
Barracuda
TECHSUMMIT19
BARRACUDA TECHNICAL SUMMIT
Supporting Regulatory Compliance
with Barracuda Email Security products

Compliance Matters!

- Risk management against misuse and data loss – archiving+
- Increasing complexity of compliance and regulation
- Balance between privacy (RTBF) and retention policies
- Large fines and potential damage to reputation resulting from failure
- Managing data only one aspect of policy

Risk in Context

Ongoing changes in culture, affecting:

- Communication within companies
- Business protocol
- Expectations between companies and employees
- Ethical questions regarding security (e.g., retaliatory hacking)
- Massive importance of data, including personal data

Compliance Regimes

Privacy

- EU - General Data Protection Regulation (GDPR)
- Japan Personal Information Protection Act
- German Federal Data Protection Act (FDPA)

Compliance Regimes

Retention and audit:

- EU -Sarbanes-Oxley (SOX)
- Payment Card Industry Data Security Standard (PCI DSS)
- Security Content Automation Protocol (SCAP)
- Federal Information Security Management Act (FISMA)
- Health Insurance Portability and Accountability Act (HIPAA)
- Health Information Technology for Economic and Clinical Health Act (HITECH)
- Security Exchange Commission Rule 17a-4 (SEC Rule 17 A-4)
- National Association of Securities Dealers 3010 & 3110 (NASD 3010 & 3110)
- Gramm-Leach-Bliley Act (Financial Modernization Act)
- Financial Institution Privacy Protection Act of 2001
- Financial Institution Privacy Protection Act of 2003
- Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Patriot Act)

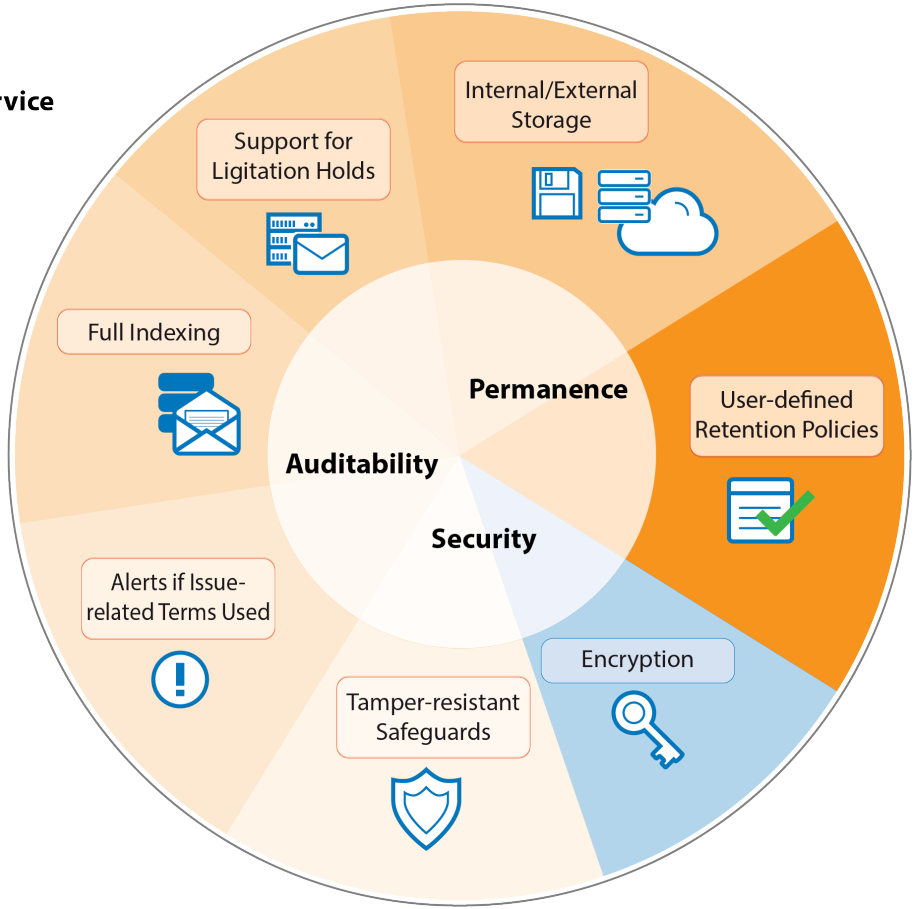
ESS

Barracuda
Email Security Service

Products and Features for Compliance

Compliance Support – ESS and CAS

Cloud Archiving Service



Email Security Service

Barracuda Products and Regulatory Compliance

- Cloud Archiving Service
- Message Archiver
- Email Security Service
- Email Security Gateway
- Barracuda Cloud-to-Cloud Backup
- Barracuda Backup

CAS
Barracuda
Cloud Archiving Service

MA
Barracuda
Message Archiver

ESS
Barracuda
Email Security Service

ESG
Barracuda
Email Security Gateway

BU
Barracuda
Backup

Different User Roles in Cloud Archiving Service

- Admin
- Auditor
- User

- Bespoke users if necessary, by request

Adding and Configuring Users

User configuration includes:

- Email address
- Display name
- LDAP retrieval
- Aliases
- Password
- Role

ESS
Barracuda
Email Security Service

GDPR: Encryption and Requests

GDPR: The Role of Encryption

The higher the risks involved in the data processing and the more likely these are to manifest, the stronger the security measures must be and the more measures must be taken.

1. Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, the controller and the processor shall implement appropriate technical and organisational measures to ensure a level of security appropriate to the risk, including inter alia as appropriate:
=> Article: 24
=> Dossier: Technical And Organisational Measures, Obligation, Risk For Rights And Freedoms

(a) the pseudonymization and encryption of personal data;

Encryption of Transport, LDAP, and Directory Information

"Encrypting personal data whilst it is being transferred from one device to another (e.g., across the internet or over wired or wireless connections) provides effective protection against interception of the communication by a third party whilst the data is in transfer..-"

UK Information Commissioner's Office

GDPR: Encryption in ESS

User-to-user:
Barracuda Email Encryption Service

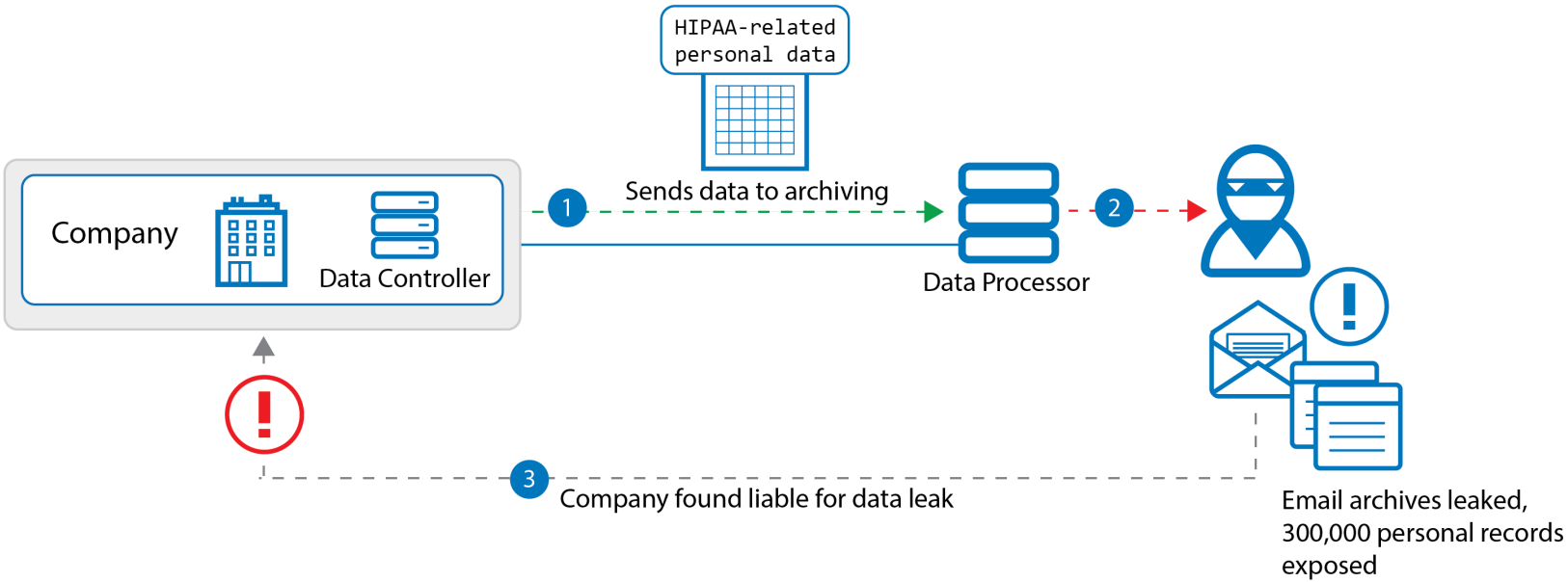
Sends notification of encrypted mail on Message Center

In transport:
External TLS, if supported by recipient email service

Internal TLS, when transferring mail

At rest:
Encrypted storage clusters

Unencrypted Data Risk



GDPR – Encryption

Using content filtering to encrypt in ESS and CAS

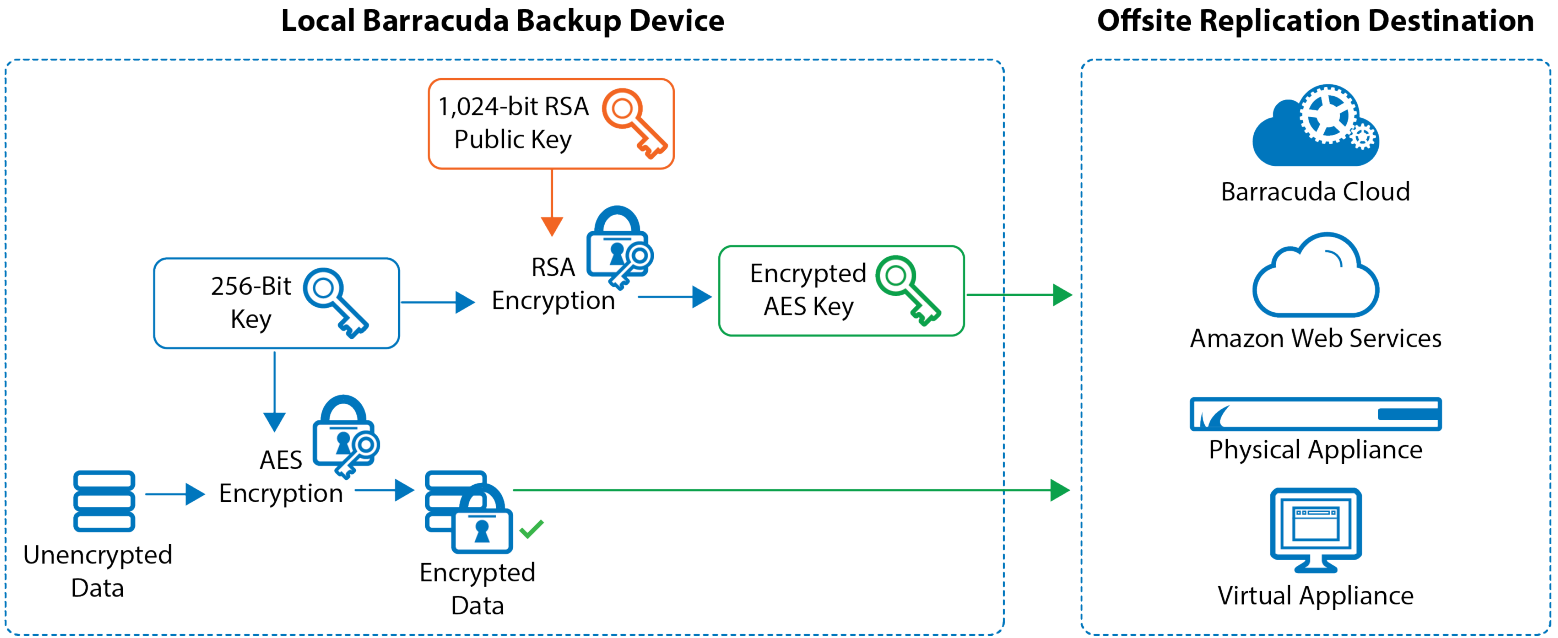
- In ESS:
  1. New message content filter
  2. Set a universal filter
  3. Choose Encrypt as the action
- Predefined filters:
  - HIPAA, credit cards, social security numbers, privacy

  4. In CAS: enable encrypted messages

ESS
Barracuda
Email Security Service

CAS
CLOUD
Barracuda
Cloud Archiving Service

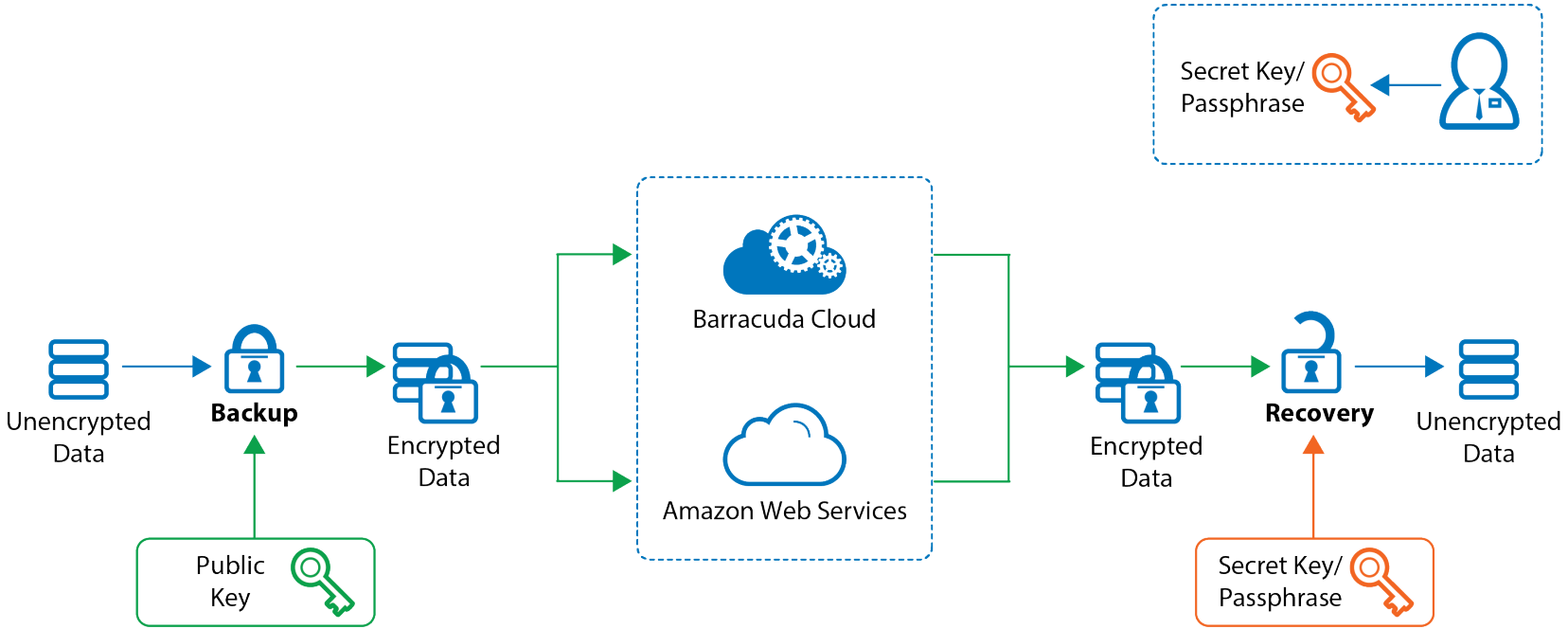
GDPR: Encryption Support in Barracuda Backup



GDPR: Encryption Support in Barracuda Backup

- Barracuda Backup, including the Barracuda Backup Agent for Windows and Linux, can protect files, servers, and virtual machines (VMs) that use various encryption methods such as file-, disk-, and volume-based encryption.
  - File-based encryption
  - Disk and volume encryption
  - Virtual machines
  - Microsoft BitLocker Drive encryption

GDPR: Private Encryption in Barracuda Backup



GDPR – Erasure Requests

Policy for removal

- Search can be used to find and remove mails belonging to individuals
- Search as a user (e.g., forensic investigation):
  Can show messages accessible to selected user

How does this affect the archive‘s integrity?

GDPR/Litigation – Exporting Emails

1. Execute search
2. From results, export one or more of these messages as a PST or ZIP file
3. Download from Tasks tab

The desired messages are gathered into a single .pst or .zip file:

- **Export Name** – A label used to identify this export task
- **Export Type** – The format used to export messages:

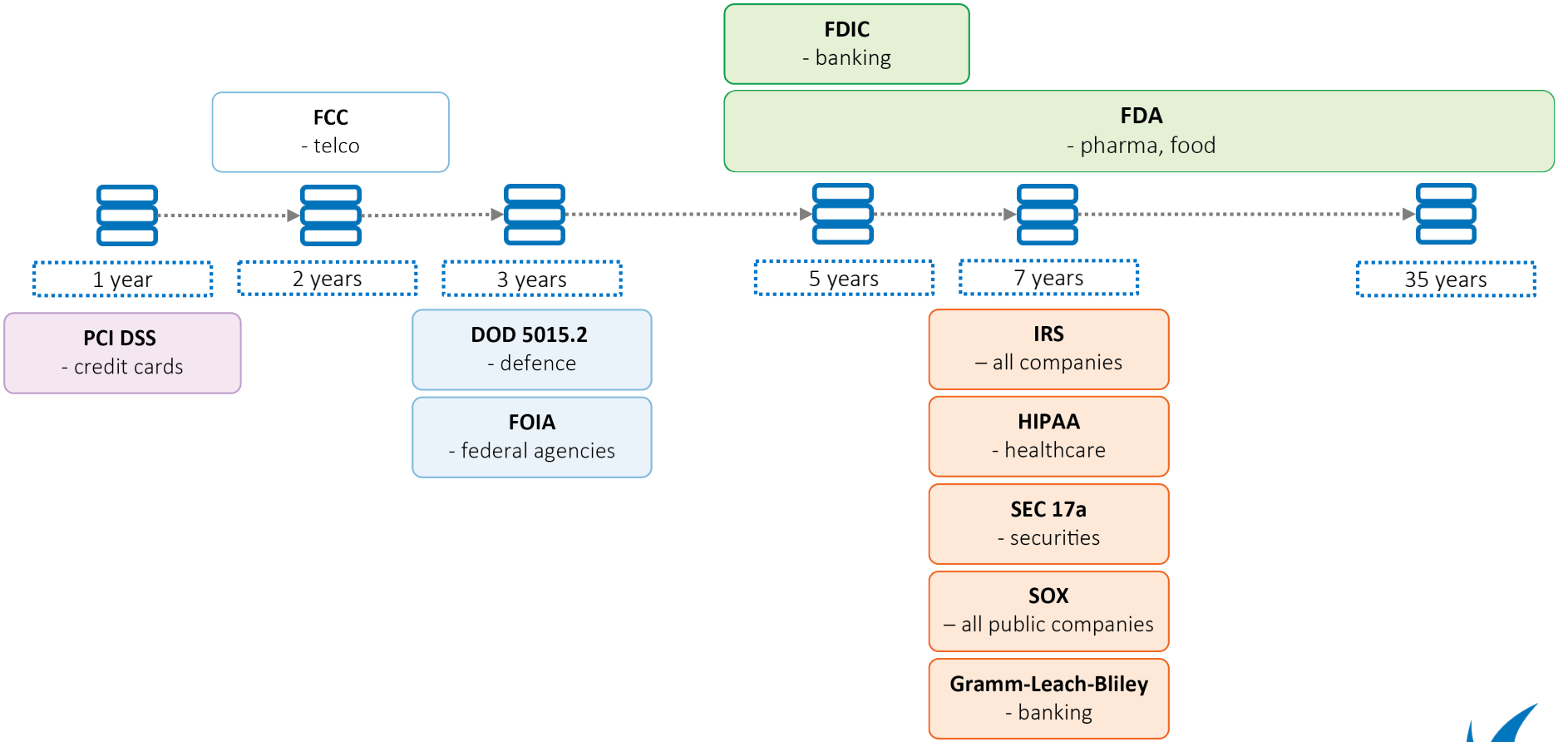
- A single PST file suitable for loading into Microsoft Outlook
- A single ZIP file containing individual EML files for each message

Possible Implications of GDPR

- Encryption becomes the “new normal”
- New compliance roles in organizations and companies
- Integrated Risk Management joining different functions
- Another factor pushing SMEs towards managed services in cloud
- Necessary to have semantic links for retrieval, e.g., for tagged pictures
- Potential conflicts with national legislation (traceability vs erasure)

Retention

Standards and Recommendations for Retention



Designing Retention Policies

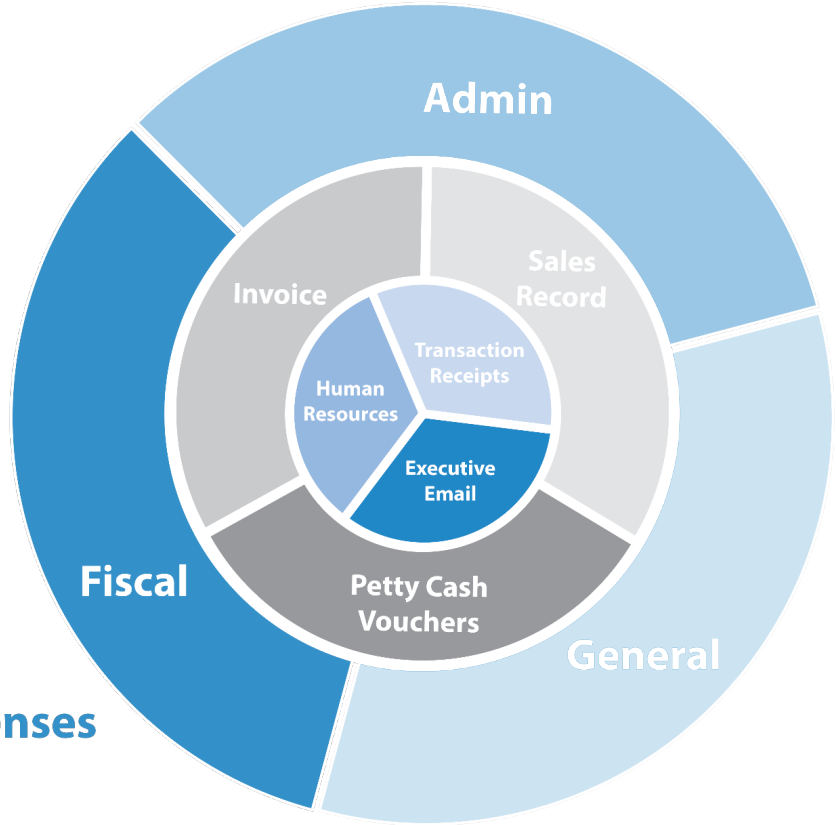
- Segmentation by type of content
  - Invoice, sales record, petty cash vouchers
- By type of use
  - Admin, fiscal, general
- By mixed criteria
  - Human resources, transaction receipts, executive email

Example Word Cloud (HR)

Setting Retention Policies

- Retention
  - Automated archived message purging in CAS every Friday evening
  - Exceptions are generated as policy, via Saved Search
  - Longest policy length applies if more than one criteria
  - Saved Search takes precedence

Saved Search Use Cases



Setting Alerts

- Hourly, daily, or weekly notifications based on policy
- Used for monitoring new and existing messages

Advanced Functions Supporting Compliance

Advanced Search Methods

Search can be used to:

- Manage storage requirements – e.g., by removing attachments
- Handle and provide access to group information
- Incorporate different parts of organization on topic basis

Implementing an Audit Hold

Litigation Hold

- Created by auditors only, when enabled
- Prevents deletion of messages that meet Saved Search criteria
- Can define expiry date for hold

Audit Log

- Record of actions by all users
- Full visibility of actions in CAS
- In addition:
  - Standard web server logging (IP addresses and HTTP requests)

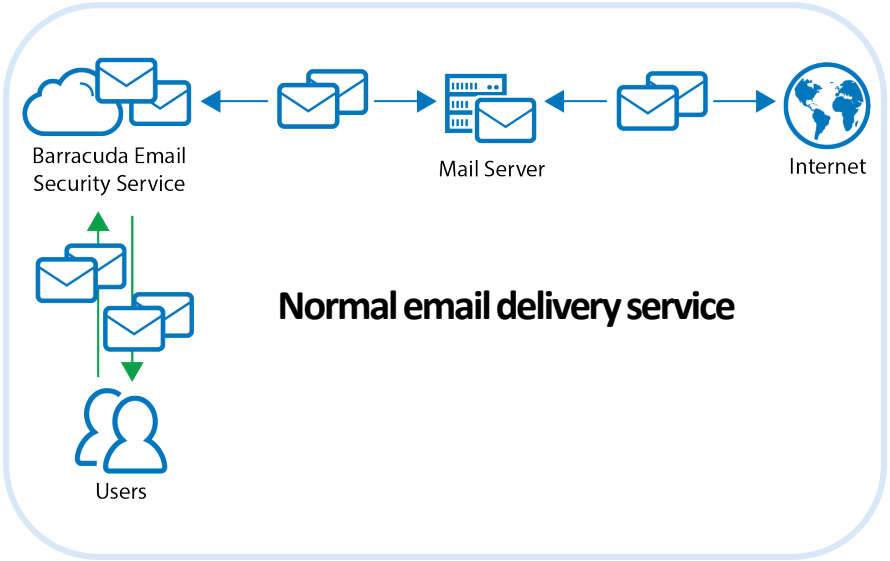
Calculating Storage Requirements

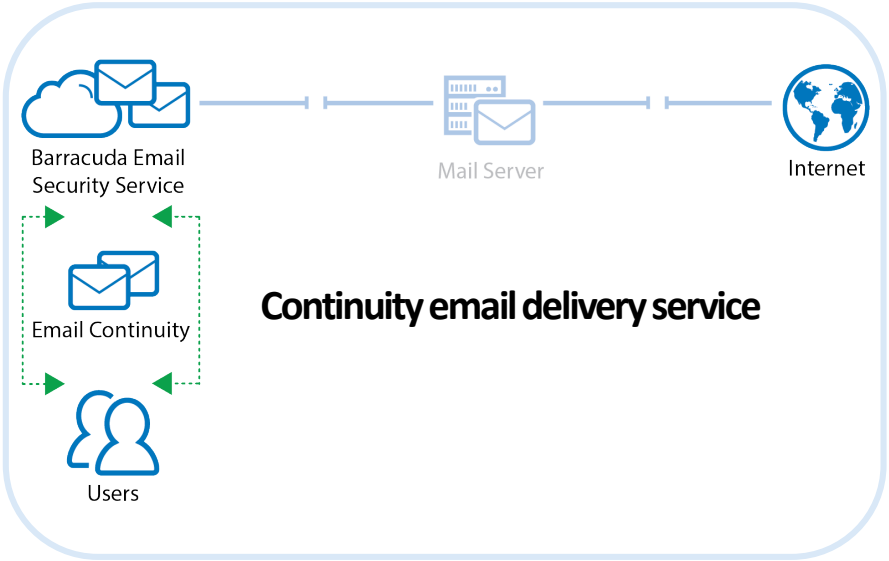
Helps ensure archive security:

- Stubbing adds predictability to storage requirement planning
  - Office 365 – Administrators can use Excel reports to calculate usage
  - Office 365 for Business – Reporting to show existing mailbox size

Email Continuity

Protects email during outages





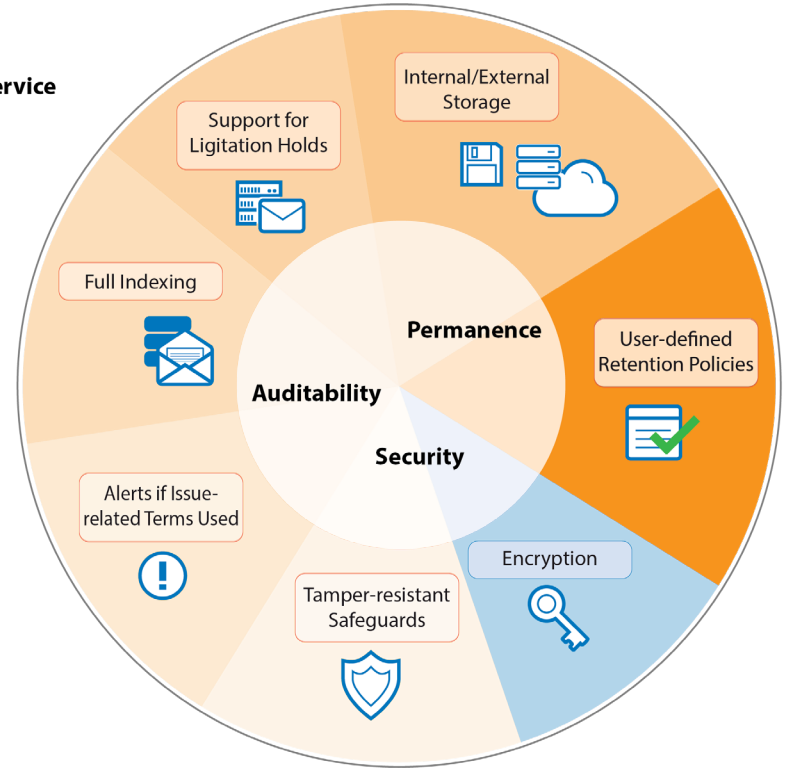
Standards of Barracuda Cloud Provision

- Can export data in mainstream formats
- Can do full delete of data
- Full audit log/web server log
- Country-specific hosting: EU, UK, US, and soon Australia
- Transfer of data limited to appropriate countries
- Emergency response to potential threats

In Summary

Functionalities in CAS and ESS supporting regulatory compliance

Cloud Archiving Service



Email Security Service


Thank you
Barracuda
TECHSUMMIT19
BARRACUDA TECHNICAL SUMMIT