

Practical SQL Server Security, Compliance, and Auditing

UNDERSTANDING REGULATORY COMPLIANCE



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Course



Security

- User Security
- Data Security

Compliance

- Policy
- Agreements
- Professional Standards
- Statutes and Laws

Auditing

- Establishing Proof



Abacos Widgets



Compliance Applies to Nearly All of Us



**Government & Non
Profit**



**Publicly Traded
Companies**



Private Organizations



Major Concerns of Data Compliance and Accreditation Processes



**Securing Sensitive
and/or Personal Data**

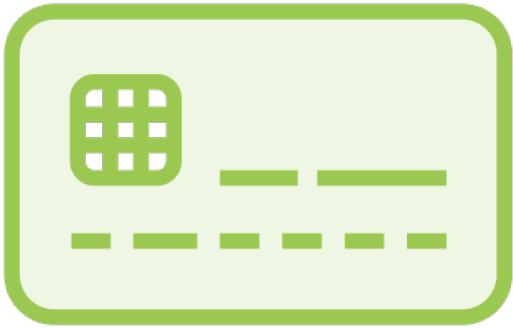


**Organizational
Transparency and
Accuracy**



Auditing

Typical Regulatory Acts and Standards



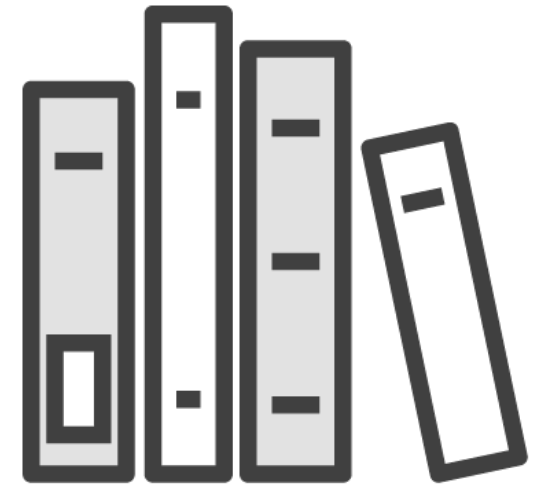
PCI



HIPAA



SOX



Misc.





No matter the compliance category or process, it always comes down to “proving it” during an audit

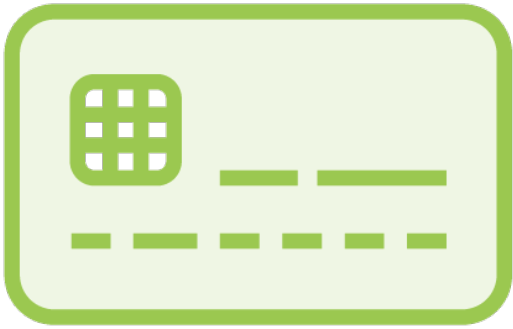
Modules



1. Understanding Regulatory Compliance
2. Implementing Security with Users, Groups, and Roles
3. Modeling Schemas to Support Security Best Practices
4. Protecting Sensitive Data with Encryption
5. Protecting Sensitive Data In-Transit
6. Setting up Compliance Enforcement, Monitoring, and Logging
7. Watching the Watcher with SQL Audit
8. Passing Audits with Compliance Reports and Documentation
9. Miscellaneous Tips and Tricks



Typical Regulatory Acts and Standards



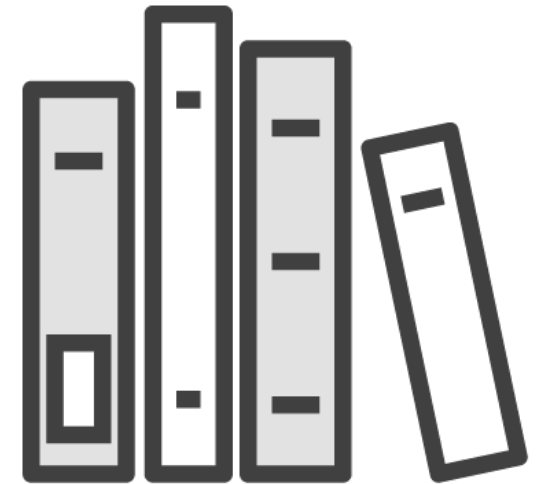
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Health Insurance Portability & Accountability Act

1. Amend Internal Revenue code 1986
2. Improve portability and continuity
3. Combat waste, fraud and abuse
4. Promote medical savings accounts
5. Improve access to long term coverage
6. Simplify administration of insurance
7. Other purposes



Health Insurance Portability & Accountability Act

Title 1

- Health Care Access, Portability, and Renewability

Title 2

- Preventing Health Care Fraud and Abuse; Administrative Simplification; Medical Liability Reform



Title 2

2.1 Privacy Rule

2.2 Transactions and Code Sets Rule

2.3 Security Rule

2.4 Unique Identifiers Rule

2.5 Enforcement Rule



Violations Can Bring

1. Fines and Penalties

2. Criminal Charges

3. Civil Lawsuits

4. Affects Many Organizations



Sarbanes-Oxley Act of 2002

1. Protect shareholders and the general public from errors and fraud
2. Improve accuracy of corporate disclosures
3. SEC administers the act



Sarbanes-Oxley Act of 2002

Result of unethical practices and accounting practices which lost many employee retirement accounts and investments when revealed



Sarbanes-Oxley Act of 2002

Primary tenants of act that concern those who work with databases is ensuring that data is protected by

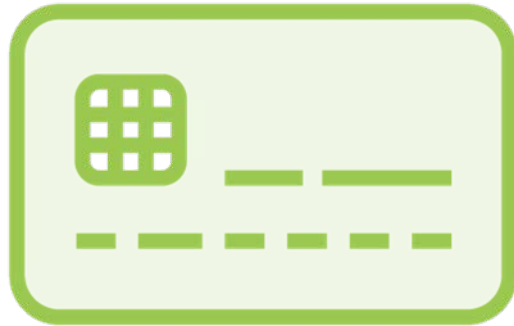
Transparency and Accuracy

Controls

Security

Documentation





PCI-DSS

Payment Card Industry Data Security Standard

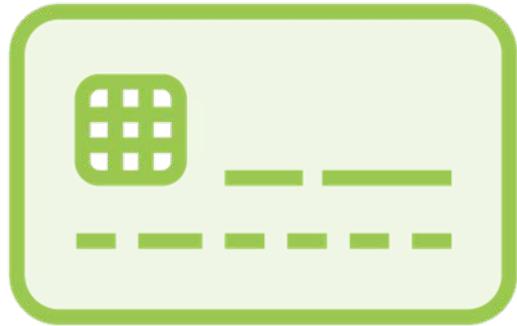
Violations are typically not criminal, but can lead to significant liability or inability to conduct business within the payment industry





Loss of card holder data is often most harshly felt in the court of public opinion and the loss of customer confidence





Security is the primary concern of PCI

- Proving compliance to standards of data security and encryption
- Establishing that environments where card holder data is stored adhere to standards
- Maintaining logs and historical evidence



Internal Policy Compliance and Audits

- Change control management
- Source control management
- Sensitive data
- Backup regularity
- Failover / DR tests

Up Next:

Our First Hands-On Module

Implementing Security with Users,
Groups, and Roles

