



GÉANT

Data Classification Tool

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2nd EUNIS and GEANT joint 2 hours workshop

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www.geant.org

Data classification

- Data are assets
- Data classification
 - Part of data management and asset management
- Data classification tool
 - Helps to understand the data
 - Assess their sensitivity and criticality
 - Estimate the risks of putting data into a cloud

- Link:

<https://clouds.geant.org/data-classification-for-cloud-services/>



Risk assesment

LOW RISK

Data for public use

Loss of confidentiality, integrity, or availability of the data or system has no significant impact

MEDIUM RISK

Personal data

Data is not generally available to the public

Loss of the data could have a mildly adverse impact

HIGH RISK

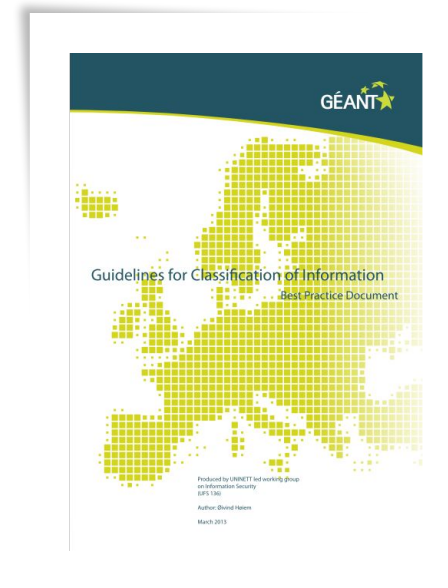
Sensitive personal data

Confidential data

Loss of the data could have a significant adverse impact

Data classification

- Best Practice Document
Guidelines for Classification of Information, UNITETT, 2013
 - Recommendation on how to classify information
 - Examples of how information objects can be classified
 - References to relevant standards, laws and regulations (Data privacy act, Freedom of Information Act, Public Administration Act)



Data classes relevant to security

- **Confidentiality**
 - 1 - Open, 2 - Restricted, 3 - Confidential
- **Integrity**
 - 1 - Low, 2 - Medium, 3 - High
- **Accessibility**
 - 1 - Low, 2 - Medium, 3 - High
- **Storage Period**
 - 1 - Temporary, 2 - Fixed, 3 - Variable, 4 - Permanent
- **Storage Location**
 - 1 - Any, 2 - EU, 3 – National
- **Disposal rules**
 - 1 - Low, 2 - Medium, 3 - High



Data classes relevant to security

- Excel file (downloadable)
- Set of questions
- Formulas to map answers into classes



DATA CLASSIFICATION QUESTIONS	Repository of doctoral thesis	Research project Raw data from IoT	Research project Scientific paper	Network Management monitoring	Network Management eduroam logs	Network Management router config files	Network Management reports to customers	ERP system Financial data
	(y/n)	(y/n)	(y/n)	(y/n)	(y/n)	(y/n)	(y/n)	(y/n)
Confidentiality (1 - Open, 2 - Restricted, 3 - Confidential)	Open	Restricted	Confidential	Restricted	Confidential	Confidential	Open	Confidential
Can data be accessed publicly without special access rights (user credentials)?	y	n	n	n	n	n	y	n
If not, does the data considered contain:								
data related to research projects shared with the project participants		y	y					
financial data (e.g. budget planning, accounting reports)								y
personal identifiable data (e.g. customer data, employee data, mail, accounting data, disciplinary matters, qualifications...)					y			
sensitive personal data (e.g. physical or mental health data, ethnic, political, ...)				n				y
Data related to corporate secrets (e.g. formulas, procedure descriptions, contracts, finance, exam questions...)			y	n		y		
Is the data confidentiality directly associated with mission-critical business process, legal requirements or contractual obligations to the users?	y			n	y	y		y
Integrity (1 - Low, 2 - Medium, 3 - High)	High	Medium	Low	Medium	Medium	Low	Low	High
If the data is considered primary or unique:								
can it be recollected/reproduced identically with acceptable cost or reputation loss?		y		y	y			n
If the data is NOT considered primary or unique (secondary data):								
can it be restored identically with no or low cost or reputation loss (e.g. backup data)?			y			y	y	
can it be restored identically with acceptable cost or reputation loss (e.g. recalculating primary data)?	y							
Can data changes or destruction be promptly/automatically detected?	n	y						
Is the data integrity directly associated with mission-critical business process, legal requirements or contractual obligations to the users?	y							y
Accessibility (1 - Low, 2 - Medium, 3 - High)	Medium	Medium	Medium	High	High	Medium	Medium	High
Is data processed permanently in real-time, so the maximum down-time must count in seconds or minutes (i.e. log archiving)?	n			y	y		n	
If not, is data processed occasionally:								
periodically in fixed intervals (e.g. hourly, daily, monthly) or on scheduled dates (e.g. 3:00 a.m., reporting, backup)						y		
regularly but not in fixed intervals (e.g. online exams)	y	y	y					y



Thank you

Any questions?

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