Technology Overview and Benefits

In an ever growing web and application dependent era, IT teams lack visibility into end-user experience, costing companies millions of dollars in downtime. NetBeez is a distributed network monitoring platform that provides real time visibility into performance across wired, WiFi and cloud networks. NetBeez continuous proactive testing to speeds up troubleshooting and reduces end-user downtime.

Why NetBeez?

Existing network monitoring tools are built upon the standard Simple Network Management Protocol (SNMP), which was designed to allow network devices to send alerts to an SNMP server when they detect a hardware failure or other conditions that require administrative attention. While this protocol is useful to get alerts from network components, it's not capable of detecting and notifying the network operator of connectivity and performance issues that affect the end user. To solve this problem, an additional end-user-centric layer of monitoring is needed to detect and immediately report outages that impact users. This system would not replace the role of an SNMP server, which is still needed to monitor the network hardware, but would complement its function by providing a more complete picture of the network and its services. NetBeez is designed to meet these needs, while providing enterprises with a solution that integrates well with existing network management software.

NetBeez Benefits

NetBeez is a distributed network monitoring solution that provides network engineers with real-time and historical performance data from the user layer to quickly detect and solve the most complex issues on wired, wireless, and cloud networks. NetBeez detects network connectivity and performance issues through dedicated monitoring sensors that simulate user interaction with intranet and Internet applications.

> *"With NetBeez, we are able to see how traffic is routing back to our data centers from the local offices, which helps us identify latency, packet loss, and asymmetric routing problems. With over 50 targets configured in NetBeez currently, we can monitor not only resources our users connect to in our data centers, but access to resources in the cloud."*
>
> **Eric Goodwin,**
> **Systems Architect,**
> **Veterans United Home Loans**

NetBeez has two primary benefits:

Reduce time to detect and troubleshoot network issues

- Dedicated monitoring agents collect information that otherwise has to be retrieved by onsite personnel or dedicated workstations
- The high frequency tests run by the agents provide quick detection of connectivity and performance degradation issues on any wired, WiFi, and cloud network

Quick ticket escalation

- Trend analysis of real-time monitoring data collected from all network locations enables quick detection and escalation of network and application performance degradation issues
- NetBeez can be easily integrated with other existing network monitoring tools by sending SNMP traps, email alerts, or through the API

Distributed organizations use NetBeez everyday to address the following use cases:

Use Case	NetBeez Solution
Proactive Detection	Detects network problems as soon as they occur, before the users report them to the help desk. Active monitoring tests performed by monitoring agents installed at remote locations where the users sit.
Network Troubleshooting	Simplifies troubleshooting of network problems that can cause interruption of network services or applications. Pinpoints network versus application issues by correlating alerts under agents or targets.
Performance Monitoring	Builds a performance baseline of a network infrastructure to identify areas where there are problems. Setup network telemetry tests like ping, iperf, and speed test from across a network infrastructure.
End-User Experience	Verifies the overall experience of the end-users against wifi and cloud or web applications. Simulates user interaction to web applications via WiFi and Ethernet sensors deployed at remote sites.

Technology Overview

NetBeez runs on client-server architecture and is composed of plug-and-play hardware and software agents that are managed and controlled by a central server. The central server runs the database, the agents' controller, and the browser-based dashboard. The central server runs in the cloud or on-premise as a virtual appliance.

Hardware

RASPBERRY PI Fast Ethernet	**INTEL UPBOARD** Gigabit Ethernet	**WiFi BEEZ** 802.11ac	**CISCO** Catalyst 9300 series

Software

|			
SOFTWARE BEEZ GNU/Linux	**VIRTUAL BEEZ** OVA/KVM/HyperV	**DOCKER BEEZ** Docker	**CLOUD BEEZ** AWS/AZURE/GCP

FIGURE 1 - The NetBeez monitoring agents support any network environment: small branch offices, large corporate locations, wireless infrastructures, data centers, and cloud networks.

NetBeez' primary users are network and wireless engineers who must provide proactive detection of performance degradation issues and a quick response to network and application issues. IT managers and directors use this data to identify underperforming areas of the enterprise, justify network upgrades with performance reports, and plan network refreshing with quantifiable data.
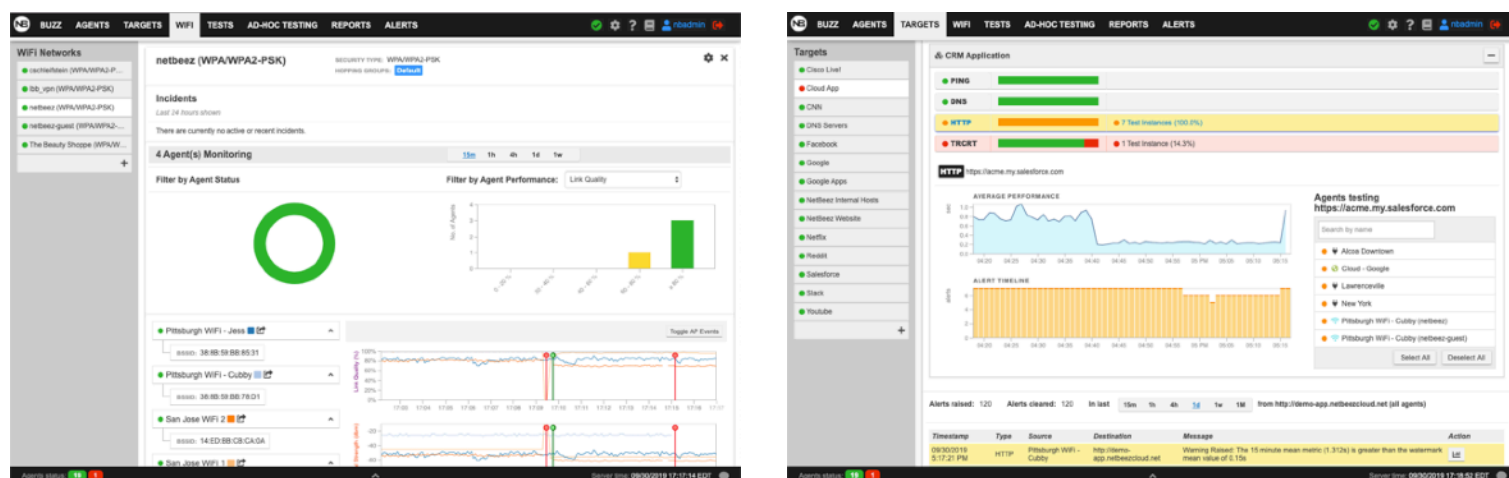
FIGURE 2 - Two screenshots from the NetBeez dashboard: on the left, the wifi tab which reports the performance and availability of monitored WiFi networks; on the right, the performance of a web-based CRM application.

About NetBeez

NetBeez, Inc. is a leader in high performance network monitoring that provides network engineers with the data and intelligence needed to successfully manage the most complex network infrastructures. Dedicated hardware and software monitoring agents test LAN, WAN, and WiFi networks from the user perspective, measuring and reporting KPI of service quality. NetBeez helps distributed enterprises maximize the value of their network infrastructure, reducing network downtime and allowing IT to quickly detect, troubleshoot, and repair network issues. For more information, visit **netbeez.net** or follow us on Twitter at **@NetBeez**.

© Copyright NetBeez 2020. All trademarks, service marks and trade names referenced in this material are the property of their respective owners.