

Towards a Common Goal

Ensuring Security in Cloud Environments

CDSR **CONTENT
PROTECTION**

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Sheraton Universal | LA



*Leaders in Risk Assessment
& Mitigation*

*Providing Security Consultancy for Cloud
Hosted Environments*

Cloud Compliance

Chris Johnson, CEO

Methodology

Janice Pearson, VP Global Content Protection,

Engagement

Mathew Gilliat-Smith, Advisor

Cloud Compliance

By Chris Johnson, CEO



Fact or Fiction?

'Some Say' the cloud is the 'the place to be'; user friendly, fast, efficient and economically friendly

'Some Believe' that behind the fluffy white façade lurks a dark and sinister threat; on prem remains the safest most secure place for content to reside only trusting certain cloud-based activities due to their increased efficiency and to remain competitive

'We know' that done correctly with the right; planning, preparation, monitoring and maintenance both eco systems can securely co-exist in harmony and; dependent upon the need a cloud environment can boost productivity, supercharge delivery, reduce overhead and even improve security!

But how can this be achieved?

Cloud Security



If correctly configured and where relevant best practice is followed, cloud workflows create undisputed speed, cost and security benefits



If not done correctly, serious security pitfalls occur (e.g. unrestricted access; weak encryption, exposed keys)



Why is it so difficult to get security right in the cloud?



ISO, NIST, ISACA, COBIT, CSA. SANS, DPP, TPN, MPAA, (BP) NCSC, AWS, AZURE, GOOGLE, IBM



Each user case is different, many types of user configurations & varied control frameworks. It's complex and confusing.



This is where the issues exist

“I just need
some cloud
security 101
practical
advice?”



Know your business requirements



Understand your information



Determine relevant security principles



Understand how the principles are implemented



Understand the level of assurance offered



Identify additional mitigations you can apply

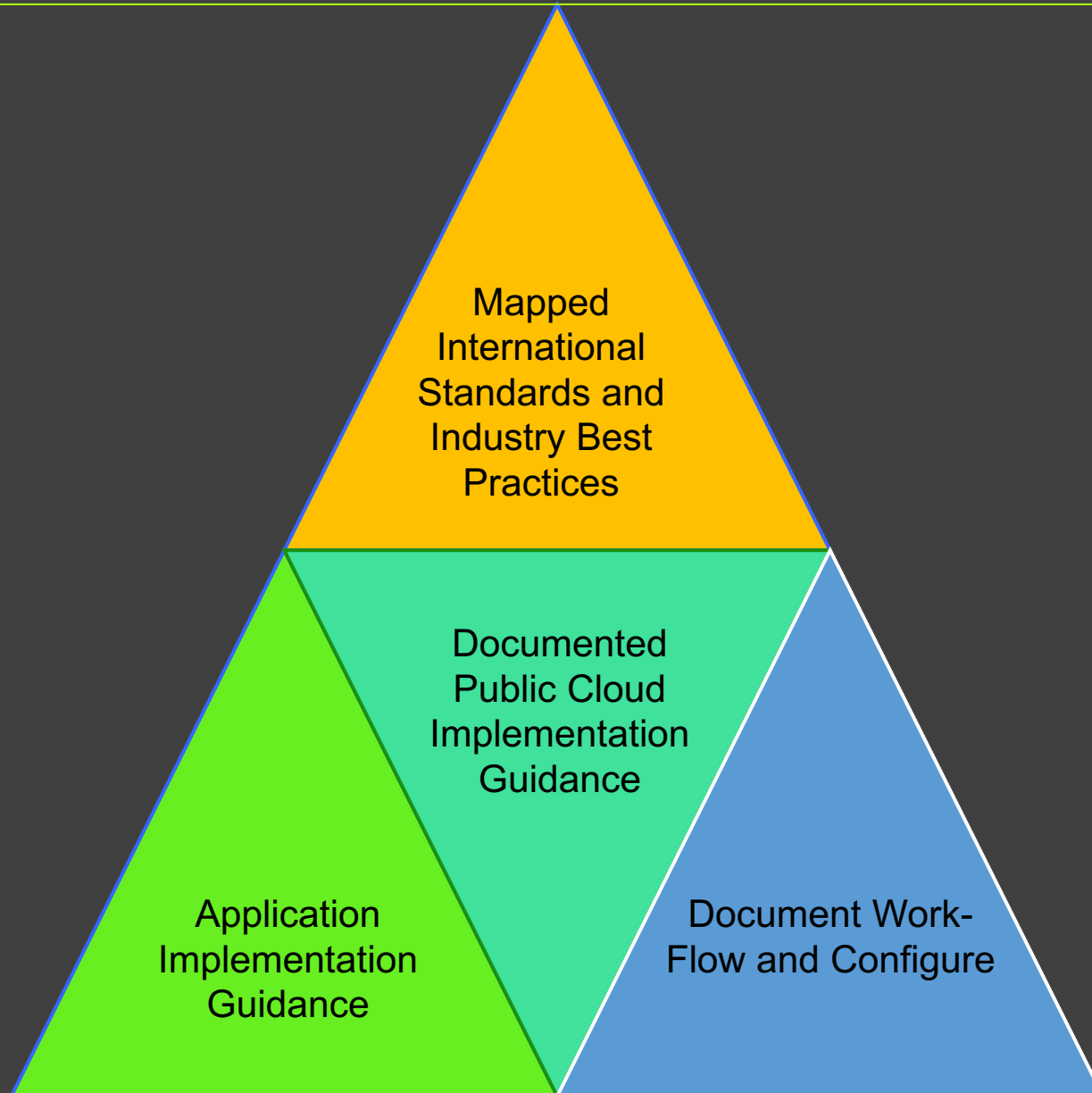


Consider residual risks



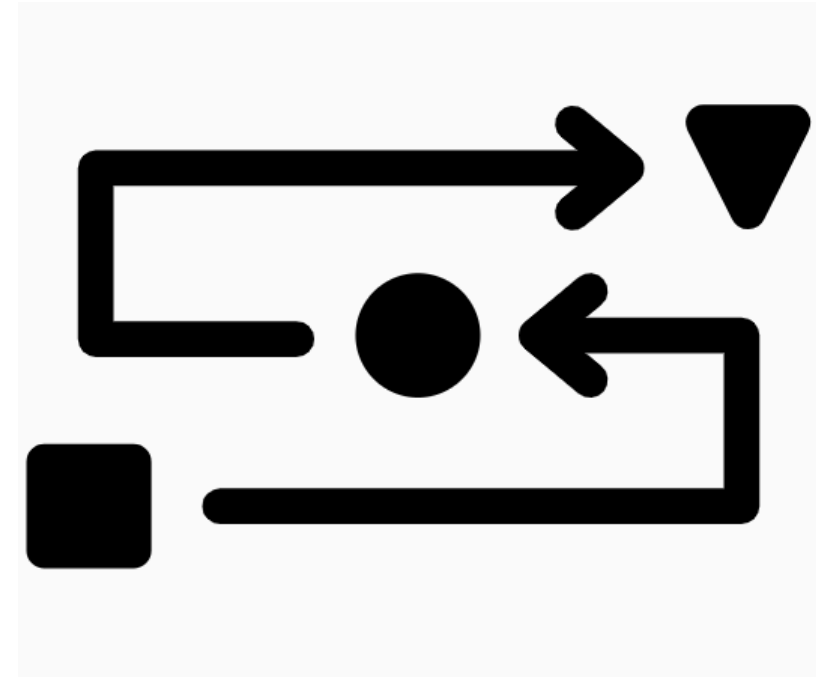
Continue to monitor and manage the risks

Existing Guides Already Available



Methodology

By Janice Pearson, VP Global Content Protection



Methodology Overview



Discovery



Architecture
Review



Review
Workflows



Final Scope
Review



Penetration
Testing



Conduct Full
Assessment
(CSA & supporting
frameworks)

Discovery

*What Problems
Are We Trying To
Solve?*

Security Cartography

- Conduct security and compliance mapping aligned to a control framework (e.g. CSA CCM, NIST, OWASP, ISO)

Tasks

- Develop control objective
- Develop an initial security baseline
- Create a responsibility assignment matrix specific to cloud (“RACI”), which maps the people who are **R**esponsible, **A**ccountable, **C**onsulted and **I**nformed within the organization

Output (via Consultancy)

- Document controls based on the chosen framework
- Development security baseline documentation
- Remediate high risk items

Design

Approaches To The Problem

Threat Model exercises

- Across all user stories

Integrate Automation

- Reduce the human element

Documented System Development Lifecycle (“SDLC”)

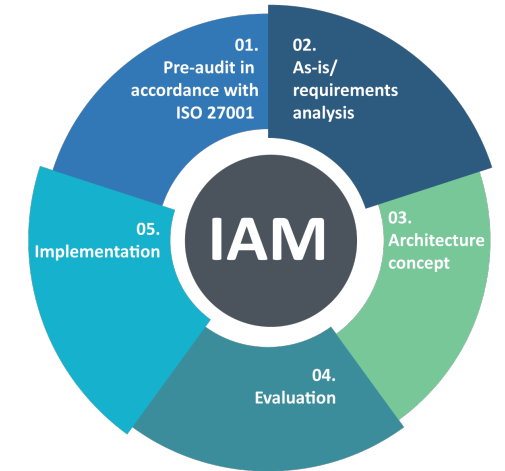
- For consistency throughout the system’s lifecycle (applications)

Output

- Identify Control Actions
- Playbook Generation
 - IAM, Detective Controls, Infrastructure Security, Data Protection and Incident Response

Tackling Security for Individual Areas

- Logging & Monitoring
- Access Management
- Networking
- Managed Services



Implementation

+

Actionable Tasks



Regular training & testing



Aggregation of security information



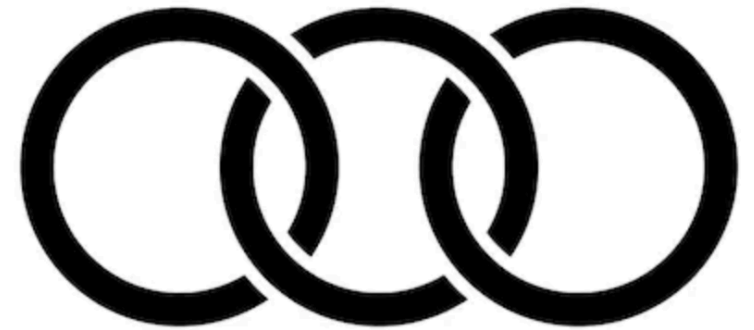
Monitoring of all sources of AWS Security telemetry



Iteratively develop control capabilities

Engagement

By Mathew Gilliat-Smith



Everyone is Different

1. All in the Cloud
 - Replicate on prem in the cloud hosted environment (multiple copy)
 - Centralised storage is preferred
 - Forgo security for performance
2. Hybrid – Cloud/On Prem
 - Constant hand-off of content through workflow increases risk
3. Thinking About It /Transitioning
 - Mixed approach &/or legacy open risk
 - Still deciding on which options



Engagement



Listening to
operational
stakeholders



Agreeing the scope



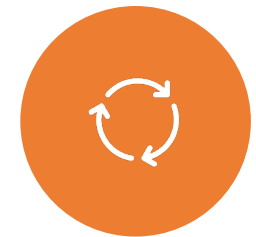
Testing



Mapping relevant
best practice &
reporting



Recommendation
for enhancements



Implementation

Ongoing

Providing specialist technical security consultancy and compliance for cloud workflows

Support

- Delivering Strategic Support and operational solutions for the secure, safe and uninterrupted delivery of media assets in cloud workflows for major studios and their supply chains

Assurance

- Ensuring that you are secure in each of your workflows and where you interconnect with third parties

New or Altered Standards

- Utilising Knowledge and Experience of new & changing International Security Standards and media industry best practices for workflow implementation and process integration



PPI

Incident Response



Security Assessment



Penetration Testing

Incident Response



Pre-Assessment



Cloud Security Consultancy

About Us - Risk Assessment & Mitigation

