



WEST BEND SCHOOL DISTRICT IDENTIFIES, SOLVES IT OPERATIONS ISSUES WITH GRAYLOG ENTERPRISE



Industry:

Education

Data Sources/Technology:

NetFlow, Switches, Wireless Access Points,
Active Directory

District Size:

7,000+ Students

ABOUT WEST BEND SCHOOL DISTRICT

West Bend School District (WBSD), located in Wisconsin, serves the City of West Bend, Villages of Jackson and Newburg and Townships of Barton, Polk, Trenton, Jackson, West Bend and Addison. In the 2019 – 2020 school year, the district serves more than 7,200 students, administrators, and educators.

The Technology and Library Media Services district department is responsible for district-related hardware, software, network and service needs and maintains 7,000+ plus accounts, 8,000+ mobile devices, and thousands of other network connected devices.

HISTORY LESSONS

The WBSD IT team's daily tasks include a variety of customer support tasks including break/fix, software installs, supporting instructional needs, tracking a student's lost chrome book, and

identifying and solving wireless connectivity issues to internal network monitoring — and they use the Graylog Log Management Platform to manage it.

But that wasn't always the case.

In 2016, when an issue arose with WBSD systems, the IT team's only solution was to bounce from one system to another, “looking through the pinhole” to determine what the issue may be. No historical data existed for reference, and the question of ‘why’ the issue occurred had no definitive response. That’s when WBSD started evaluating log management platforms to meet their need for log collection, log analysis, system monitoring, and system troubleshooting.

At the time, West Bend School District evaluated and trialed Graylog (Open Source) and ELK Stack (now Elastic Stack) and chose Graylog for its simplicity and ability to get the department up and running quickly. WBSD places a high priority on systems security, identifying incidences, and maintaining the predictability of their systems to make data-informed decisions. In 2020, WBSD migrated to Graylog Enterprise to take full advantage of the platform’s power, flexibility, and customizations. Now they can do things like correlate events to build powerful alerts to ensure system and network health and security.



“Our goal is two-fold for our log management platform, said Tim Harder, director of technology, libraries, and CTE at WBSD. “We need it for day-to-day operations — alerting, network thresholds, and looking at areas of different data pieces. We also need true data on who is using our systems, for what reasons, and what kind of traffic we’re running for planning purposes.”



CHARTING NEW COURSES

WBSD collects as much log data as possible from its major systems, including its student information system, on-premise to off-premise servers, along with network user, and the types of devices and applications in use. The department builds models and patterns to help with issue detection and troubleshooting.

For example, when a wireless access issue arises, WBSD’s IT team can identify what devices are being affected, determine if it is district-wide or at a specific site and draw data-informed conclusions. With Graylog Enterprise, the IT team can also determine if the issue is with a wireless

service provider, the WBSD network, or a specific make/model of a device. Instead of relying on third-party vendors to assess the issue, IT can dig in deep, cross-reference with historical data, and move to resolve the problem fast.

“Education is a different environment than other corporate industries — we track and monitor very different assets — and we required a product that we could customize, adjust and scale to fit our specific needs so that we can act upon the data that we collect,” added Harder.

IT can look at correlations and relations between different types of data by aggregating its systems logs and visualize the results in Graylog. IT uses Graylog to create stakeholder reports with the right mix of data for the intended recipient.

“As we use Graylog more, we are finding additional use cases for our environment,” commented Harder. “We wanted a platform that expanded with us, and we have that with Graylog. We look forward to evaluating additional Graylog features and functions as the company rolls them out.”

```
34>Jan 11 07:53:22 07:53:22 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 08:02:41 08:02:41 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 08:13:47 08:02:41 filterlog: 7,,,1000000105,igb0,match,block  
90>Jan 11 08:41:55 08:41:55 dhcpd: DHCPREQUEST for 10.0.0.187 (10.0.0.  
34>Jan 11 07:29:22 07:29:22 filterlog: 7,,,1000000105,igb0,match,block  
34>Jan 11 07:28:41 07:28:41 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 07:13:47 07:13:47 filterlog: 5,,,1000000103,em0,match,block,  
90>Jan 11 07:41:55 07:41:55 dhcpd: DHCPREQUEST for 10.0.0.187 (10.0.0.  
34>Jan 11 07:53:22 07:53:22 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 08:02:41 08:02:41 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 08:13:47 08:02:41 filterlog: 7,,,1000000105,igb0,match,block  
90>Jan 11 08:41:55 08:41:55 dhcpd: DHCPREQUEST for 10.0.0.187 (10.0.0.  
34>Jan 11 07:29:22 07:29:22 filterlog: 7,,,1000000105,igb0,match,block  
34>Jan 11 07:28:41 07:28:41 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 07:13:47 07:13:47 filterlog: 5,,,1000000103,em0,match,block,  
90>Jan 11 07:41:55 07:41:55 dhcpd: DHCPREQUEST for 10.0.0.187 (10.0.0.  
34>Jan 11 07:53:22 07:53:22 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 08:02:41 08:02:41 filterlog: 5,,,1000000103,em0,match,block,  
34>Jan 11 08:13:47 08:02:41 filterlog: 7,,,1000000105,igb0,match,block  
90>Jan 11 08:41:55 08:41:55 dhcpd: DHCPREQUEST for 10.0.0.187 (10.0.0.  
34>Jan 11 08:41:55 08:41:55 dhcpd: DHCPREQUEST for 10.0.0.187 (10.0.0.
```

ABOUT GRAYLOG

Graylog is a centralized log management platform for companies seeking seamless data collection and normalization from any data source, faster analysis, and greater affordability. Purpose-built for modern log analytics, Graylog removes complexity from IT operations, data exploration, error tracing, and threat hunting so you can quickly and easily find meaning in data and take action faster. Our customers enjoy increased productivity, improved performance, secure systems, and an empowered team.

www.graylog.com
sales@graylog.com

1301 Fannin St, Ste. 2140
Houston, TX 77002

