Getting strategic about security

Mike Bursell
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Agenda

What I may well end up covering

- Intro to the Office of the CTO

- What this session *isn't*
- What organisations aren't interested in
  - (and what they are)
- Some interesting technologies
- What could Red Hat do?
- Questions

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The Office of the CTO

The Office of the CTO

Office of the CTO Objectives:
- Provide a RHT technology vision & strategy establishing our industry leadership
- Identify technology trends & assess their impacts on RHT's technical, product & business strategy and develop a response
- Ensure RHT's success by identifying & supporting relevant upstream projects communities

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The Office of the CTO

And me

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*This is a security joke. If you don't get it, you're either in the wrong session, have a more mature sense of humour than I do, or managed to avoid cryptographic protocols in your career path (well done?).

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What this session *isn't*

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What this session isn't

- A roadmap
- A marketing pitch
- A detailed description of one or more low-level technologies
- A full description of Red Hat's 10 year security plans*

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- A roadmap
- A marketing pitch
- A detailed description of one or more low-level technologies
- A full description of Red Hat's 10 year security plans*

*If you're interested in this, then come and chat. I'd love to have one of these. You may have to join Red Hat to define all the detail, but that's fine, too.

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What organisations aren't interested in (and what they are)

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Definition: *"Organi[s|z]ation"*

I mean:

- The business function of organisations
- The function that controls budget, strategy, direction

There will always be organisational units with specific focus on different areas

- IT, legal, HR, etc.

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Organisations aren't interested in...

High School Musical (3)

Cat videos

Cake recipes

Cricket tactics

Make-up tutorials

Groovy fonts

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Organisations aren't interested in...

Security.

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Organisations aren't interested in...

Security.

- They're really not.
- Security is a **means to an end** for all but
  - a vanishingly small group of organisations
  - and a slightly higher number of security-focussed people.

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Closest is "we'll help you make it more difficult to be insecure".

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This makes my role, given my job title, somewhat interesting.

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Organisations *are* interested in...

Risk.

Organisations *are* interested in…

Risk.

- Understanding, managing, mitigating, measuring, monitoring…

Also:

- Being able to tie security policies to governance
- Managing trust in infrastructure, vendors, etc.
- Changes to culture, methodologies, etc.
  - E.g. Dev(Sec)Ops
- (Talking about new technologies)
  - (Particularly if you can tie them to solving business problems)

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Some interesting technologies

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Disclaimer

1. This is a set of stuff that I'm interested in.
   - I think it's cool, so I'm going to enthuse. Sorry.
2. Some, all or none of the following may end up in Red Hat products, tools or service offerings.
3. I'm *far* from having the only view on these. I'd like to hear your thoughts.

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Some interesting technologies

And methodologies. And architectures. And cultural changes.

A few to tickle your fancy:

- DevSecOps
- Remote attestation
- Quantum-safe crypto
- Trusted Execution Environments (TEEs)
- Multi-Party Computation (MPC)
- "Serverless" computing
- Trust domains
- AI/ML and security

What could Red Hat do?

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What's special about Red Hat?

- "Open-ness" (FOSS-ness)
  - Community involvement
  - Credibility
  - Open culture
  - Other things "open"...?
- The stack
- You!
  - Customer, partners, associates, ecosystem, analysts, press...

"Open unlocks the world's potential"

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What could Red Hat do?

- Keep doing the fundamentals!
  - Provenance
  - CVE response
  - Building great security-related features
    - SELinux, OpenSCAP, KeyCloak, etc.

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  - Platform, orchestration, middleware, tooling, CI/CD, Dev(Sec)Ops...

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    - Provide products and solutions that address risk, trust, policy, etc.

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- Engage at the business-function level of organisations
  - Provide products and solutions that address risk, trust, policy, etc.
- Do things that only an open source company *can* do
  - Equip customers and partners with new views, integration points, controls

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Questions

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