Coordinated Vulnerability Disclosure

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DM18-0315

Reminder – RSA Attendees

VENDOR Meeting: Monday April 16, 2018,

Westin St. Francis in San Francisco, CA, US.

FREE

https://www.eventbrite.com/e/2018-cert-vendor-meeting-registration-39956032569

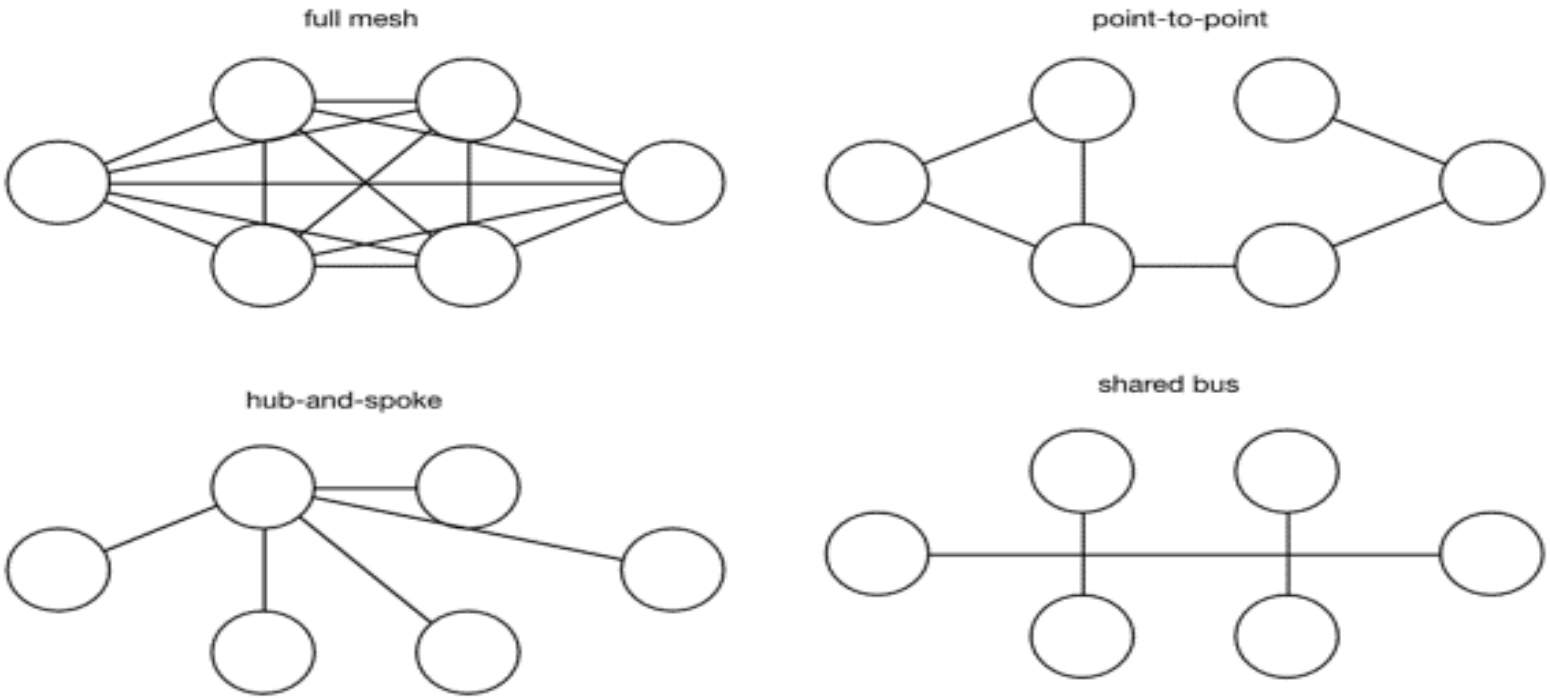
Morning Sessions:

1. Training: Vul Coordination 101
2. Supply chain transparency & component relationships

Afternoon Session:

Radically new ways multi-party coordinated vulnerability disclosure

Coordination Communication Topologies



Common network topologies

Single Vendor Vulnerability Report

Reporter Identifies a Vulnerability

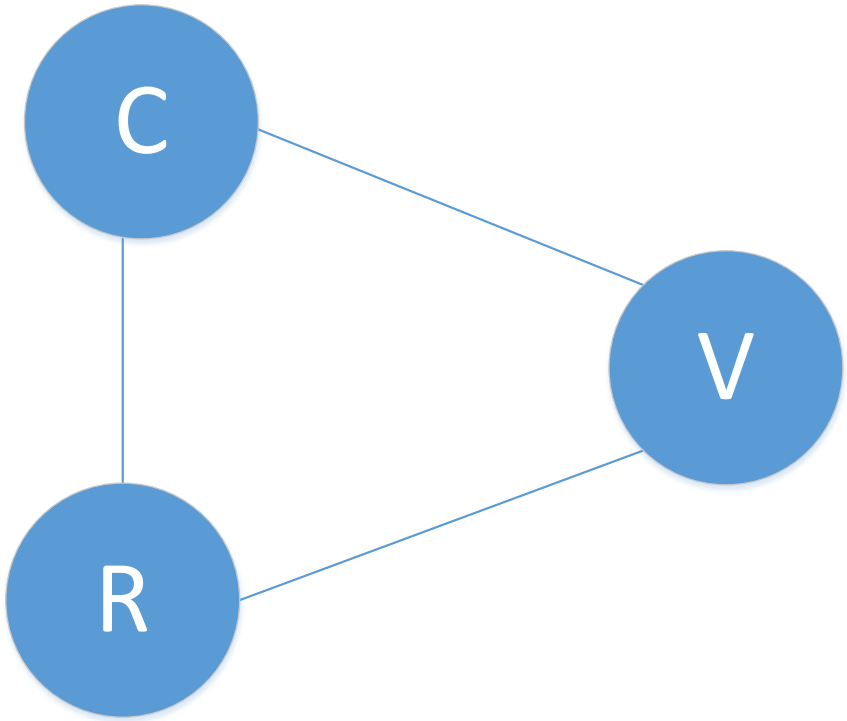
Reporter contacts Vendor

Vendor responds (or ignores) Reporter

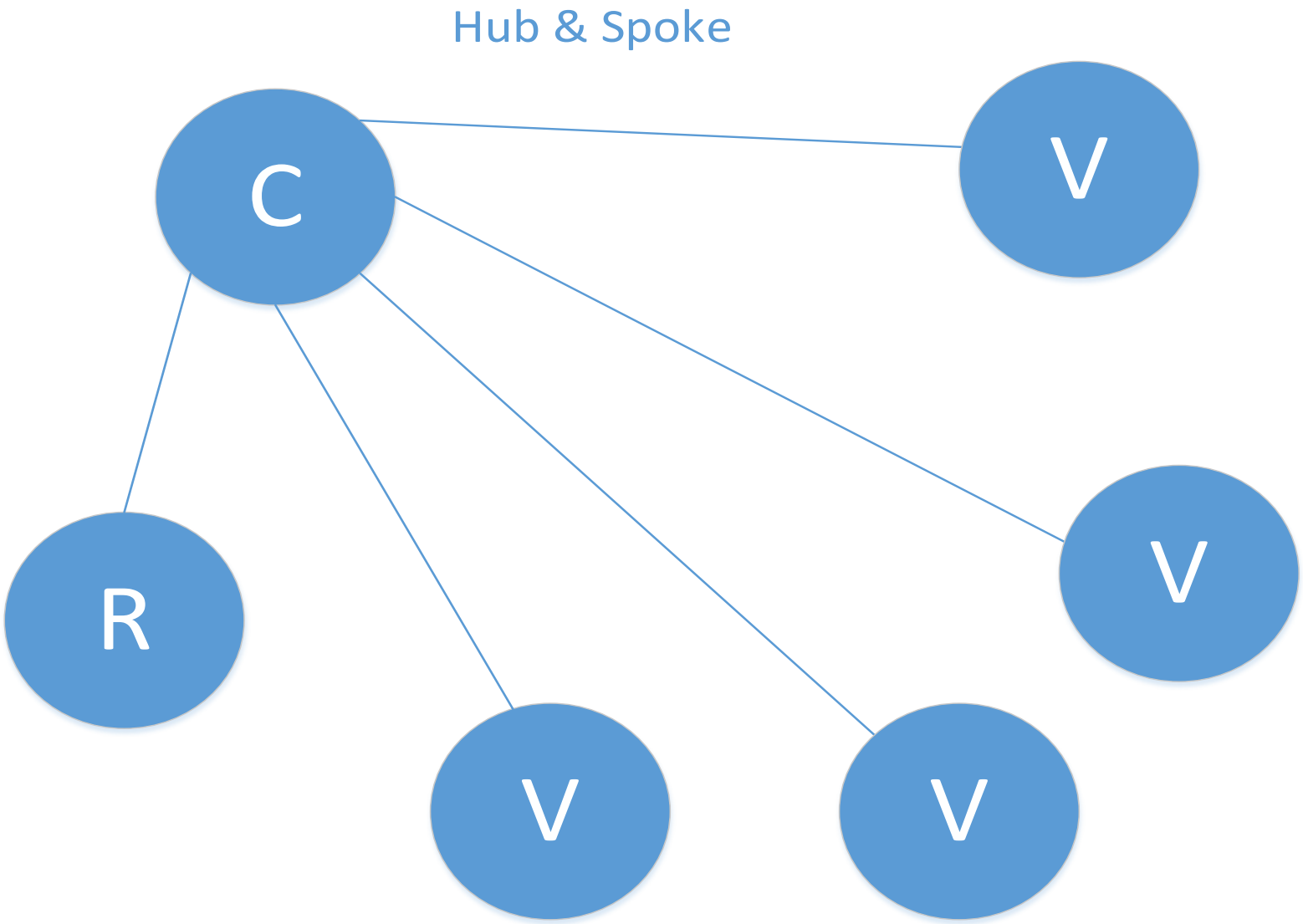
Reporter requests assistance:

- Reporter contacts CERT/CC
- CERT/CC confirms VUL
- CERT/CC communicates with Reporter
- CERT/CC contacts Vendor

Point to Point



Multiple Vendor Vulnerability Report



Coordinated Vulnerability Disclosure

Problems with Multi-Vendor Coordination:

- Hub & Spoke does not scale
- Who do we notify?
- Who did we miss?
- More effort happens after Disclosure
- Vendors must contact us for updating the vul note.
- Balancing conflicting vendor disclosure policies.

Examples:

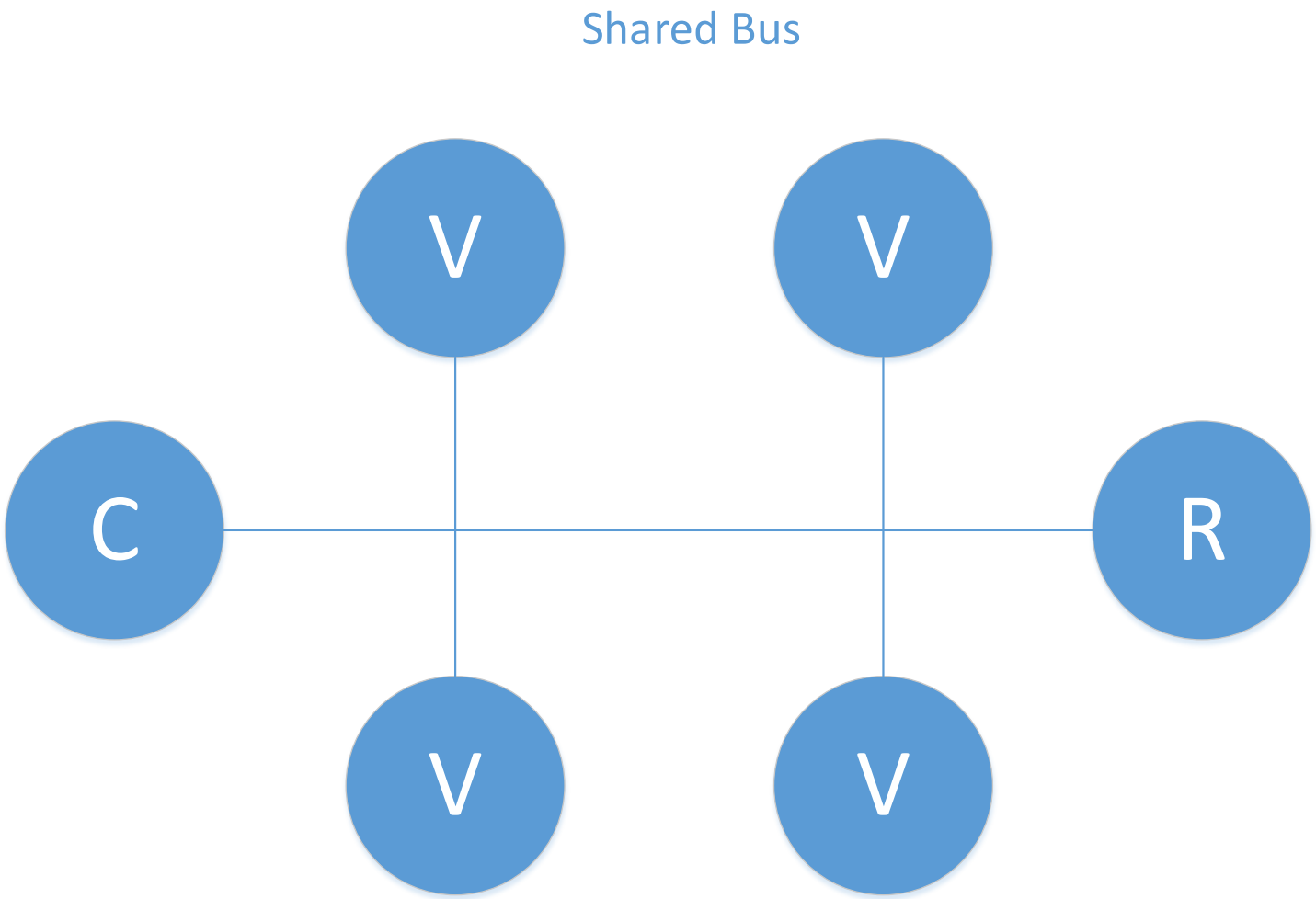
- VU#484891 (the vul that enabled SQL Slammer)
- VU#228519 (KRACK)

Is there a better solution?

Improving Coordination

Collaborative Vulnerability Disclosure

A Better Solution?



Microsoft's response to Congressional Letter

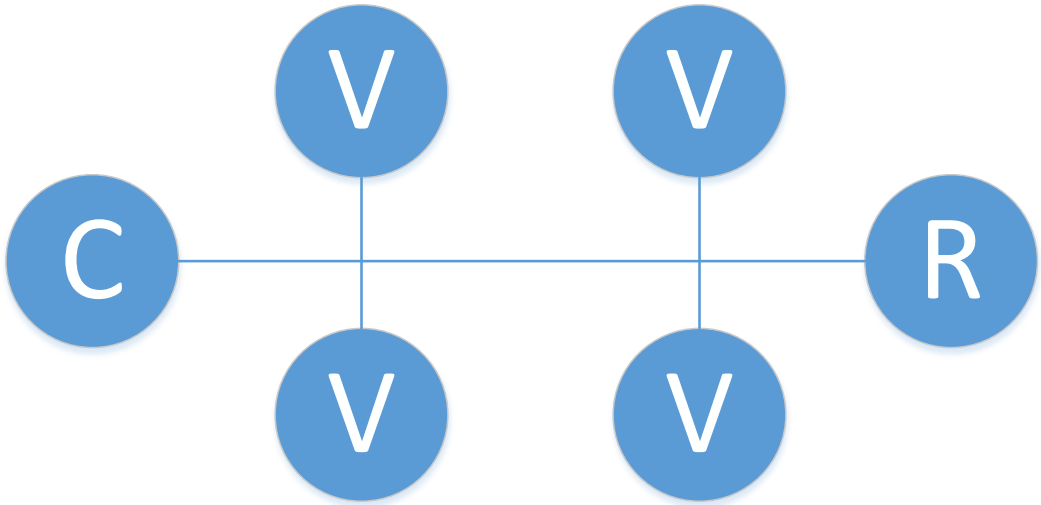
In less complicated scenarios, the CVD protocol calls for a **hub-and-spoke** model of communication through which a vulnerability owner communicates individually with each affected vendor.

In more complicated scenarios—like the one presented by Meltdown and Spectre—a "**shared-bus**" model can be required, to ensure affected companies can coordinate directly "through the use of conference calls, group meetings, and private mailing lists."

https://energycommerce.house.gov/wp-content/uploads/2018/02/MSFT-Spectre-Response-to-EC-Committee-.pdf

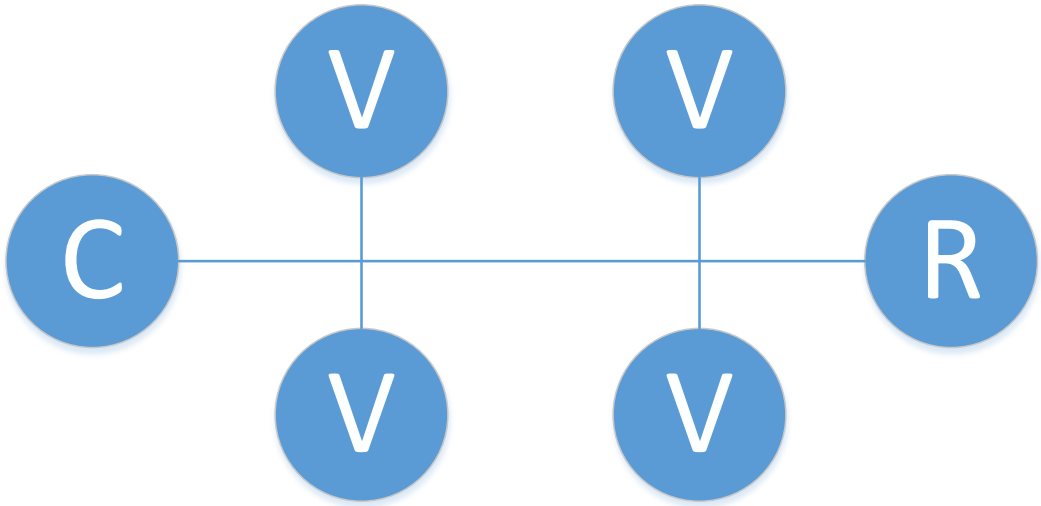
Communications

- Private shared venue
- Vendors are invited in.
- Shared file space
- Track threaded discussions
- Vendors can be added, immediate access to history



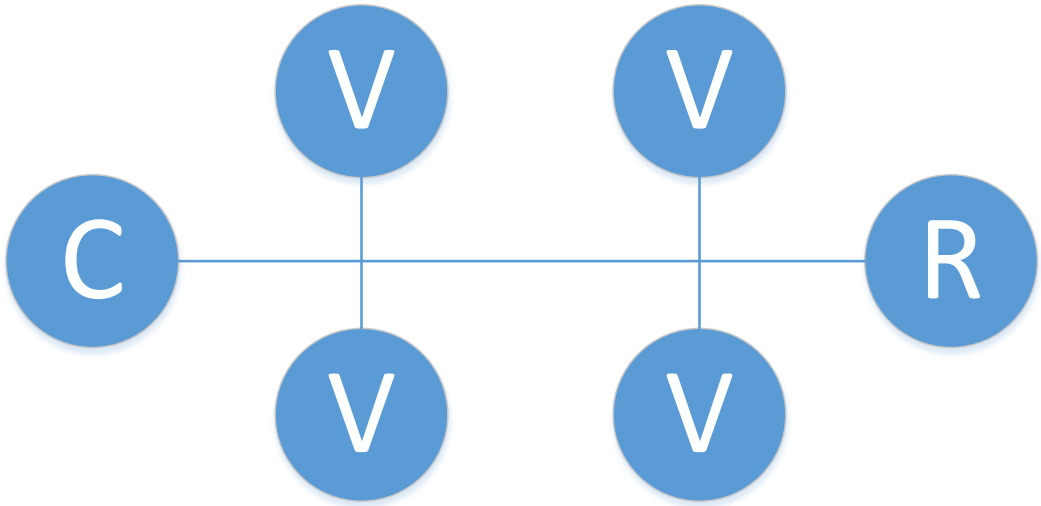
Coordinator/Coordination

- Sets target dates and milestones
- Identifies and invites affected vendors
- Invites additional vendors as identified



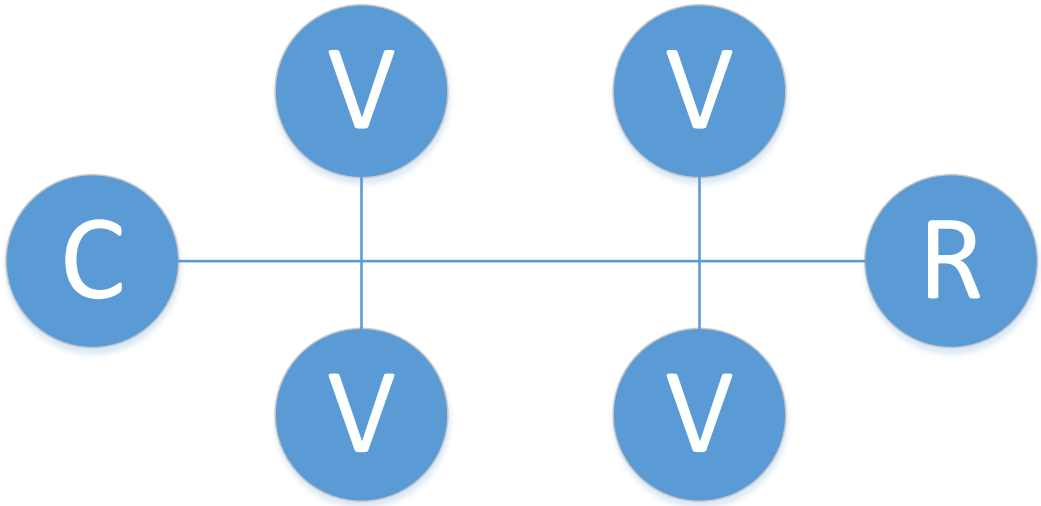
Reporter

- Identifies the vulnerability
- May/may not contact vendor(s)
- Contacts Coordinator



Vendors

- Vendors post statements, links to patches, etc.
- Possible Multiple vulnerability reports (separate venues)



Challenges

Coordination	Collaboration
Tracking threaded communications	
Secure Communications	
Contact Management	Account Management?
Disclosure Timing	Disclosure Timing – Everyone agrees?
Publishing	Publishing
Updating Reports	Updating Reports

Alternate Disclosure

Pre-Disclosure :	Disclosure:	Post – Disclosure:
Group effort Open comms within the group Add new vendors Discussion threads/ scheduling disclosure	Artifacts (publishable docs)	Find new vendors Update references Refine Content

What are your thoughts?

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Team Lead