

# HOW BALABIT HELPS TO COMPLY WITH ISO 27001?



## A.5 Information security policies

**A.5.1 Management direction for information security**  
To provide management direction and support for information security in accordance with business requirements and relevant laws and regulations.



## A.6 Organization of information security

**A.6.1 Internal organization**  
To establish a management framework to initiate and control the implementation and operation of information security within the organization.

**Shell Control Box**

- Creates a separate auditor layer above privileged users, segregates the role of IT maintenance and security, audits and controls the work of system administrators.

**syslog-ng**

- Securely transfer log messages to a logserver real-time, preventing the user (or an attacker) from manipulating the logs.
- on the logserver, it can store the logs in encrypted and time-stamped format.

**A.6.2 Mobile devices and teleworking**  
To ensure the security of teleworking and use of mobile devices.

## A.7 Human resource security

**A.7.1 Prior to employment**  
To ensure that employees and contractors understand their responsibilities and are suitable for the roles for which they are considered.

**A.7.2 During employment**  
To ensure that employees and contractors are aware of and fulfil their information security responsibilities.

**A.7.3 Termination and change of employment**  
To protect the organization's interests as part of the process of changing or terminating employment.



## A.8 Asset management

**A.8.1 Responsibility for assets**  
To identify organizational assets and define appropriate protection responsibilities.

**A.8.2 Information classification**  
To ensure that information receives an appropriate level of protection in accordance with its importance to the organization.

**A.8.3 Media handling**  
To prevent unauthorized disclosure, modification, removal or destruction of information stored on media.



## A.9 Access control

**A.9.1 Business requirements of access control**  
To limit access to information and information processing facilities.

**Shell Control Box**

- Granularly controls access to servers, applications and protocol features, based on the identity of the user, or group-memberships.

**A.9.2 User access management**  
To ensure authorized user access and to prevent unauthorized access to systems and services.

**Shell Control Box**

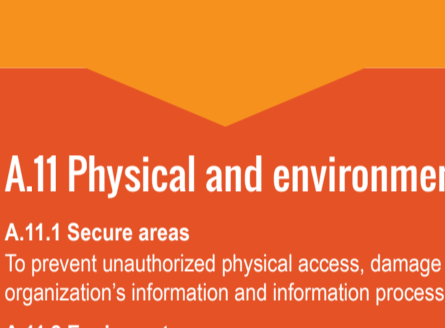
- Controls remote access from a central location,
- enforces strong authentication and authorization,
- provides customized access control to audited systems,
- supports scenarios when the user does not know the credential of the server (removes access rights easy when shared accounts are used).

**A.9.3 User responsibilities**  
To make users accountable for safeguarding their authentication information.

**A.9.4 System and application access control**  
To prevent unauthorized access to systems and applications.

**Shell Control Box**

- Central authentication host
- controls which remote applications or protocol features are available for a specific user.
- enforces strong encryption methods
- enforces strong authentication methods,
- authenticates the users to a LDAP database (for example, Microsoft AD),
- requires to authenticate on SCB using the personal credentials and use different credentials to access the target server,
- uses a password vault to authenticate on the target server.



## A.10 Cryptography

**A.10.1 Cryptographic controls**  
To ensure proper and effective use of cryptography to protect the confidentiality, authenticity and/or integrity of information.

**Shell Control Box**

- Enforces strong encryption methods,
- audit trails can be digitally signed, time-stamped and encrypted,
- requires multiple certificates to be present to decrypt the audit trails (optional).

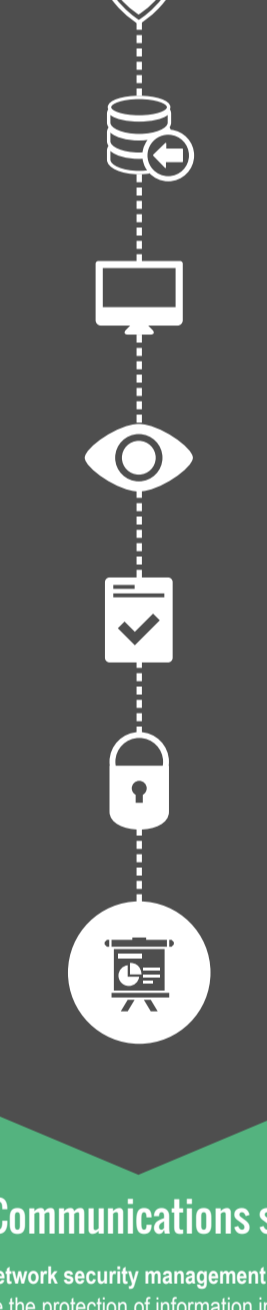
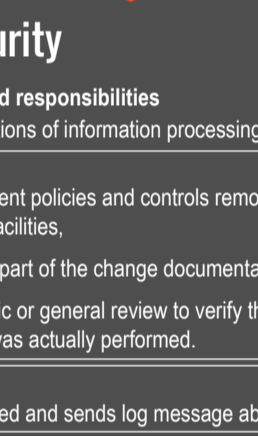
**syslog-ng**

- Enforces strong encryption methods (e.g. disallow weak cipher algorithms, or require mutual authentication between client and server),
- log files can be encrypted, digitally signed and time-stamped.

## A.11 Physical and environmental security

**A.11.1 Secure areas**  
To prevent unauthorized physical access, damage and interference to the organization's information and information processing facilities.

**A.11.2 Equipment**  
To prevent loss, damage, theft or compromise of assets and interruption to the organization's operations.



## A.12 Operations security

**A.12.1 Operational procedures and responsibilities**  
To ensure correct and secure operations of information processing facilities.

**Shell Control Box**

- Controls change management policies and controls remote management of inf. processing facilities,
- changes can be audited, and be part of the change documentation,
- audit trails can be used in forensic or general review to verify that a particular configuration change was actually performed.

**syslog-ng**

- Detects if its configuration changed and sends log message about it.

**A.12.2 Protection from malware**  
To ensure that information and information processing facilities are protected against malware.

**A.12.3 Backup**  
To protect against loss of data.

**A.12.4 Logging and monitoring**  
To record events and generate evidence.

**Shell Control Box**

- Records and audits the actions of privileged users,
- records events can be replayed like a movie,
- operates transparently, so the monitored users have no access to the appliance,
- provides reliable, digitally signed, and encrypted audit trails and reports to prevent manipulation or misuse (strong evidence),
- the events can be reviewed exactly the same way as they happened.

**syslog-ng**

- Collects logs from a wide variety of devices and applications and transfers them to a central logserver,
- allows to access every relevant log message at a single place,
- features "logstore", a binary, encrypted, time-stamped, digitally signed log storage format,
- provides granular, membership-based access control to logs (SSB),
- provides reliable time information about the log message even if the sender's clock is mistimed.

**A.12.5 Control of operational software**  
To ensure the integrity of operational systems.

**A.12.6 Technical vulnerability management**  
To prevent exploitation of technical vulnerabilities.

**A.12.7 Information systems audit considerations**  
To minimize the impact of audit activities on operational systems.

## A.13 Communications security

**A.13.1 Network security management**  
To ensure the protection of information in networks and its supporting information processing facilities.

**Shell Control Box**

- Controls, monitors, and audits the encrypted channels used in remote access,
- enforces strong authentication and authorization methods, incl. gateway authentication, two-factor authentication, and 4-eyes authorization,
- monitors the terminal connections used to access networking devices, such as switches,
- collects configuration changes of Cisco routers,
- prevents the network admins from executing unwanted commands.

**syslog-ng**

- TLS can be used to encrypt the communication between the clients and the log server,
- TLS-encryption also prevents third-parties from modifying the communication,
- The communication between the client and the server can be mutually authenticated using X.509 certificates.

**A.13.2 Information transfer**  
To maintain the security of information transferred within an organization and with any external entity.



## A.14 System acquisition, development and maintenance

**A.14.1 Security requirements of information systems**  
To ensure that information security is an integral part of information systems across the entire lifecycle. This also includes the requirements for information systems which provide services over public networks.

**A.14.2 Security in development and support processes**  
To ensure that information security is designed and implemented within the development lifecycle of information systems.

**A.14.3 Test data**  
To ensure the protection of data used for testing.

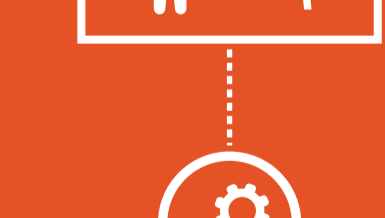
## A.15 Supplier relationships

**A.15.1 Information security in supplier relationships**  
To ensure protection of the organization's assets that is accessible by suppliers.

**A.15.2 Supplier service delivery management**  
To maintain an agreed level of information security and service delivery in line with supplier agreements.

**Shell Control Box**

- Oversees IT services managed by third parties,
- provides detailed audit trails and reports to review the actions of the third parties,
- offers granular access control to limit the access of the third party to the absolutely necessary.



## A.16 Information security incident management

**A.16.1 Management of information security incidents and improvements**  
To ensure a consistent and effective approach to the management of information security incidents, including communication on security events and weaknesses.

**Shell Control Box**

- Records all sessions into searchable audit trails, making it easy to find relevant information during incident investigation,
- audit trails can be browsed online, or followed real-time to monitor user activities
- the audit player replays the recorded sessions just like a movie – all actions of the administrators can be seen exactly as they happened,
- audit trails are indexed which makes the results searchable,
- provides easier postmortem incident analysis, as auditors can access detailed search results,
- the full-text search provide search results ranked by relevance, many powerful query types, and support for non-Latin characters.

**syslog-ng**

- Reliable, secure collection and storage of the log messages,
- uses TLS to encrypt the communication between the clients and the log server,
- TLS-encryption also prevents third-parties from modifying the communication,
- The communication between the client and the server can be mutually authenticated using X.509 certificates,
- log messages can be encrypted using public-key encryption,
- requests time-stamps for the stored data from an external Timestamping Authority (TSA) to include reliable dates in the log files.

## A.17 Information security aspects of business continuity management

**A.17.1 Information security continuity**  
Information security continuity shall be embedded in the organization's business continuity management systems.

**A.17.2 Redundancies**  
To ensure availability of information processing facilities.

**Shell Control Box**

- Supports high-availability configurations (two SCB units operate together in fail-over mode),
- the appliances can be equipped with redundant power units.

**syslog-ng**

- The syslog-ng Store Box supports high-availability configurations (SSB units operate together in fail-over mode),
- the SSB appliances can be equipped with redundant power units.



## A.18 Compliance

**A.18.1 Compliance with legal and contractual requirements**  
To avoid breaches of legal, statutory, regulatory or contractual obligations related to information security and of any security requirements.

**A.18.2 Information security reviews**  
To ensure that information security is implemented and operated in accordance with the organizational policies and procedures.