Protect 2014

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HP ArcSight SIEM and data privacy best practices

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Privacy is a data security issue

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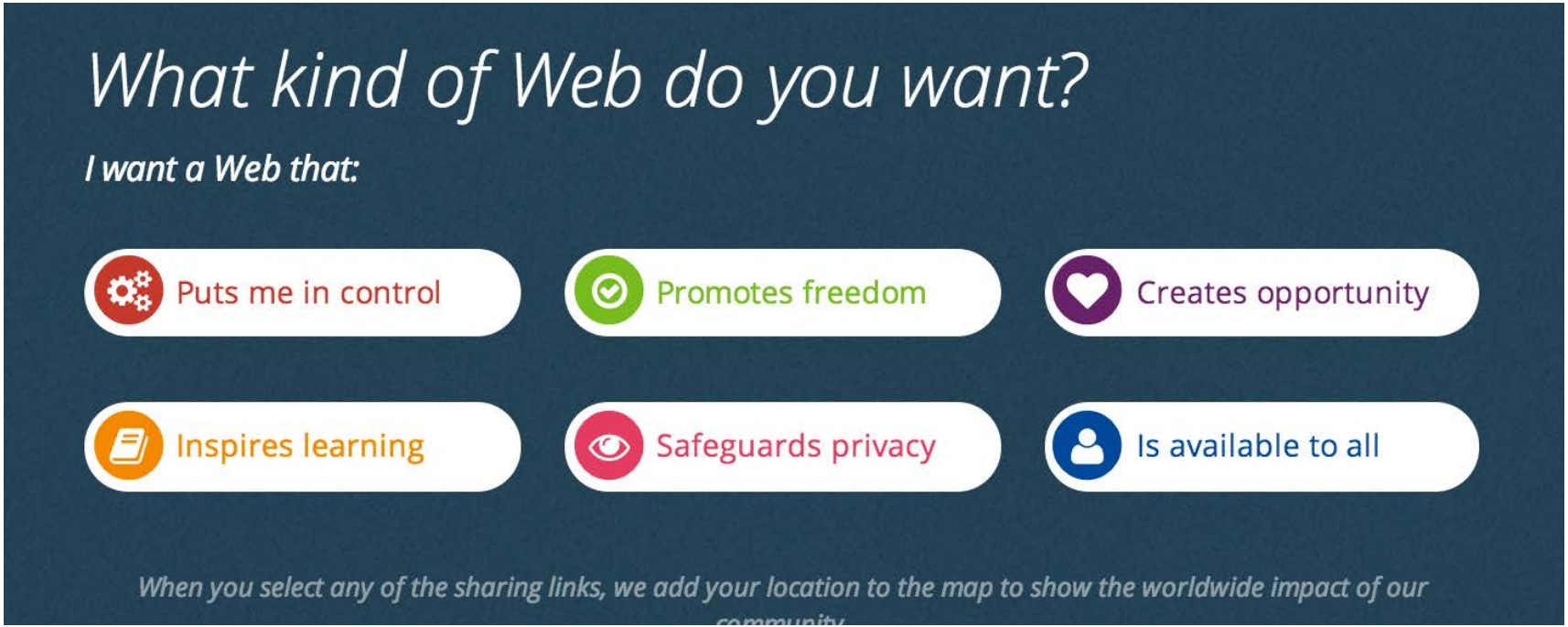
Consumers Care About Privacy

Privacy: Top Issue Around the World

The Web We Want Project (https://webwewant.mozilla.org)



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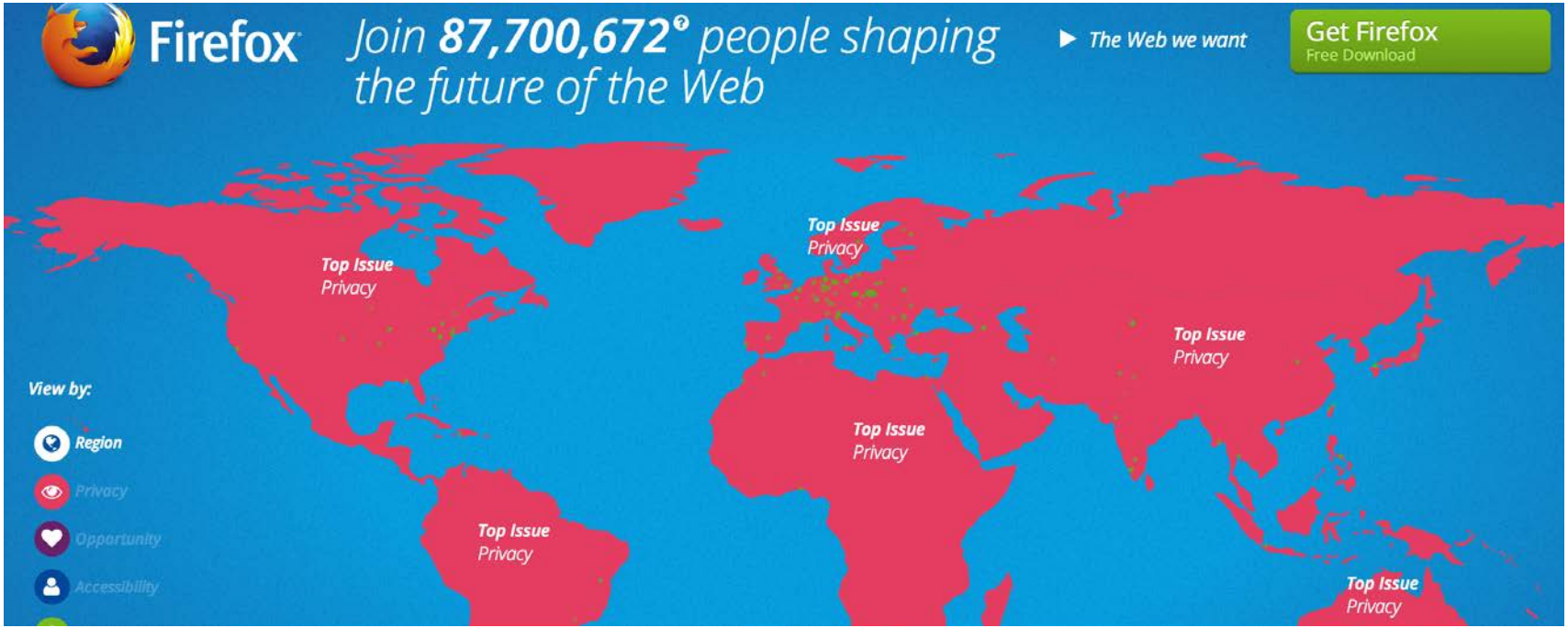
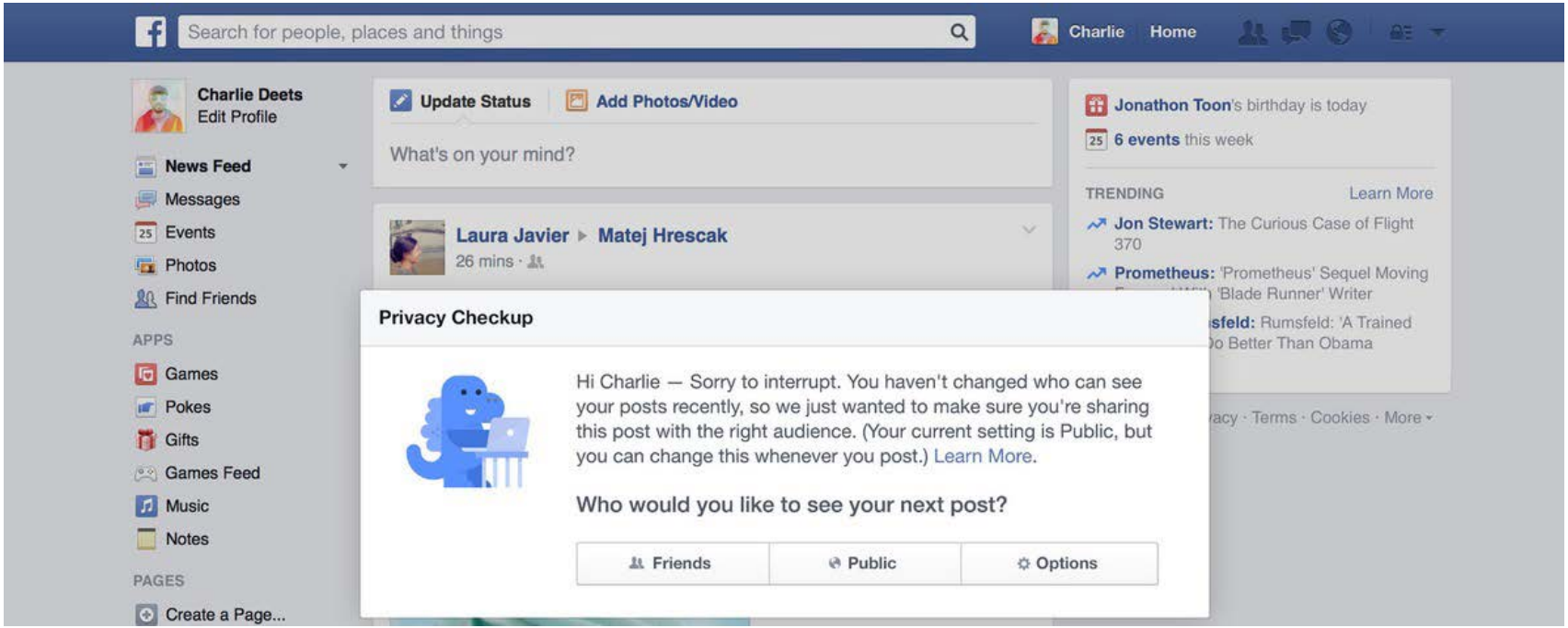


Privacy: A Competitive Differentiator

Microsoft's Scroogled (http://scroogled.com)

Privacy: A Value Proposition

Facebook's anonymous login, privacy dinosaur, enhanced controls, etc.



Privacy: The Main Value Proposition

Silent Circle Blackphone (https://www.blackphone.ch)

Consumers Care About Privacy

Notice and Consent Does Not Work

Report to the President: Big Data and Privacy (http://www.whitehouse.gov)

"Notice and consent is the practice of requiring individuals to give positive consent to the personal data collection practices of each individual app, program, or web service. Only in some fantasy world do users actually read these notices and understand their implications before clicking to indicate their consent."

- President's Council of Advisors on Science and Technology

Regulators Respond

FTC Chairwoman vows to sue companies that collect large amounts of data and misuse it

Regulators Respond

Statistics to consider

- Of the top 10 privacy lawsuits in history, 2013 registered 4 of them. *Source: Jay Cline*
- Among the 130 “significant” Safe Harbor enforcement actions since 1999, 60% were after 2011. *Source: Jay Cline*
- Among the 50 data security cases since 2000, half came after 2010. The FTC had begun to deliberately strengthen its foray into holding businesses accountable for specific data security inadequacies through its unfairness power. *Source: IAPP*
- Prior to 2011 the FTC brought ~3 legal actions/year for violations of consumers’ privacy rights, or those that misled consumers by failing to maintain security for sensitive information. Between 2011 and 2013 there were ~5 such cases/year. *Source: FTC*

FTC’s Authority Is Tested in Court

Wyndham case provides a benchmark moment

- **FTC has settled with dozens of companies over accusations of being “unfair,” Wydham was the first not to settle out of court.**
- **Wyndham suffered a breach of more than 500k records including credit card information. The FTC complaint charged, “the security practices were unfair and violated the FTC Act” due to “Wyndham’s inadequate security procedures.”**
- **In motion to dismiss Wyndham set first court testing case of ”FTC authority to go after ‘unfairness’”**
- **FTC prevailed in a district court ruling.**
- **Game changer**

Regulators Respond Globally

Greater enforcement in Europe, and 100 other countries

The Future Is Now: Enterprise Is Accountable

Privacy risk mitigation requires more than compliance with applicable laws a regulations

You Need to Know your Data

Data security needs to play key role in mitigating privacy risk

Data privacy in the SIEM world

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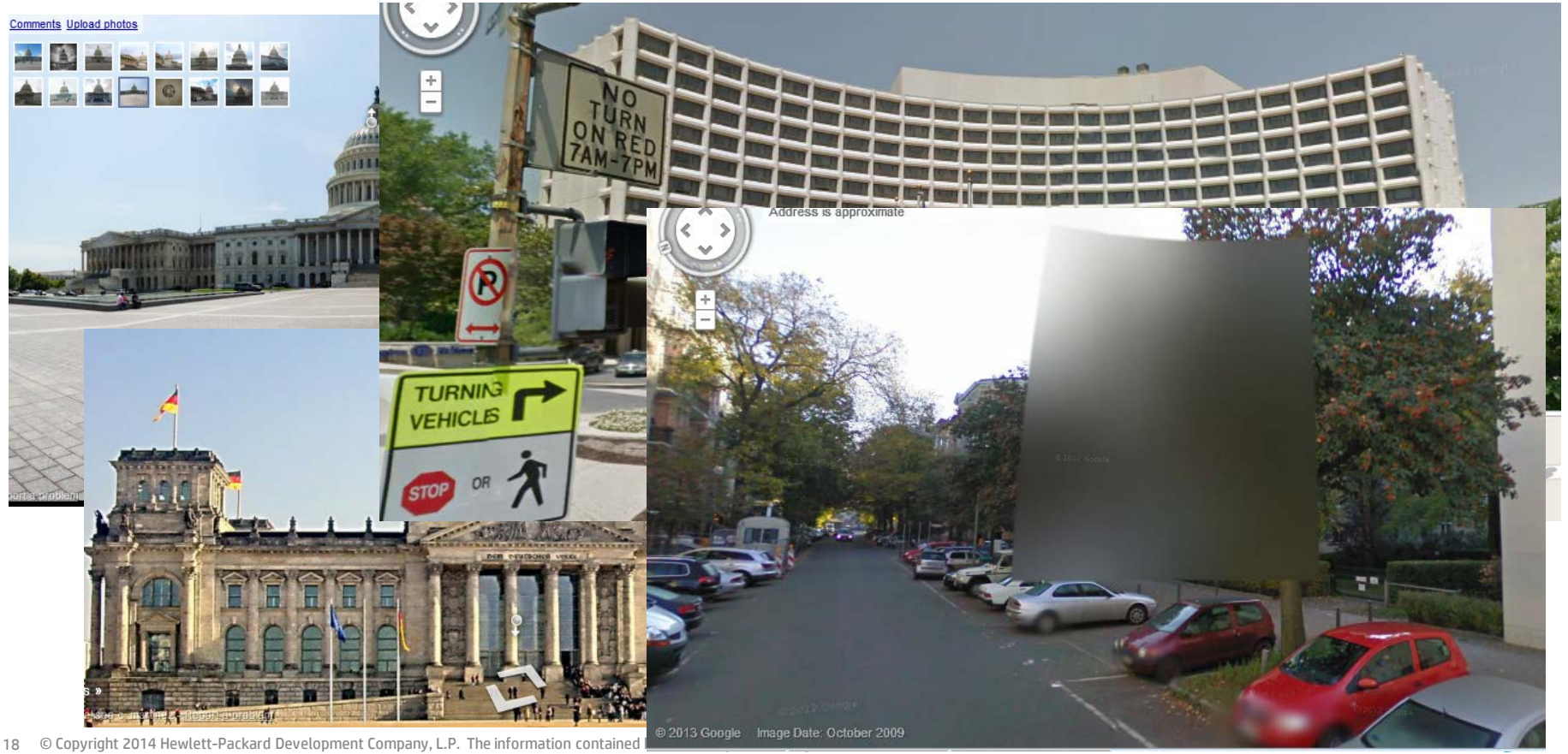
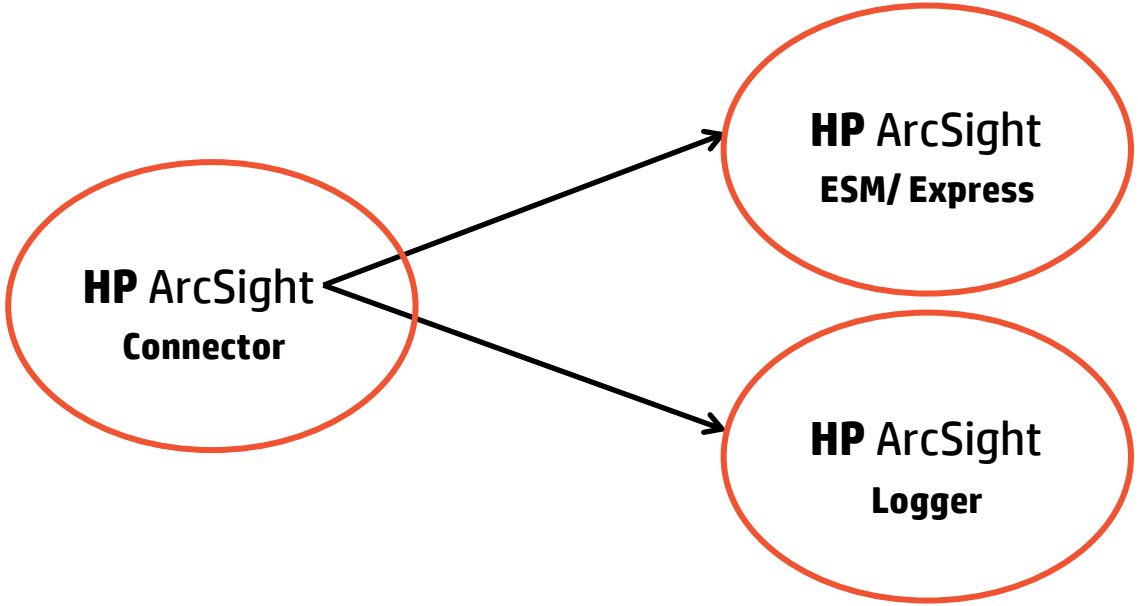
A StreetView example



Elements we will talk about

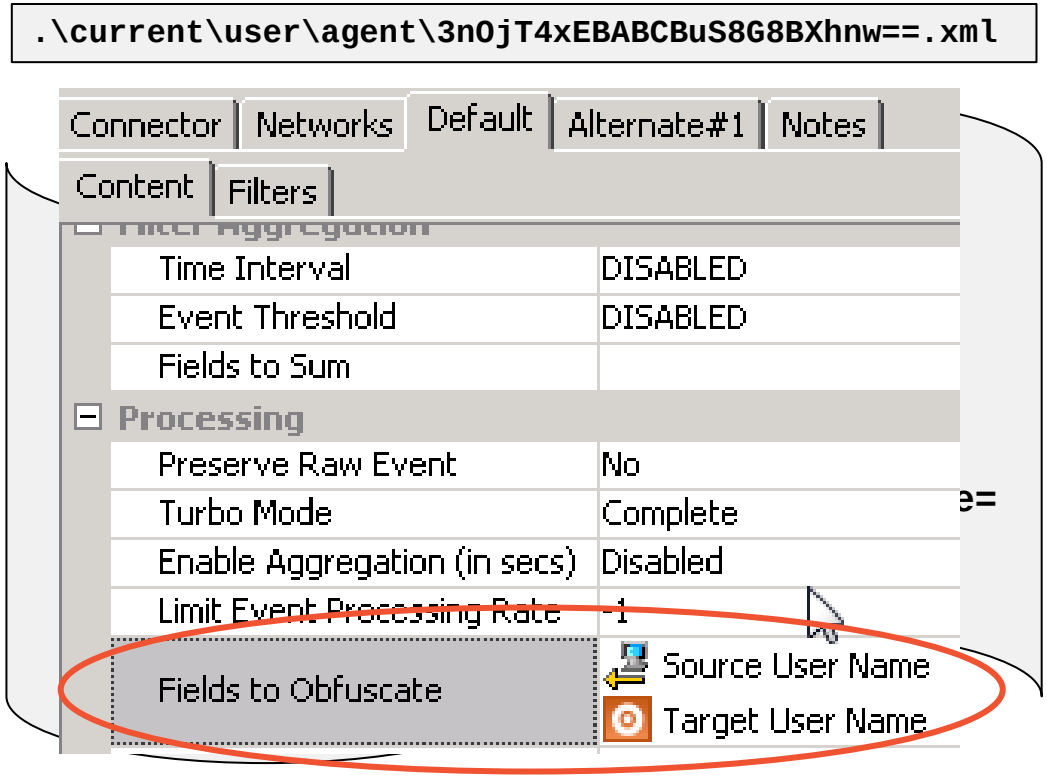


Connector

Connector obfuscation - configuration

Destination specific setting in <agentID.xml>

- One or many fields
- Uses hash algorithm
  - MD5
  - SHA256 (FIPS)
- One way operation
- High performance



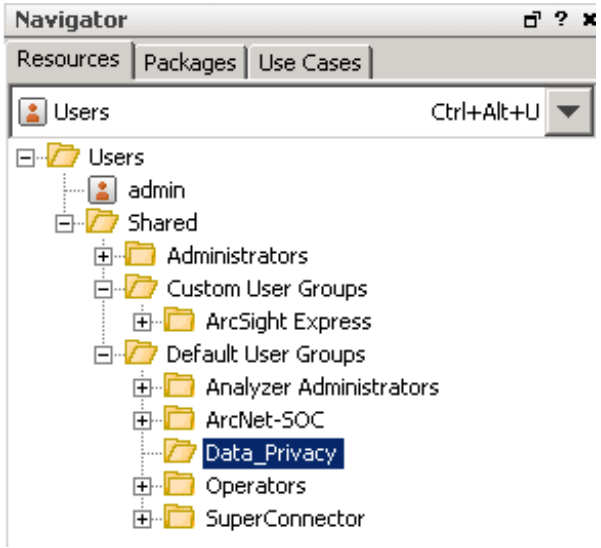
Connector obfuscation – ESM console view

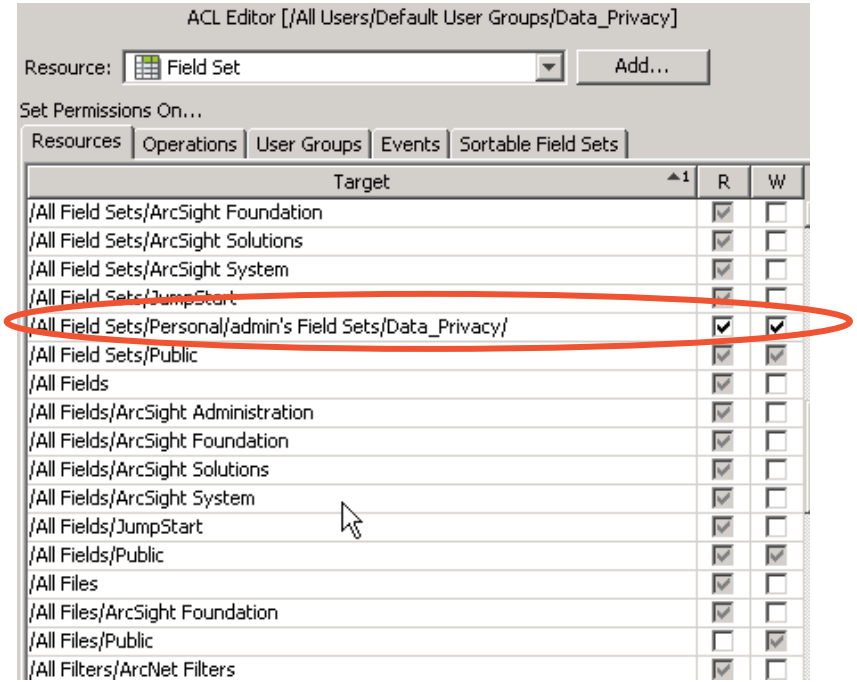
End Time	Name	Attacker User Name	Target User Name	Attacker Address	Target Address
21 Aug 2013 00:11:04 PDT	DB access attempt	mwhite	sys		10.0.112.213
21 Aug 2013 00:11:02 PDT	User Account Deleted	Santos	gwashington		10.0.112.215
21 Aug 2013 00:11:02 PDT	User Account Deleted	santos	gwashington		10.0.112.215
21 Aug 2013 00:11:02 PDT	User Account Deletion	Santos	gwashington		10.0.112.215
21 Aug 2013 00:11:02 PDT	User Account Deletion	Santos	gwashington		10.0.112.215
21 Aug 2013 00:11:02 PDT	User Account Deletion	santos	gwashington		10.0.112.215
21 Aug 2013 00:11:02 PDT	User Account Deletion	santos	gwashington		10.0.112.215

End Time	Name	Attacker User Name	Target User Name	Attacker Address	Target Address
20 Aug 2013 06:56:29 PDT	User Account Deletion	6f816c94fe41d47a5d...	7367fdba594821...		10.0.112.211
20 Aug 2013 06:56:29 PDT	User Account Deletion	6f816c94fe41d47a5d...	7367fdba594821...		10.0.112.211
20 Aug 2013 06:56:29 PDT	Logon Failure	200CEB26807D6BF99...	DE2F15D014D40...	10.0.113.27	172.16.1.10
20 Aug 2013 06:56:29 PDT	Failed Authentication - Windows Work...	200ceb26807d6bf99f...	de2f15d014d40b...	10.0.113.27	172.16.1.10
20 Aug 2013 06:56:28 PDT	TCP_MISS	336D5EBC5436534E6...		10.10.30.200	192.168.4.205
20 Aug 2013 06:56:28 PDT	User Account Deleted	F3E3016C9F958241A...	7792144DADBD7...		10.0.112.207
20 Aug 2013 06:56:28 PDT	TCP_MISS	336D5EBC5436534E6...		10.10.30.200	192.168.4.205

ESM/Express

ESM/Express – role-based access



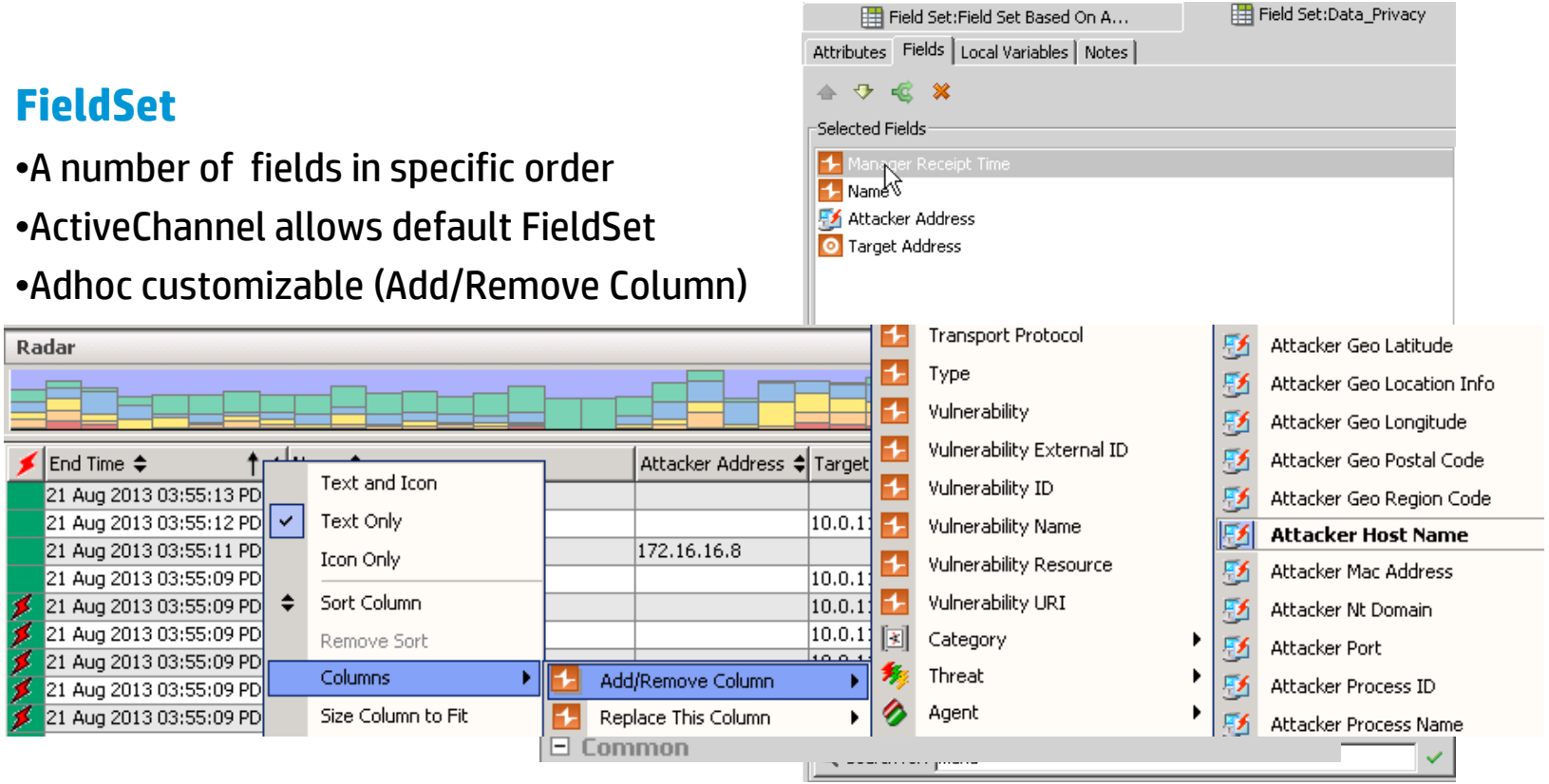


Access Control Lists (ACL) based on user groups with inheritance

ESM/Express – I. FieldSets

FieldSet

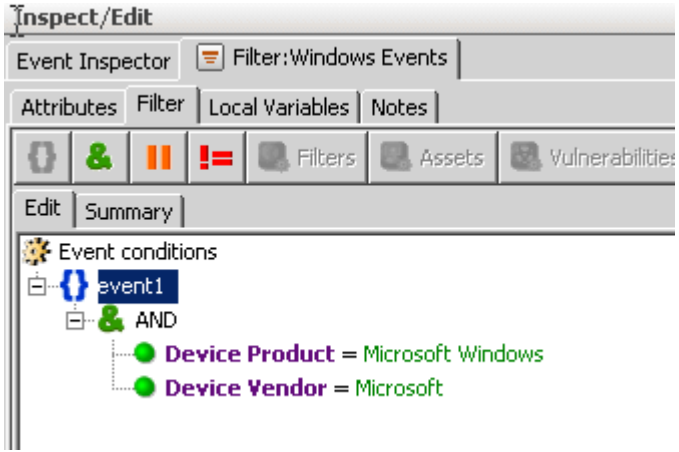
- A number of fields in specific order
- ActiveChannel allows default FieldSet
- Adhoc customizable (Add/Remove Column)

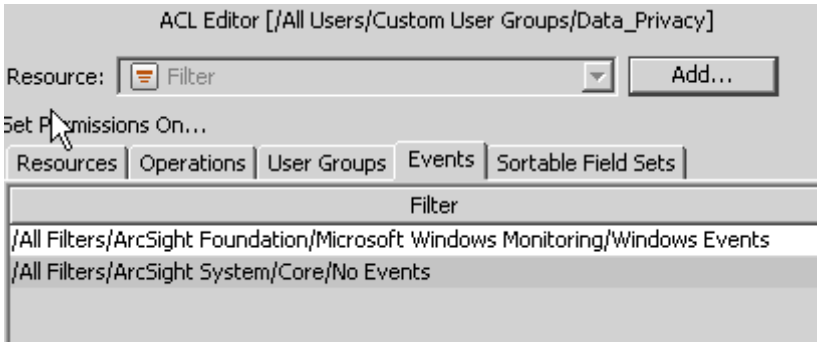


ESM/Express – II. Event Filter

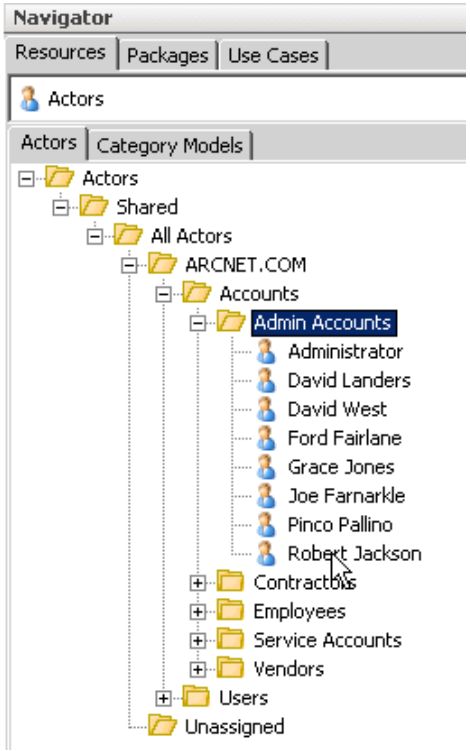
Restricts access to a subset of events

- Based on standard Filters
- Enforced on User Group level
- Transparent to the user

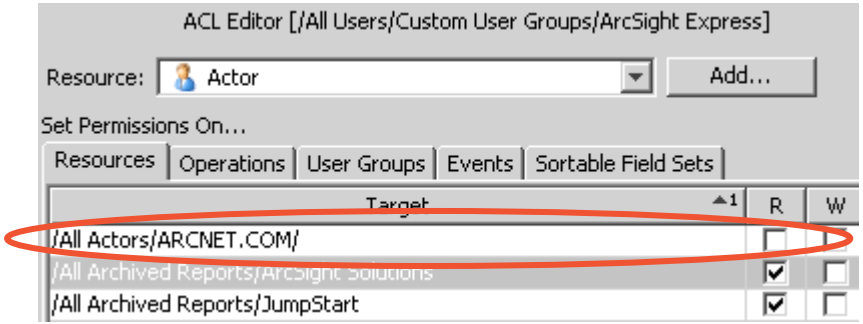




ESM/Express – III. Actors



- IdentityView
- Granular restriction via ACL
- Restriction on all Actors / a Domain / Types
- Allows Mixed Mode



ESM/Express – III. Actors

End Time	Name	ActorByAccountID.Full N	ActorByAccountID.Depa	Attacker User Name	Target User Name
21 Aug 2013 05:24:59 PDT	GRANT ROLE	Robert Jackson	Facilities	RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	CREATE USER	Robert Jackson	Facilities	RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	LOGON	Robert Jackson	Facilities	RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	Successful Logon	Robert Jackson	Facilities		RJACKSON
21 Aug 2013 05:24:58 PDT	Authentication successful	Robert Jackson	Facilities		RJACKSON
21 Aug 2013 05:24:58 PDT	Physical Access Granted	Robert Jackson	Facilities		rjackson
21 Aug 2013 05:24:57 PDT	Audit Log Cleared	Josh Coleman	Finance		JOSHC
21 Aug 2013 05:24:56 PDT	Job Printed	Josh Coleman	Finance		JOSHC
21 Aug 2013 05:24:55 PDT	Successful Logon	Josh Coleman	Finance		JOSHC

End Time	Name	ActorByAccountID	ActorByAccountID	Attacker User Name	Target User Name
21 Aug 2013 05:24:59 PDT	GRANT ROLE			RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	CREATE USER			RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	LOGON			RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	Role Violation			RJACKSON	RJACKSON_DBA
21 Aug 2013 05:24:59 PDT	After Hours Database Access by At Ri...			RJACKSON	RJACKSON_DBA

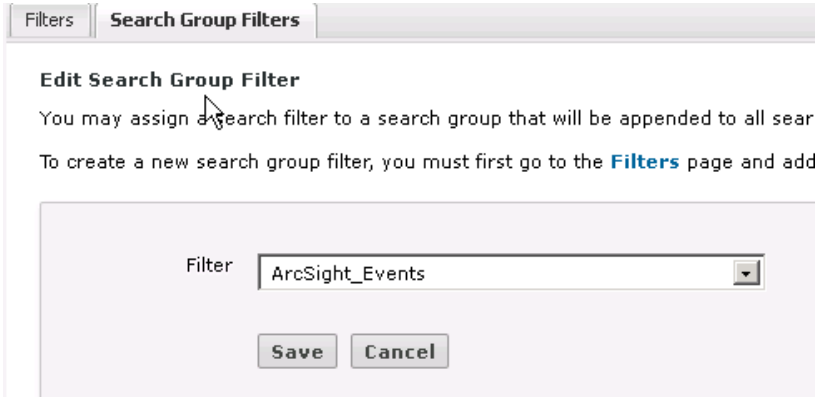
Not an all-or-nothing option, allows view of actor data based on membership level

Logger

Logger – Search Group Filter

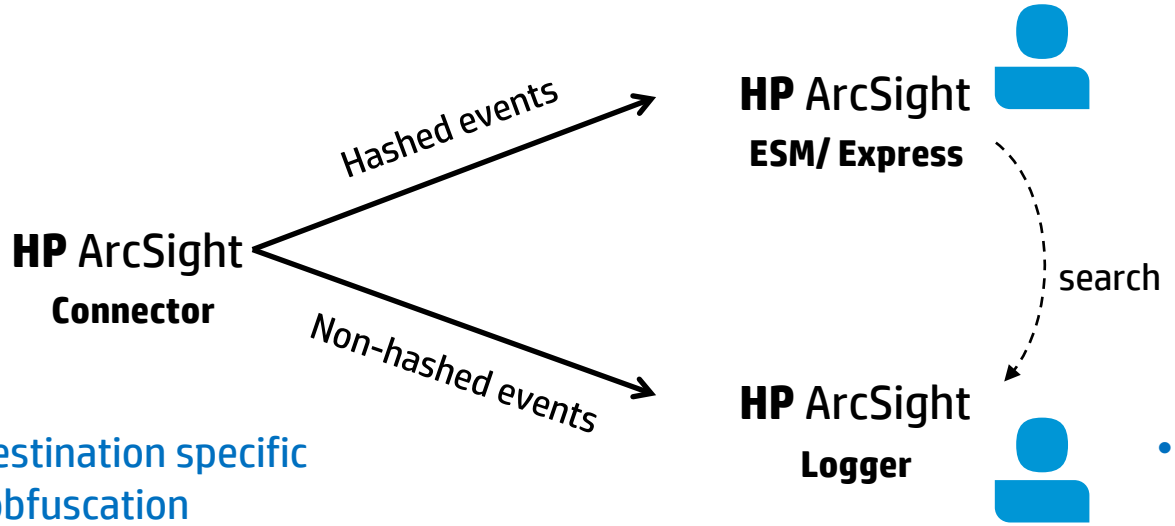
Restricts access to a subset of events only

- Restriction based on user group membership
- transparent to the Logger user
- RegEx filters
- Applies on peer Loggers
- Performance on RegEx speed



All together

A powerful mix – example scenario



Destination specific obfuscation

- Only obfuscated events to ESM
- Special User with Logger Integration Command can search for unobfuscated data on remote Logger within ESM console

- Only special user is allowed to access unobfuscated data on Logger

Summary

Multi-layer approach

Impact on SIEM design

Correlation and data privacy at the same time

Like a StreetView for SIEM

Tonight's party

@ Newseum

Time

7:00 – 10: 00 pm

Shuttles run between hotel's Porte Cochere (Terrace Level, by registration) and Newseum from **6:30 - 10:00 pm**

Questions?

Please visit the Info Desk by registration

Enjoy food, drinks, company, and a private concert by Counting Crows

Please give me your feedback

Session TB2990 **Speaker** Jeff Northrop and Frank Lange

Please fill out a survey.

Hand it to the door monitor on your way out.

Thank you for providing your feedback, which helps us enhance content for future events.

Thank you

Make it matter.