

# Open Source Network Monitoring Management in MANETs

Rakesh Dhanalakota  
Student (M.Tech.)

CSE Department  
BVRIT, Vishnupur, Narsapur.

## Abstract

*Open Source Network Monitoring Management in MANETs is an open source based network monitoring tool with the advanced monitoring techniques. It's an open source based free solution for monitoring network in different communications over mobile ad hoc networks. It uses the simple monitoring and managing method to detect the network traffic activity in a single GUI console. It necessarily equates the network monitoring solution for free. The new monitoring solution method results in improving the inbound and outbound network monitoring activity by the skilled hands without any investment and without wasting time in development. It also uses the advanced network monitoring management technique with the availability of the advanced enhanced data collection with deep analysis of the advanced network monitoring platform. It also makes the use of the network usage with the wide range of varieties in monitoring with the help of network protocols with network management protocol. It's a powerful network monitoring open source tool which supports the different mobile network operating system platforms which offers the efficient network monitoring activity with unique search key.*

## 1. Introduction

Open Source Network Monitoring Management in MANETs offers the easiest way to use with the mobile ad hoc network based interface with advanced monitoring support.

It makes the use of network monitoring unique key for network activity detection in order to avoid network delays. Among the other mobile ad hoc networks current network monitoring tool can manage and detect the activity in depth with the unique and random network monitoring key with the advanced features which integrates with the mobile application compatibility whereas users can access the network monitoring web console over network amongst the mobile ad hoc networks.

Open Source Network Monitoring Management can be deployed for various mobile devices such as android phone, windows phone and the iPhone. Application can be customized easily and can also be optimized with the advanced network monitoring options.

It's an open source network based monitoring tool with the support of external monitoring devices and it also integrates with the advanced alert management system. It also uses the manual network monitoring and scanning modes with in the mobile ad hoc network in a given subnet address where as it integrates the advanced protection layer where other anonymous users cannot access and will not have limited access to the Open Source Network Monitoring Web Console in MANET.

It also supports the multi-layouts for pointing or mapping to the network monitoring console domain. Application can be deployed on a full qualified domain.

## 2. System Requirements

- Requires a fully qualified domain with DNS support with monitoring web agent server
- Requires fully configured web application server with the Web Server with network tool support which can run on both Windows Operating System and the Linux Operating System
- Pre-requisites for the Web Server and Network Monitoring Web Agent Server
- Should be Supported with the Open Source Framework for advanced Network Monitoring
- Network Monitoring Management Console and web application deployed on a standalone web server.
- Network Monitoring tool with high threat Management and high security for network monitoring web application.
- Network Detection, monitoring and the Alert system with threat management in mobile ad hoc networks.
- Integrates with the high network security with the with the advanced protection service such as firewall for network monitoring web console and the integration of security tools for monitoring network console.
- Supported with the Quality of Service for network monitoring tool.
- Networking Monitoring Web Console integration for mobile devices and monitoring devices. Can be deployed in any of the above said hardware applications.

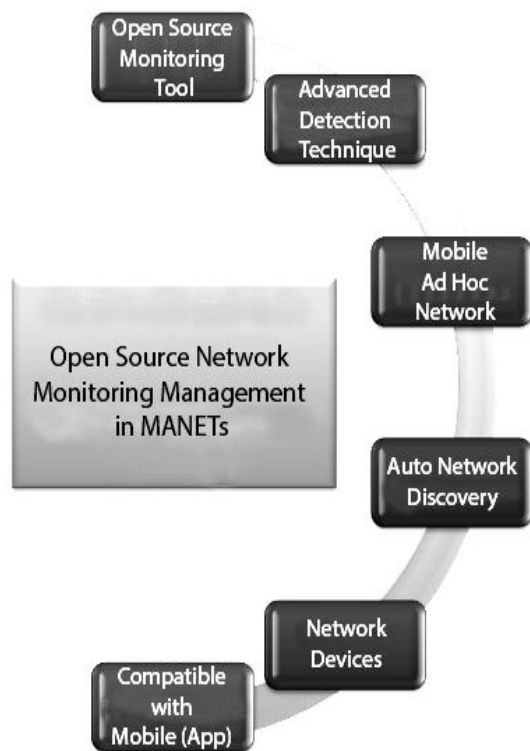
## 3. Network Monitoring Management Tool

- Data Open Source Network Monitoring Management Tool is a standalone web application tool for managing, detecting and monitoring the network activity.
- Network Monitoring Management Tool is a GUI based application interface which displays the advanced network activity on the mobile ad hoc networks, it also analyses the information from the multiple sources on the mobile ad hoc network and also gathers the network activity information on differently collected mobile ad hoc networks (MANETs), It records the activities such as network event logs, network devices that are connected, network services, network traffic in mobile ad hoc network.
- The ad hoc network administrators can also setup the alert system and the notification system on the network. It uses the extended network search for searching the network devices, it also generates the network reports with advanced information of the connected device in the mobile ad hoc network. Monitoring Management Tool collects all the data of the devices on the network.
- It's an Open Source Monitoring Tool which simply points the user wireless devices on the network, Tool makes the user devices discoverable on the network with the help of advanced network services which is used in the mobile ad hoc network with unique static protocol address which is automatically assigned by the MANET router. User or administrator of the tool can gain the control access over the managed network on the GUI Web Console for

Monitoring Management Tool which can easily detect the network activity.

- Administrator and User level activity report on dashboard can be easily combined with two security levels which can be managed manually.
- Monitoring Web can be easily installed or deployed on mobile or handheld devices. It enables the web application to use the advanced system functionality of the monitoring detection system.
- It runs on multi network platform for monitoring the system which can detect the various activities of the user and that provides with the user activity or user events monitoring management solution. The performance of the monitoring tool can be optimized manually or automatically which is also known as performance monitoring analysis.
- Network Monitoring Tool also supports the various operating system which can run with the help of the open source database engine, it also makes the use of the distributed network monitoring system with advanced detection method or advanced network discovery method.
- It gives the option of web console interface, GUI Interface and Mobile Console Interface. It also makes the use of impact analysis on the mobile ad hoc network with enhanced network monitoring tool.
- It can also generate the activities list, events list and reporting schedule list on the MANET. This can also be used in enterprises known as Enterprise Network Monitoring Management Tool.
- It is more than a network hub, network switch, network router, network proxy etc.
- It monitors the network devices and network based applications on the mobile ad hoc network. Problem can be easily troubleshooted on the Network Monitoring Management Web Console Tool.
- It can also be virtualized without any performance loss and workloads can be easily allocated on the network servers. It can be easily configured and performance can also be calculated with the help of the tool.
- It mainly focuses on the monitoring management effort system of the tool, the monitoring web application tool enables with the more number of the service oriented network monitors which can perform network monitoring request and network monitoring response system.
  - The network monitoring tool can detect in 2 or 3 phases of the different network layers just like a router interface with the various multiple devices on the network. Network discovery and network resolution can be solved in less time.

#### 4. Architecture



**Figure: 1 Open Source Network Monitoring Management in MANETs**

#### 5. Conclusion

Open Source Network Monitoring Management in MANETs is an open source based powerful network monitoring tool which supports the object detection management with built-in auto discovery and auto network device detection system. All the devices can be easily monitored in the mobile ad hoc network environment. Network Monitoring System Tool can detect and retrieve the messages from the network monitoring web console. It monitors all the activities, it notifies and alerts the administrators when the intrusion or malicious attack is detected.

I hereby conclude that Open Source Network Monitoring Management in MANETS Tool is

mainly useful for IT Data Centres, Organizations, Enterprises and also for the intelligence security bureau. It is a free web application and integrated with Open Source Framework.

#### 6. References

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