

Four Abilities Your Database Needs to Enable the Future of Financial Services, Banks and Insurance

Let's face it: securing financial data in the 21st century is a major headache. There are so many things you need to be thinking about today that you didn't even have to worry about even five or 10 years ago, such as new compliance laws and regulations, and how to keep sophisticated fraudsters from exploiting all the new touchpoints your customers are using.

It all comes down to your database, and here are the specific abilities your database must possess to protect your financial data and keep your enterprise from becoming compromised.



1. Unified Authentication and Access Control

Unified authentication and role-based access controls allow you to easily provision and manage the permissions of users across a variety of sources, including LDAP, Active Directory, and Kerberos. A good data management platform will allow you to utilize multiple sources of authentication and role assignments in the same cluster. You should also have granular access control at the row and column levels, as opposed to just at the table level. Also, if administrators have full access to operate the database but can revoke the access to the data itself, this provides an extra layer of security.

2. End-to-End Encryption

True data protection and compliance starts at the data layer. When companies think of how best to protect their data and meet ever stricter and more complex compliance requirements, they should first and foremost be considering their data management solution.

The need for enhanced data auditing and reporting along with end-to-end encryption and redaction of sensitive application data enables you to easily comply with regulatory standards like PCI, SOX, HIPAA, and the European Union's General Data Protection Regulation (GDPR). While Unified Authentication, parameterized statements, and SSL-enabled drivers allow you to minimize risk exposure, increase transparency, control, and prevent things like SQL injection attacks.

With advanced mechanisms like authentication, authorization, transparent data encryption, and auditing, DSE Advanced Security enables you to prevent unauthorized access and cyber threats in real time and meet ever-changing regulatory requirement.

3. User Activity Auditing

Your data management platform should have integrated user activity auditing in real time, which allows you to record and audit all or a sub-set of user activity, including login attempts, empowering you to discover any data breaches or unauthorized behavior almost as they happen.

4. Compliance

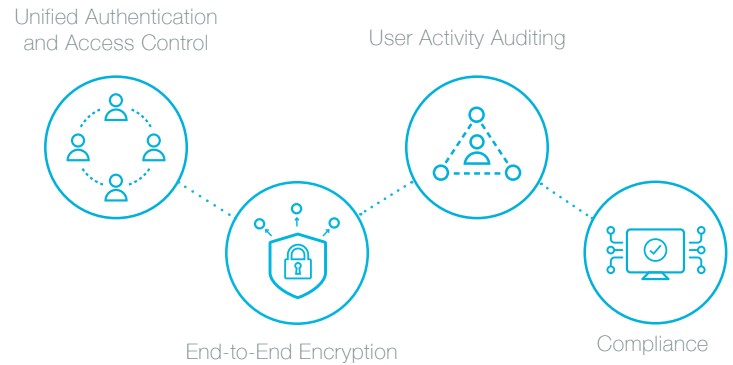
Whether it's GDPR, PSD2, SOX, or PCI-DSS, compliance has become a major issue for financial data protection. There are so many ways *not* to comply these days, and so many ways to end up with a major fine or even a lawsuit, that handling compliance at the data layer is really your only chance of being totally secure, all the time.

A good data management platform can contextualize all data, making it not just possible but easy to discover all the touchpoints and activities of your customers, identify questionable transactions or suspicious behavior, resolve entities, and maintain comprehensive audit trails to meet the mandatory compliance requirements on time, on budget, and in real time.

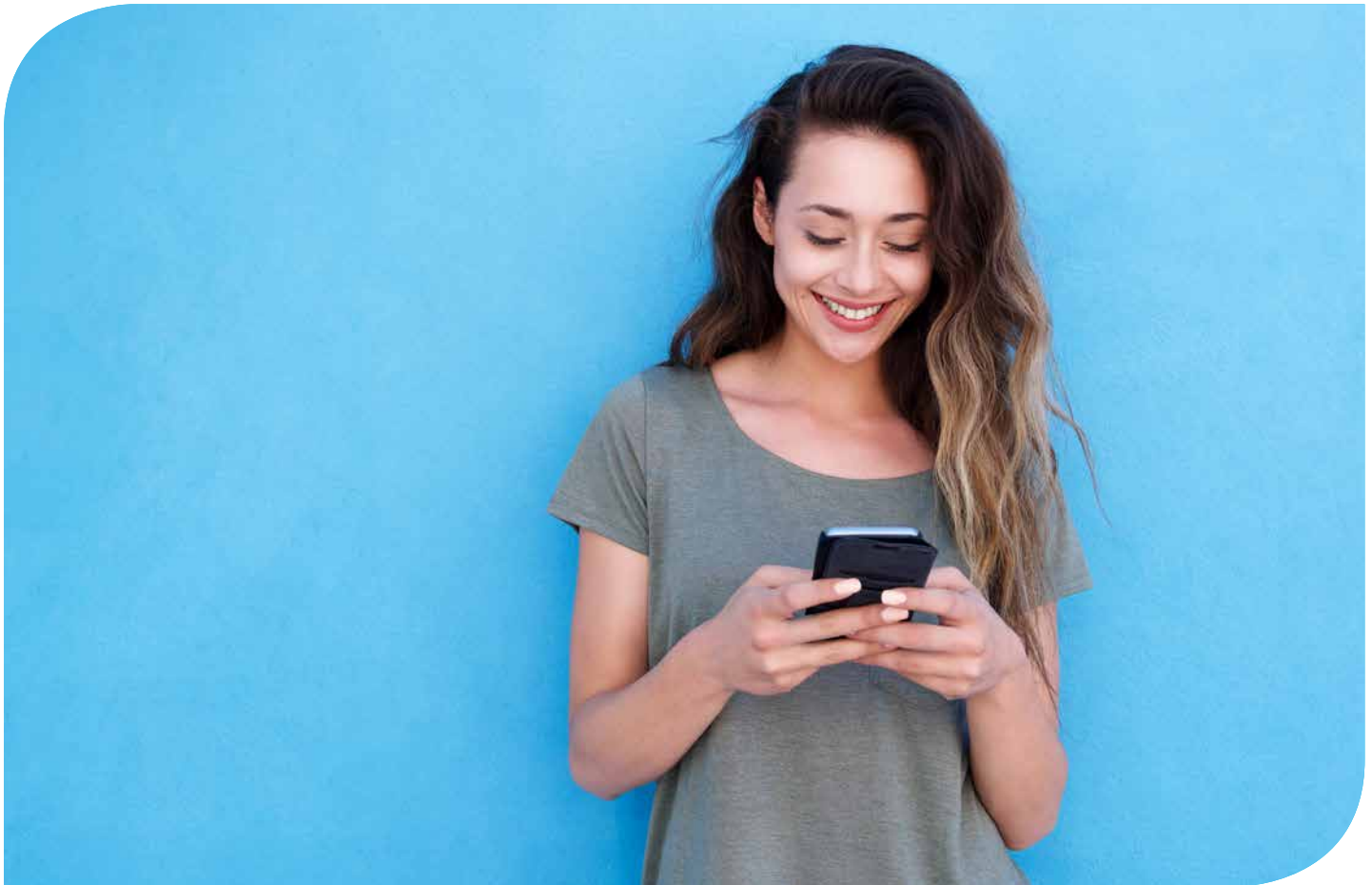
Combine All the Above into One System That's the Final Key

You want to be able to achieve all of the above capabilities with one vendor and not have to go to several different third parties to sew together a quilt of financial data protection that would probably have gaps and could then come easily apart if one of your third parties breaks away from you, or vice versa.

DataStax Enterprise offers a comprehensive, advanced data security solution built into our industry-leading data management platform—all with a consistent security model across database, search, and analytics. From compliance to identity management to fraud detection, we've got you covered at the data layer.



For more information on how DataStax helps banks and financial service providers with their data transformations visit www.datastax.com/banking.



© 2019 DataStax, All Rights Reserved. DataStax, Titan, and TitanDB are registered trademarks of DataStax, Inc. and its subsidiaries in the United States and/or other countries.

Apache, Apache Cassandra, and Cassandra are either registered trademarks or trademarks of the Apache Software Foundation or its subsidiaries in Canada, the United States, and/or other countries.

May 2019