

# Your Journey Starts Here.

**Understand Your Security Management Strengths & Weaknesses** 

**Evaluate Performance and Required Next Steps by Security Area** 

## **Build a Security Improvement Roadmap**

The following report is a sample of what you will receive after completing the Security Management Scorecard. Each report is customized to the individual organization highlighting the IT Security Team's most pressing needs.

Complete the diagnostic program to get the data you need to start your security management journey.





# Security Management Scorecard Copy: Inside the Report

1	Understand Your Security Management Strengths & Weaknesses	Once a year, take a step back from day-to-day security operations and look at the big picture.	Measure your security management practices against industry standard best practices	Build your framework for managing & improving security practices over the long term.
2	Evaluate Performance and Required Next Steps by Security Area	Identify areas for improvement, and justify allocation of resources toward these goals.	Communicate current strengths, and use year over year comparisons to measure long term progress.	Measure success in terms of meeting industry standard best practices.
3	Build a Security Improvement Roadmap	Cut through the noise: uncover the processes that really matter in building your world-class IT security function.	Align your team behind achieving your vision, communicating the rationale behind your decisions.	Prioritize quick wins to show your stakeholders that rapid improvement is a priority.

# Governance & Management SCORECARD

Fill out by yourself or with your team.

#### **PREPARED FOR:**

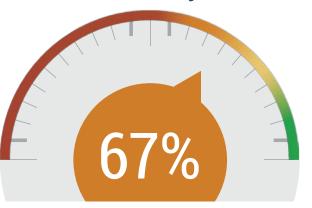
Mike Buma, Strategy Analyst and Product Owner Info-Tech Research Group



INFO~TECH



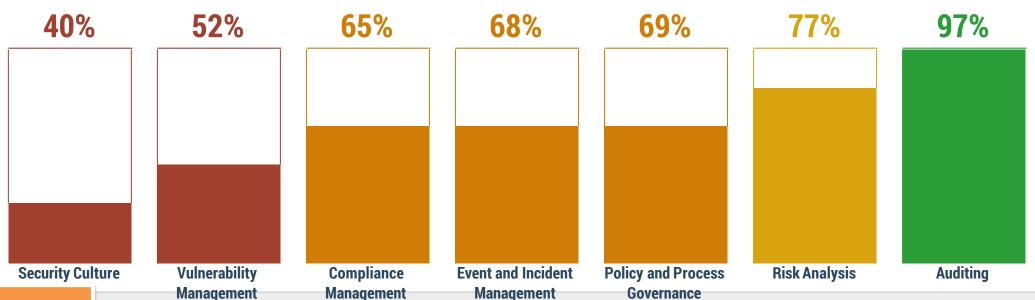




Measuring and communicating success in IT Security can be difficult. This score is a summary indicator of where you're at in relation to industry standard best practices.

#### **Scores by Governance and Management Area**

Use this information to identify and prioritize opportunities for improvement.

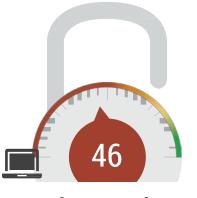


**Evaluate overall security maturity as well as across 7 governance** areas. Determine which areas require the most improvement and use this report to investigate improvement opportunities..

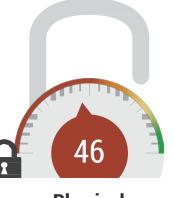
ecurity Culture, Vulnerability Management, and Compliance Management. Roles in these areas should also be better defined. For more information on the and management, see the Improvement Roadmap and Policy and Process Area Detail sections of this report.

#### **Policy and Process Scores by Security Area**

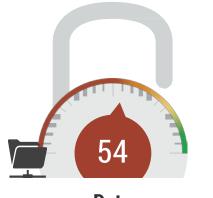
As with the section above, these scores can be used to identify areas for improvement and prioritize the order in which to address them.



**End User Devices** 



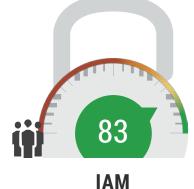
**Physical** 

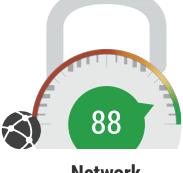


**Data** 



Servers





Network





#### Info-Tech Research Group

Addressing gaps in documentation and enforceme more information on the specific steps you can tal

Assess process maturity across 7 areas of security. Determine which areas require the most improvement and use this report to investigate process improvement opportunities...

hat security is consistently meeting the organization's needs. For s Area Detail sections of this report.

#### Recommended Actions Roadmap: Improve

Get a prioritized list of security areas requiring immediate **attention.** Use this to focus work effort and build improvements. Mike Buma, Strategy Analyst and Product Owner



Urgency Score

prove on your biggest gaps and inconsistencies, and to

This section consolidates the high priority recommende address deficiencies in areas of greater importance.







Ensure that assessments of security awareness training uptake are conducted on at least an annual basis for the most critical security controls, and targeting the most critical user populations.





## **End User Devices Security**

Deployment and Decommissioning

#### **ACTION**

Formalize and document this policy or process, then ensure accountability to achieve consistency.





#### **Physical Security** Incorporation in Other Processes

#### **ACTION**

Formalize and document this policy or process, then ensure accountability to achieve consistency.



**ACTION** 

**Host Security for Servers** 

Risk Analyis for Patches/Updates

Formalize and document this policy or

process, then ensure accountability to





#### **Security Culture End User Evaluation**

#### **ACTION**

Ensure that refresher training on key security awareness messages is completed on at least an annual basis. Consider more frequent training and awareness campaigns for the most critical security awareness messages.





### **Compliance Management**

#### Accountability

Clarify accountability and responsibility for compliance management, and communicate to affected stakeholders.





Vulnerability Management
Status

#### **ACTION**

Formalize and document vulnerability management processes, then ensure accountability to achieve consistency.









#### **Vulnerability Management**

Comprehensiveness

Ensure that all aspects of security are included in vulnerability management processes to optimize vulnerability management.



achieve consistency.



## **Security Culture**

#### **ACTION**

Ensure that new hire security awareness training is provided to all new staff within a reasonable timeframe post-hire. Focus on the most critical security messages to get the biggest bang for your training buck.

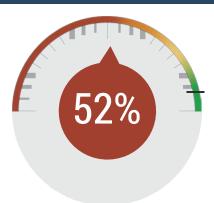




## **Security Culture**

#### **ACTION**

Ensure that assessments of security training uptake are conducted on at least an annual basis for the most critical security controls, and targeting the most critical systems.



**Vulnerability** Management Weighted Area Score: 3.1/6

Previous: 2.1/6

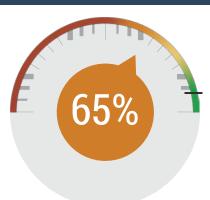
#### **Vulnerability Management - Security Governance Areas**

1 of 5

Vulnerability management is critical for establishing initial security configurations and maintaining a secure state over time. Use this report to understand and improve your vulnerability management capabilities.

#### **RECOMMENDED ACTIONS QUESTION WEIGHT AND SIGNIFICANCE** Current Score Previous Score STATUS - Current Score 3/6 - Weight: High Status Please indicate the status of your vulnerability management process. Formalize and document vulnerability management processes, then ensure Vulnerability management provides organizations with visibility into, and processes for accountability to achieve consistency. remediating, known technical vulnerabilities associated with current and planned technology implementations. Previous Score 1/6 STATUS - Current Score 2/6 - Weight: Medium Comprehensiveness Is vulnerability management applied and enforced in all areas of Ensure that all aspects of security are included in vulnerability management security? processes to optimize vulnerability management. Vulnerability management activities must cover all aspects of security, or unnecessary residual risks will exist in the areas that have not been considered. Previous Score 3/6 **Project Planning and Change Management STATUS** - Current Score **3/6** - Weight: Medium Are security considerations included in project planning and change Expand the application of vulnerability management processes to a broader set management processes? of significant projects and changes. Vulnerability management activities must be part of all significant IT initiatives and changes, or unnecessary residual risks will exist. Previous Score 3/6 **STATUS** - Current Score **4/6** - Weight: High **Accountability** Have responsibility and accountability been clearly established for your Clarify accountability and responsibility for vulnerability management, and vulnerability management process? communicate to affected stakeholders. Without clear roles and responsibilities documented, vulnerability management processes run the risk of being ignored or circumvented. Previous Score 2/6

Evaluate the effectiveness of individual security governance areas. For low scoring areas, follow recommended actions to start improvement efforts



obligations.

Compliance Management Weighted Area Score: 3.9/6

Previous: 4.5/6

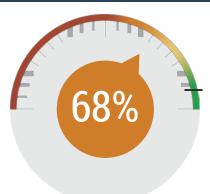
#### **Compliance Management - Security Governance Areas**

Regulatory and policy compliance are key elements of many organizations' information security programs. This report demonstrates the state of your compliance management efforts.

#### **QUESTION WEIGHT AND SIGNIFICANCE RECOMMENDED ACTIONS** Current Score Previous Score STATUS - Current Score 3/6 - Weight: High **Accountability** Have responsibility and accountability been clearly established for your Clarify accountability and responsibility for compliance management, and compliance management process? communicate to affected stakeholders. Without clear roles and responsibilities documented, compliance management processes run the risk of being ignored or circumvented. Previous Score 5/6 **STATUS** - Current Score **4/6** - Weight: High Status Ensure accountability and enforcement to achieve consistency in your Please indicate the status of your compliance management process. Formality of supporting processes is critical to establishing and maintaining compliance compliance management processes. with regulatory and policy requirements. Previous Score 3/6 **STATUS** - Current Score **4/6** - Weight: Medium **Exceptions** Ensure that compliance exception handling processes are formalized, and Are explicitly approved exceptions audited, monitored, and reported? expand to ensure that all staff are aware of the exception process. Compliance exceptions must be documented and managed, or else the organization risks falling into a non-compliant state. Previous Score 5/6 **STATUS** - Current Score **4/6** - Weight: Medium **Promotion and Enforcement** Formalize compliance enforcement protocols so reported violations can be Is compliance promoted and enforced? handled in a consistent manner. A culture of compliance begins with promotion of the compliance obligations, and relies heavily on enforcement mechanisms to detect and remediate compliance violations. Previous Score 5/6 **STATUS** - Current Score **4/6** - Weight: Low **Issues Investigation** Are issues investigated to prevent further offenses? Formalize and expand your capabilities for investigating compliance violations. Addressing compliance violations as one-off problems is only half of the story; seek out process-related and other systemic breakdowns to ensure that issues don't propagate. Previous Score 5/6 **STATUS** - Current Score **5/6** - Weight: Medium Communication Ensure that compliance communication plans include broad communications Are compliance requirements communicated to relevant staff? for general staff and more specific elements targeted at those most affected by Compliance with regulation and policy is challenging if you haven't communicated those compliance requirements. requirements; ensure all those with a need to know have been informed of their

Previous Score 5/6





Event and Incident Management Weighted Area Score: 4.1/6

Previous: 1.8/6

inconsistent, resulting in prolonged response times and elevated risk.

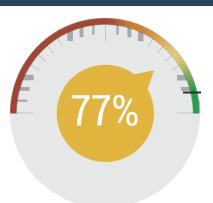
#### **Event and Incident Management - Security Governance Areas**

3 of 5

Event and incident management enable proactive and rapid reaction responses to potential and actual threats to information security. Use this report to focus on the key aspects of your response processes.

#### **QUESTION WEIGHT AND SIGNIFICANCE** RECOMMENDED ACTIONS Current Score Previous Score STATUS - Current Score 3/6 - Weight: Medium **Event Comprehensiveness** Ensure that all aspects of security are included in event monitoring processes to Does your event monitoring include all areas of security? optimize event monitoring. Event monitoring is needed for all areas of IT security, otherwise blind spots will exist that introduce unnecessary risk. Previous Score 2/6 Status STATUS - Current Score 4/6 - Weight: High Please indicate the status of your event and incident management Ensure accountability and enforcement to achieve consistency in your event/ process. incident management processes. Event and incident management process formality provides the basis for organizational confidence that attacks and other security events can be detected and responded to in a Previous Score 1/6 timely and thorough manner. **Event Accountability STATUS** - Current Score **4/6** - Weight: High Have responsibility and accountability been clearly established for your Clarify accountability and responsibility for event monitoring processes, and event monitoring? communicate to affected stakeholders. Without clear roles and responsibilities, event monitoring often is overlooked in favour of other operational duties; if event monitoring isn't done consistently, incidents may be Previous Score 2/6 overlooked. **STATUS** - Current Score **4/6** - Weight: Medium **Incident Comprehensiveness** Ensure that all aspects of security are included in incident monitoring processes Does your incident management include all areas of security? to optimize incident management Incident management is needed for all areas of IT security, otherwise unnecessary risk will result from inconsistent handling of escalated incidents. Previous Score 2/6 **STATUS** - Current Score **5/6** - Weight: High **Incident Accountability** Have responsibility and accountability been clearly established for your Ensure that incident management processes roles and responsibilities have incident management? been communicated to affected stakeholders in all situations. Without clear roles and responsibilities, incident handling can be confused and

Previous Score 2/6



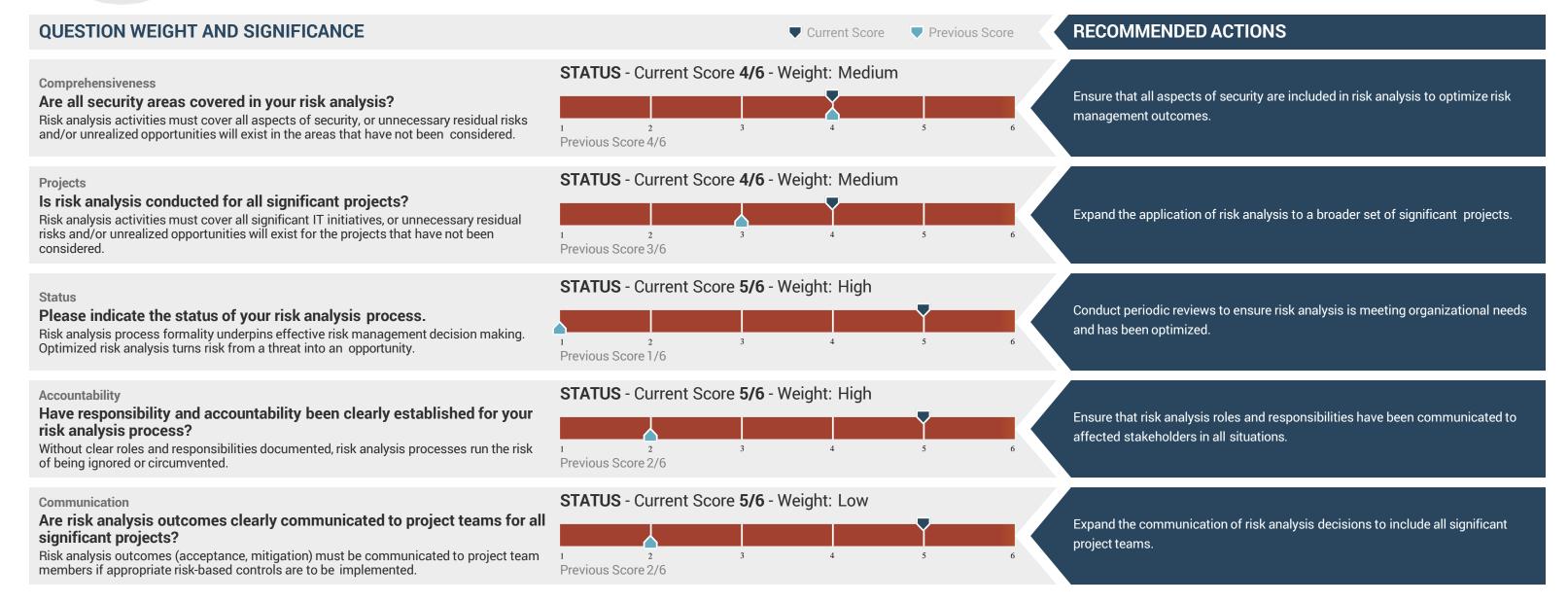
Risk Analysis Weighted Area Score: 4.6/6

Risk Analysis Score Details

Previous: 2.3/6

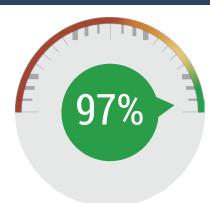
#### **Risk Analysis - Security Governance Areas**

Appropriate security measures start with risk analysis to understand the threats, potential impact, and business tolerance for risk. Use this report to understand your risk analysis score and to improve process maturity and comprehensiveness in this area.



4 of 5





#### **Auditing Weighted** Area Score: 5.8/6

Previous: 3.3/6

#### **Auditing - Security Governance Areas**

A solid audit program is key to ensuring that information security policies and processes are being followed across the organization. This report will help you to focus on improvements in your security audit program.



5 of 5





# No matter how good your security controls, the weakest link will always be your people.

Creating a security culture through training and assessment is the most effective way to mitigate human risk. Info-Tech has identified four core elements of successful security awareness training for end users:

Methods
Scope
Frequency
Foundation



#### Security ultimately depends on IT

Whether the task is instituting security controls, training and assessing end users, or executing on the organization's risk tolerance decisions, security hinges in large part on the knowledge and diligence of IT staff. Info-Tech has identified four core areas of IT responsibility that are crucial to creating a culture of security:

Expertise

**Assessment** 

**End User Evaluation** 

Knowledge Transfer

Weight: Medium - Current Score 4/6



**RECOMMENDED ACTION:** Ensure that all aspects of security are included in security awareness training materials to optimize security awareness



**Security Culture -End User** Weighted Area Score: 2.3/6

Previous: 3.9/6

Security Culture Score Details: End User

Regardless of the security controls in place, users themselves represent a significant risk to information security. A strong security culture can mitigate this risk. This report shows the state of your efforts to foster a security culture among business users, the non-IT staff whose everyday actions may - most often through no malicious intent - create vulnerabilities and vectors for attack. Use the "recommended action" items to improve your security awareness training and address gaps in your process.

#### "How often is security training provided to existing staff?"

Weight: Medium - Current Score 1/6



**RECOMMENDED ACTION:** Ensure that refresher training on key security awareness messages is completed on at least an annual basis. Consider more frequent training and awareness campaigns for the most critical security awareness messages.

#### Frequency

Frequency matters: security awareness messages benefit from repetition, and in some cases frequent repetition.

Not everyone learns the same way, and some messages bear repeating; using multiple methods of delivering awareness and training materials will optimize outcomes.

**Methods** 



Previous Score 1/6

**RECOMMENDED ACTION:** Ensure that a variety of methods are used to reach a wider population of users with diverse learning styles.

"Do you use a variety of methods in your security awareness training?"

Current Score

"Is security awareness training provided to new staff?"

Weight: Medium - Current Score 2/6



**RECOMMENDED ACTION:** Ensure that new hire security awareness training is provided to all new staff within a reasonable timeframe posthire. Focus on the most critical security messages to get the biggest bang for your training buck.

#### **Foundation**

To meet the organization's expectations for security behavior, new hires must be provided with security awareness training - ideally before system access is granted.

Awareness training must cover activities across the full range of security areas, or residual risk will be higher than necessary.

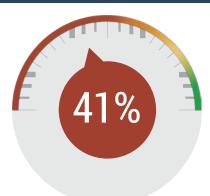


training.



Previous Score

Previous Score



# Security Culture - IT Weighted Area Score: 2.5/6

Previous: 2.5/6

Creating a culture of security depends in large part on the knowledge and diligence of IT personnel. This report shows where your IT personnel are at in terms of four areas of responsibility and accountability that are crucial to creating a culture of security. Use the "recommended action" items to improve your security awareness training and address gaps in your process.

"Do you assess the effectiveness of end user training through regular testing and follow up with users who fail these tests?"

Weight: High - Current Score 1/6



RECOMMENDED ACTION: Ensure that assessments of security awareness training uptake are conducted on at least an annual basis for the most critical security controls, and targeting the most critical user populations.

"Is special security training for system administrators, database administrators, network administrators, and application developers assessed and the results of these assessments followed up on?"

Weight: High - Current Score 3/6



RECOMMENDED ACTION: Ensure that assessments of security training uptake are conducted on at least an annual basis for the most critical security controls, and targeting the most critical systems.

# **End User Evaluation**

Testing is critical for reinforcing awareness training messages and ensuring that you can identify and remediate situations where the messages have not been internalized.

#### **Assessment**

To maximize the benefit of specialized security training, assessment is key. The best things to assess are the system or code artifacts themselves.

#### Knowledge Transfer

Without clear roles and responsibilities documented, security awareness training processes run the risk of being ignored or back-burnered.

"Have responsibility and accountability been clearly established for your security awareness training?"

Current Score

Weight: High - Current Score 3/6



**RECOMMENDED ACTION:** Establish and document responsibility and accountability for security awareness training using a RACI chart.

#### **Expertise**

Specialized security training for IT staff is a necessity for secure development and operations.

"How often do your system administrators, database administrators, network administrators, and application developers get special security training?"

Weight: Medium - Current Score 3/6



RECOMMENDED ACTION: Ensure that refresher training on key security topics is completed on at least an annual basis. Consider more frequent training and awareness campaigns for the most critical security topics.



End user devices, unlike servers, must retain flexibility to operate in support of users' diverse needs; this creates opportunities for malware to be introduced into the organization.

#### **Current Scores**

"To what extent are the following policies and processes in place for End User Devices Security?"





Internal security standards defined for each tablet or smartphone platform

Previous Score 5/6



Complete a security checklist as part of deployment and

Audit deployed devices to ensure they still meet requirements

Internal security standards defined

for each desktop/laptop platform

Previous Score 3/6

#### How to Improve

Use these action items to close the gaps in your core End User Devices Security policies and processes.

#### **Recommended Actions**



**Document the Process:** Formalize and document this policy or process, then ensure accountability to achieve consistency.



**Ensure enforcement:** Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.

**Get a list of recommendations for improvement.** Begin taking action in key areas and optimizing policies & processes as needed.

#### **How to Optimize**

Use the following checklist to ensure that all your End User Devices Security policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Internal security standards defined for each tablet or smartphone platform	(_)
Internal security standards defined for each desktop/laptop platform	()
Complete a security checklist as part of deployment and decommissioning processes	(_)
Audit deployed devices to ensure they still meet requirements	
BYOD policies	(_)
Perform a risk analysis prior to deploying patches/updates	(_)
Audit device deployment practices to ensure they are being followed	()

#### Accountability

· · · · · · · · · · · · · · · · · · ·	
Establishing who is accountable for each policy and process is important for enforcement and quality control.	
Internal security standards defined for each tablet or smartphone platform	No one - Assign Accountability
Internal security standards defined for each desktop/laptop platform	Bob Datacrunch
Complete a security checklist as part of deployment and decommissioning processes	No one - Assign Accountability
Audit deployed devices to ensure they still meet requirements	Joe Computerguy

See which processes are lacking clear accountability. Assign accountability against key processes.

Assess process maturity of individual security areas. Determine which processes you are missing or have not formalized.



Even when other people, process, and technology controls are in place, physical security breakdowns can lead to information risk. Ensure that your data and systems are secure against "low tech" physical security breaches.

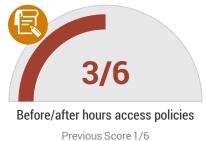
#### **Current Scores**

"To what extent are the following policies and processes in place for Physical Security?"





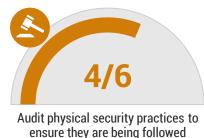
access policies
Previous Score 4/6



3/6

Incorporate physical security considerations into other processes

Previous Score 5/6



Previous Score 1/6

#### How to Improve

Use these action items to close the gaps in your core Physical Security policies and processes.

#### **Recommended Actions**



**Document the Process:** Formalize and document this policy or process, then ensure accountability to achieve consistency.



**Ensure enforcement:** Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.



Maintain solid practices: Best practices are in place for this policy or process. Maintain optimal status through periodic reviews and continued enforcement.

#### How to Optimize

Use the following checklist to ensure that all your Physical Security policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Visitor/guest registration and access policies	()
Before/after hours access policies	()
Incorporate physical security considerations into other processes	()
Audit physical security practices to ensure they are being followed	()
Perform physical penetration testing	()
Visible badging policy	(-)
Key management and/or card access management pratices	(_)

#### Accountability

Establishing who is accountable for each policy and process is important for enforcement and quality control.

Visitor/guest registration and access policies

Before/after hours access policies

Joe Computerguy

Incorporate physical security considerations into other processes

Bob Datacrunch

No one - Assign Accountability

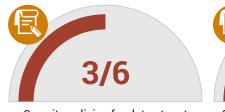


Data, or information, is ultimately what it's all about protecting. Ensure that these critical assets are protected against breaches of confidentiality, availability, and integrity.

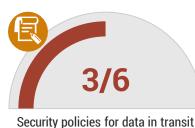
#### **Current Scores**

"To what extent are the following policies and processes in place for Data Security?"





Security policies for data at rest Previous Score 6/6



Data classification definitions Previous Score 3/6



Previous Score 5/6

Audit data sources to ensure policies are being followed Previous Score 1/6

#### How to Improve

Use these action items to close the gaps in your core Data Security policies and

#### **Recommended Actions**



Document the Process: Formalize and document this policy or process, then ensure accountability to achieve consistency.



Ensure enforcement: Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.



Maintain solid practices: Best practices are in place for this policy or process. Maintain optimal status through periodic reviews and continued enforcement.

#### **How to Optimize**

Use the following checklist to ensure that all your Data Security policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Security policies for data at rest	(_)
Security policies for data in transit	(_)
Data classification definitions	()
Audit data sources to ensure policies are being followed	()
Security policies for backup data	()
Require apps to use secure channels for transferring sensitive data	
Require offsite backup vendors to meet your security policies for data	(_)

#### **Accountability**

Establishing who is accountable for each policy and process is important for enforcement and quality control. Security policies for data at rest **Bob Datacrunch** Security policies for data in transit **Bob Datacrunch** Data classification definitions **Bob Datacrunch** Audit data sources to ensure policies are being followed **Bob Datacrunch** 

Info-Tech Research Group

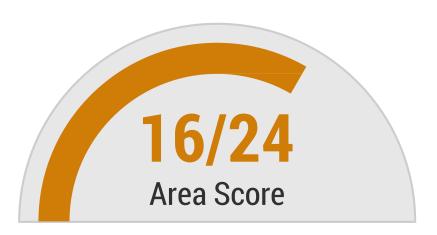




Server hosts represent the most concentrated stores of valuable information; host security controls protect against wholesale compromise.

## **Current Scores**

"To what extent are the following policies and processes in place for Host Security for Servers?"





Perform a risk analysis prior to deploying patches/updates

Previous Score 6/6



Internal security standards are defined for each platform

Previous Score 6/6



Complete security checklist as part of deployment and decommissioning

Previous Score 6/6



Audit deployed servers to ensure they still meet security requirements

Previous Score 6/6

#### How to Improve

Use these action items to close the gaps in your core Host Security for Servers policies and processes.

#### **Recommended Actions**



**Document the Process:** Formalize and document this policy or process, then ensure accountability to achieve consistency.



**Ensure enforcement:** Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.



**Maintain solid practices:** Best practices are in place for this policy or process. Maintain optimal status through periodic reviews and continued enforcement.

Audit deployed servers to ensure they still meet security requirements

#### How to Optimize

Use the following checklist to ensure that all your Host Security for Servers policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Perform a risk analysis prior to deploying patches/updates	()
Internal security standards are defined for each platform	()
Complete security checklist as part of deployment and decommissioning	(_)
Audit deployed servers to ensure they still meet security requirements	()
Audit server deployment practices to ensure policies are being followed	

Joe Computerguy

#### Accountability

Establishing who is accountable for each policy and process is important for enforcement and quality control.

Perform a risk analysis prior to deploying patches/updates

Internal security standards are defined for each platform

Complete security checklist as part of deployment and decommissioning

Joe Computerguy

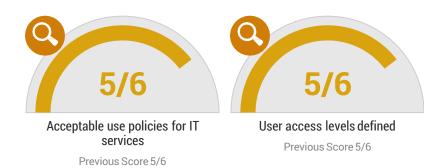


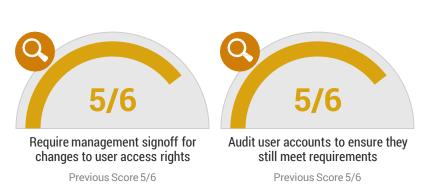
Managing your users' IDs, and what the users have access to, is a critical factor in reducing the risk of intentional or unintentional data compromise.

### **Current Scores**

"To what extent are the following policies and processes in place for IAM Security?"







#### How to Improve

Use these action items to close the gaps in your core IAM Security policies and processes.

#### **Recommended Actions**



**Document the Process:** Formalize and document this policy or process, then ensure accountability to achieve consistency.



**Ensure enforcement:** Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.



Maintain solid practices: Best practices are in place for this policy or process. Maintain optimal status through periodic reviews and continued enforcement.

#### How to Optimize

Use the following checklist to ensure that all your IAM Security policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Acceptable use policies for IT services	()
User access levels defined	()
Require management signoff for changes to user access rights	()
Audit user accounts to ensure they still meet requirements	()
Separation of duties policy	()
New user deployment policy	
Employee termination security policy	()
Password complexity requirements	()
Mult-factor identification required	()
Federated identity management required	()
Smart card identity management required	()
User access rights approval policy	()
Audit IAM practices to ensure policies are being followed	()

#### Accountability

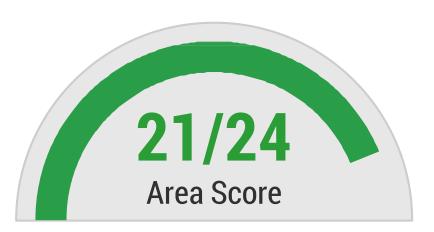
Establishing who is accountable for each policy and process is important for enforcement and quality control.

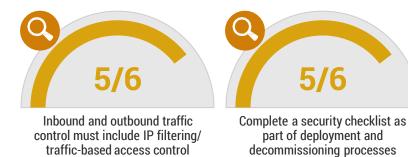
Acceptable use policies for IT services	Jane Techpro
User access levels defined	Jane Techpro
Require management signoff for changes to user access rights	Jane Techpro
Audit user accounts to ensure they still meet requirements	Jane Techpro

Network security controls protect against external threats, and provide a brake against and potential visibility into threats that originate inside the network perimeter.

#### **Current Scores**

"To what extent are the following policies and processes in place for Network Security?"





Previous Score 5/6



Previous Score 3/6

Previous Score 5/6

Audit deployed networks to ensure they still meet requirements

Previous Score 3/6

#### How to Improve

Use these action items to close the gaps in your core Network Security policies and

#### **Recommended Actions**



Document the Process: Formalize and document this policy or process, then ensure accountability to achieve consistency.



Ensure enforcement: Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.



Maintain solid practices: Best practices are in place for this policy or process. Maintain optimal status through periodic reviews and continued enforcement.

#### **How to Optimize**

Use the following checklist to ensure that all your Network Security policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Inbound and outbound traffic control must include IP filtering/traffic- based access control	(_)
Complete a security checklist as part of deployment and decommissioning processes	(_)
Audit deployed networks to ensure they still meet requirements	(_)
Network segmentation policy	$(\bar{\mathcal{L}})$
TCP/IP services security policy	
Perform a risk analysis prior to deploying patches/updates	
Employ honeypots to proactively detect threats and update security practices accordingly	(_)
Audit network deployment practices to ensure policies are being followed	(_)

#### **Accountability**

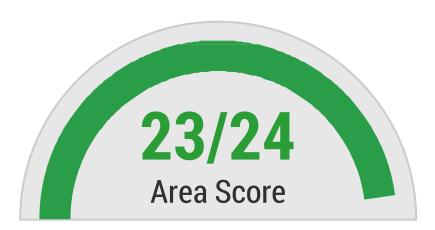
Establishing who is accountable for each policy and process is important for enforcement and quality control. Inbound and outbound traffic control must include IP filtering/traffic-based access control Jane Techpro Complete a security checklist as part of deployment and decommissioning processes Jane Techpro Audit deployed networks to ensure they still meet requirements Joe Computerguy Network segmentation policy Jane Techpro



Applications are often the "front door" by which information is accessed; failure to adequately secure apps can result in large scale information breaches.

#### **Current Scores**

"To what extent are the following policies and processes in place for Application Security?"





Require security testing prior to deployment for custom and COTS apps

Previous Score 1/6



still meet security requirements

Previous Score 1/6

6/6

Application development projects

must include countermeasures to STRIDE

Network and production data segmentation between Dev/Testing and Production environments

Previous Score 5/6

#### How to Improve

Use these action items to close the gaps in your core Application Security policies and processes.

#### **Recommended Actions**



**Document the Process:** Formalize and document this policy or process, then ensure accountability to achieve consistency.



**Ensure enforcement:** Ensure accountability and enforcement to achieve consistency in this policy or process.



Conduct Reviews: Conduct periodic reviews to ensure this policy or process is meeting organizational needs and has been optimized.



 Maintain solid practices: Best practices are in place for this policy or process. Maintain optimal status through periodic reviews and continued enforcement.

#### How to Optimize

Use the following checklist to ensure that all your Application Security policies and processes are formalized, documented, enforced, and reviewed.

Policies and Processes	Optimized
Require security testing prior to deployment for custom and COTS apps	(_)
Application development projects must include countermeasures to STRIDE	$\langle \overline{\mathcal{L}} \rangle$
Network and production data segmentation between Dev/Testing and Production environments	$\langle \bar{\mathcal{L}} \rangle$
Audit deployed apps to ensure they still meet security requirements	(Z)
Appliction development design documents include internal and external compliance requirements such as legal, regulatory, data confidentiality, security, development, software architecture, and infrastructure	
Approved code sources	()
Require security testing as part of change control procedures for custom and COTs apps	(_)
Conduct vulneraiblity assessments as part of QA prior to deployment	(_)
Perform a risk anlaysis prior to deploying software patches	()
Audit application development practices to ensure policies are being followed	(_)

#### Accountability

Establishing who is accountable for each policy and process is important for enforcement and quality control.

Require security testing prior to deployment for custom and COTS apps	Jane Techpro
Application development projects must include countermeasures to STRIDE	Jane Techpro
Network and production data segmentation between Dev/Testing and Production environments	Jane Techpro
Audit deployed apps to ensure they still meet security requirements	Bob Datacrunch