From large enterprises to start-ups and small businesses, companies are generating more data than ever before. The global volume of data will grow by a factor of 300 — from 120 to 40,000 exabytes — between the year 2005 and 2020. Not only is the volume of data growing, but the velocity at which it is transferred is increasing too.

42 Mbps

By 2018, global fixed broadband speeds will reach 42 Mbps, up from 16 Mbps in 2013.

3 Reasons Securing Big Data in Hadoop is a Big Deal

1. From large enterprises to start-ups and small businesses, companies are generating more data than ever before.

2. More organizations are deploying Hadoop because it provides scalable, cost-effective storage and faster processing of big data.

3. Security breaches are on the rise, yet Hadoop lacks the ability to completely secure data in a cluster or in motion across your network.

Between January and March 2014 alone, more than 200 million records were stolen — the equivalent of approximately 93,000 records stolen every hour. A 233 percent increase over the same period last year.

32% of companies surveyed have already made a Hadoop deployment, 31 percent intend to deploy Hadoop in the next 12 months, and 36 percent say they could use a Hadoop deployment in more than a year.

4 Tips to Secure Big Data in Hadoop

1. Use Transparent and Seamless Encryption:
   - Encryption should not disrupt Hadoop performance or end user experience
   - Protect both the data-at-rest stored in a cluster and data-in-motion rapidly streaming across your network

2. Ensure Implementation is Fast and Easy:
   - Rapid deployment and implementation across multiple DataNodes in a Hadoop cluster
   - No rearchitecting of your big data implementation should be required

3. Leverage Centralized Key and Policy Management:
   - Organization should control encryption keys for ultimate security
   - Granular access controls to guard against unauthorized or rogue access to high-value data

4. Look for Compliance-Ready Capabilities:
   - Support and enforce compliance mandates, such as HIPAA and PCI DSS, in your big data implementation

4. Source: SafeNet Breach Level Index, Q2 2016