# RSAConference2020

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HUMAN ELEMENT



HOW TO RUN A CYBER-INCIDENT RESPONSE EXERCISE USING AN OPEN-SOURCE SCENARIO



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#### Two disclaimers

1v2

Nothing in this presentation represents the views of John or Aaron's employers.

This presentation is not intended to be legal advice.

If you require legal advice you are advised to consult a qualified lawyer in your jurisdiction.

# Agenda

Why practice an incident?

Preparation

Facilitation

Have a go!



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Why practice?

John

# NIST cyber security framework

Gold Strategic
Silver Tactical
Bronze Incident Management

Identify Protect Detect Respond Recover

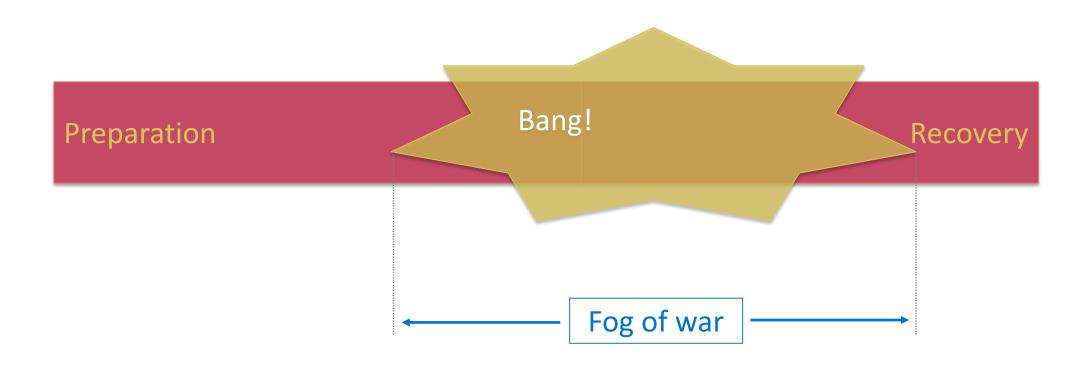


# "Right of bang"





# There really isn't just a bang





### Why practice?

- Get the top team to actively think about this
  - It's not just a theoretical playbook or an IT issue
- It's better to make mistakes when the world isn't watching
- We all learn from mistajes
- It's very trite but ...
- Personnel change frequently
- A control without assurance is not a control



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# Preparation

John

### **Typical incident management**

**Gold Team** Practice here Strategic Silver Team **Tactical** Incident Management / Bronze Operational



### **Typical Gold Team members**

- Chief Executive Officer
- Chief Operating Officer
- Chief Financial Officer
- CIO / Head of IT
- (CISO)
- General Counsel / Head of Legal
- Heads of:
  - Marketing / PR
  - HR



### **Overcoming objections**

We don't have time

Incidents are unknowable

It won't happen to us

We can do this without practice

It takes 2 hours. It can save a fortune.

The general principles are the same.

Mostly the questions you need to answer are the same.

You can, and historically people who do this don't do very well.





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# **Facilitation**

**Aaron** 

# Facilitation: Setting the scene

1. Establish a safe place

2. Elicit expectations

3. Agree rules

4. Clarify roles

There are slides for this on the website



### 1. Establish a safe place

It's fine to pause, stop, think

If you feel pressured, say so

Have fun

We're <u>all</u> here to learn...

It's fine to say "I don't know"



# 2. Elicit expectations

# What are the participants hoping they will achieve?

- Gaps in our knowledge, processes, technology
- Things we can do better
- Training our breach response safely
- And anything else?





# 3. Agree rules

Role play (or not)

How long?

Interruptions

Timeouts

Car park



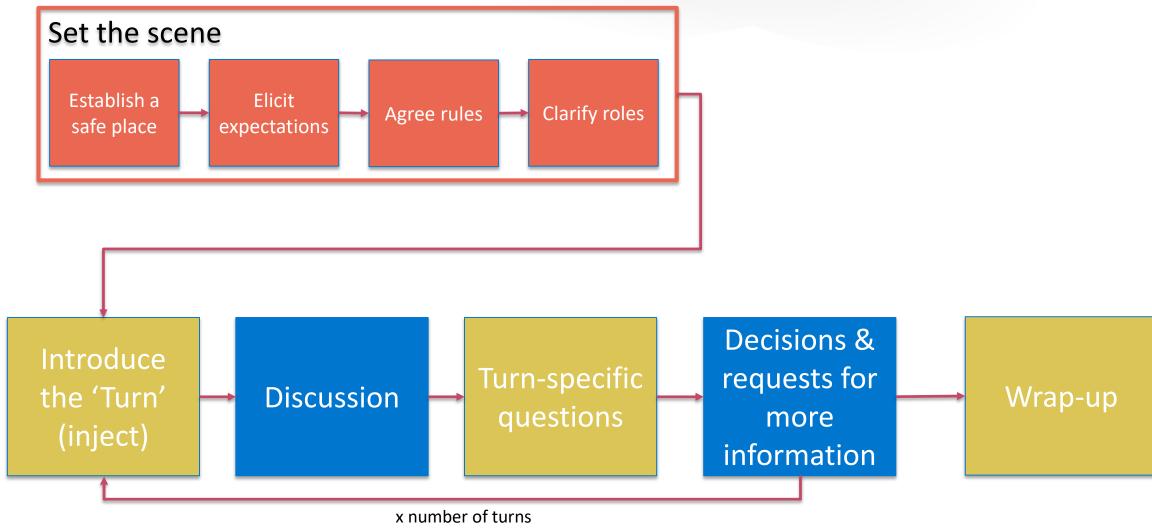


### 4. Clarify Roles

- Introductions and roles
- Gold leader
- Reserve gold leader (after n hours)
- Note takers
  - For the incident (they also need to practice).
     Important in real incidents for legal protection and "memory"
  - For the exercise (capture lessons)
- Someone responsible for post-exercise change



#### Structure of the exercise



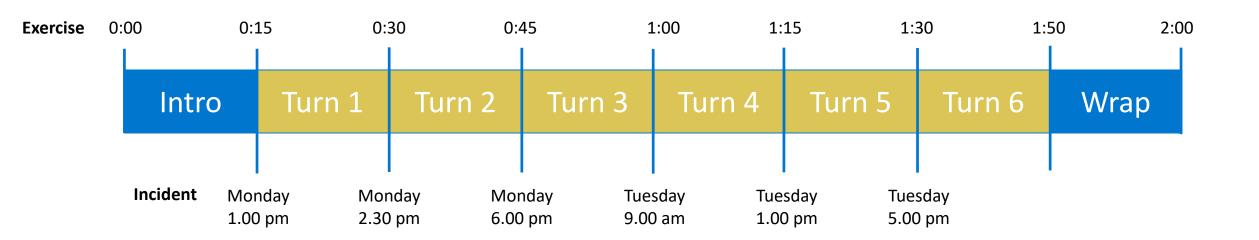


### **Facilitation tips**

- Know your audience
- Allow conversation, deviations, learning
- GET THE DECISIONS at each turn bring focus to the end of the turn
- Gently keep things moving



#### **Incident timeline**





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What you need

John

### Free to use, open-source resources

Introduction slides

(Any scenario)

Facilitator
Overview and
Turns

(Scenario specific)

Turn slides

(Scenario specific)

Handouts

(Scenario specific)

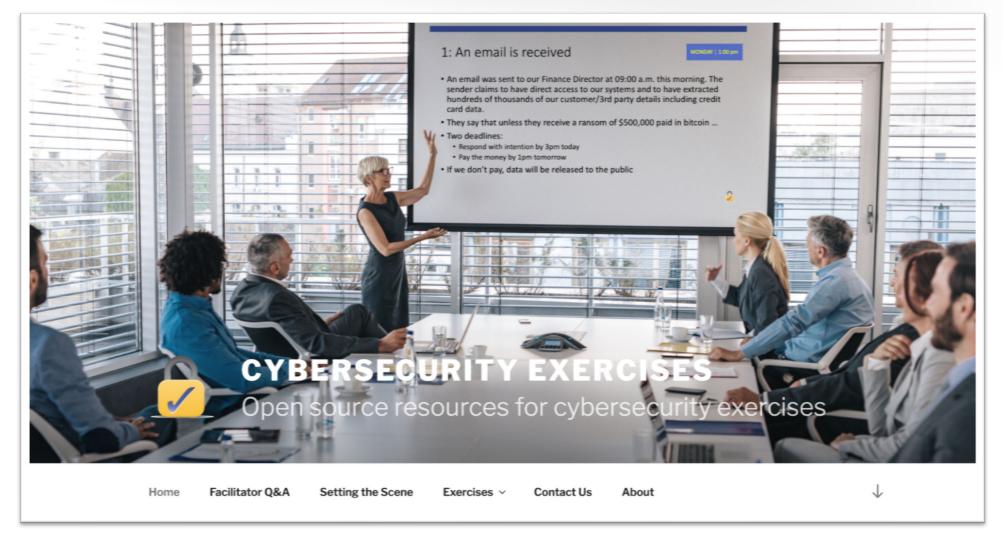
All can be customized to make it real for your organization.

e.g. today's exercise: <SENSITIVE\_DATA> = credit card data; <CELEBRITY> = Elon Musk.





### cybersecurityexercises.com – Free, Open Source





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### How to start an exercise

**Aaron** 

# Roles for the learning lab

- Facilitator
- Chief Executive Officer
- Chief Operating Officer
- Chief Financial Officer

- Head of IT or CISO
- Head of Legal
- Head of Marketing
- Head of HR



#### **Facilitator**

- Find the pack
- Introduce turn injects
- Respond to all questions as 'leader' of Silver team
- Move the exercise along today
- Get the required decision





#### **Chief Executive Officer**

- You care about:
  - Day to day activities with your COO
  - Communication to the Board

- How do we make people forget
- Share price

#### **Chief Operating Officer**

- You care about:
  - Day-to-day business operations
  - Resourcing the problem

 How do we contain and then clean this up?



#### **Chief Financial Officer**

- You care about:
  - Money
  - Effect on share price / market confidence / credit rating
  - Investor relations
- Do I get the blame for previous underinvestment?

### **Head of HR / CPO**

- You care about:
  - People strategy
  - Culture of organisation
- Employee relations (e.g. a strike!)
- Does this issue open us up to HR issues?



### **Head of Legal / CLO**

- You care about:
  - Legal affairs of company
  - Regulatory issues
- Does this open us up to litigation risk?

### **Head of Marketing / CMO**

- You care about:
  - Company's marketing campaigns
  - Company's goals
  - Our customers
- How does this incident and our reaction affect our brand?



#### Head of IT / CIO

- You care about:
  - IT infrastructure
  - IT Security →
  - User satisfaction

- Recovery of normal IT operations
- Do I get the blame for this?

# or Head of Information Security / CISO

- You care about:
  - Your team
  - Was this unexpected?
- Recovery of state
- Do we the blame for this?



### Scribe (groups of 9)

- You care about:
  - Documenting decisions
  - Legal cover
  - The next time

- You can help focus
  - "Can I just understand ...."



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Let's do it!

You!

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Wrap-up

John

### Wrap-up

- Do you feel confident you can run an exercise?
- What else would you like to have?
- If we ran this lab again, what should we change?



### What next for you...

- Schedule an exercise within the next six weeks!
- Remember to customize the slides and handouts
- Talk to silver and gold team leaders to see which exercise and format will work best for your organization
- This is a journey.
   The more an organization practices, the better it gets.



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# Thank you

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