3. Enter registered IMEI



Fill up the IMEI-field. Press the button to activate the device

- 2. Login
- 2.1. Tap "Get Started" and accept all permissions



After tapping the button, location permission and phone permission will be asked, **allow all permission** needed.

2.2. Enter Field tester email and password



Fill up email and password with the given field tester account.

3. Speed test proper

3.1. Conduct speed test - Android



Tap "Start" to conduct a speed test

3.2. Conduct speed test - iOS

Note: Signal strength is not displayed on iOS due to Apple Inc. restriction



Tap "Start" to conduct a speed test

3.2. Save history as PDF

3.2.1. Tap "PDF icon" button



After pressing the PDF icon button, saved file could be found at the device download folder.

4. Saving manual reports

- 4.1. Save manual report
 - 4.1.1. Tap ISP Card
 - 4.1.2 Tap 'Save Report' Android



Manually saved report will be saved in Reports section

4.1.3 Tap 'Save Report' - iOS



Manually saved report will be saved in Reports section

Note: Signal strength is not displayed on iOS due to Apple Inc. restriction

- 4.2 Send manually saved report
 - 4.2.1 Good internet connection
 - 4.2.2. Tap "Send icon" button



If sent succeed, report will be posted on the result server and will save a PDF copy.

Frequently Asked Questions:

1. How can I manually create a report in the NetMesh mobile app?

Answer: Use a mobile data > Launch NetMesh mobile app then go to Service Provider > Tap Save Report Go to Reports section > Locate to the newly created manual report then tap Send icon.

2. Is it possible to log in to the NetMesh mobile app with multiple users?

Answer: Yes

3. Does the NetMesh iOS app display the signal strength?

Answer: No, signal strength, and some phone information are restricted by Apple Inc. in the speed test to maintain user data privacy and protection. However, signal strength is only available on Android.

4. Can I select any server to run the speedtest?

Answer: Yes

5. If I reinstall my NetMesh app, should I still reactivate my phone device in the NetMesh mobile app? Answer: Yes, you still need to reactivate the device after reinstalling the NetMesh mobile app

6. After saving the manually created report, will the test result be sent to the result server?

Answer: No you need to manually cond it first. Go to the Penert section, select the manually server.

Answer: No, you need to manually send it first. Go to the Report section, select the manually saved report, and then tap the Send icon.

NetMesh Web Based User Manual

1. Access https://netmesh.pregi.net/ as Public user in any web browsers

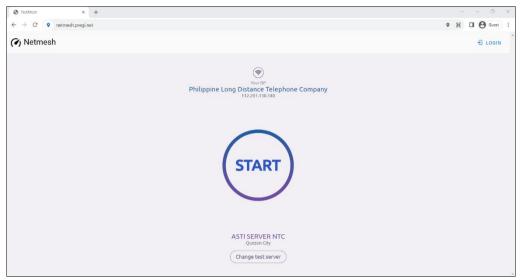


Figure 1: Home page

- 2. The home page displays the ISP, the selected server, the server list, and the login button
- 3. Click Start

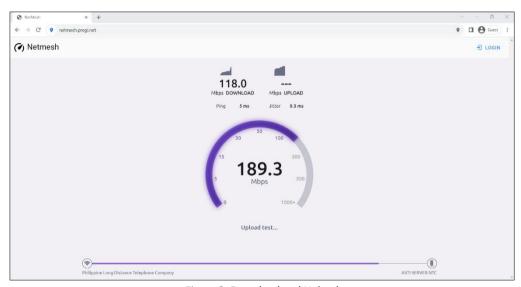


Figure 2: Download and Upload

4. The test will start running. Once the test is done, the test results, such as Download, Upload, Ping, Jitter, ISP, and Test server, will be displayed. Users can test again or go back to the home page by clicking the Back button

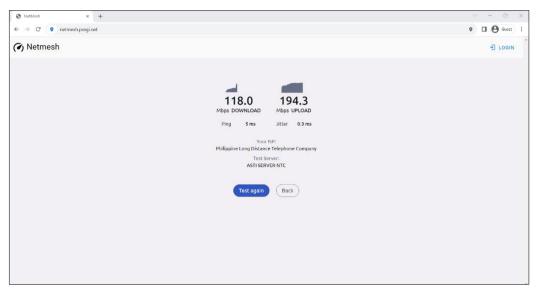


Figure 3: Test Result

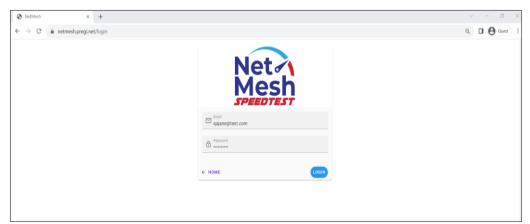


Figure 4: Login

5. Login to NetMesh as NTC Admin

Note: Only NTC personnel have access to log into NetMesh Speedtest

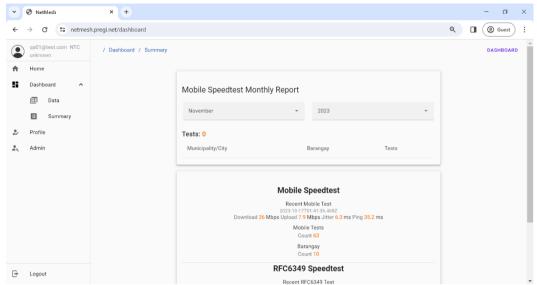


Figure 4: Dashboard Summary

6. After logging into the NetMesh web-based platform, users will be redirected to the Dashboard Summary, where recent Mobile/RFC6349 test results, all test counts, and the number of barangays where tests have been conducted will be displayed in Dashboard Summary. Additionally, the user can filter the month and year of the conducted tests.

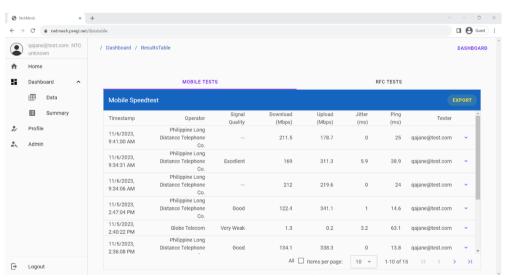


Figure 5: Dashboard Data - Mobile/RFC test results

7. **Dashboard Data (Mobile/RFC test results)** - User Mobile/RFC test results should be displayed in the 'Dashboard Data – Mobile/RFC Tests'. When an admin checks the 'All' checkbox, they will have the ability to access the test results of other field testers within their region.

Note: Only admin can access the test results of other field testers within their region when user checks the 'All' checkbox

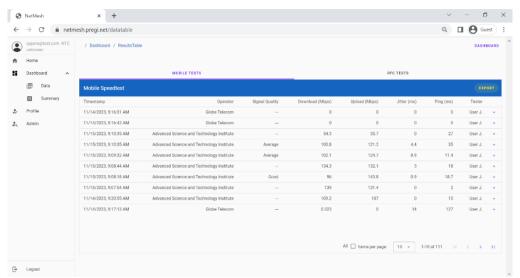


Figure 6: Dashboard > Data

8. Export CSV file- All NTC Personnel has the access to generate the Mobile/RFC test results in CSV file

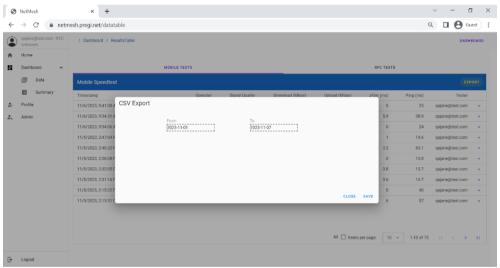


Figure 6: Export CSV File

9. **Profile** – Users can select their designated NTC Office.

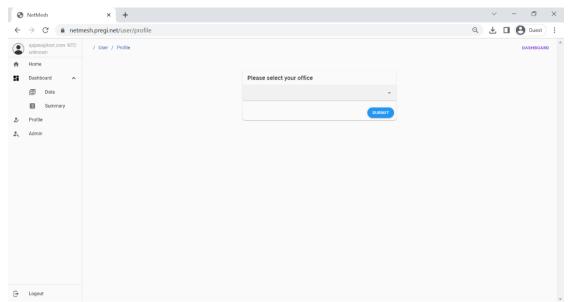


Figure 7: Profile

10. Admin- Users have access to features such as Users, Mobile devices, RFC devices, and Speedtest reports.

Note: Only administrators have access to these features

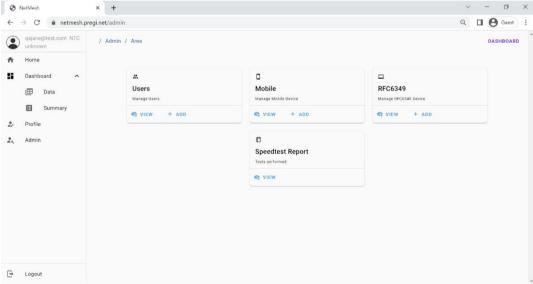


Figure 8: Admin

11. Admin > Users- Admin has the ability to edit/view all the users in their region and to add a new admin or field tester user

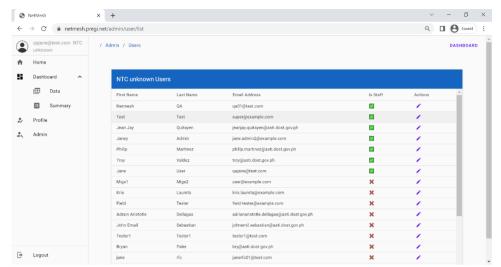


Figure 9: Admin > Users

12. **Admin > Mobile –** Admin has the ability to add a new mobile device and view all the mobile devices in their region. Admins can also assign a mobile device to a field tester.

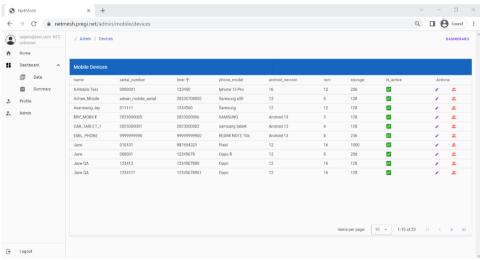


Figure 10: Admin > Mobile devices

13. Admin > RFC6349 - Admin has the ability to edit/view the RFC6349 devices in their region.

Note: Admin cannot add an RFC6349 device in the web portal; it should be registered in the RFC6349

application

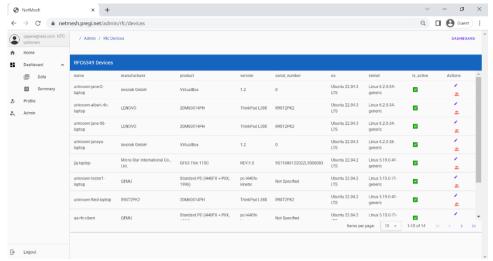


Figure 11: Admin > RFC6349 devices

14. **Admin > Speedtest results** – Admins can view the field tester test results, total counts of Speedtest, location, and the month in which they were conducted.

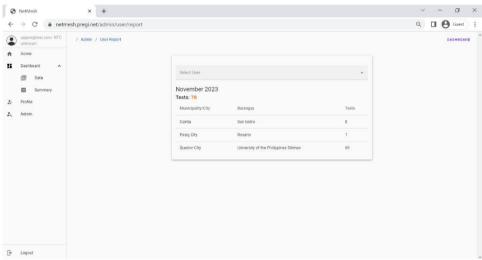


Figure 12: Admin > Speedtest results

Field Tester - User manual

- 1.Login to https://netmesh.pregi.net/login as Field tester in any web browsers
- 2. **Dashboard > Summary** After logging into the NetMesh web-based platform, users will be redirected to the Dashboard Summary, where recent Mobile/RFC6349 test results, all test counts, and the number of barangays where tests have been conducted will be displayed in Dashboard Summary.

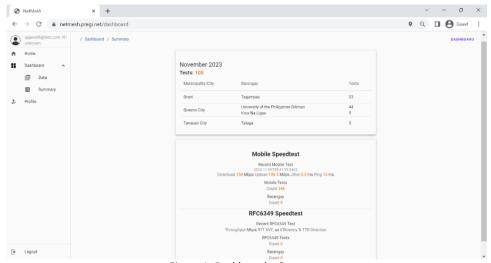


Figure 1: Dashboard > Summary

3. **Dashboard > Data (Mobile/RFC test results)** - Field tester can view their own Mobile/RFC test results should be displayed in the 'Dashboard Data – Mobile/RFC Tests' table.

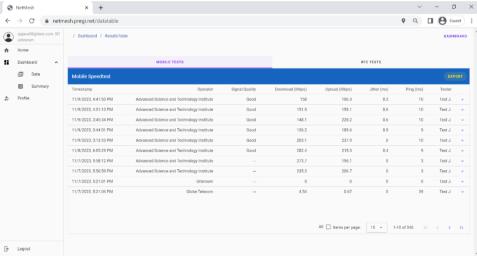


Figure 2: Dashboard > Data

4. Export CSV file- All NTC Personnel has the access to generate the Mobile/RFC test results in CSV file

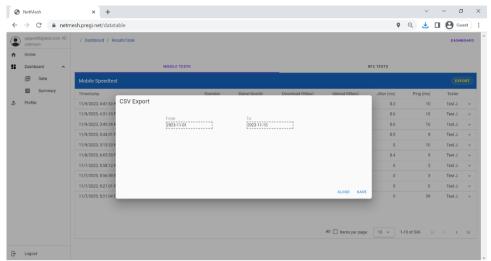


Figure 3: Excel CVS Export

5. **Profile** – Users can select their designated NTC Office.

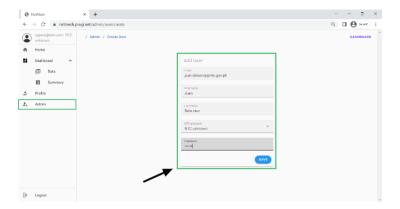


Figure 4: Profile

Frequently Asked Questions:

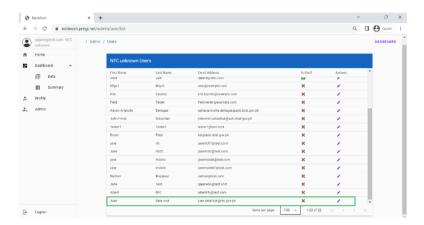
1. How to add new field tester?

Answer: Access https://netmesh.pregi.net/ as Admin user in any web browsers then go to Admin> Users section click Add. Fill out the required fields then click Save button



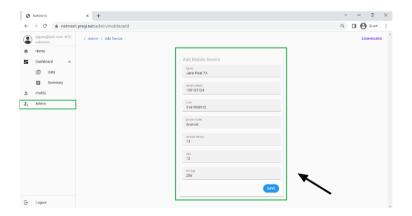
2. How to view newly added field tester?

Answer: Go to Admin > Users click View, find the newly added field tester



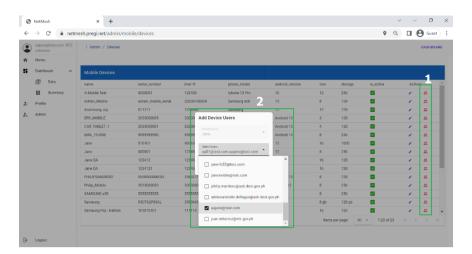
3. How to add mobile device in Web portal?

Answer: Go to Admin > Mobile device click Add then fill out the required fields.



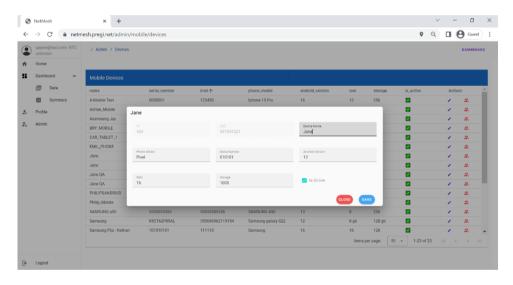
4. How to assign a mobile device to a user?

Answer: Go to Admin > Mobile device, then select any mobile device and click the user icon on the right side of the screen. Look for your user email, then tick the checkbox beside your user email. Toast message 'Success' will be displaced then device has now been assigned to you



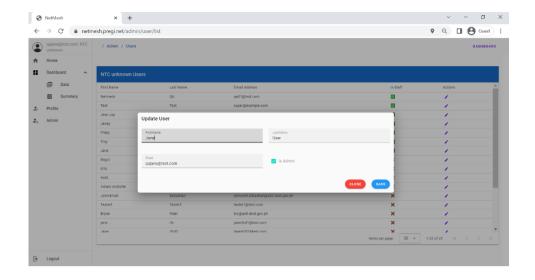
5. Can admin user be able to edit the mobile devices?

Answer: Yes, Admin can edit the Device Name, Phone Model, Serial Number, Android Version, Ram, Storage and Is Active checkbox except ID and IMEI



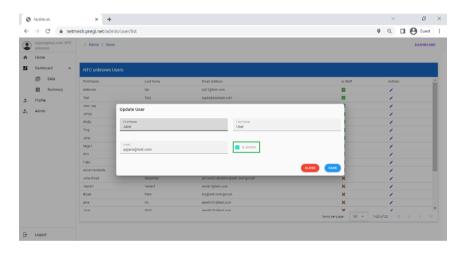
6. Can admin user be able to Update field user info?

Answer: Yes



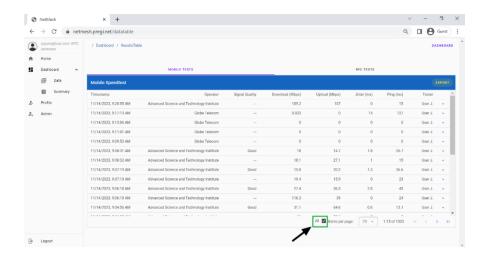
7. How can I assign the 'field tester' role to an admin user?

Answer: Go to Admin > Users click View, Click on field tester user then click the edit icon. In 'Update User' modal, check the checkbox next to the label 'Is Admin then Save.



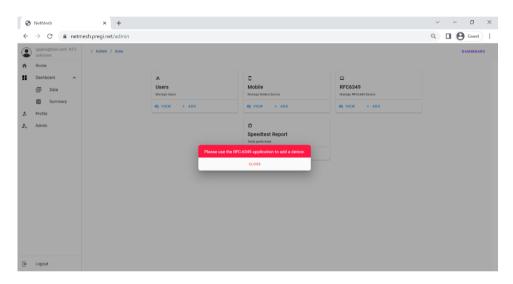
8. As an admin user, how can I view all the test results conducted by field testers in my region?

Answer: Navigate to Data > Summary, then in the Mobile Tests table, click the checkbox labeled 'All. All the test results in your region will be displayed on the table.



9. For RFC6349, can I register my laptop device in the web portal?

Answer: No, an admin user does not have the ability to add a device in the NetMesh web portal. You should register the device in the RFC-6349 application.



NetMesh RFC-6349 application

1. After installing the RFC-6349, user should have to register their device in NetMesh RFC-6349 application

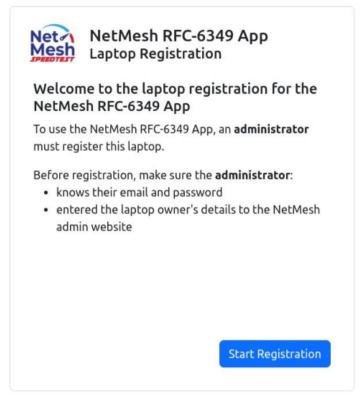


Figure 1: Laptop registration

2. Login as admin to register the field tester's laptop device

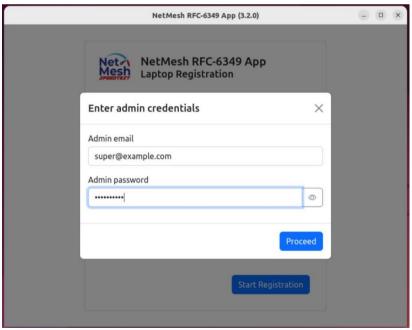


Figure 1.1: Laptop Registration – Login as Admin

3. Assign the device to the field tester and name it.

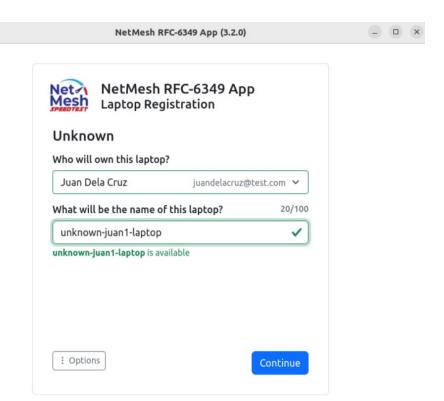


Figure 1.3 Laptop registration – Assign the device to the field tester

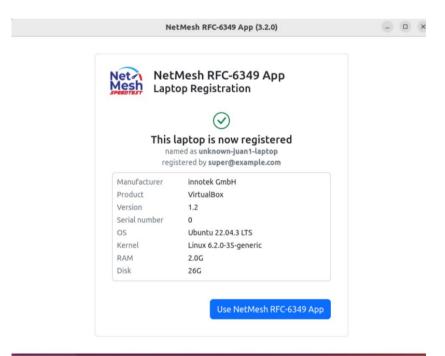


Figure 1.4: Laptop registration – Laptop is now registered

4. Login as field tester



Figure 2: Login as field tester

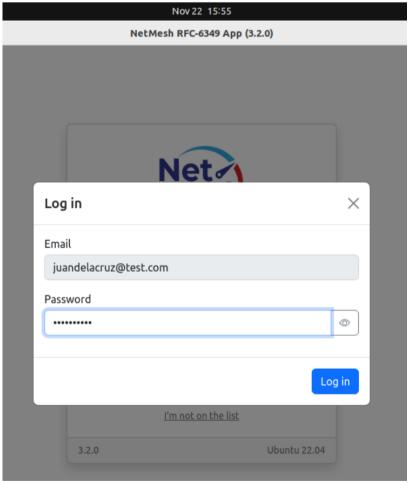


Figure 2.1: Login as field tester – enter password

5. Enter the required field to run the test

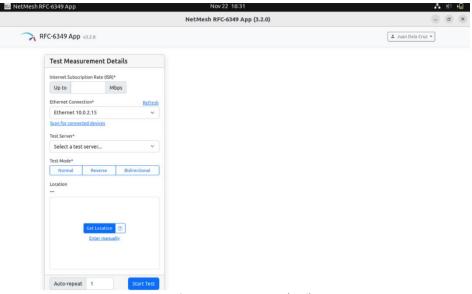


Figure 3: Test Measurement details

6. Conducting a test

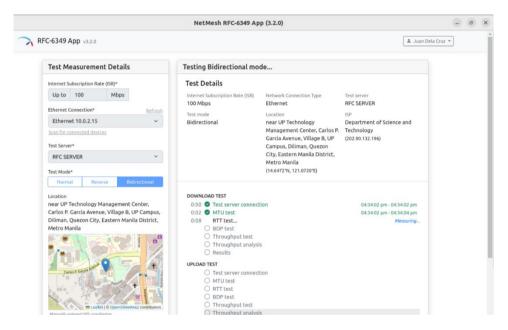


Figure 4: Test is running

7. After the test runs, the test results will be displayed

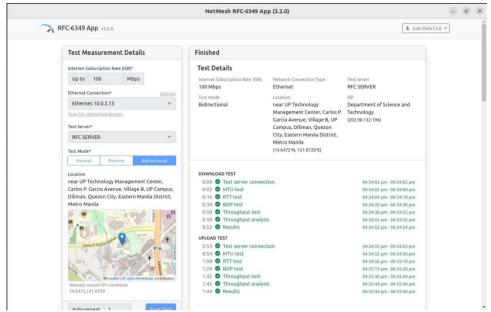
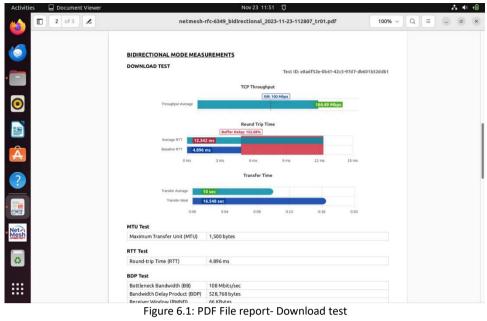


Figure 5: Test results

8. The user has the ability to save the test results in a PDF file.



Figure 6: PDF File report



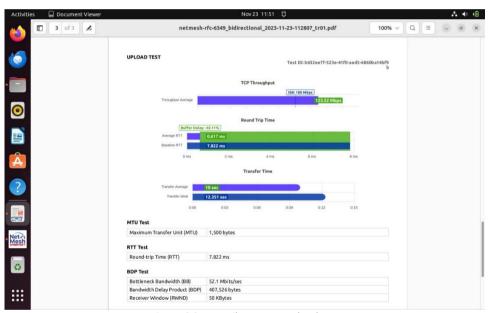


Figure 6.2: PDF File report- Upload test

10. **Auto Repeat Test** – Allow NTC personnel to automatically repeat the test by entering the number of times they want to repeat it.

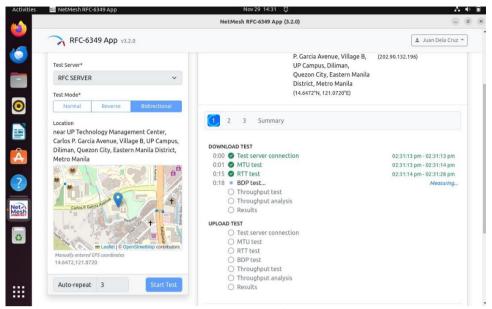


Figure 7: Auto Repeat- Conducting a test

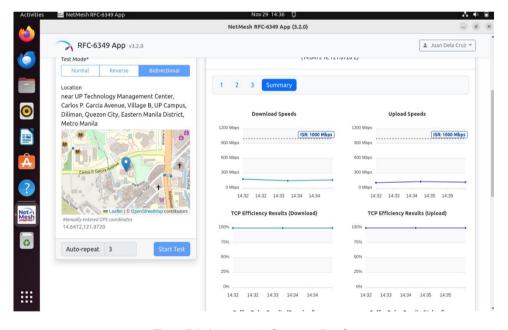


Figure 7.1: Auto repeat- Summary Results

Frequently Asked Question:

1. What is RFC-6349 App?

Answer: RFC-6349 App is a fixed speed test software that measures the quality of service of the ISP for Filipino households. This App is internally used by the NTC.

2. What is the basis of the test measurement of the App?

Answer: The test measurement of the App is based on the "Framework for TCP Throughput Testing" documentation (https://datatracker.ietf.org/doc/html/rfc6349) created by the Internet Engineering Task Force (IETF)

3. Who can use the App?

Answer: Field testers are the main users of the App. However, to install the App, an administrator must do the laptop registration part of the App.

4. Can I create another Ubuntu user to use the App separately from other Ubuntu users?

Answer: No

5. Can I use the App without Internet connection?

Answer: No, this App is Internet dependent because the primary purpose of the App is to measure the Internet speed of the household.

6. Where do I get the Internet Subscription Rate of the household?

Answer: Please ask someone in the household about their Internet subscription plan.

7. No one in the household knows the ISR. Can I still conduct the speed test on the App?

Answer: You cannot conduct the speed test without the ISR. To conduct the speed test, you may still enter any value of ISR from 1 to 1,000.

8. I forgot the LAN cable. Can I still conduct the speed test on the App?

Answer: No, you must connect a LAN cable to the household's router before conducting the test.

9. Can I perform the speed test using Wi-Fi?

Answer: Highly discouraged, this App is applying the RFC-6349 methodology which focuses on Ethernet-terminated services.

10. Can I conduct a speed test multiple times in one click?

Answer: Yes, you can set up to 30 times the speed test will repeat automatically in one click.

11. I set auto-repeat to more than 1, then the first speed test is successful, but the succeeding speed test fails. Can I continue the multiple speed tests? What will happen to the results of the successful tests?

Answer: You can continue the multiple tests. Repeat the speed test that failed. Successful tests are automatically sent to the results server. You may already save the successful tests in one PDF report.