

Mary Ann Davidson

Chief Security Officer Oracle Corporation @heenaluwahine

How Did We Get Here?



- Explosion in security-related questionnaires
- Scope is ...the moon, the stars, the known universe
- No clear risk concern behind many questions
- No clear "driver"
- Result
 - Long, expensive sales cycles
 - Potentially worse security from "crowding out effect"
 - Statistically significant increase in Scotch consumption

A Theory...



- History of "demand better assurance..."
- With cloud, security is a shared responsibility
- However, natural need to assess the processor of sensitive data is now skewed:
 - Assessing everything
 - Neglecting basics

Learning Objectives



- Understand why "checkbox-based security" isn't necessarily good security
 - "Look both ways before crossing the road..."
- How to ask legitimate, clear questions internally and externally to advance your ability to assess risk



Sound Familiar?



- HEAD KNIGHT: The Knights Who Say Ni demand a sacrifice!
- ARTHUR: Knights of Ni, we are but simple travelers who seek the enchanter who lives beyond these woods.
- HEAD KNIGHT: Ni! Ni! Ni! Ni!
- ARTHUR and PARTY: Oh, ow!
- HEAD KNIGHT: We shall say 'Ni' again to you if you do not appease us.
- ARTHUR: Well, what is it you want?
- HEAD KNIGHT: We want... a shrubbery!

A Few Caveats



- Assessing relevant risk management concerns is good and useful
- Regulated industries have more questions they believe they need answered
- No shrubberies or herrings were harmed during the making of this presentation

Reasonable Expectations



- Gauging supplier's risk management practices...
 - …as they specifically affect the purchaser
- Scoped questions related to specific products and services
- Alignment with relevant, recognized, international, independentlydeveloped standards

Unreasonable Expectations



- Asking questions about all business risk of the supplier
- Questions relating to "all products and services"
- Demands that are vague, unmeetable or that enable "another shrubbery" ask
- Requiring "assessments" by specific contractors or auditors against their proprietary, non-standard "frameworks"

In Other Words...



Applicable
Risks to
Customer
Supplier's Business Risks

Examples



- "Provide the patching status of every Windows server in your enterprise."
- "Provide a patch for anything we deem critical so we can apply it within 3 days."
- "Answer this service-oriented questionnaire for on premises products."
- "Your entire security team needs to fly to < > to explain your assurance program."

....And Why They Are Problematic



- "Patching status"
 - Server hosting customer data patched against ransomware != entire enterprise
- "3 day patching"
 - Third party library, architectural changes required, "community issues..."
 - "We know nobody can meet this."
 - Pulling the plug for a DOS vulnerability
- "Service-oriented questionnaire"
 - Renter vs. hotel
- "Fly to <x>"
 - 10-20 people for 3 days for one customer?



Sound Familiar?



ARTHUR: You silly sod!

TIM: What?

ARTHUR: You got us all worked up! **TIM:** Well, that's no ordinary rabbit!

ARTHUR: Ohh.

TIM: That's the most foul, cruel, and bad-tempered rodent you

ever set eyes on!

ROBIN: You tit! I soiled my armor I was so scared!

TIM: Look, that rabbit's got a vicious streak a mile wide! It's a

killer!

More Painful Examples



- "We want to pen test any internal system."
- "You must agree to <non-standard assurance certification>, provide development artifacts including security design, architectural analysis, static analysis results..."
- "You must meet with our auditor."
- "You must notify us immediately of any CVSS 7 or greater or any zero day."
- "Your security policies must have a watermark on them."

....And Why They Are Problematic (1 of 2)



- "Pen test any internal system"
 - Our internal systems contain... none of your data
 - Multitenant clouds containing a competitors' data, really?
- "Non-standard certification, development artifacts..."
 - No contractual restrictions on "asks" for more artifacts, or third party code analysis
 - Access to core IP would "bleed"
 - Attestations to documented assurance practice would be reasonable

....And Why They Are Problematic (2 of 2)



- "Auditor"
 - On site auditor didn't know scope of audit, asked customer audit support person, who didn't know...
- "Vulnerability notification"
 - Watch and learn from PCI...
 - Notification without a patch doesn't solve the problem
 - Attestation that security issues are (generally) fixed in severity order is reasonable
- "Watermark"
 - On non-printed material?

Even More Painful Examples



- "We found a severe CSRF: you must provide static analysis results for each release and patch."
- "You must review each of 120 documents (1000 pounds, printed)."

....And Why They Are Problematic



- "Static analysis results"
 - Wasn't a CSRF and issue had already been fixed
- "120 documents"
 - Each organization agreed we align with ISO27001:2013, NIST, other standards
 - Extremely costly exercise that added no value but deducted from bottom line

Considerations



- Spending resources on "shrubbery" uses scarce resources that could be spent making security better for everybody
- Specific risk concern to a purchaser != any and all business risk
- Nobody should contractually commit to something that is vague or cannot be done
- Unclear/bad regulations should be pushed back on, not kowtowed to



Sound Familiar?



Old Man from Scene 24: Stop! WHAT is your name?

King Arthur: It is Arthur, King of the Britons!

Old Man from Scene 24: WHAT is your quest?

King Arthur: To seek the Holy Grail!

Old Man from Scene 24: WHAT is the airspeed velocity of an unladen swallow?

King Arthur: What do you mean? African or European swallow?

Finding the Holy Grail – Vendors (1 of 2)



- Provide "rules of engagement"
 - Ask about specific products/services
 - Submit via X not Y
- Roadmaps help everyone get to the finish line faster
- Provide "self service" materials as publicly as you can
- Use/train account teams on expectations management and eliciting core risk management concern

Finding the Holy Grail - Customers (2 of 2)



- Eliminate the middleman and accompanying "translation problems"
- Push back on vague/unclear/unworkable "regulation"
- Focus on meaningful, cost-effective risk mitigation
 - Compliance may be necessary, but it is not sufficient
 - ...especially if it crowds out actual security
- Buy...a shrubbery! (Not too big.)

Lessons from the Trenches



- Published "rules of engagement" for customers
- Creating more online information about security practices
- Providing FAQs on "why we won't provide X, and why it's in your interests"
- Exploring if there are regulatory requirements behind some of the stranger asks
- The above can work for companies of any size

Apply What You Have Learned Today



- Next week you should:
 - Watch Monty Python and the Holy Grail
- In the first three months following this presentation you should:
 - Ensure all your vendor security questionnaires have a clear, prioritized "risk management concern" behind each item
- Within six months you should:
 - Review relevant regulatory areas driving security questions
 - Identify problematic areas that need clarification or revision
 - Determine whether African or European swallows are faster