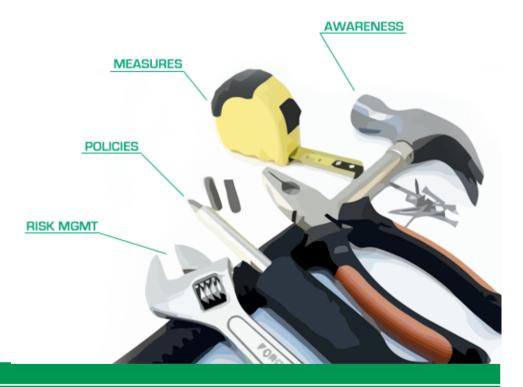


Tools of the Trade for a Modern (C)ISO

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Who Am I



- Old-school infosec guy since 1997
- Technical background in networking [e.g. see my ShmooCon/Day-Con talks]
- Security thinking centered around risk
- Insinuate to a number of (C)ISOs on a regular basis [-> www.insinuator.net]
- On a mission for a better infosec world



insinuator.net









This is a loose collection of thoughts on the current state of the infosec world and an ISO's role in it, covering...

- Tasks & Challenges of an ISO
- His mission & its dimensions
- Some movies from my youth



Intended Audience of this Talk





An ISO's Tasks



Traditional core responsibilities

- Long-term security strategy
- Creation of policies & guidelines
- Risk assessment
- Analysis of security incidents
- Taking care of compliance...



Main future role: Trusted Business Advisor

Challenges



- World getting ever more complex
- Outsourcing
- \$NEW_TECH (Virtualization et.al.)
- Limited resources



Heritage

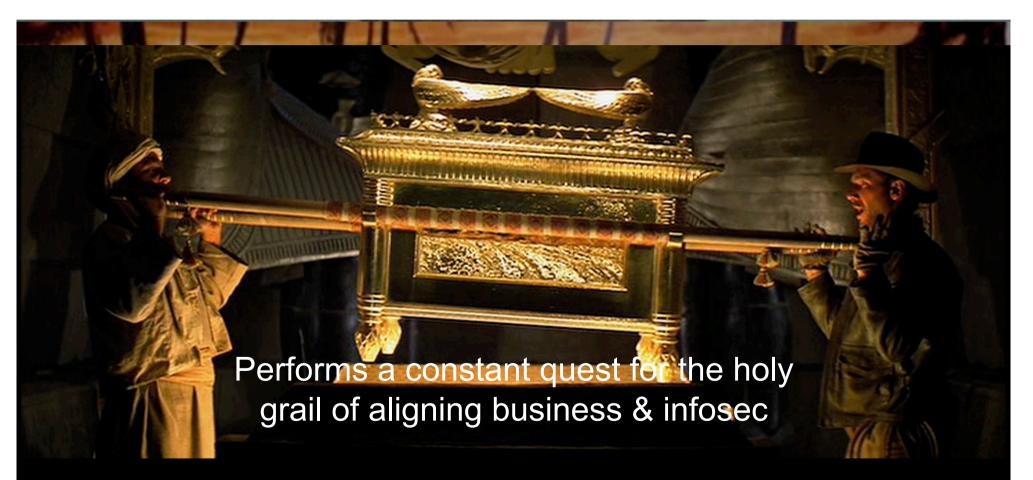




 All this while being despised within the organization, by a long tradition...

On his Ever-lasting Mission, an ISO...





Mustaufighetestahatheevenusimeessolererks

And Might even get Postal over his Impossible Task





Ok, seriously, there are three Main Dimensions of an ISO's Life & Work

- Technology
- Communication & Tools
- Mindset & Approach



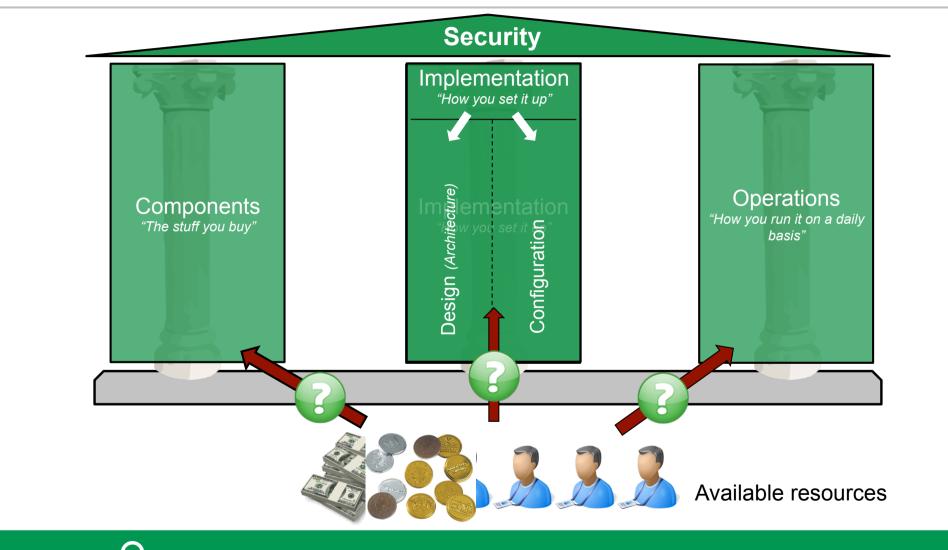


- The house of security & the role of operations
- The ongoing change of the threat landscape & subsequent consequences
- The evaporation of network based controls

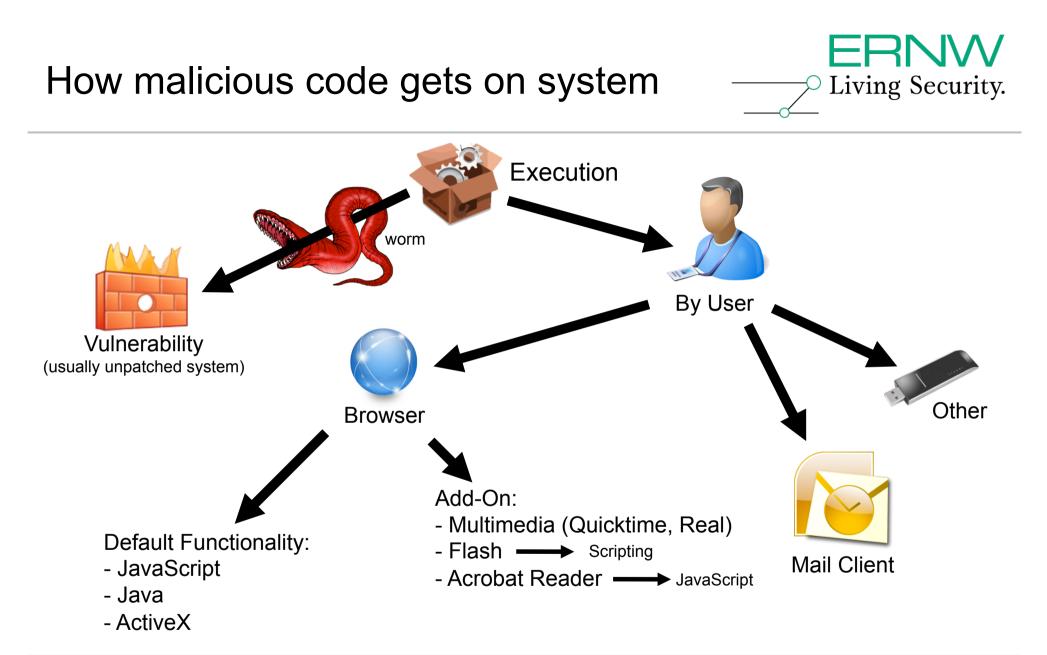
See my *Troopers09* keynote for more on this stuff

The House of Security





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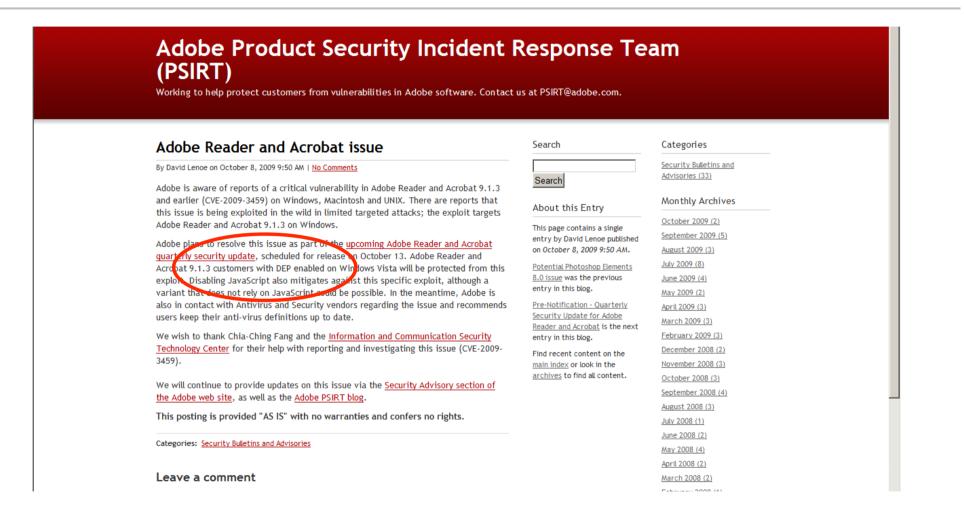
In the light of recent events...



Search for TechNet Home > TechNet Security > Bulletins Go Microsoft Security Bulletin MS09-062 - Critical TechNet Security Vulnerabilities in GDI+ Could Allow Remote Code Execution (957488) Security Bulletin Search Published: October 13, 2009 | Updated: October 14, 2009 Library Learn Version: 1.1 Downloads Support Community General Information Executive Summary This security update resolves several privately reported vulnerabilities in Microsoft Windows GDI+. These vulnerabilities could allow remote code execution if a user viewed a specially crafted image file using affected software or browsed a Web site that contains specially crafted content. Users whose accounts are configured to have fewer user rights on the system could be less impacted than users who operate with administrative user rights. This security update is rated Critical for all supported editions of Windows XP and Windows Server 2003; Windows Vista and Windows Vista Service Pack 1; Windows Vista x64 Edition and Windows Vista x64 Edition Service Pack 1; Windows Server 2008 for 32-bit Systems, Windows Server 2008 for x64-based Systems, and Windows Server 2008 for Itanium-based Systems: Microsoft Internet Explorer 6 Service Pack 1 when installed on Microsoft Windows 2000 Service Pack 4, SOL Server 2000 Reporting Service Pack 2, all supported editions of SQL Server 2005, Microsoft Report Viewer 2005 Service Pack 1 Redistributable Package, Microsoft Report Viewer 2008 Redistributable Package, and Microsoft Report Viewer 2008 Redistributable Package Service Pack 1. This security update is rated Important for all supported editions of Microsoft .NET Framework 1.1 and Microsoft .NET Framework 2.0 on Microsoft Windows 2000; Microsoft Office XP: Microsoft Office 2003: all affected Office Viewer software for Microsoft Office 2003: 2007 Microsoft Office System: all affected Office Viewer software for 2007 Microsoft Office System; Microsoft Office Compatibility Pack, Microsoft Expression Web, Microsoft Expression Web 2, Microsoft Office Groove 2007 and Microsoft Office Groove 2007 Service Pack 1; Microsoft Office Project 2002; Microsoft Office Visio 2002; Microsoft Works 8.5; and Microsoft Forefront Client Security 1.0. For more information, see the subsection, Affected and Non-Affected Software, in this section. The security update addresses the vulnerabilities by introducing proper data validations within GDI+ when rendering WMF images, modifying the way that GDI+ manages a heap buffer when reading a PNG file, modifying the way that GDI+ allocates a buffer used when reading TIFF files, This update modifies the way that GDI+ manages buffers when certain .NET API calls are made, modifying the way that GDI+ calculates the required size of a buffer while parsing a PNG image, , and modifying the way that Microsoft Office opens specially crafted files. For more information about the vulnerabilities, see the Frequently Asked Questions (FAQ) subsection for the specific vulnerability entry under the next section, Vulnerability Information. Recommendation. Microsoft recommends that customers apply the update immediately. Known Issues. Microsoft Knowledge Base Article 957488 documents the currently known issues that customers may experience when installing this security update. The article also documents recommended solutions for these issues. ☆ Top of section Affected and Non-Affected Software The following software have been tested to determine which versions or editions are affected. Other versions or editions are either past their support life cycle or are not affected. To determine the support life cycle for your software version or edition, visit Microsoft Support Lifecycle. **Microsoft Windows and Components** Operating System Component Maximum Security Impact Aggregate Severity **Bulletins Replaced** Internet | Protected Mode: On 🖓 🕶 🔍 100% 📼 Done

In the light of recent events... II

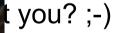




The evaporation of Network Based Controls ving Security.

- Get over it.
- In times of "convergence", VoIP, virtualization, multi-tier monster apps... segmentation & filtering might no more work
- Personally, this hurts ;-)
- Still, your nev
 - Host Hardenir
 - Encryption









- Operations is key
- Prevention pays
- It's the simple things in life...







- Relationships in the organization
- Policies
- Risk assessment



Understand who has "the money"





Don't go into fights you can't win.









In case you've not written them yourself...



→ Establish line-of-contact to *policy people* in your org
→ Try to figure out intent if clauses are not clear





- In case you write them yourself
- Support business
- Provide flexibility
- Still be distinct & precise! Align with governance model.
- It's not a problem having a statement like "apply where appropriate" in your policy as long as
 - People do not decide about "where appropriate" on their own.
 - They know when and who to ask for guidance.
 - This guidance is provided and there's a governance model.

Policies 3



Role of "outside world" has changed

Do not think only of "inside corp" (e.g. when writing policies), but _always_ think "outward"

- Main discussion in many environments currently. How to treat:
 - Business partners
 - Subsidiaries \$CORP holds 51% of.
 - At least today. Tomorrow it might be 20%...



© Dan Piraro

External data sources (trading systems, weather forecast etc.).

It's all about risk





You NEED some tools/framework.

Honestly, I can't understand how any CISO can get along without some tools...

Lessons learned



- Understand who has money & power
- Don't go into fights already-lost
- Get & communicate the role of policies
- USE risk assessment (tools)



Mindset & Approach

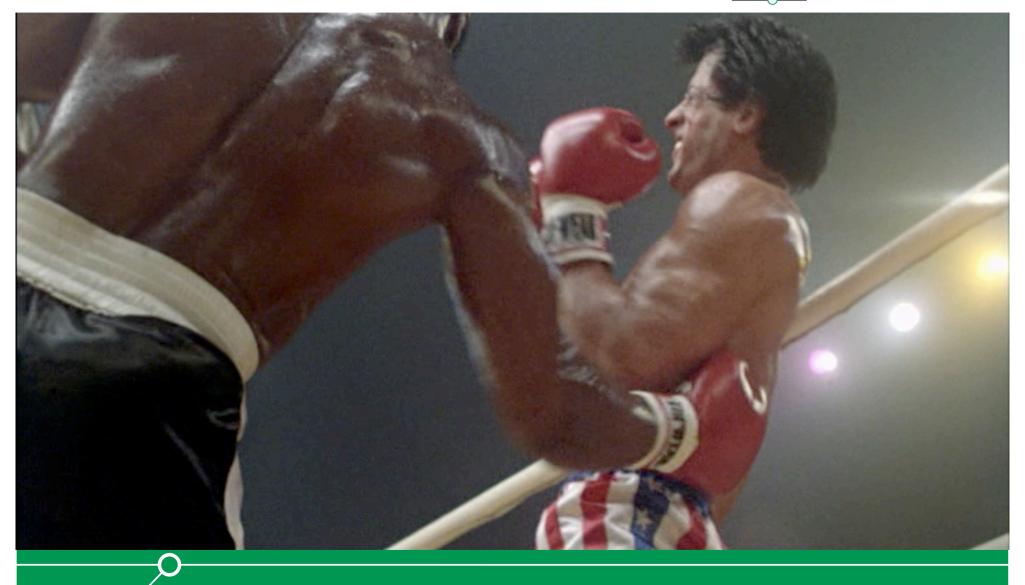


- Be able to take punches
- Risk & Reward
- Trust & Control



Be able to take punches





The concept of reward





The concept of reward

ERNV Living Security.

 "Slipping and falling on the ice, for example, is a game for young children, but a potentially fatal accident for an old person. And the probability of such an event is influenced both by a person's perception of the probability, and by whether they see it as fun or dangerous.
 For example, because old people see the risk of slipping on an icy road to be high, they take avoiding action, thereby reducing the probability." [from: John Adams's *Risk*]



But they miss the *fun*, that is the reward.



The value of trust



- Confidence is built on
 - Trust
 - Control



- You can't control everything
 - Remember your limited set of resources...
- So understand where to control... and where to trust...

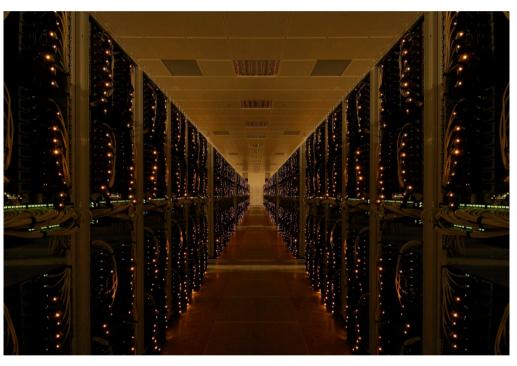
Sometimes you can trust...



Home



Datacenter





Home

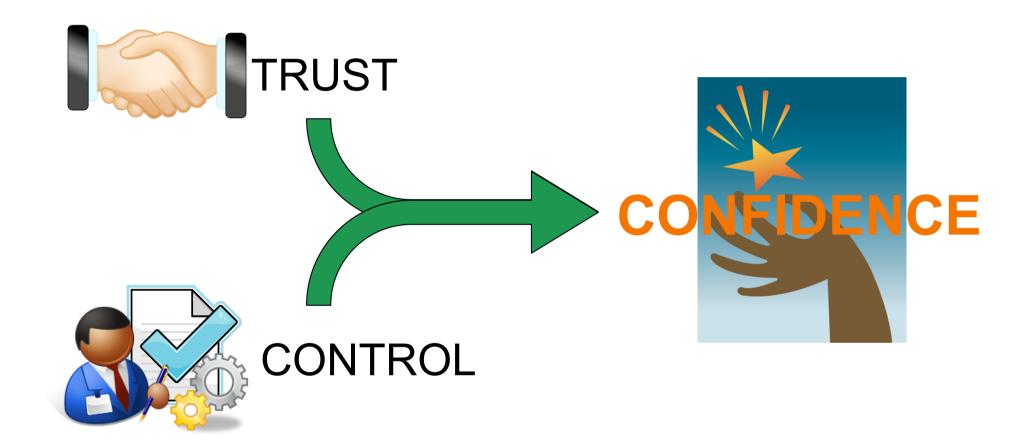


Datacenter



Trust, Control & Confidence







Lessons learned



- The right mindset is paramount.
- There's risk... and reward.
- Confidence has two sources...







- Corporate infosec world might be complex and cruel.
- YOU can still master it with the right tools & mindset.
- And thereby accomplish your future mission...



Trusted Business Advisor





There's never enough time...









Rocky IV

Sylvester Stallone, 1985

Rocky Balboa

Sylvester Stallone, 2006

Indiana Jones Raiders of the Lost Ark

Steven Spielberg, 1981

Taxi Driver

Martin Scorsese, 1976

Scarface

Brian De Palma, 1983