



# **NovoNet**

V1.00.00

By NovoSync Mobility Inc

## **Setup and User Guide**

### **Overview**

NovoNet is a multi-component tool that monitors network traffic and presents the traffic data in a dashboard. It performs network analysis so that you can see select network activity that is occurring on your Local Area Network. Its core features include:

- 1) Determining whether the network packets are being transmitted to local hosts on the LAN or are external traffic from the LAN. The dashboard shows the percentage of internal vs external traffic.
- 2) Determines which countries the requests have been made to (based on server location)
- 3) Determining the Top 30 endpoints that requests have been made to with distribution
- 4) Captures all endpoints that requests have been made to with a traffic "hit" count
- 5) Allows tracking of users on the LAN (by their IP address) that have made requests to specific endpoints. This feature requires an input file that specifies a substring of the endpoint domain you want to track. It will show the IP of the user that communicated with the specified domain. You can track this by a substring of the domain, or the domain name itself (without http or other protocol specified).

Based on the results, you can make decisions on how to optimize your business. NovoSync provides and maintains the database used by NovoNet.

## Pre-requisites

- 1) The NovoNetDashboard – Windows 7/8/10 and .Net Framework 4.5.2 or higher
- 2) The NovoNetClient – JRE 7 or higher (the client supports both Linux and Windows)
- 3) Each LAN/Subnet that you wish to run NovoNet on requires an Inline (Transparent) Proxy server where all the LAN's traffic, for both internal network and external network requests, pass through. The NovoNet client runs on the proxy/proxies.
- 4) tshark installation on the proxy/proxies
- 5) ensure port 3306 (MySQL DB) is not blocked by your network firewall.

## Installing the software

Once the proxy hardware and traffic routing has been configured, the steps to get up and running are:

- 1) install tshark on the proxy (part of Wireshark)

*RHEL Linux:* `sudo yum install wireshark`

*UBUNTU Linux:* `sudo apt-get install tshark`

*WINDOWS:* (download and install the latest version of Wireshark)

- 2) Regardless of OS, make sure your PATH variable includes the location of tshark
- 3) Make sure your PATH variable includes the JRE
- 4) NovoNetClient
  - a. Put the NovoNetClient folder in any location on the proxy server
  - b. cd to the NovoNetClient folder
  - c. execute with:  
`java -cp "bin;/lib/*" com.novosync.novonet.NovoNetReader <.txt file specifying the domains you want to track by user> <the network interface name> <account email address> <account password> <account/LAN key>`
  - d. (you can run the process in the background)
  - e. To stop the client (and further capture analysis) kill the process by its ID
  - f. The tracking .txt file should be in the root of the NovoNetClient folder (see sample file included in package)
  - g. Do not change the placement of any included files in the NovoNetClient folder.
- 5) NovoNetDashboard
  - a. Place the NovoNetDashboard anywhere on your PC.
  - b. Ensure the MySql.Data.dll is kept in the same folder as the NovoNetDashboard.exe
  - c. Execute the dashboard by double clicking on it

## Tracking Users

The text file should have the substring or full domain name of the endpoints on separate lines.

*Example 1 (MyTrackedEndPoints.txt):*

[www.youtube.com](http://www.youtube.com)

[www.facebook.com](http://www.facebook.com)

*Example 2 (MyTrackedEndPoints2.txt):*

Youtube

Facebook

Reddit

If the match is found in a request, the users IP is captured that made the request and the number of times such requests have been made.

## Using the Dashboard

The dashboard will present the network traffic data. All traffic will continuously be updated from the first session/run. The dashboard will only show the latest data if you click the “Refresh” button. You can start a new session by clicking on the “Start New Session” button. If you do this, all prior data is lost and new data from the point in time the new session is started will be captured and presented (must “Refresh”).

## Support and Account

Contact [fqureshi@novosync.biz](mailto:fqureshi@novosync.biz) for support questions or account creation and/or account updates.

For account creation, you must agree to the EULA and email it to [fqureshi@novosync.biz](mailto:fqureshi@novosync.biz)

(NovoSync will not support the proxy setup or its network configuration)