Understanding Third-party Risk in the Cloud

PROTECT DATA AND USERS EVERYWHERE

SAFELY ENABLE THE CLOUD AND WEB

DELIVER SECURITY THAT IS FAST AND SCALABLE

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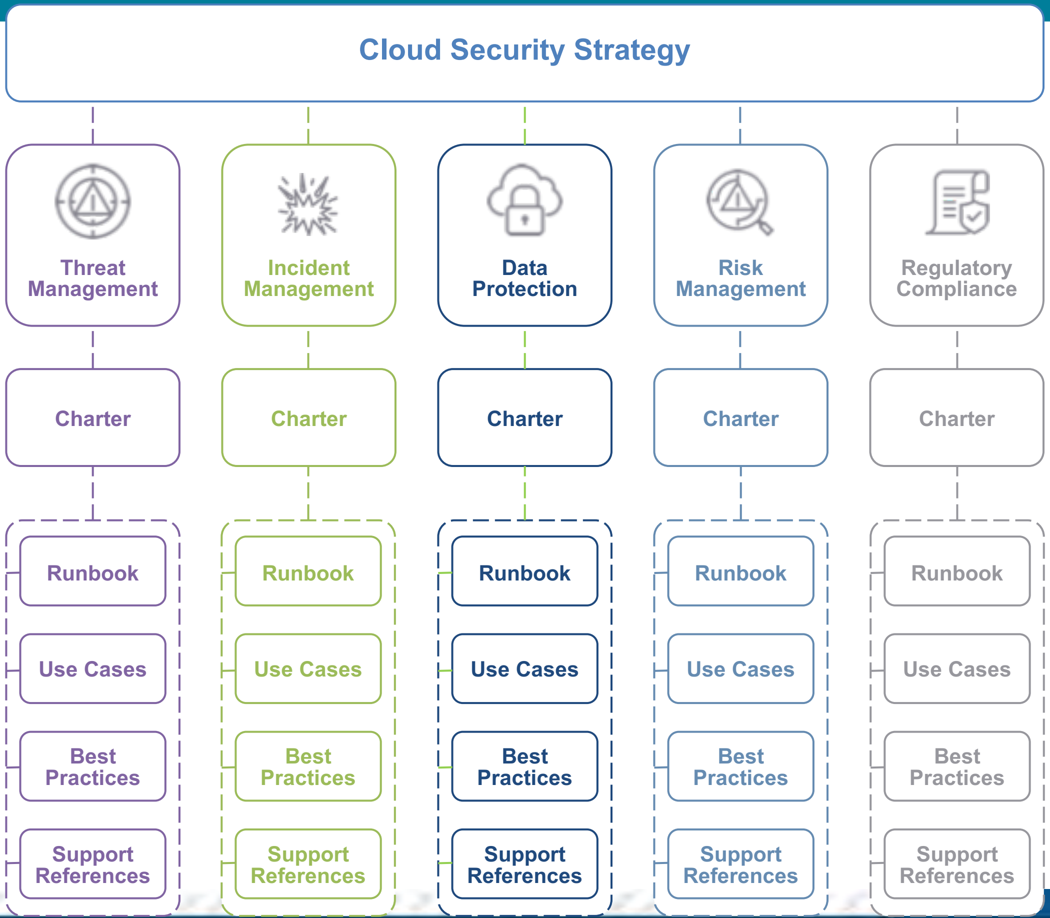
The Evolutionary Focus of Third-party Risk in the Risk Management Domain



Third-party Risk Management Process

Understand the risks associated with business requirements

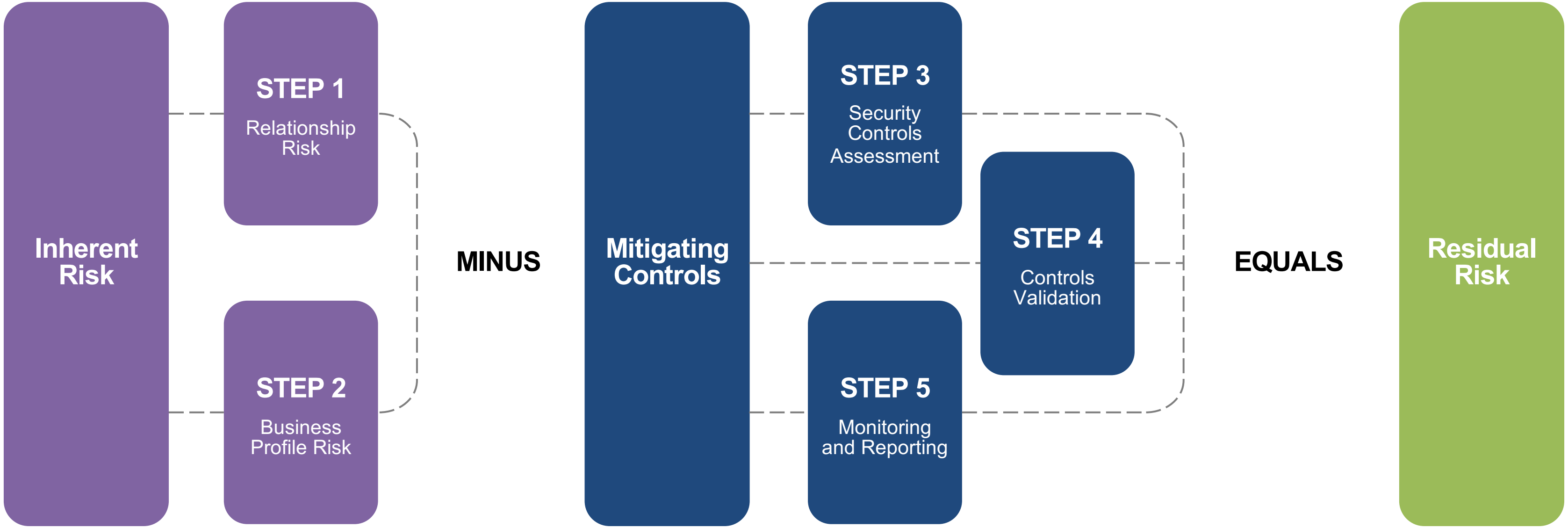
Risk alignment with the third-party

Determine proper security controls

Evaluate and validate controls

Define a continuous monitoring program

Steps to Managing Third-party Risk



Inherent Risk

STEP 1
Relationship Risk

STEP 2
Business Profile Risk

MINUS

Mitigating Controls

STEP 3
Security Controls Assessment

STEP 4
Controls Validation

STEP 5
Monitoring and Reporting

EQUALS

Residual Risk

Traditional Assessments

A third-party risk assessment questionnaire, but does it work for cloud applications?

Use a third-party to evaluate third-party vendors

Evaluate risk of an enterprise’s public IP

Blind trust

SLA and MSA reviews

The traditional way is on a collision course for failure!

Risks in the Cloud Are Real

Cloud service providers mitigate all risk, right?

Nope!

Companies know where their data is going

Do they?

Companies know the type of data that is moving

Not Exactly

Companies know how the data is moving

Maybe…

Third-party risk management is broken!

Expectations vs. Realities of Addressing Third-party Risk

```
    mirror_mod.use_x = False
    mirror_mod.use_y = True
    mirror_mod.use_z = False
elif _operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True

    #selection at the end -add back the deselected mirror modifier object
mirror_ob.select= 1
modifier_ob.select=1
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob)) # modifier ob is the active ob
    #mirror_ob.select = 0
```

Digital Transformation Induced Shifts

The perimeter has dissolved, yet **90%** of Enterprise Security spend is on-premise approaches.

90%

Data created in the last two years

90%

Enterprise devices that are mobile

85%

Enterprise internet traffic has moved to SaaS / Cloud

2%

Percentage of SaaS apps that IT controls and secures

What You Already Know about Third-party Risk in the Cloud

Cloud applications are inexpensive

Business is looking for “ease of use”

Cloud applications must be fast with minimal latency

Compliance standards highlight third-party risk

Most applications are hosted in a cloud data center (AWS, Azure, Google Cloud)

Compliance Measures

- SOC Reports, cybersecurity insurance, NDAs, MSA's, SLA's
- Risk assessments required for compliance checks
  - National Institute Standards Technology (NIST) Special Publication (SP) 800-53r4 and NIST Cybersecurity Framework (CSF) v1.1 Standards and Frameworks
  - Health Insurance Portability and Accountability Act (HIPAA)
  - Health Information Technology for Economic and Clinical Health Act (HITECH)
  - Payments Card Industry (PCI) Data Security Standards
  - Federal Acquisition Regulation (FAR)
  - Gramm-Leach-Bliley (GLB)
- Do paper-based policies and statements mean security?

What You May Not Already Know About Third-party Risk in the Cloud

- Visibility of cloud applications
- Types of data that resides in cloud applications
- The risk of cloud applications
- Identities being used for cloud applications
- Types of data that is being used during a POC

How Traditional Threats are Evolving

- Hunting for publicly accessible IaaS resources like S3 buckets and repos
- Malware Infection through Cloud
- Using Cloud Resources for C&C or storing payloads
- Using the Cloud to Hide Phishing
- Exploiting Application vulnerabilities running on cloud services to launch attacks
- Brute forcing weak passwords for public facing services

Challenges to Addressing Third-party Risk in the Cloud

Smaller companies with a unique solution may not have a security program

Many cloud applications have limited to no cybersecurity insurance

Third-parties are using sub-contractors, introducing fourth-party risk

There is a privacy concern of personal vs business data

Businesses are extending their virtual boundaries

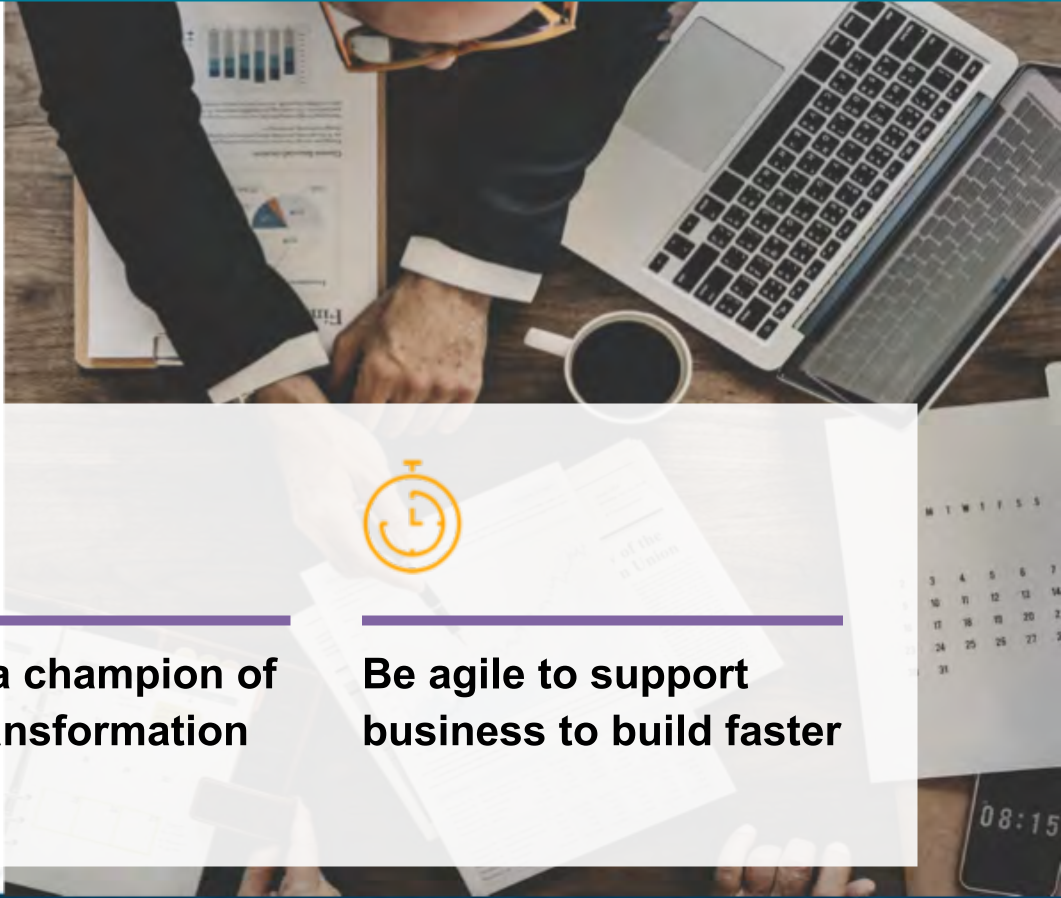
Improving Third-party Risk Assessment in the Cloud

How Are you Evolving?

The Future of Cloud Risk Assessments

- Evaluate what data is being used
- Configuration controls in place to monitor or block cloud applications
- Identify potentially risky cloud applications
- Ensure MSA includes the Right-to-Audit clause
- Invoke identity challenges for access to sensitive data

How to Enable Your Business



Understand the business needs for cloud applications

Become a champion of digital transformation

Be agile to support business to build faster

VISIBILITY IS KING. GET IT BACK.

Recommendations

Build relationships with supply chain and procurement

Extend data classification into cloud applications

Identify the cloud applications being used

Educate the workforce

Be a partner with the business

Understand innovative risk

Ask the Right Questions:

1. Data Sovereignty: Where does the data live?
2. Ownership: Who owns the data rights?
3. Portability: Can we download data at end of contract?
4. Retention/Destruction at end of contract
5. Compliance: Standards and Certifications

Insider, Data, & Configuration Controls

Cloud Security Governance & Ops

Continuous Security Assessment

Enhance visibility, prevent security exposure, and simplify governance & compliance

Breach Detection and Response

Detect & prioritize active threats across all web and cloud services

Cloud & Web Service Data Protection

Data Protection

Identify, and Prevent sensitive data from being sent to uncontrolled Cloud and Web services.

Threat Protection

Detect malware sent to or from Cloud services or being executed from a trusted cloud

Insider Protection

Insider Threat Protection

Control access to unmanaged cloud services and prevent data exfiltration

Questions?

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