Dataguard™

We provide digital and operational security solutions dealing with resilience and risk
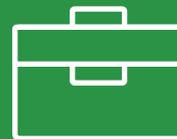
Our story

Dataguard ePay
Encrypted Payslips

Dataguard eMail
Encrypted eMail

Dataguard eBox
Encrypted Storage

Our story

Dataguard was founded to bring together technologies and platforms to facilitate the secure handling and communication of confidential data for the purpose of allowing UK companies to continue to operate efficiently and grow within an ever tightening regulatory and cost environment. Through simple add-on expansion, Dataguard can help these companies meet their paperless aspirations without imposing overbearing replacement systems or implementation costs.

It can do this by combining secure back end platforms and easily integrated front end interfaces into the existing digital systems employed by UK companies.

Dataguard was founded by a multi-skilled team from a wide range of backgrounds

spanning investment and company floatation, to the production and patenting of paper payslips, from IT infrastructure, security and development to database management.

Dataguard makes three products available all of which are underpinned by the same highly secure processes, standards and protocols.

Dataguard partners with Regify one of the leading encryption pioneers whose Regipay technology ePay is based on. Regibox and Regimail form the base platforms to Dataguard's eMail and eBox technology

Dataguard's sister company Datashield Security enables complementary IT Security technology which can provide a complete solution to your data protection needs.

Our philosophy

Dataguard recognises the critical importance of data security as an end-to-end system.

Highly secure data storage is, for instance, undermined by insecure transmission of the

data to and from that source - a chain is only as strong as its weakest link and Dataguard ensures that each link provides equal strength to the entire data transfer and storage chain.

| AES 256 data encryption | Tier 4 data storage | SHA-2 hashcodes | Auditable transaction tracking | SSL encryption | One-time only encryption keys | RSA encryption |

Our values and methodology

IT & Security Aware
Over 100 years combined IT infrastructure and application implementation experience. 20 years in data security and protection.

Problem Solvers
Lateral thinkers who never shy away from a technical challenge. "There's always a reason, you just have to find it".

Forward Thinking
Always looking for innovative solutions and ways to implement them to provide the greatest benefit.

Customer Support
We completely understand the need to provide good customer service and support.

Our products

ePay
encrypted payslips

Dataguard™ enables you to send your payslips electronically and securely using our easy to use add-on ensuring the integrity of your payroll Dataguard ePay works with any payroll system that can output PDF's and we encrypt to AES 56k ensuring total end to end security with an easy user interface for your employees to securely retrieve their pay role information.

eMail
encrypted email

Traditional e-mail has the confidentiality level of a postcard. Any actor involved in its transport can easily read it. Dataguard eMail offers a way to transform your email into a confidential and auditable electronic letter. This works using your existing e-mail address and does not allow use nor any third party to access or to store the content of your e-mail.
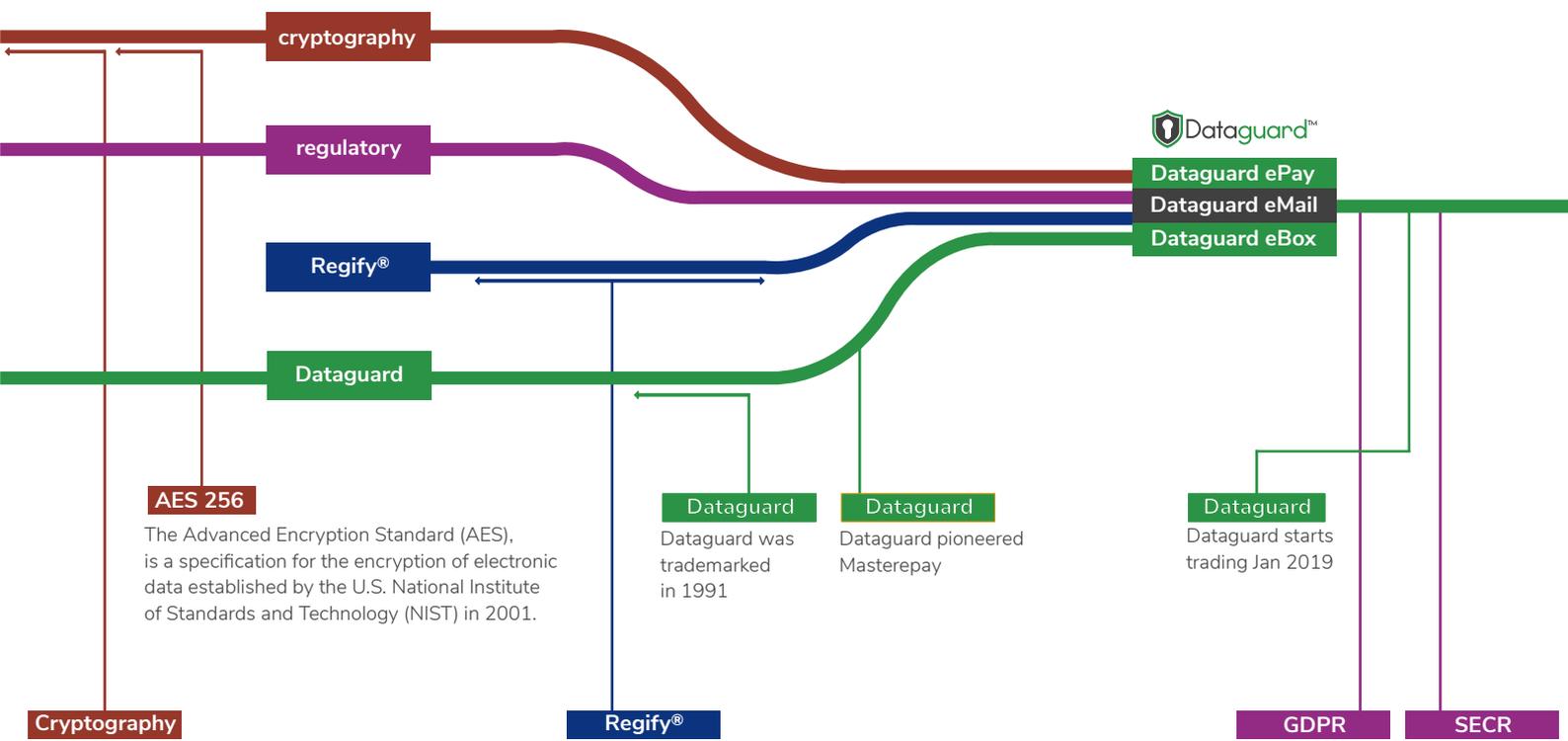
eBox
encrypted file sharing

Making documents available to a group of users with all revisions of these documents, is a key task of projects and business processes of any kind. If this task must be performed in an auditable manner and the documents must be protected against access from third parties, then Dataguard eBox is the right choice.

Timeline of key dates

| 2006 | 2007 | 2008 | 2009 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |

cryptography

regulatory

Regify®

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Dataguard ePay
Dataguard eMail
Dataguard eBox

AES 256

The Advanced Encryption Standard (AES), is a specification for the encryption of electronic data established by the U.S. National Institute of Standards and Technology (NIST) in 2001.

Dataguard

Dataguard was trademarked in 1991

Dataguard

Dataguard pioneered Masterepay

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Dataguard starts trading Jan 2019

Cryptography

Cryptography has a long and complex history. However, it wasn't until the 19th century that it developed anything more than ad hoc approaches to either encryption or cryptanalysis (the science of finding weaknesses in crypto systems). Examples include Charles Babbage's Crimean War era work on mathematical cryptanalysis of polyalphabetic ciphers. By World War II, mechanical and electromechanical cipher machines were in wide use. Great advances were made in both cipher design and cryptanalysis. The successes of the codebreakers at Bletchley Park and their decryption of the German Enigma codes are now written into legend.

Regify®

2009 - IP research, application for global patents, solution design
2010 - 10 providers of regify services, first international providers
2011 - International rollout, technology security audited in UK
2012 - Clearing service operation Incert guaranteed by government
2013 - Technology in Germany officially certified for data protection
2016 - Healthcare Data Ecosystems: proof-of-concept and pilots
2017 - Industry Ecosystems, proof-of-concept
2018 - Healthcare Data Ecosystems: international rollout

GDPR

General Data Protection Regulations kicks in May 2018

SECR

Streamlined Energy and Carbon Reporting expected April 2019

The technology - AES 256

Dataguard's products are underpinned by the regify® platform which uses Advanced Encryption Standard (AES). This is a worldwide protocol for encrypting data for safe transmission and storage. It is the first (and only) publicly accessible cipher approved by the National Security Agency (NSA) for top secret information.

It was developed in response to the US National Institute of Standards and Technology (NIST) requirement to replace DES. It became an approved method of encryption within the US government before being more widely used around the globe by businesses and public organisations alike. An encryption key is generated during the substitution-permutation process, allowing the data to be deciphered and read only by the intended recipient.

How does AES work?

AES is a substitution permutation network (SPN) block cipher algorithm. This means the algorithm takes a block of plain text and applies alternating rounds of substitution and permutation to it.

In AES, the size of each box is 128, 192 or 256 bits, depending on how strong the encryption needs to be. 128-bit is typical though Dataguard, via the regify® platform, uses 256-bit.

An encryption key is generated during the substitution-permutation process, allowing the data to be deciphered and read by only the intended recipient. Without the key, the data is completely scrambled and unintelligible.

AES has yet to be broken in the way that DES was. The majority of cryptographers agree that, with current hardware, successfully attacking the AES algorithm, even on a 128-bit key would take billions of years.

Where is AES used?

AES has been adopted by businesses and other organisations worldwide and is now one of the most widely used encryption algorithms.

It's used in all sorts of file and transfer scenarios. For example, when you transmit files over an HTTPS connection, the chances are AES is keeping your data secure from any man-in-the-middle type attacks.

The platform - regify®

Dataguard's products run on the regify® platform

The Dataguard ePay service is powered by regify® technology. regify® enables the only network solution for secure and binding e-mail-communication and electronic post. Whereas many vendors narrowly define "secure e-mail" as encrypted e-mail, regify®'s comprehensive solution includes features such as confirmation of receipt and an auditable web-based tracking log of the transactions. regify® elevates ordinary e-mail to the level of a registered electronic letter. Regify®'s secure digital transaction service is globally recognised and trusted . It has been approved by Mastercard to underpin its encryption key technology for its virtual credit cards. Uniquely, these keys are only ever used once and only for each individual transaction.

The delivery - Dataguard

We can smoothly implement our products into your business

Dataguard brings the regify® platform to UK businesses. It allows seamless add-on functionality to existing payroll systems, and delivers significant cost savings and/or highly secure end-to-end processes for the distribution of confidential information.

Whichever payroll system you employ and whether you are already invested in paper or electronic portal distribution of your confidential information such as payslips, PAYE forms, employment contracts etc, we can help you achieve cost savings, increased security and GDPR compliance, or both.