

# Splunk® at NPR

Digital Intelligence Benefits Listeners and Stations



“We spent months unsuccessfully trying to get meaningful numbers using other tools. I downloaded the trial version of Splunk and was immediately able to parse and analyze web logs to extract what we needed. It also saves us hundreds of thousands of dollars per year in service fees!”

**Sondra Russell, Sr.**  
Digital Analyst, NPR

## OVERVIEW

### INDUSTRY

- Public broadcasting

### SPLUNK USE CASES

- Digital Intelligence
- Business Intelligence
- Reporting and Analysis

### BUSINESS IMPACT

- Saves approximately \$300,000 per year in log tracking service costs
- Achieved return on investment (ROI) in less than 30 days
- Accelerated NPR API performance by 50%, reducing need for infrastructure upgrades and increasing user satisfaction
- Optimizes resource allocation through accurate tracking of mobile platform downloads
- Improves and simplifies royalty accounting accuracy and flexibility
- Combine data from multiple sources within Splunk reports and dashboards to enhance usefulness and impact

### DATA SOURCES

- Akamai server log data
- Google analytics
- NPR API logs
- Streaming downloads, live concerts, podcasts, video downloads

## The Business

Each week, millions of Americans tune in to hear NPR’s popular radio programs such as *Car Talk*, *All Things Considered* and *Wait Wait...Don't Tell Me!* These are just some of the programs that air on NPR-member stations nationwide and are available as downloads and in streaming form for smart phones and other mobile devices.

NPR uses Splunk to cost-effectively measure the ebb and flow of its online “listeners,” evaluate the effectiveness of new programs and campaigns, optimize resource allocation and content delivery and more accurately account for revenue sharing and royalty payments.

## Challenges

NPR is a privately- and publicly-funded non-profit membership media organization that distributes award-winning news, information and music programming to a network of 900 independent stations, reaching nearly 27 million listeners.

While NPR uses leading web analytic applications such as Adobe Omniture and Google Analytics to track the health of websites belonging to it and member stations, it has been difficult for the organization to track and evaluate audio and video distribution. While web (client-side) traffic analysis systems typically use cookies or scripts to track browser activity, it was far more difficult for NPR to accurately capture and analyze meaningful numbers for website visitors who were streaming or downloading audio and video programs.

This made it challenging to allocate development resources to promising new programs or the most popular generations of mobile devices. NPR attempted to use Omniture to analyze log data captured from the Akamai managed download service. However, this proved cumbersome and expensive.

## Enter Splunk

In April 2010, NPR senior digital analyst Sondra Russell downloaded a trial version of Splunk Enterprise, loaded some log files from audio and video downloads and got “numbers immediately that I couldn’t get any other way.”

Russell crunched the numbers and discovered that if NPR continued using Omniture for log-based tracking it would quickly get to be “very expensive,” potentially costing \$300,000 or more per year. She was able to easily demonstrate not only the cost-effectiveness of Splunk, but the power and flexibility it offered NPR for web analytics, business intelligence and operational efficiency.

## Breakthroughs

### Digital and Business Intelligence

Splunk enables NPR to accurately and quickly track and analyze important social media and audio/video downloads and streaming content. This new level of digital intelligence has allowed NPR, for the first time, to estimate how many unique listeners are using audio and video resources and which mobile platforms are most popular.

NPR uses Splunk to analyze more than 50 million audio and video events each month and report on the results to C-level NPR management and member station managers. Splunk helps NPR:

- Determine the total number of “listeners” for online content, as well as totals for individual programs—showing where promotional campaigns are working and the relative success of new programming.
- Identify the most popular mobile platforms (e.g., iPhone, iPad, Android), this enables limited development resources to be targeted for greatest benefit.
- Track podcast downloads for 300+ partner stations to determine accurate apportionment of sponsorship funds.
- Provide cost-effective and accurate song royalty tracking and calculation to accommodate downloads and streaming broadcasts—saves time of 3-4 staff and supports continued programming expansion.

### Operational Efficiency

NPR continues to find new uses for Splunk, including monitoring the organization’s critical content handling systems. The NPR application programming interface (API) provides a structured way for the public and member stations to access NPR archived content. The API development team uses Splunk to write a single text line to a log file for each API call with details such as call duration, topic and time.

This information is presented in a Splunk dashboard to help identify API bottlenecks. In just a few hours, the NPR team was able to use this system to cut overall API response time by more than 50%. The team continues to use Splunk for ongoing API monitoring and performance enhancement.

According to Russell, Splunk helps NPR provide the highest quality online experience and helps build a pool of engaged listeners and contributors. She notes: “We knew we could make the API more efficient, but without powerful data analysis we didn’t know where to start. With Splunk, we can quickly troubleshoot problems and collect the information we need to make better decisions.”

### Free Download

[Download Splunk](#) for free. You’ll get a Splunk Enterprise 6 license for 60 days and you can index up to 500 megabytes of data per day. After 60 days, or anytime before then, you can convert to a perpetual Free license or purchase an Enterprise license by contacting [sales@splunk.com](mailto:sales@splunk.com).