

SOX404 Control Activities

Security

Governance

- Enterprise security policies, procedures and standards to support information integrity are documented and reviewed periodically.
- Segregation of duties between datacenter/hardware, network, operating system, application and data administration is documented and reviewed periodically.
- Segregation of duties between implementation, testing and authorization is documented and reviewed periodically.

Datacenter/Hardware

- Security changes are appropriately tested and authorized.
- Authorizers are reviewed periodically.
- Security is reviewed periodically.
- Activity is logged and monitored.

Network

- Security changes are appropriately tested and authorized.
- Authorizers are reviewed periodically.
- Security is reviewed periodically.
- Settings and configurations are reviewed and tested periodically.
- Non-standard activity is logged and monitored.
- External security appropriately protects the internal network.

Operating System

- Security changes are appropriately tested and authorized.
- Authorizers are reviewed periodically.
- Security is reviewed periodically.
- Settings and configurations are reviewed and tested periodically.
- Non-standard activity is logged and monitored.
- Anti-virus software is deployed on all desktops and servers and is maintained periodically.

Application

- Security changes are appropriately tested and authorized.
- Authorizers are reviewed periodically.
- Security is reviewed periodically.
- Settings and configurations are reviewed and tested periodically.

Data

- DBMS internal security vs. no internal security.
- Security changes are appropriately tested and authorized.
- Authorizers are reviewed periodically.
- Security is reviewed periodically.
- Settings and configurations are reviewed and tested periodically.
- Non-standard activity is logged and monitored.

Change Management

Governance

- Enterprise change management policies, procedures and standards to support information integrity are documented and reviewed periodically.
- Segregation of duties between datacenter/hardware, network, operating system, application and data administration is documented and reviewed periodically.
- Segregation of duties between implementation, testing and authorization is documented and reviewed periodically.

Datacenter/Hardware

- Changes are logged, tracked, documented, appropriately tested and authorized.
- Environments are separated based on job duties.
- Backout procedures are documented and available to the appropriate individuals.
- Authorizers are reviewed periodically.

Network

- Changes are logged, tracked, documented, appropriately tested and authorized.
- Types of changes include software upgrades & patches and configuration parameters.
- Environments are separated based on job duties.
- Backout procedures are documented and available to the appropriate individuals.
- Authorizers are reviewed periodically.

Operating System

- Changes are logged, tracked, documented, appropriately tested and authorized.
- Types of changes include software upgrades & patches and configuration parameters.
- Environments are separated based on job duties.
- Backout procedures are documented and available to the appropriate individuals.
- Authorizers are reviewed periodically.

Application

- Version control is maintained via migrations.
- Changes are logged, tracked, documented, appropriately tested and authorized.
- Types of changes include software upgrades & patches, internal development and configuration parameters.
- Environments are separated based on job duties.
- Backout procedures are documented and available to the appropriate individuals.
- Authorizers are reviewed periodically.

Data

- Internal change log vs. no internal change log.
- Changes are logged, tracked, documented, appropriately tested and authorized.
- Types of changes include software upgrades & patches, configuration parameters, database structure and data changes done outside secure, controlled and audited applications.
- Environments are separated based on job duties.
- Backout procedures are documented and available to the appropriate individuals.
- Authorizers are reviewed periodically.

Operations

Governance

- Enterprise operations policies, procedures and standards to support information integrity are documented and reviewed periodically.
- Segregation of duties between datacenter/hardware, network, operating system, application and data administration is documented and reviewed periodically.
- Segregation of duties between implementation, testing and authorization is documented and reviewed periodically.

Datacenter/Hardware

- Environmental controls appropriately protect equipment for temperature, humidity, power loss and fire suppression and are tested periodically.

Network

- Appropriate backups are done with media management, retention, secured off-site storage, auditing and testing of media.
- Requestors of backups must be authorized and authorizers are reviewed periodically.
- Schedule changes are authorized and authorizers are reviewed periodically.
- Non-standard events are recorded, analyzed and resolved in a timely manner.

Operating System

- Appropriate backups are done with media management, retention, secured off-site storage, auditing and testing of media.
- Requestors of backups must be authorized and authorizers are reviewed periodically.
- Schedule changes are authorized and authorizers are reviewed periodically.
- Non-standard events are recorded, analyzed and resolved in a timely manner.

Application

- Appropriate backups are done with media management, retention, secured off-site storage, auditing and testing of media.
- Requestors of backups must be authorized and authorizers are reviewed periodically.
- Schedule changes are authorized and authorizers are reviewed periodically.
- Non-standard events are recorded, analyzed and resolved in a timely manner.

Data

- Appropriate logging is enabled
- Appropriate backups are done with media management, retention, secured off-site storage, auditing and testing of media.
- Requestors of backups must be authorized and authorizers are reviewed periodically.
- Schedule changes are authorized and authorizers are reviewed periodically.
- Non-standard events are recorded, analyzed and resolved in a timely manner.