

Big Data Security Implementation



Client Overview

A leading mobile engagement and communication provider which connects 1500+ clients with their customers

Business Challenges

- Hadoop's in-built internal security only allows string-based queries and is not suitable for setting authorizations, authentication and privileges
- The client requested a RDBMS-type of security to variably restrict access of its 250 employees

Implementation Approach

- Indium audited the existing system to evaluate its security features and formulated an architecture around pertinent tools to deliver robust security
- Kerberos was implemented for HDLC security to control user's login
- Knox implemented the web-portal for the user to download or view their reports
- Ranger was implemented on Hive, Phoenix, HBase & Sol for authentication/ accessing data

Business Impact

- Introduced Kerberized security features integrated with Sentry
- The client was able to set privileges and prevent unauthorized access, improving data security and integrity
- 100% elimination of the external access threats to the data
- Establishing permissions curtailed 90% of internal threats. The remaining 10% were internal names who needed to have access to the system

 Technology

 **CLOUDERA** Kerberos Ranger