Company, Application, Data Security and Privacy

LUCYs Security & Privacy Policies

Organization of Risk & Information Security

Questions	Response	Comments
Is there a comprehensive, documented information security & privacy policy in place?	yes	Yes, "Management-Handbook-Security-Policy" and a GDPR Code of Conduct for LUCY Employees
Are the policies communicated to all individuals with access to IT systems or access to tenants data?	yes	Personal information, part of the employee contract, availability for everybody
Is there a comprehensive, documented information security concept including access management for your service in place?	yes	Tenant Model, Role Model and ACL in Place (Access control list)
Is a risk management process implemented dealing with the periodical identification, valuation of risks and the implementation of mitigation controls?	yes	It's in Management Handbook Security Policy. Each employee is encouraged to report risks. This applies in particular to IT and Cyber risks. A risk catalog is kept. At least once a year a risk assessment is carried out. The obligation is with the DPO / Chief Security and Risk Officer.
Is a periodic assessment conducted of how well the security policies and procedures are respected within the company?	partially	We have two roles DPO & CSRO (chief sec and risk officer). There's a regularity done by the CSRO himself. .

Allocation of information security responsibilities

Questions	Response	Comments
Do you have a dedicated person or team that is formally chartered with responsibility for information security?	yes	dpo at lucysecurity dot com

Allocation of IT risk management responsibilities

Questions	Response	Comments
Do you have a dedicated person or team that is formally chartered with responsibility for IT risk management?	yes	dpo at lucysecurity dot com

Security Audits

Questions	Response	Comments
Do you regularly conduct internal/external audits?	Annually	Internal Audit

Providers & external Suppliers

Physical Protection

Physical entry controls

Questions	Response	Comments
Is physical access to buildings that house critical IT facilities restricted to authorized individuals?	yes	Access to the building is possible with a fingerprint in addition to an RFID key card. Without it no access is not possible.

Policy for DC and IT System access

Questions	Response	Comments
Are policies and procedures implemented to specify proper use of and access to IT systems and network components.	yes	Access to Routers / Network components is only possible through a separate VPN network. Authentication on Firewalls / Routers is only possible through SSH-Key. All Logs are stored on a separate logging device, all configuration changes are monitored, saved and alerted. Physical Access is only possible for certified network admins.

Secure disposal or re-use of IT equipment

Questions	Response	Comments
Is a secure decommissioning process in place? (E.g. wiping data from old hard drives, secure deletion of network configurations from routers.)	yes	We don't apply secure deletion. When applying dedicated deletion orders it is done with an overwrite routine using shred (Linux Software).

Human Resources Security

Roles and responsibilities

Questions	Response	Comments
Are security roles and responsibilities of employees defined and documented?	yes	A member of the top management.

Security awareness of LUCY staff

Questions	Response	Comments
Is staff made aware of the key elements of information security and why it is needed (i.e. segregation of duties, need to know)?	yes	All staff that has any relation to the software code and our infrastructure (software engineers, QA engineers, support engineers, system admins, etc) pass internal information security courses.

Questions	Response	Comments
Are service administrators properly educated on their responsibilities with regard to security?	yes	All employees are getting an internal lesson on cybersecurity and passing security courses that include basic vulnerabilities overview, penetration technologies, mitigation methods, etc. It is an internal training based on the one-to-one introduction and a combination of Webinars / Practical Laboratory courses using Kali Linux.

Identity and Access Management

Authentication

Questions	Response	Comments
Which method is used to authenticate a user against the provided service (user ID/password, OTP, SMS, etc.).	yes	Username & Password and we use SMS-based one-time passwords.

Access control policy

Questions	Response	Comments
Is the access to the service and data restricted to authorized individuals and based on an established access control policy?	yes	Physical access is protected with a fingerprint in addition to an RFID key card and the keys of the rack. "Virtual" access via SSH-Keys. No written policy for that and not mandatory for a company of this size.
Do access control arrangements restrict access to only approved system capabilities?	yes	Physical access is protected with a fingerprint in addition to an RFID key card and the keys of the rack. "Virtual" access via SSH-Keys. No written policy for that and not mandatory for a company of this size.

Data access

Questions	Response	Comments
Is a Data Loss Prevention System in use? Who has the ability to accesses tenant data?	no	NO DLP System is in place and no alerting system is used at LUCYs promises

Data integrity

Questions	Response	Comments
Are controls implemented to confirm that customer data has not been improperly altered or destroyed	yes	NO DLP System is in place and no alerting system is used at LUCYs promises

Password policy

Questions	Response	Comments
Will the allocation of passwords be controlled through a formal password policy process?	partially	When choosing passwords they need to have more than 8 characters and they must be a mix of capital/lower letters, numbers and special characters. If there is a possibility for two-factor authentication (2FA), then 2FA should be applied.

User registration & management

Questions	Response	Comments
Is there a formal user registration and de-registration procedure in place for granting and revoking access to all systems and services and to tenants data?	yes	An engineer may obtain access to a single tenants data only in case there is a need for maintenance, based on tenants request. An engineer sends a request to the systems admin or to the tenants responsible person (there is an option to grant access from the tenant's side). The permission is immediately revoked after the maintenance is finished. The permissions are granted and revoked within a few minutes.
Is a user management process in place (creation, revocation, provisioning, and termination of rights, etc.)?	yes	After contract termination the LUCY Server Instance is safely reset. This is a built-in and secure feature in LUCY Server. https://www.lucysecurity.com/PS/doc/dokuwiki/doku.php?id=factory_reset

Session time-out

Questions	Response	Comments
Do inactive end-user sessions shut down after a defined period of inactivity?	yes	The end-user session terminates after 1 hour of inactivity

Vulnerability Reporting and Management

Alerting

Questions	Response	Comments
Do you have an easy way for externals to report security vulnerabilities in your systems?	yes	Write a mail to support@lucysecurity.com or dpo@lucysecurity.com . Every employee needs to react as stated in the GDPR code of contact

Information about inappropriate access

Questions	Response	Comments
Will you share user entitlement remediation and certification reports with your tenants, if inappropriate access may have been allowed to tenant data?	yes	With a dedicated form, within 72 hours after discovery

Notification of customers

Questions	Response	Comments
Do you inform your customers about vulnerabilities in your products once you had a chance to address them, regardless of whether they were discovered internally, or reported to you?	yes	with a dedicated form and a direct mailing put in place already

Operations Management and Security Controls

Separation of development, test and operational facilities

Questions	Response	Comments
Are development, test and operational facilities separated from each other to reduce the risk of unauthorized access or change to the operational environment.	yes	Operational facilities are completely separated.

Network hardening

Questions	Response	Comments
Is hardening for Firewalls and Routers performed?	yes	On all routers and firewalls, management access is only possible via VPN. There are separate users for monitoring and configuration. All configuration changes are automatically reported and saved. In general, all firewalls and routers only run SSH for management access and otherwise only the necessary routing processes such as BGP, OSPF or just the firewall software.

Operating system hardening

Questions	Response	Comments
Is an operating system hardening performed for all systems involved?	yes	OS is protected by internal firewall (iptables), SSH access keys are randomly generated, removed USB/firewire drivers, the app runs under a limited user account, etc.

Application Server hardening

Questions	Response	Comments
Is hardening performed for all relevant application server?	yes	App servers are hardened using common approaches: proper file permissions, non-privileged account, removed version banner, disabled directory indexes, disabled ETags, secure cookie flags, etc. The system partially conforms to "CIS Debian 8" checklist (50% conformance), we can provide a detailed list of non-conforming items upon request.

Database hardening

Questions	Response	Comments
Is hardening performed for all relevant database management systems?	yes	Only local connections are allowed and the system partially conforms to "CIS PostgreSQL 9.5" checklist (50% conformance), we can provide a detailed list of non-conforming items upon request.

Security Updates

Questions	Response	Comments
Is a process in place to install emergency patches outside of the regular patching schedule for security updates that address high-risk vulnerabilities?	yes	Critical and high-risk patches are issued within 24 hours, medium - up to 1 week, low-risk - up to 1 month

Vulnerability management

Questions	Response	Comments
Do you regularly perform penetration tests on all systems relevant to your service?	yes	We use various web application vulnerability scanners and OS security auditing tools (Burp Suite, OpenVAS, Lynis, Nessus). Even though we've done our own human-based penetration tests in the past we do not perform human-based penetration assessment on a regular basis.
How often are penetration tests done for the above scope (on average)?	yes	LUCY software is not a classic SaaS Plattform or Software. We do not perform penetration tests on client production instances. We release new Major updates of the software every 1-2 months, the software is mostly distributed as a virtual appliance (VMWare ESXi or Amazon image) and the process of automated penetration testing is tied to the release process - we perform such testing on the final stage of the release lifecycle. The set of application versions and software configurations of the version we are going to roll out exactly corresponds to the state of all systems after they migrate to the new version. For example, we are preparing version 5.0 for release and run penetration tests against it, within a virtual appliance. After all tests passed and all vulnerabilities are closed, we release the update, which is distributed over all existing software installations on different servers. All existing installations switch their state (install all required packages, remove old ones, change configuration, etc) to the state of the new version automatically, so all vulnerabilities closed on the pre-release stage will be closed on all tenants servers automatically. We never change anything on tenants servers directly.

Security incident detection and correlation

Questions	Response	Comments
Does your infrastructure include a capability for security incident detection e.g. file integrity (host) and network intrusion detection (IDS) tools?	partially	These tools are used on infrastructure servers. Workstation installations do not have file integrity or IDS tools installed.

Protection of data storage media

Questions	Response	Comments
Is tenets data held on data storage media (including magnetic tapes, disks, printed results, and stationery) protected against corruption, loss or disclosure?	yes	Tenants data is entirely stored on a disk on the server, and the only measure against data loss we perform _by default_ is a local daily database backup, which can help to prevent minor data loss. As an additional measure, we can set up RAID0 or RAID5 array, which can add an additional layer of protection against data loss or corruption. There is no access to other storage media from the server. The information in DB is encrypted using AES-256 (so it's stored int he encrypted form) and the key is built into the application, so there's minimal protection from data disclosure.

Malware/ Defacement

Questions	Response	Comments
Are controls in place to protect the service and our tenants from malware?	yes	Infrastructure servers have anti-malware software installed.

Security gateways

Questions	Response	Comments
Is network traffic routed through security gateways like web application firewalls or reverse proxies, prior to being allowed access to target service?	partially	WAFs and reverse proxies are used on infrastructure servers, though that is not the case on workstation installations.

Data encryption

Questions	Response	Comments
Do you encrypt tenant data in storage and server side?	yes	Data is encrypted using AES-256. The application server gets data over HTTP/TLSv1.1+ connection and operates the data in cleartext form. The information is encrypted by the application before storing it into the DB, so the DB engine receives the information in an encrypted form (and therefore stores it to the storage media). The application decrypts the information from the DB before processing it. There are no other types of encryption beyond these.

Network encryption

Questions	Response	Comments
Do you encrypt tenant data in transit (network - e.g. TLS)?	yes	The system uses TLSv1.1+

Logging & Monitoring

Questions	Response	Comments
Are a process and audit trails in place to monitor and record exceptions and other security-relevant events to assist in investigations and in access control monitoring?	yes	All actions are monitored and logged in order to help investigating any incidents.

Service Development

Data input and output validation

Questions	Response	Comments
Do you provide secure software development training to your engineers, that teaches them about common threats and countermeasures related to the software they are writing?	yes	Software engineers are trained to avoid OWASP top 10 vulnerabilities identify any existing vulnerabilities and mitigate them during the software development.

Use of productive Data for test purpose

Questions	Response	Comments
Will you use tenant data for testing purposes?	no	

Data input and output validation

Questions	Response	Comments
Are data input and output integrity routines (i.e., reconciliation and edit checks) implemented for application interfaces and databases to prevent manual or systematic processing errors or corruption of data?	yes	Built-in validations in the application

Business Continuity Management

Plans and procedures

Questions	Response	Comments
Has the provider a defined and documented method for coping with a business continuity situation?	no	The software has not mission criticality for the business

Plans and procedures

Questions	Response	Comments
Has the provider implemented, tested and documented a set of procedures and actions for a contingency situation?	no	The software has not mission criticality for the business

Data and production recovery

Questions	Response	Comments
Is the data security ensured by redundant systems?	no	The software has not mission criticality for the business

Crisis management

Questions	Response	Comments
Does the provider have an emergency and crisis management with defined contact people?	yes	It's in LUCYs Management Handbook Security Policy.

GDPR Agreement

Please download our GDPR agreement

here

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