

# Splunk® for Big Data Analytics

Turn massive machine data into real-time operational intelligence

## Big Data Comes From Machines

All your IT applications, systems and technology infrastructure generate data every millisecond of every day. This machine data is one of the fastest growing, most complex areas of big data. It's also one of the most valuable, containing a definitive record of user transactions, customer behavior, sensor activity, machine behavior, security threats, fraudulent activity and more.

Machine data holds critical insights for everyone in your organization. Here are a few examples:

- Monitor end-to-end transactions for online businesses providing 24x7 operations
- Understand customer experience, behavior and service usage in real time with historical context
- Fulfill internal SLAs and monitor service provider agreements
- Study network, geo-location and sensor data to inform new products and services
- Map and visualize threat scenario behavior patterns to improve security posture

Making use of machine data is challenging. It's difficult to process and analyze by traditional data management methods or in a timely manner.

- Machine data is generated by a multitude of disparate sources; correlating meaningful events across these is complex
- The data is unstructured and difficult to fit into predefined schemas
- Machine data is high-volume and time-series based, requiring new approaches for management and analysis
- The most valuable insights from this data are often needed in real time

Traditional business intelligence, data warehouse or IT analytics solutions are simply not engineered for this class of high-volume, dynamic and unstructured data. Enterprise architects need to empower new big data use cases while consolidating separate systems. Emerging open source technologies can provide part of the answer, but often require months of development and have a high risk of failure. Today's enterprises can't wait. Key stakeholders across the organization need to keep pace and adapt quickly to rapidly changing business environments. They need a flexible platform that supports real-time analysis, data mining and ad hoc reporting—a solution that can give them answers as fast as they think of questions.

## Making Machine-Generated Data Accessible, Usable and Valuable to Everyone

Splunk provides the leading software platform for real-time operational intelligence. Splunk Enterprise collects, analyzes and visualizes machine-generated data. Splunk Cloud provides all the features of Splunk Enterprise delivered as a cloud service\*. Hunk® delivers the power of Splunk software for historical data in Hadoop and NoSQL data stores.

Splunk Enterprise and Splunk Cloud provide a unified way to organize and extract real-time insights from massive amounts of machine data from virtually any source. This includes data from websites, business applications, social media platforms, app servers, hypervisors, sensors, traditional databases and open source data stores.

Once your data is in Splunk Enterprise or Splunk Cloud, you can search, monitor, report and analyze it, no matter how unstructured, large or diverse it may be. Splunk software gives you real-time understanding of what's happening and deep analysis of what's happened, driving new levels of visibility and insight. This is called operational intelligence.

**Enterprise-scale big data.** Splunk Enterprise scales to collect and index tens of terabytes of data per day, across multigeography, multidatacenter and hybrid cloud infrastructures. Because the insights from your data are mission-critical, Splunk software provides the resilience you need, even as you scale out your low-cost, distributed computing environment.

**Robust platform for developing big data apps.** Developer teams will find a whole host of ways to leverage Splunk and maximize enterprise technology investments. Built-in SDKs for JavaScript and JSON with additional downloadable SDKs for Java, Python, PHP, C# and Ruby make it easy to customize and extend the power of Splunk.

**Powerful connectivity.** Integrating structured data from relational databases, enterprise data warehouses and business intelligence software with raw, granular machine data in Splunk software can drive deeper levels of operational intelligence and business insights. Splunk DB Connect delivers reliable, scalable integration between Splunk software and relational databases, and the Splunk ODBC Driver allows you to report on machine data with your choice of business intelligence software.

**Proven results.** Splunk Enterprise is proven at over 8,400 customers. These organizations are using Splunk to improve service levels, reduce operations costs, mitigate security risks, enable compliance and create new product and service offerings.

Splunk customers typically achieve a return on investment (ROI) measured in weeks or months, sometimes even before being deployed into production.

## What Makes Splunk Software Unique

Splunk Enterprise and Splunk Cloud are integrated, end-to-end, real-time solutions for machine data delivering the following core capabilities:

- Universal collection and indexing of machine data, from virtually any source
- Powerful search processing language (SPL™) to search and analyze real-time and historical data
- Real-time monitoring for patterns and thresholds; real-time alerts when specific conditions arise
- Powerful reporting and analysis
- Custom dashboards and views for different roles
- Resilience and scale on commodity hardware
- Granular role-based security and access controls
- Support for multitenancy and flexible, distributed deployments on-premises or in the cloud
- Robust, flexible platform for big data apps

## Extend Splunk Software to Hadoop, NoSQL and Other Data Stores

Hunk is a full-featured, integrated analytics platform that enables everyone in your department or organization to interactively explore, analyze and visualize data in Hadoop and NoSQL data stores. Explore data without building fixed schemas, hiring people with scarce skills or moving data to an in-memory store.

Unlike many big data initiatives, which take months, have high rates of failure and require data scientists with scarce skills, Hunk empowers departments or organizations to quickly and easily unlock actionable insights from raw big data, wherever it may reside. Hunk delivers proven value for product analytics, risk management, security, a 360-degree customer view and the Internet of Things. To learn about Hunk, download the [Hunk Sandbox](#).

## Customer Success With Splunk Software

8,400+ licensed customers are the best examples of machine-generated big data in action.

### Salesforce.com®

Salesforce.com, the industry-leading enterprise cloud computing company, uses Splunk software to mine large quantities of data generated from across its entire technology stack. Salesforce.com has over 500 users of Splunk dashboards from IT users monitoring customer experience to product managers performing analytics on new services like “Chatter.”

**“The fact that we had a data treasure chest was not obvious until Splunk came in to the picture. Splunk has augmented our ability to make data-driven decisions.”**

Director Product Management, Salesforce.com

### NPR®

NPR, the award-winning, multimedia news organization reaching 26.8 million listeners per week, uses Splunk software to gain better visibility and insight of its digital asset infrastructure.

NPR initially used Splunk to monitor and troubleshoot its end-to-end asset delivery infrastructure. Before Splunk, there were critical business metrics NPR couldn't get from their traditional web analytics solutions. It expanded its deployment of Splunk and now measures program popularity, views by device, reconciles royalty payments for digital rights, measures abandonment rates and more.

**“Only Splunk easily gives us the business reports about our web-based digital assets that we need.”**

Online Metrics Analyst, NPR

### Cricket Communications

As a prepaid telecommunications provider, Cricket Communications is driven by web and point-of-sale channels. At the heart of this is a homegrown CRM application, coupled with third-party applications for middleware, billing and rating and PoS (Point of Sale) support. Using Splunk to harness terabytes of machine data generated by these systems and infrastructure, the operations team calculates that Splunk helped them reduce outage frequency by about 15%, translating into an annual ROI of US\$1.2 million. In addition, analytics from this machine data has enabled Cricket to provide executives real-time sales dashboards that deliver sales by store, product type, device, rate plans, zip code and other factors. Machine data is being used to enrich data from structured sources within the data management infrastructure.

### Online Travel Company

One of the world's leading online travel companies initially used Splunk software to avoid website outages, saving millions of dollars in lost revenue. It quickly expanded their use of Splunk and within ten months they were monitoring 98% of its infrastructure. Today, over 2,700 users at this organization use Splunk to gain real-time insights of not only their IT infrastructure, but also online bookings, performance of air-travel coupons and optimizing search engine marketing (SEM).

## Free Download

[Download Splunk Enterprise](#) 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. [Download Hunk](#) for free for a 60-day trial to connect to any size cluster. After 60 days you can convert to a Splunk Enterprise perpetual Free license or purchase an Enterprise license for Splunk Enterprise or Hunk by contacting [sales@splunk.com](mailto:sales@splunk.com).