









Objective: 5.1 Understand the importance of data privacy and protection.

• Privacy vs. security



Data Privacy and Security

- Privacy vs. security
 - Privacy is about the individual
 - Security is about the data
- Privacy vs. confidentiality
 - Confidentiality is about the data
 - Privacy is about keeping an individual's identity secure
- Data security is protected through controls
- Privacy has to do with data usage



Data Privacy and Security

- Types of data
 - Personal
 - Personal health
 - Financial
 - Copyrighted
- Legal requirements for data
 - GDPR
 - HIPAA
 - US copyright law
 - PCI DSS





Objective: 5.1 Understand the importance of data privacy and protection.

- Non-technical controls
- Classification
- Ownership
- Retention
- Data types
- Retention standards
- Confidentiality
- Legal requirements
- Data sovereignty
- Data minimization
- Purpose limitation
- Non-disclosure agreement (NDA)



Nontechnical Controls

- Data ownership
- Data classification
- Data confidentiality
 - Nondisclosure agreement (NDA)
- Data sovereignty
 - Principle behind GDPR
- Data minimization
- Data purpose limitation



Data Retention

- Standards
 - What data do we keep?
 - How long do we keep this data?
 - Where do we keep this data?
 - How do we delete data?



Data Retention

- Taxonomy
 - How data is stored and organized for future recall
- Normalization
 - Makes it possible to relate data and extract meaningful reports
- Indexing
 - Way of organizing data for searchability and rapid recall





Objective: 5.1 Understand the importance of data privacy and protection.

- Technical controls
- Encryption
- Data loss prevention (DLP)
- Data masking
- Deidentification
- Tokenization
- Digital rights management (DRM)
 - Watermarking
- Geographic access requirements
- Access controls



Technical Controls

- Access controls
 - Limit access to certain resources
 - Identification, authentication, authorization
- Encryption
 - Protects confidentiality
- Sharing data while preserving privacy
 - Data masking
 - Deidentification
 - Tokenization



Technical Controls

- Digital rights management (DRM)
 - Watermarking
 - Geographic access requirements
 - Geoblocking



Technical Controls

- Data loss prevention (DLP)
 - Process:
 - Create data inventories
 - · Monitor data flows
 - Implement, test, tune
 - DLP solution placement
 - Network DLP (NDLP)
 - Endpoint DLP
 - Hybrid DLP

