NOMINUM® N2™ BIG DATA CONNECTOR

Leverage DNS data for critical subscriber insights

Strengthen customer intelligence and network security

Service providers collect and analyze multiple subscriber attributes to build brand loyalty and offer more personalized experiences, but they could be missing out on important DNS data.

Now, untapped DNS data can be integrated with subscriber profiles for deeper insight. When used in conjunction with N2 ThreatAvert, N2 Big Data Connector improves the effectiveness of entire cybersecurity ecosystems.

With Nominum N2 Big Data Connector, service providers can:

- Correlate and determine security threats
- Analyze visited destinations and determine patterns
- Monitor specific domains like streaming sites or competitor sites
- Perform legal intercept on mandated sites or subscribers
- Build more precise and complete subscriber profiles

Easily access and analyze big data

Service providers continue to increase their investment in big data infrastructure and data science teams, often using Hadoop to store and process large volumes of data.

Nominum Vantio™ CacheServe is the gold standard for DNS resolution, processing 1.7 trillion queries every day. The same extraordinary performance is now extended to a purpose-built tool precisely for big data platforms to absorb and analyze DNS data in one or more central locations.

Storing and analyzing big data can be challenging for service providers. Some providers gather data at the network layer with a network tap. This can get expensive, as it requires hardware close to each DNS server. Plus, duplication of raw DNS data exhausts valuable link capacity, reducing throughput of internal links that may already have lower capacity. Providers typically operate dozens, if not hundreds, of DNS servers, making this approach cost-prohibitive.

N2 Big Data Connector allows service providers to easily integrate DNS data into their big data platform for better subscriber insights.

KEY HIGHLIGHTS

- Fast time to deployment
- Pre-built integration into Hadoop and Splunk
- Visibility into services and applications used
- Complete, aggregated view of subscriber data without additional hardware
- Syncs subscriber data in near real-time
- No dependency on third-party cookies for activity information
- data compressed up to 80 percent for rapid integration with BI tools

N2 Big Data Connector enables data to be gathered from Vantio CacheServe where data is compressed at the edge of the network to efficiently use bandwidth, providing compression of up to 80 percent. DNS data is then transported using a resilient, highly scalable, publish/subscribe system that leverages industry standard Apache Kafka. The data is aggregated and converted from the Nominum bandwidth-efficient binary format into a JSON format that can easily be stored in big data systems such as Hadoop or Splunk. Data is continuously updated via an ETL process into big data systems.

Instead of gathering DNS data at the network layer with a network tap, one aggregated stream of data can be fed directly to big data platforms.
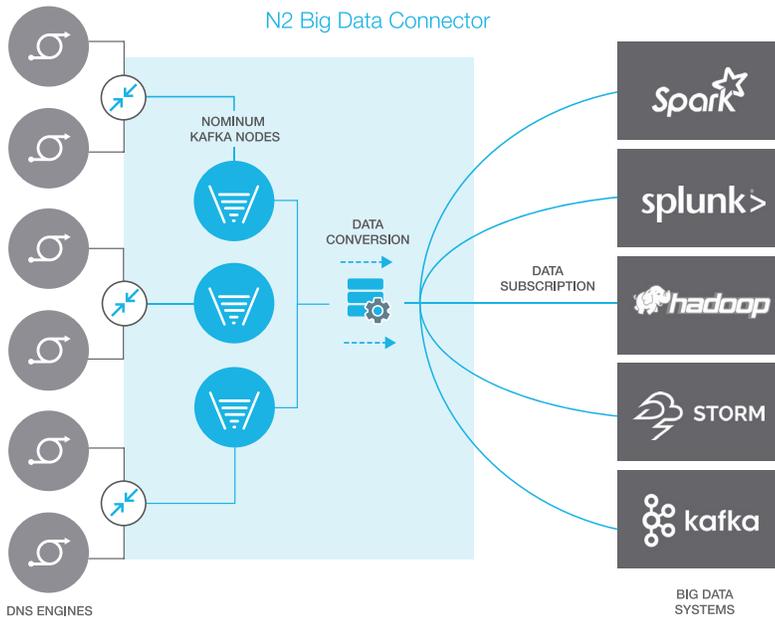
N2 Big Data Connector compresses data by up to 80 percent for efficient, real-time export to big data systems.

Recognize DNS and its wealth of information

DNS transactions contain a treasure trove of information that can provide intelligent insight in conjunction with other data sources to support cross-functional efforts to improve subscriber satisfaction, strengthen brand loyalty and improve operations. Such functions include:

- Security analysis
- Capacity planning
- Trend analysis
- Law enforcement

Strengthen network security

Today's subscribers connect from various devices and locations. With visibility into all domain activity that contributes to your security intelligence and threat dashboards, you can track key threats that put your network and subscribers at risk.

Capacity planning

Observe traffic like streaming, gaming, IoT devices and more to use with information like bandwidth demand for more precise capacity planning.

Drive adoption

DNS data provides real-time insight into subscriber behaviors such as the use of certain apps or IPTV viewing. With this valuable data, providers can better tailor outreach programs to drive adoption for their subscriber programs.

Improve cross-sell and upsell

DNS data improves marketing efforts by fueling more personalized campaigns based on knowledge of browsing habits, pay-per-view orders and more.

Law enforcement

Abide by local laws and collect browsing data for all domains (or specific ones) to meet legal obligations that require providers to retain subscriber metadata for a specified period.

Improve customer satisfaction

Don't let your ongoing innovation and investment efforts go belly-up. With the help of DNS data, providers can identify subscribers who need technical help or are at risk of churn by tracking subscribers that visit support or speed test sites.

ABOUT NOMINUM

Nominum is the world's DNS innovation leader and the first company to create an integrated suite of DNS-based, subscriber-centric applications that digitally transform service providers while personalizing the online experience for subscribers. More than 135 providers in over 45 countries trust Nominum software to protect their networks and deliver greater value to subscribers.

CORPORATE HEADQUARTERS

Nominum, Inc.
800 Bridge Parkway
Redwood City, CA 94065

+1 (650) 381-6000

hello@nominum.com