CompTIA Security+ Exam SY0-701

Lesson 16

Summarize Data Protection and Compliance Concepts

Lesson 16

Topic 16A

Data Classification and Compliance

Data Types

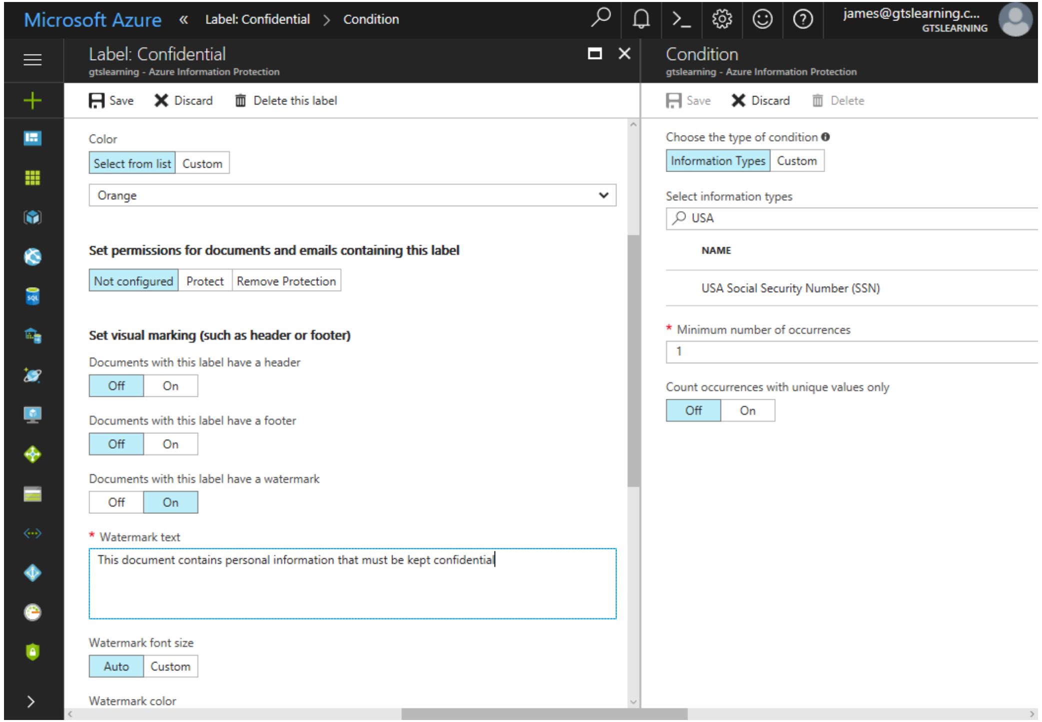
Categorizing or classifying data based on its inherent characteristics, structure, and intended use

- Regulated Data
- Trade Secrets
- Intellectual Property
- Legal and Financial Data
- Many Others

Data Classifications

Identifying the importance and associated protections required to protect different types of data.

Typically defined in 3 levels



Label: Confidential
gtslearning - Azure Information Protection

Color
[✓ Select from list] Custom
Orange

Set permissions for documents and emails containing this label
[✓ Not configured] Protect Remove Protection

Set visual marking (such as header or footer)

Documents with this label have a header
[✓ Off] On

Documents with this label have a footer
[✓ Off] On

Documents with this label have a watermark
Off [✓ On]

* Watermark text
This document contains personal information that must be kept confidential

Watermark font size
[✓ Auto] Custom

Watermark color

Condition
gtslearning - Azure Information Protection

Choose the type of condition
[✓ Information Types] Custom

Select information types
USA

NAME
USA Social Security Number (SSN)

* Minimum number of occurrences
1

Count occurrences with unique values only
[✓ Off] On

Using Microsoft Azure Information Protection to define an automatic document labeling and watermarking policy. (Screenshot used with permission from Microsoft.)

Data Sovereignty and Geographical Considerations

Data Sovereignty

A legal jurisdiction restricting processing and storage of data on systems that do not physically reside within that jurisdiction

Geographical Considerations

Organizations must ensure data remains within a designated boundary

Access controls to validate a user's geographic location

Privacy Data

- Personally identifiable or sensitive information associated with an individual's personal, financial, or social identity
- Data that could infringe upon an individual's privacy rights, if exposed or mishandled
- Data protection and privacy laws safeguard both data types
  - Rapidly evolving legal environment

- Privacy data is closely associated with the rights of individuals to control the use and disclosure of their personal information
- Individuals have the right to access, correct, and request the deletion of their privacy data

Privacy Data

Legal Implications

- Protecting privacy data carries significant local, national, and global legal implications
- Many countries have specific privacy laws and regulations that dictate how personal data should be handled within their jurisdiction
- The General Data Protection Regulation (GDPR) in the European Union has had a substantial impact globally by setting high privacy and data protection standards.
- GDPR applies to organizations that process the personal data of EU residents, regardless of their physical location.

Roles and Responsibilities

- Data Controller and Data Processor
  - Both roles are responsible for ensuring personal data protection in compliance with data protection laws and regulations.
- Data Subject

Privacy Data

Right to Be Forgotten

- Fundamental principle outlined in the General Data Protection Regulation (GDPR)
- Grants data subjects the right to request the deletion of their personal data under certain circumstances

Ownership of Privacy Data

- It is not easy to attribute traditional notions of ownership to privacy data
- Many data protection laws place the emphasis on protecting the data subject

Data Inventories and Retention

- Detailed record of personal data being collected, processed, and stored
- Retain personal data only for as long as necessary to fulfill the intended purpose or as required by law

Privacy Breaches and Data Breaches

When information is read, modified, or deleted without authorization

Organizational Consequences

- Reputation damage
- Identity theft
- Fines
- Intellectual Property (IP) theft

Breach Notification

- Requirements for different types of breach are established in laws and in regulations
- Public Notification and Disclosure

Compliance

Security compliance refers to organizations' adherence to applicable security standards, regulations, policy and best practices

Compliance Issues

- Legal & Regulatory Noncompliance
- Software Licensing
- Contractual Noncompliance

Monitoring and Reporting

Systematically assessing, evaluating, and reporting an organization's adherence to laws, regulations, contracts, and industry standards

- Internal and External Compliance Reporting
- Compliance Monitoring

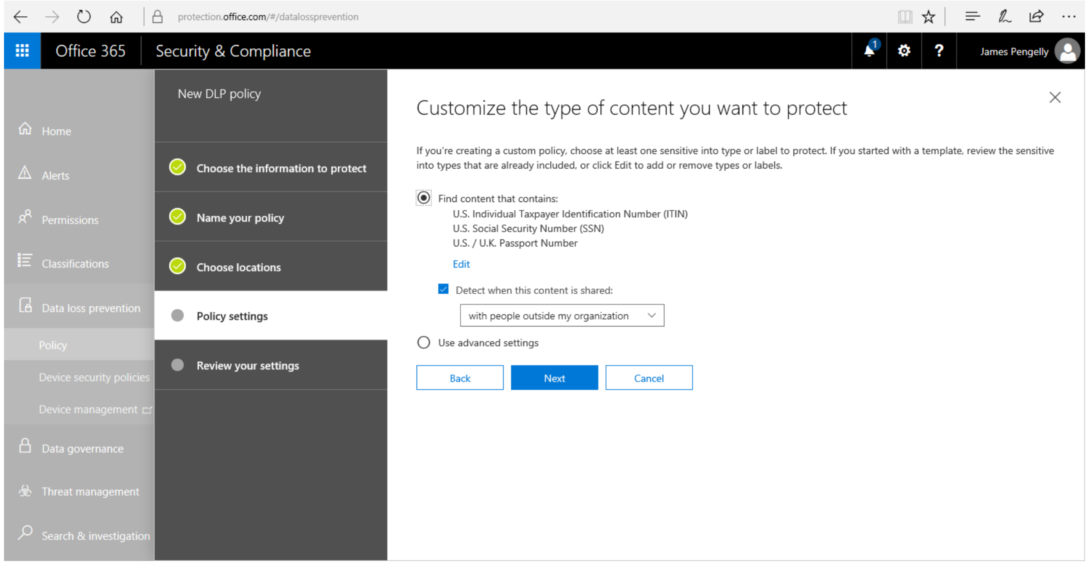
Data Protection and Data Loss Prevention

Data requires different protection methods for each state

- Data at rest
- Data in motion
- Data in use

Data Loss Prevention

Automates the discovery and classification of data types and enforce rules so that data is not viewed or transferred without a proper authorization.



Customize the type of content you want to protect

If you're creating a custom policy, choose at least one sensitive into type or label to protect. If you started with a template, review the sensitive into types that are already included, or click Edit to add or remove types or labels.

● Find content that contains:
U.S. Individual Taxpayer Identification Number (ITIN)
U.S. Social Security Number (SSN)
U.S. / U.K. Passport Number

Edit

☑ Detect when this content is shared:
with people outside my organization

○ Use advanced settings

Creating a DLP policy in Office 365. (Screenshot used with permission from Microsoft.)

Review Activity: Data Classification and Compliance

- Data Types
- Data Classifications
- Data Sovereignty and Geographical Considerations
- Privacy Data
- Privacy Breaches and Data Breaches
- Compliance
- Monitoring and Reporting
- Data Protection
- Data Loss Prevention

Lesson 16

Topic 16B

Personnel Policies

Conduct Policies

Operational policies include credential management, data handling, incident response and those those governing employee conduct and respect for privacy

- Acceptable Use Policy
- Code of Conduct
- Social Media Use and Analysis
- Use of Personally Owned Devices
- Clean Desk Policy

User and Role-Based Training

Untrained users represent a serious vulnerability because they are susceptible to social engineering and malware attacks and may be careless when handling sensitive or confidential data.

Appropriate security awareness training needs to be delivered to employees at all levels, including end users, technical staff, and executives.

Training should be tailored to the audience and job role

Training Topics and Techniques

Popular Techniques

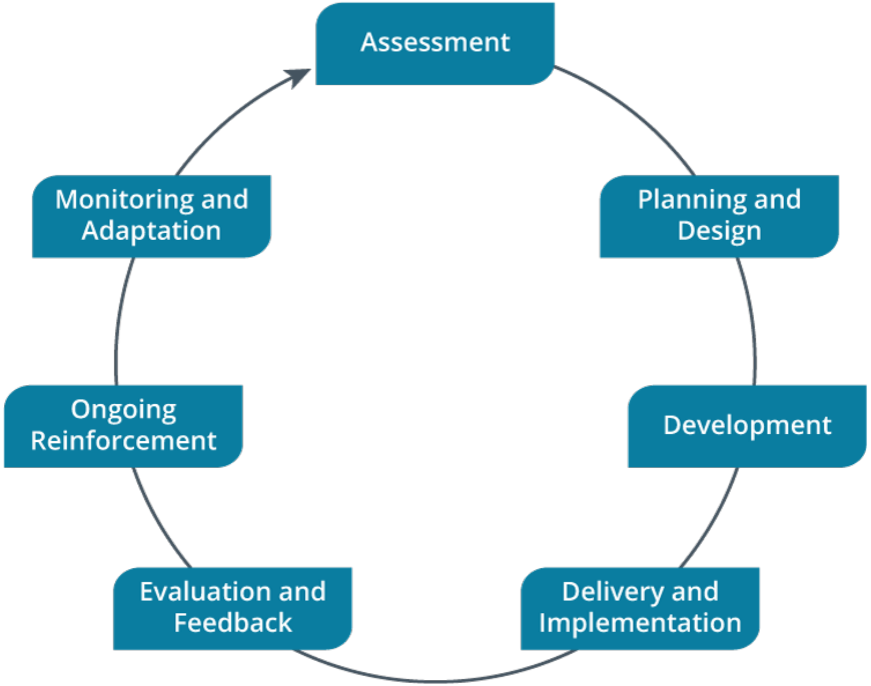
- Computer-Based Training
- Gamification
- Phishing Campaigns

Topics

- Situational Awareness
- Reporting and Escalation Procedures
- Policy/Handbooks
- Insider Threat
- Password Management
- Removable Media and Cables
- Hybrid/Remote Work Environments

Security Awareness Training Lifecycle

Security awareness training practices should follow a lifecycle approach consisting of several stages.



Security Awareness Training Lifecycle.

Review Activity: Personnel Policies

- Conduct Policies
- User and Role-Based Training
- Training Topics and Techniques
- Security Awareness Training Lifecycle

Lab Activity

- Assisted Lab: Training and Awareness through Simulation
- Challenge Lab: Discovering Anomalous Behavior

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Summary