

## SOLUTION BRIEF

### The **Problem**

As organizations today must comply with changing regulations and ensuring the security of their data, the identification of the sensitive data so critical to those processes remains a challenge. While many solutions on the market today claim they are able to identify organizational data types, one of the top concerns in the market remains how exactly these solutions are identifying data to ensure the right steps are put in place so that sensitive data remains secure.

### The **Solution**

Identifying all of the sensitive data organizations create and maintain requires multiple data identification methodologies. A combination of these methodologies can help you understand not only specific data but also its context. This is done by evaluating sentences surrounding a word, or the type of document the data is contained within, for example. Only then will a solution be sufficiently capable of protecting organizational data.

### How Titus **can help**

While there are several methods of classifying and identifying data within the data protection industry, Titus provides the most robust and flexible data detection tools available on the market today. Titus incorporates advanced Machine Learning (ML) capabilities and enables customers to quickly and accurately detect and protect their sensitive data. The combination of Titus data identification tools is called our “**Data Detection Engine.**”

The Titus Data Detection Engine provides a range of data detection tools, which, when used in conjunction, build the most robust security programs available.

**RegEx**, a.k.a. regular expressions, is a sequence of characters that define a search pattern. This method of search inspects the data character-by-character looking for a pattern that matches the search pattern. Most data protection organizations stop here when it comes to data detection methodology.

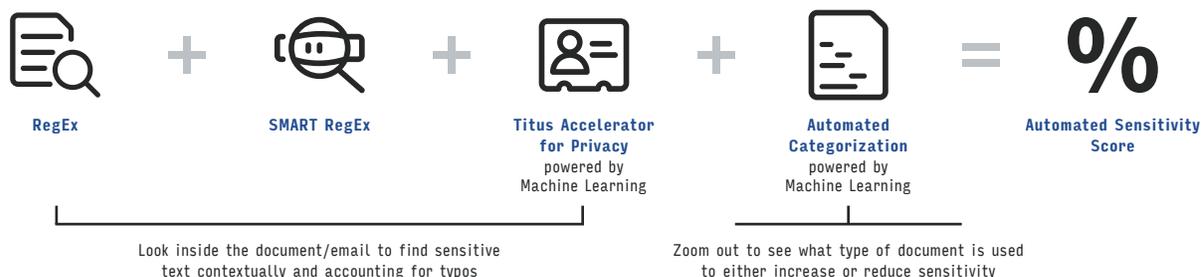
**Smart RegEx** pre-processes data into tokens such as words or numbers which allows for more targeted scans of well-formed sensitive data in large documents with repeated search queries. The pre-processing helps the solution focus and can improve performance dramatically.

**Automated Categorization powered by machine learning** leverages machine learning to recognize a topic by correlating words in a document that are indicative of said topic. This depends on a model that was trained from a corpus of documents, sorted by topic.

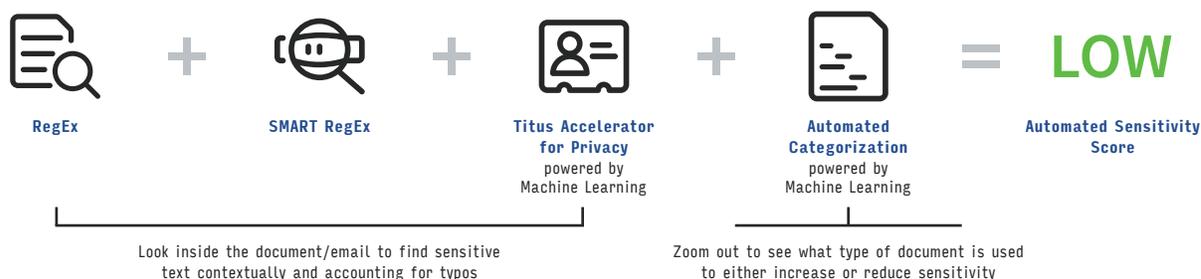
**Titus Accelerator for Privacy powered by machine learning** also uses a type of machine learning called deep learning to categorize data. This tool doesn't consider the topic, but rather scans through content focusing on finding PII (personal identifiable information). This uses both words and the context of those words surrounding it to reduce false positives, and focuses on PII, PHI (personal health information), and PFI (personal financial information).

## Identifying data with Titus

Below, the multiple methodologies within the Titus Data Detection Engine work together to provide a better understanding of the sensitivity of data.



To provide an example, if an end user is saving a document, the Titus Data Detection Engine will leverage RegEx, Smart RegEx, and Titus Accelerator for Privacy to discover a number of items within a file, including: name, email address, phone number, and credit card number. While the combination of this information within a document would be considered highly sensitive, the use of Automated Categorization proves that there is a very high probability that this document is, in fact, an admin guide, which contains high levels of sample data. With that in mind, the context related to the data discovered within the document takes on a different meaning, and the document itself deserves a low sensitivity score.



Most data detection solutions on the market today have few methodologies to identify and therefore protect organizational data. Unlike other solutions available, Titus solutions leverage the Titus Data Detection Engine, formed by multiple unique data detection methodologies that best ensure data is identified correctly and dealt with accordingly ultimately creating the most robust privacy and security ecosystem for our customers.

## About Titus

Titus is a leader in providing solutions that enable businesses to accelerate their adoption of data protection. Millions of users in over 120 countries trust Titus to keep their data compliant and secure, including some of the largest financial institutions and manufacturing companies in the world, government and military organizations across the G-7 and Australia, and Fortune 2000 companies. To learn more about how Titus can help with CUI and CNSI marking and metadata programs visit [www.titus.com](http://www.titus.com).



Protect your data.  
Free your business.