



Ashley Jelleyman FBCS CITP M Inst. ISP
Head of Information Assurance

Privacy vs Security

You Can't Have Both
At the same time

Privacy vs Security

- We can look at privacy in a number of ways
 - Sometimes we as individuals willingly give up our privacy
 - Sometimes we are forced to give up our privacy to get something we want
 - and sometimes it happens beyond our control.
- And there is a third side to the triangle.

Privacy vs Security

- Let me introduce Ethan, aged 13.



- He has an expectation of privacy
 - He keeps his bedroom door shut because he's a teenage lad who wants his privacy

Privacy vs Security

- Which means his bedroom looks like this:

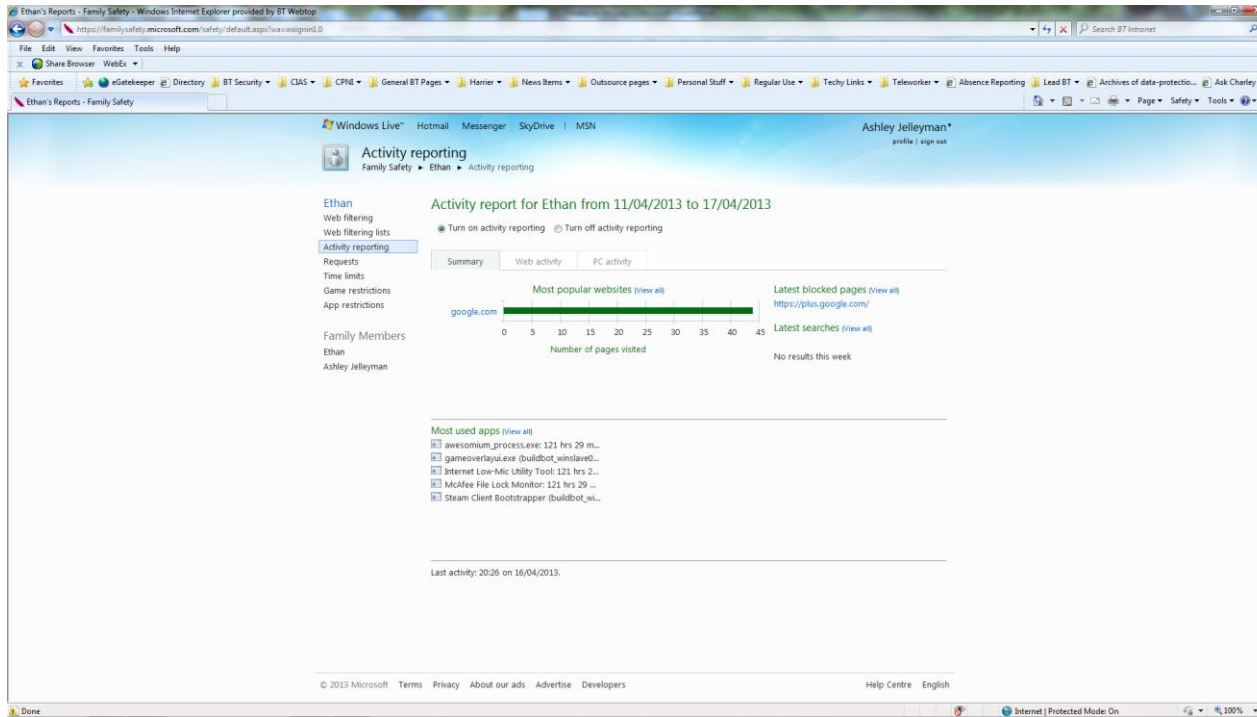


- Because he wants his privacy he surrenders the “security” of his mum cleaning the bedroom.

Privacy vs Security

- He has two PCs, one in his room for homework, one in the conservatory for games.
- His homework computer has no games on it and only goes to restricted educational web sites.
- But if he wants to have a computer to play games on he has to surrender his privacy so I can protect him.
- MS Family Safety.
 - Gives remote control and reporting

Privacy vs Security



- So again, he has surrendered his privacy and control, for the right to use the computer.
- I know both he and the network at home are safe and secure !

Privacy vs Security

- Then there is my wife; Margaret, aged, no comment.



- We share a bank account, but I manage the reconciliation
- So my wife gives me all the receipts for the money she spends.
- She has surrendered her privacy to ensure that we have the security of knowing what money we have, and don't go overdrawn.
- But if she wants to surprise me with a gift at Christmas it's difficult, so I've surrendered that pleasure.

Privacy vs Security

- So what about at work:
- Most of us have access to the corporate email and to the internet.
- Our emails are monitored for appropriateness, spam and Phishing attacks. So if we receive a private message we can expect it will be at least scanned by an automated system.
- We have surrendered our privacy for the right to receive private emails at work

Privacy vs Security

- And when the monitoring doesn't work
- You get incidents like Aramco – a click on a dodgy link



The August attacks, using a virus called Shamoon, wiped the hard drive of the Saudi computers and left thousands of Aramco employees unable to access email and kept them off company networks for a week or more

Privacy vs Security

- Internet access is monitored to ensure people don't visit in-appropriate sites.
- That gives the company security from viruses trojans and other malware.
- But we as employees don't expect the company to sniff our banking passwords, or other credentials.
- So now we are introducing the concept of trust into the surrender of privacy equation.

Privacy vs Security

- Then we move out into the wider world:
- BT and many other ISPs provide access to the internet.
- As we transact more and more business on the internet we expose more information, not just to the end website, but potentially our ISP.
- But again we trust our ISP not to read all of our traffic, look at what we are viewing, and record our activity
 - Except that sometimes they have to by law
 - New laws requiring the storage of all on-line activity are being enacted for National Security reasons.
- Matters of national security can over ride the personal privacy agenda.

Privacy vs Security

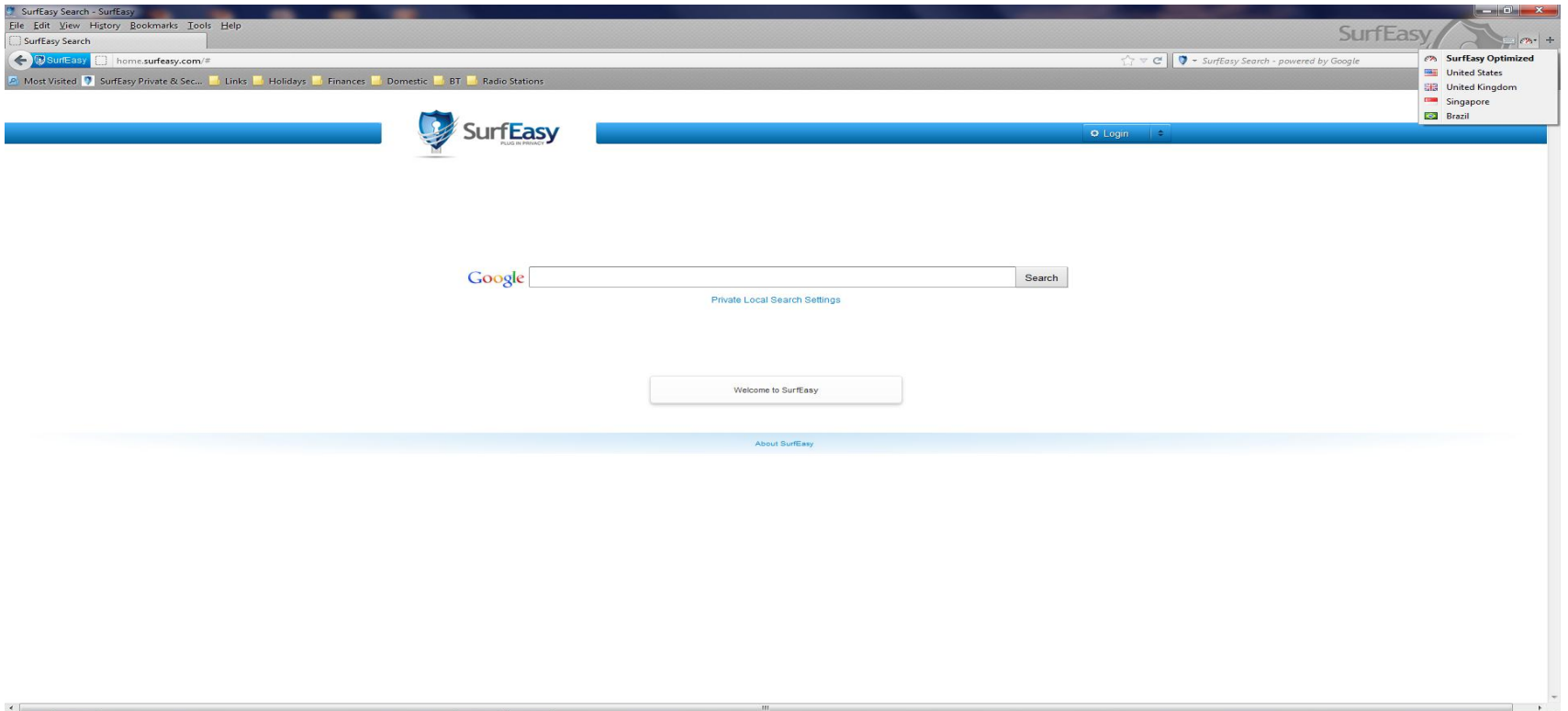
- But again, we also surrender our privacy for benefits.
 - We allow cookies to be stored on our machines
 - Many web sites don't work without them
- We allow companies to use our experience of their software to improve the next version, we get better software.
- We are regularly willing to trade our privacy for the “security” of a better, more reliable feature rich service.

Privacy vs Security

- What about when we really want privacy,
- We can establish an encrypted link: https:
 - But that only works on the sites that offer it
 - It isn't 100%
 - Still exposes your IP address
 - What about other sites that don't offer HTTPs:

Privacy vs Security

- There are some commercial offerings,



Privacy vs Security

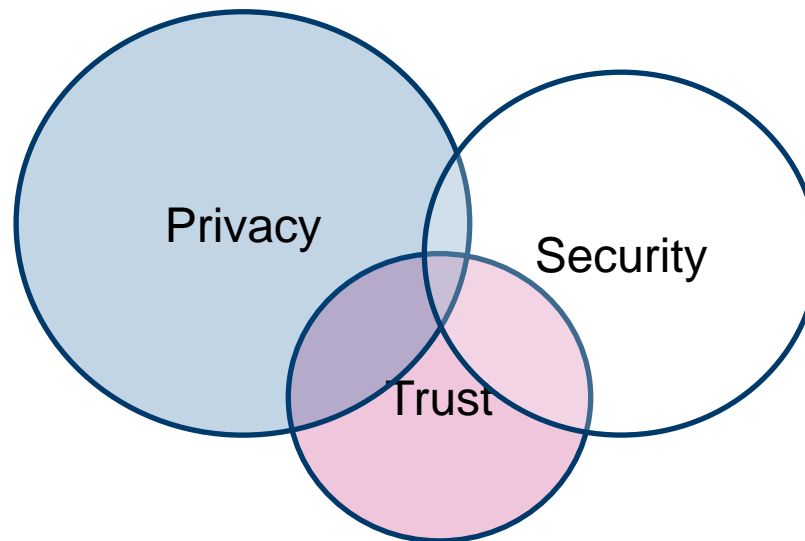
- This one promises to encrypt your connection to the target
- It masks your IP address by proxying the connection
- It will even offer to make your connection appear to come from a different country.
 - Useful if you want to watch domestic online TV from a different country

Privacy vs Security

- But are you really getting privacy ?
 - Depends if you trust the provider who is proxying the traffic.
- I assume that they can see all your traffic.
- So again to get that “security” you are placing your trust in someone else.

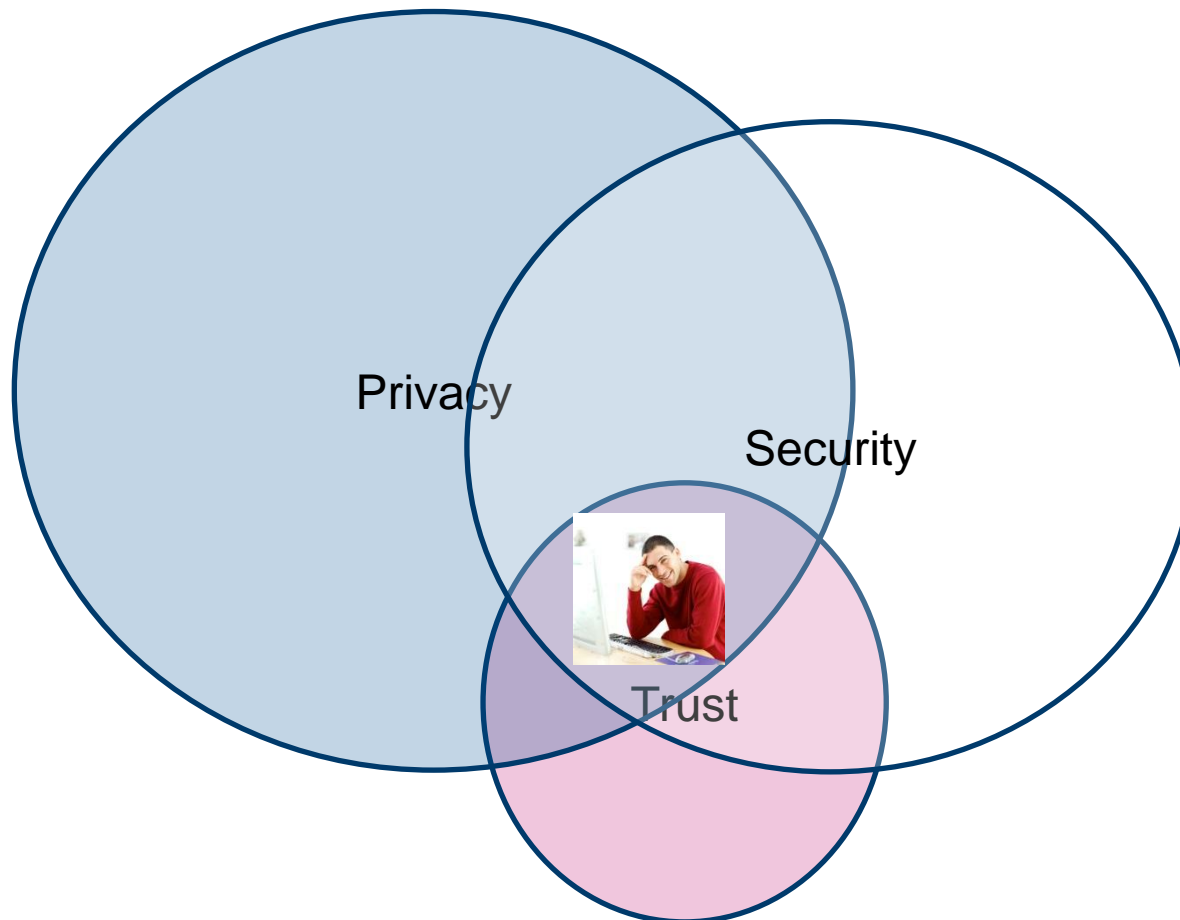
Privacy vs Security

- So in most cases the truth isn't a simple Privacy Vs Security slider.
- It's usually a three way deal between
 - Privacy
 - Security
 - and Trust.



Privacy vs Security

- And it's up to each of us to decide how big each circle is.



Any Questions ?

