Title

Monitoring and maintenance options for your InfiNet Wireless network

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Every type of network, whether it is intended for Enterprise services, Internet Service Providers, Industrial Markets, etc., implies usually, deployments using an increased number of devices. It is therefore necessary to consider an efficient solution for monitoring the status of all network nodes and to be able to have a centralized management for the whole network. A network monitoring system represents the solution in this case, for saving resources like staff, time and money. On the other hand, for specific troubleshooting tasks it is also important to have standalone management and monitoring capabilities. Products that have a rich set of monitoring options will help to optimize the maintenance process.

The scope of this document is to present the features and capabilities of the InfiNet Wireless products in terms of monitoring and maintenance. Various solutions are available to ensure a proper unit maintenance, among them being: the Web interface, CLI, SNMP and InfiMONITOR which is a performant tool for network monitoring.

Why are Monitoring and Maintenance tasks so important?

A monitoring system is intended to ensure continuity of services in a production environment by offering the means to perform reactive and proactive actions. If you are wondering whether it is worth investing in a monitoring system or how important are the functionalities offered by your devices, below are listed the key points to have in mind:

- **Time and energy saving**: a great deal of value comes from the fact that a monitoring system transforms the network monitoring task into an easy process. Instead of wasting time and energy to periodically search for failure points, automatic alerts will be received as soon as a fault occurs. The staff can therefore spend their time in a more productive way, by taking actions to solve the real issues and improve the network functionality rather than constantly keeping an eye on every node of the network. Furthermore, the network products that provide various monitoring tests and performance analysis methods, are capable to ease the troubleshooting tasks, by accurately and quickly identifying the fail cause.
- **Staff reduction**: all network devices can be monitored by a reduced number of people, saving both money and effort. InfiNet Wireless units can all be supervised by only one person from a centralized location with the least effort.
- **Improved network reliability**: preventive measures can be taken in order to avoid long outages and timely actions can be taken in order to provide a fast recovery for a detected failure. This way the overall availability will be significantly increased.
- **Network awareness**: by visualizing the network topology with all its existing connections, a better understanding of the network is achieved, providing the grounds for an easier evaluation of the required optimization measures.

What to look for?

When reviewing the benefits of a monitoring system, the following considerations must be taken into account:

- **Reliability:** the monitoring system should be even more reliable compared to the monitored elements. It should be stable and offer accurate network status in real time.
- **Resource and bandwidth consumption:** since the monitoring system will be continuously running, its impact on the existing infrastructure should be minimal. The bandwidth occupied by the monitoring system should be reduced, in order to seamless transfer management information and save the resources for the user data traffic. Also, the hardware requirements like CPU, RAM are desired to be reduced for achieving the best network performance and offer reduced implementation costs.
- **Cost:** Three types of costs are to be evaluated: acquisition, implementation and operational costs. The final scope of the monitoring system is to reduce the operational costs for maintaining a network, so the acquisition and implementation costs are desirable to be covered in the shortest time.
- **User friendly:** the interaction with the monitoring system or with the maintenance interface of the device should be easy and intuitive. The interface structure should be clear, the actions to be performed straight-forward in order to ensure a fast learning and best productivity. The constant focus will be easily kept only on the critical and major alerts, ensuring this way efficiency and fast recovery.
- **Automatic discovery/scalability:** it is very important for the monitoring system be able to detect the existing network elements automatically by using protocols like SNMP. Additionally, all changes and network expansions should be as well automatically detected. A network will always evolve according to the company's needs, so change is part of the process all the way. The monitoring system has therefore to keep up with all the modifications for ensuring a quick and accurate topology transition. The capabilities regarding the maximum number of elements that can be managed or the maximum amount of information to be stored should also be evaluated.
- **Alerting/Troubleshooting:** in order to ensure an efficient troubleshooting, various monitoring methods must be implemented. Alerts, graphs, link statistics and so on are features that help to mitigate the network threats and improve its health. The way the information is organized and presented will enhance the troubleshooting process. For example sending emails is a mandatory feature for a network monitoring system.

Monitoring and Maintenance tools provided by InfiNet Wireless

Title

- InfiLINK 2x2 and InfiMAN 2x2
- InfiLINK XG and InfiLINK XG 1000
- Quanta 5 product family
- Simple Network Management Protocol
- InfiMONITOR system