OPEN SOURCE DATA WAREHOUSE USES TRANSPARENT DATA ENCRYPTION TO PROTECT DATA-AT-REST AND IN MOTION

- Provides ultra-high query performance
- Allows petabyte-scale data ingest loading
- Supports wide range business intelligence tools
- Enables advanced machine-learning capabilities
- Offers robust FIPS 140-2 Level 3 certified platform

PIVOTAL AND THALES DELIVER POWERFUL, FAST, AND SECURE BIG DATA BUSINESS INTELLIGENCE

THE PROBLEM: DATA MANAGEMENT CAPABILITIES HAVE NOT KEPT UP WITH AVAILABLE DATA EXPLORATION AND BUSINESS INTELLIGENCE NEEDS

With an evolving competitive landscape and an increased adoption of business intelligence tools by the enterprise, legacy data management solutions need to scale to the volumes of data now available for advanced analytics. Massive parallel processing (MPP) architectures enable data warehouses to deliver ultra-high volume loading, processing, and linear scalability, but new approaches are needed for effective data exploration and business insight.

THE CHALLENGE: ENSURING ENTERPRISE SECURITY POLICY AND REGULATORY COMPLIANCE FOR DATA MANAGED IN ANALYTICAL DATABASES

As more data is available for analytical purposes, the threat that sensitive and private information may be at risk increases. Protecting the confidentiality, integrity and availability of warehoused data and ensuring that access is controlled becomes a vital function. Strong encryption secures data, but it must be done in a manner that does not impact performance or interfere with the database query process. Encryption keys must also be protected and managed in a trusted manner for security and compliance with regulations.

Thales Vormetric Transparent Encryption agents, served by dual Data Security Managers, integrate with Pivotal Greenplum data warehouse segment hosts to encrypt data-at-rest and centralized key management.
PIVOTAL AND THALES DELIVER POWERFUL, FAST, AND SECURE BIG DATA ANALYTICS

THE SOLUTION: PIVOTAL GREENPLUM OPEN SOURCE DATA WAREHOUSE AND THALES VORMETRIC TRANSPARENT ENCRYPTION (VTE) DELIVER OPTIMUM PERFORMANCE AND SECURITY

Pivotal Greenplum is an open source data warehouse that provides powerful and rapid analytics on very large volumes of data. Uniquely geared towards machine learning and advanced data science, Greenplum is powered by an advanced cost-based query optimizer delivering unmatched analytical query performance on large volumes of data. Pivotal Greenplum provides flexibility and tight integration with leading analytical libraries and software stacks.

For added security, Pivotal Greenplum integrates with Thales VTE to establish strong controls around sensitive data, and do so with maximum efficiency. Thales VTE delivers data-at-rest encryption with centralized key management, privileged user access control, and security intelligence to proactively meet compliance reporting requirements for structured databases and unstructured files. The solution can be deployed without any changes to applications, databases or infrastructure so security organizations can implement encryption with minimal disruption, effort, and cost.

WHY USE THALES VTE TO PROTECT THE CONFIDENCE, INTEGRITY, AND AVAILABILITY OF WAREHOUSED DATA?

Thales VTE deliver continuous protection long after the encryption key is applied. Enhanced security features provide:

► Persistent enforcement of security policies that protect against unauthorized access by users and processes
► Continued login of all access attempts to monitoring authorized and unauthorized user activity
► Granular controls and least-privileged access policies to protect data from advanced persistent threat (APTs) and misuse by privileged users
► Specialized policy setting to control administrators with root privileges, processes, file types, time of day, and other parameters
► Security intelligence capabilities to provide detailed data event logs to satisfy compliance and forensic reporting, and to enable additional data security analytics with popular security information and event management (SIEM) systems

As an agent running at the file system or volume level on a server, Thales VTE offers flexible implementation. The agent is available for a broad selection of Windows, Linux, and UNIX platforms, and can be used in physical, virtual, cloud, and big data environments, regardless of the underlying storage technology.

THALES

Thales e-Security is the leader in advanced data security solutions and services delivering trust wherever information is created, shared, or stored. Security solutions ensure that critical data is both protected and trusted in any deployment – on-premises, in the cloud, in data centers, or in big data environments – without sacrificing business agility. Security professionals around the globe rely on Thales to confidently accelerate their organization’s digital transformation. Thales e-Security is part of Thales Group.

PIVOTAL

Pivotal’s mission is to transform how people build software. Central to this mission is being great at working with data. Pivotal Greenplum is a commercial, fully featured data warehouse, powered by the open source Greenplum Database. Uniquely geared towards predictive analytics. Greenplum is powered by the world’s most advanced cost-based query optimizer, delivering high analytical query performance on petabyte scale data volumes.

For more detailed technical specifications, please visit www.thales-esecurity.com or www.pivotal.io