
AmWINS Adds NetBeez Monitoring Capabilities to Improve Digital Experience for Branch Employees on Cisco iWAN



At a Glance

Customer: AmWINS Group, Inc.

Industry: Insurance Distribution Services

Challenge: The company WAN spans more than 80 branch offices. The network engineering group needed insight on the end user experience at each branch and how key services of their iWAN solution impact that experience. They wanted more information than the iWAN tools can provide.

Solution: NetBeez WAN monitoring integrated with Cisco routers

Results:

- Able to quickly measure the impact of network changes or outages on end users
- Able to proactively detect and address degradation in service before users notice an issue
- Able to monitor how the Internet backbone affects SaaS applications



Background

AmWINS Group is a global specialty insurance distributor with expertise in property, casualty, professional lines, and specialty group benefits products. Founded in 1998, the company has more than 5400 employees across nearly 120 locations in 31 states and 12 countries. The company handles \$17.4 billion in annual premium placements.

The company operates a software-defined wide area network built on Cisco's Intelligent WAN (iWAN). AmWINS has Cisco integrated services routers (ISRs) at each branch to dynamically route traffic based on application, endpoint, and network conditions.



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*Brad Addington,
Network Engineer at
AmWINS Group*

The Challenge

- **Get a better understanding of the end user experience at branches**
- **Learn how iWAN performance routing impacts the user experience**
- **Get actionable data to provide to other IT teams and business leaders**

Like most large insurance companies, AmWINS is a very distributed company in terms of where its employees and associates work. While some are concentrated in large branch offices, many others work in smaller, more intimate offices that lack local IT support. The company WAN connects them to the critical tools they need to do their jobs.

With the software-defined Cisco iWAN in place, AmWINS uses Dynamic Multipoint VPN tunnels and locally offloads Internet traffic at each branch. Many of the company's applications – particularly SaaS applications like Microsoft 365 – are affected by the quality of the Internet backbone. When they implemented network changes, or when a brownout would occur, they had limited visibility into what was happening. Workers would experience issues and the root causes could be difficult to determine.

Network engineer Brad Addington says the network often took the blame for performance issues, rightly or wrongly. "Our DBAs or our developers could make a change to something that would disrupt the typically good user experience. The natural response was to blame the network for poor response. We didn't have insight to correlate the change to the actual cause of the degraded performance," says Addington.



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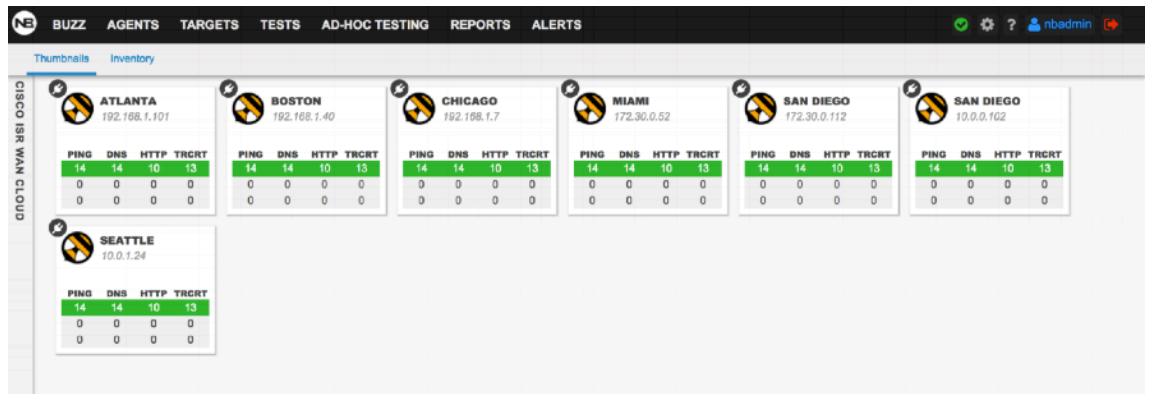
The Solution

- **NetBeez WAN monitoring integrated with Cisco routers**

The network engineering team evaluated its options and came across NetBeez, which offers a solution to monitor the end user digital experience across a network. AmWINS deployed a version of NetBeez monitoring software as an agent on the Cisco iOS routers. "We're deploying a KVM image as a container on the ISR devices," says Addington, "so essentially the router acts as a host for our NetBeez agent. It's totally approved and supported by Cisco. It tells us exactly what the network is doing because the active sensor is actually right there in the routing edge."

Addington says the NetBeez solution is like having a remote computer at each branch. The agent runs on Linux, making it complementary to other tools the network engineering team runs to do things like pulling DNS information. It also ties into the operational skills the engineering team already has, so minimal training was necessary to get up to speed on using NetBeez.

AmWINS has deployed about 80 agents so far. Addington calls the deployment process extremely straightforward. “The documentation that NetBeez provides is spot-on. It’s very accurate and assisted us greatly in our deployment. We in the tech industry are accustomed to poorly written documentation from vendors, so it was a nice surprise to get the easy-to-follow installation instructions from NetBeez. And once we deployed one or two agents, the process became repetitive and we were able to easily automate the process to deploy the agents in about five minutes.”



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Once the sensors were in place, the network engineers began seeing things they couldn’t see before, including the impacts of network changes. “Previously, we used multiple tools to help us manage and monitor changes, before and after they were made. Now with the NetBeez agent, we can see down to the actual response time and the path that traffic takes,” says Addington. With point-in-time monitoring such as My Traceroute, network engineers can go back in time and correlate with what iWAN sees when it comes to crossing thresholds.

Not only does Addington’s team find this helpful, but also the DBAs, the apps team, and the server infrastructure team say it’s useful to their jobs. “When any of these teams make a change, we are able to see the response times or the standard before the change and then after. In one case, a small change caused a 20-millisecond increase in response times. We could see that happening right away and revert the change to make sure we didn’t hurt end users,” says Addington.

The Benefits

- Having information readily available on where to start looking at issues
- Getting alerts when the Internet is impacting critical services
- Ability to justify IT efforts to business leaders

It's not unusual to blame "the network" when users experience problems, but sometimes the root cause isn't the network at all. NetBeez readily provides the information to know where to start looking for the real cause of issues. For example, the problem could be with the DNS service, or with the Internet in general.

To that end, AmWINS leverages NetBeez in a variety of ways. "Our in-house Microsoft team gave us the URLs to our most common Microsoft services, and we use NetBeez to monitor HTTP response times to our Microsoft 365 suite, to Outlook and SharePoint," says Addington. "And we're using it to monitor DNS, to make sure that URLs are actually resolving correctly. We even have it tracking a My Traceroute going out and watching from each branch to know how the Internet is actually impacting cloud services, especially with voice, Microsoft Teams, and other apps that are more susceptible to packet loss and jitter. To be able to see that and get alerts on that when something crosses a threshold that we've set within the NetBeez dashboard, it just makes for an overall better experience."



















NetBeez provides valuable data that the iWAN solution alone doesn't provide. "We are able to share this data with other teams and especially with our business leaders to show that changes we are making are actually helping the infrastructure and the network," says Addington.

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Your Network Locations

Click on a Location's name to see more information.

Name	Status	Availability	Download (mbps)	Upload (mbps)	# Open Alerts
Atlanta	● Operational	100%	671.66 Mbps 	35.49 Mbps 	0 Alerts
Boston	● Operational	46.5%	380.56 Mbps 	35.02 Mbps 	0 Alerts
Chicago	● Unresolvable	99.79%	289.76 Mbps 	25.81 Mbps 	1 Alert 
Miami	● Operational	100%	84.95 Mbps 	93.06 Mbps 	0 Alerts
San Diego	● Operational	98.81%	82.86 Mbps 	87.49 Mbps 	1 Alert 
Seattle	● Operational	100%	26.85 Mbps 	17.07 Mbps 	0 Alerts
Athens	● Operational	100%	25.46 Mbps 	4.95 Mbps 	0 Alerts
Tucson	● Operational	100%	20.75 Mbps 	16.49 Mbps 	0 Alerts

Future Plans

The network engineering team will continue to look for additional use cases to get even more value from the data derived from the NetBeez sensors.

In Summary

NetBeez has been a valuable addition to the IT toolbox at AmWINS. It's the one tool that views network performance from the end user perspective. The NetBeez deployment couldn't be easier, as the agent simply runs as a container on the existing Cisco routers. The data NetBeez provides helps to quickly diagnose issues, especially after network or application changes. For AmWINS, this solution helps keep its employees and associates working at a high level, regardless of where they are located.

About NetBeez

NetBeez, Inc. is a network performance monitoring company delivering a scalable monitoring solution that continuously simulates user connectivity on Ethernet and WiFi networks. Dedicated hardware sensors or software agents simulate end users and enable proactive identification and troubleshooting of complex network issues, helping to significantly reduce IT's time to resolution. For more information, visit <https://netbeez.net> or follow us on Twitter at [@NetBeez](https://twitter.com/NetBeez).

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