Internet filtering and censorship proposals
Technical parameters

Stephen Gillies
Security Technologies Business Unit, Cisco Systems
sgillies@ironport.com
Cisco and E-Security

- Cisco has co-founded the US National Cyber Security Alliance ([http://www.staysafeonline.org](http://www.staysafeonline.org)) (NCSA)

  NCSA is a computer security awareness organisation, funded by a public-private partnership including the Department for Homeland Security focused on changing security behaviour for home users, small businesses, K-12 school children, and higher education

- “National Cyber Security Awareness Month” held annually (recently in October 2008) and other targeted campaigns through the year

- Build on five pillars; information sharing, awareness and education, vulnerability management, research and development, and a legal framework.
Filtering by URL and filtering by content

- The Internet
- Firewall
- Content Redirection switch
- Proxy device farm
- DSL Termination point
- Internet Connection (DSL/Cable)
Website browsing **Static Blacklist**

- User makes request using their browser for a website.
- Proxy checks the website against the URL blacklist.
- If the URL is on the blacklist, deny the user access.
- If the URL is not on the blacklist, allow the user to the website and all the content contained.
Website browsing Dynamic database

- User makes request using their browser for a website
- Proxy checks the website against the reputational database and receives a score
- A low score = bad content
- A high score = acceptable content
- ISP can allow or deny based upon the score per customer profile