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
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
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?).
What this session isn’t
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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*
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*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.
What organisations aren’t interested in (and what they are)
Definition: “Organisation”

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.
Organisations aren’t interested in...

- High School Musical (3)
- Cricket tactics
- Cake recipes
- Cat videos
- Make-up tutorials
- Groovy fonts
Organisations aren’t interested in...

Security.
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-focused 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.
Organisations are interested in...

Risk.
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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)
Some interesting technologies
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.
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?
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”
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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- Engage at the business-function level of organisations
  - 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
Questions
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