

# Fun with Google custom searches: Intelligence, secrets and leaks

By: Jamal Bandukwala

http://infosecmindstorm.blogspot.com/

## infosecmindstorm

 I blog about various information security topics and do my own research, my blog can be found at

http://infosecmindstorm.blogspot.com/

Going to talk about some of my personal research

#### Google Custom Searches

- What are they?
- What exactly am I doing with these searches?
- Why are they useful?
- Will talk about the 3 major searches I have put together, how they differ and what they are useful for.
- Invisible Attacks

 Google offers a program that allows developers/ users to create their own custom search engines.

 Allows developers/ users to be up and running in minutes using a wizard interface along with more advanced options as needed.  This allows the search owner to focus on developing their content and search list.

- Advanced options of note:
- fine tune search results by removing items
- promoting search results

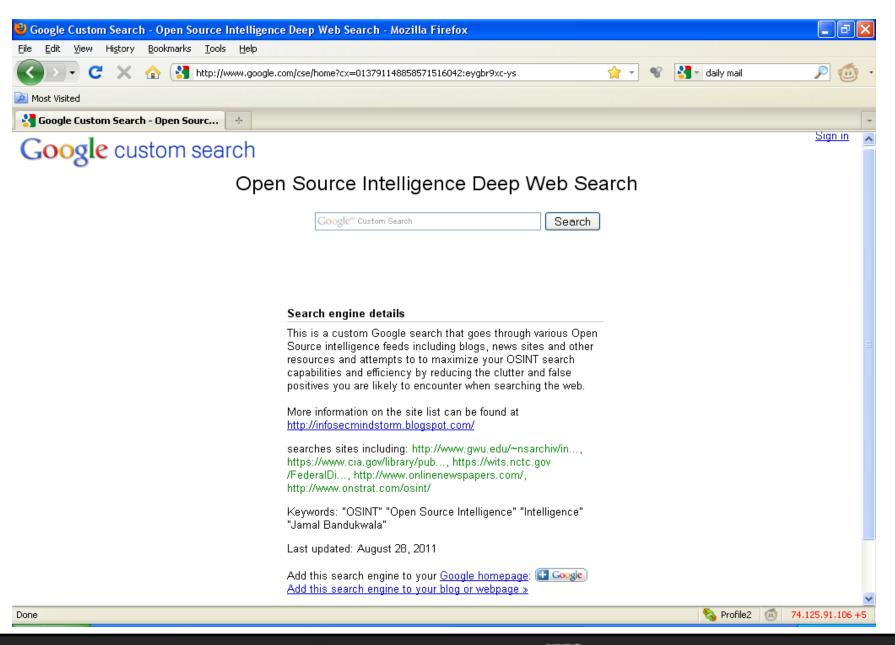
on-demand indexing.

 These enable the user to retrieve search results from newly added sources in a shorter time frame.



# Open Source Intelligence Deep Web Search





## Open Source Intelligence

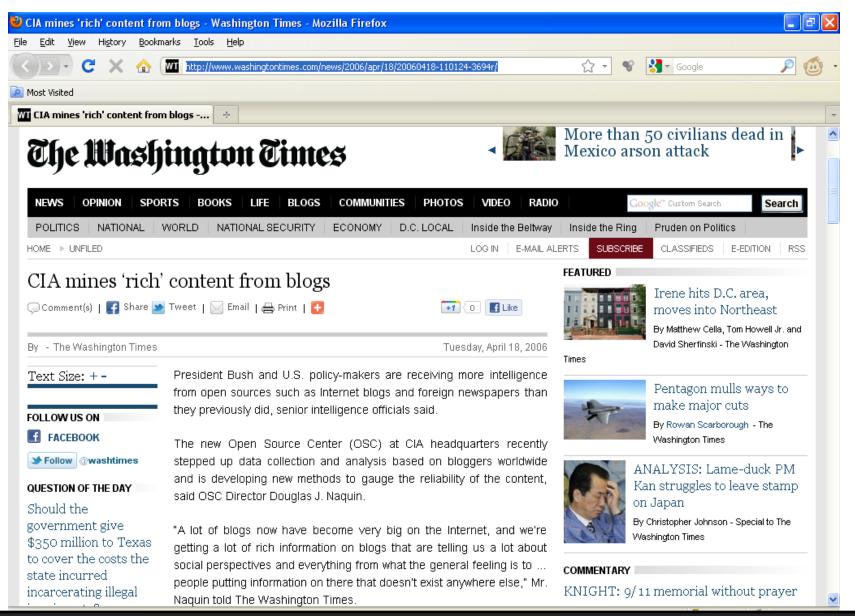
 Open Source Intelligence (OSINT) is a form of intelligence gathering from open sources.

 Open sources refers to publically available information as opposed to covert information.

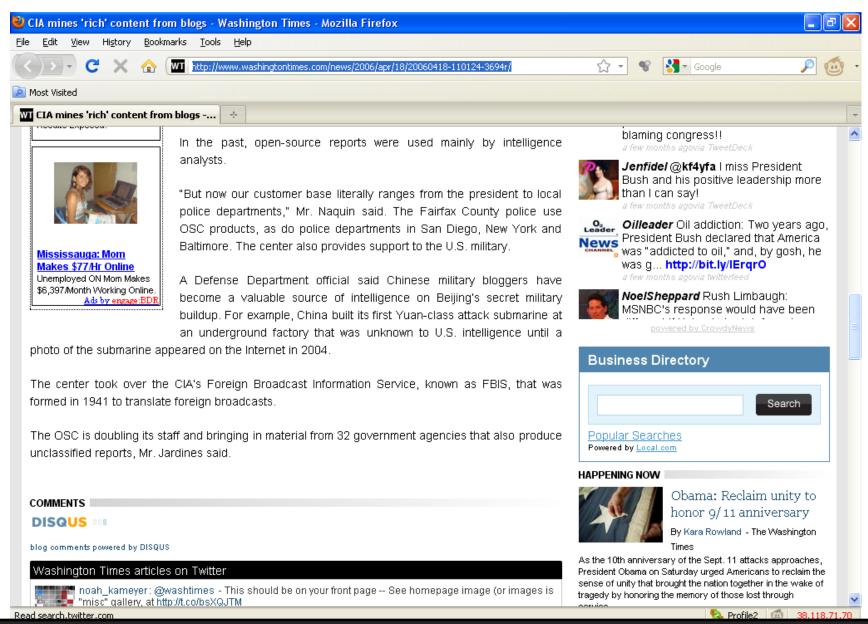
 In 2006 the Washington Times had an article discussing how OSINT was becoming increasingly important.



- I find that the following lines were really significant:
- "A Defense Department official said Chinese military bloggers have become a valuable source of intelligence on Beijing's secret military buildup. For example, China built its first Yuan-class attack submarine at an underground factory that was unknown to U.S. intelligence until a photo of the submarine appeared on the Internet in 2004."
- http://www.washingtontimes.com/news/2006/apr/18/20060418-110124-3694r/







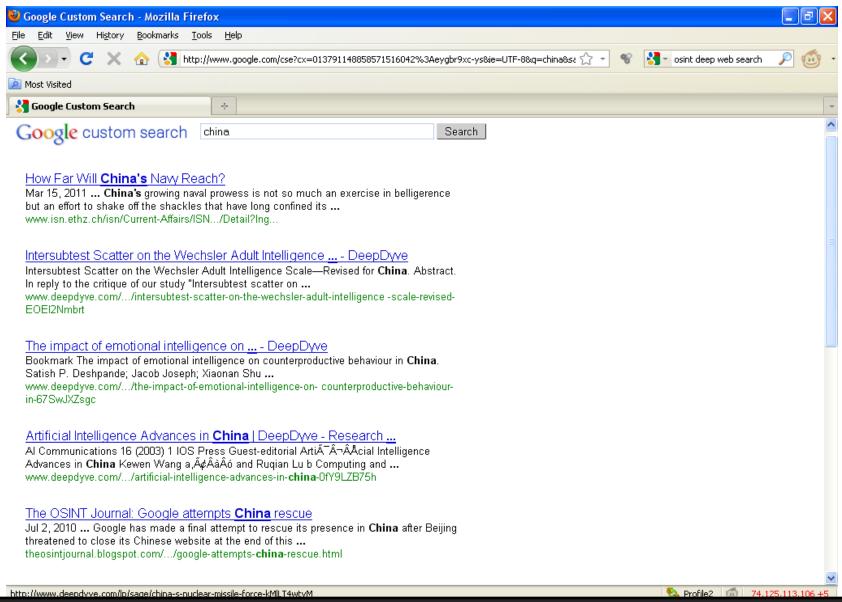
 This includes everything from media like newspapers, TV, web content (blogs, wikis, among others), satellite images, public databases, academic journals/ conference info and other publically available information.

• I have put together a customized Google search that runs against a large list of OSINT sources(which I have compiled and actively maintain). This makes it easier for analysts/researchers to locate useful information.

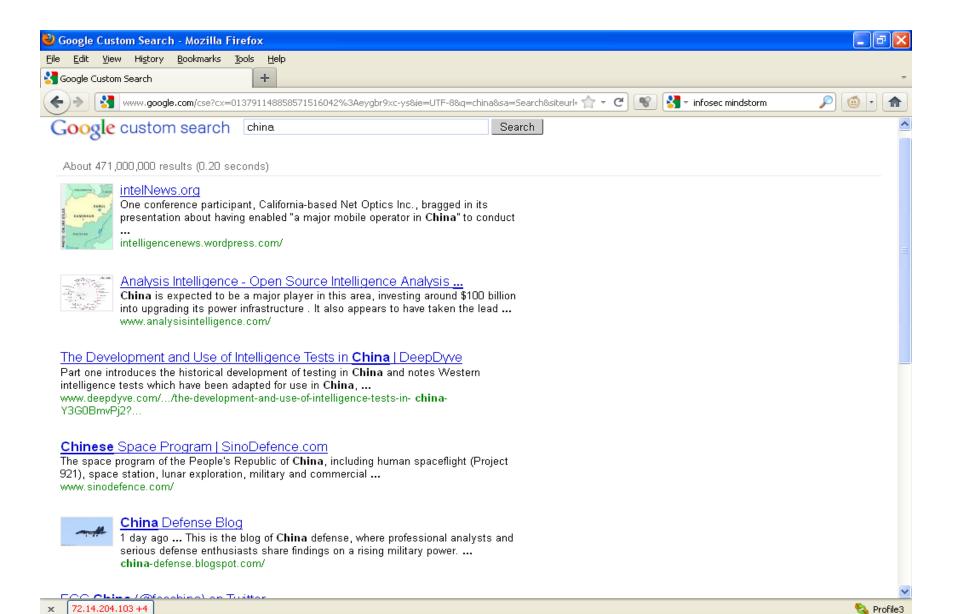
 A number of these sites can be found on my blog at infosecmindstorm.

 Useful for gathering political, economic and related intelligence.

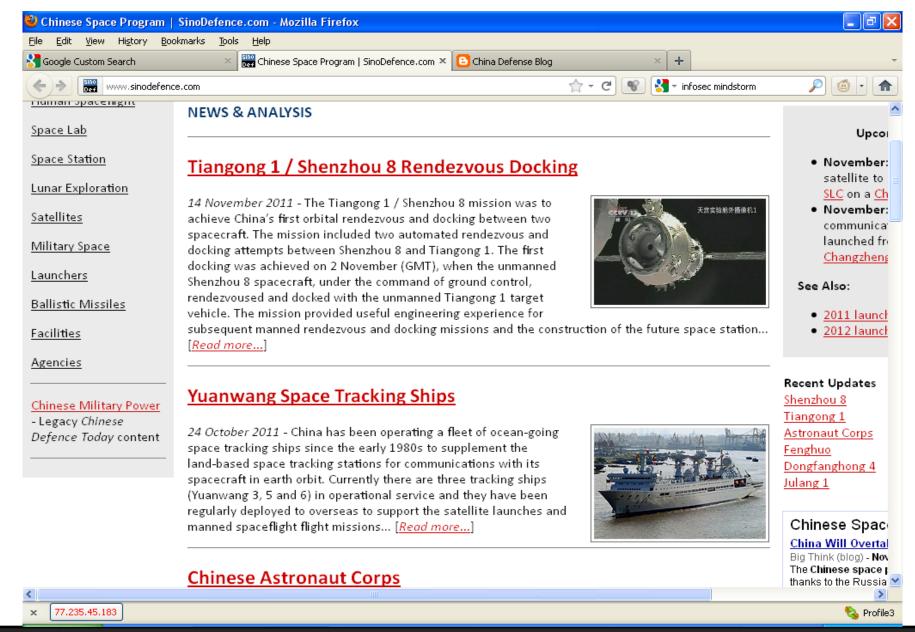




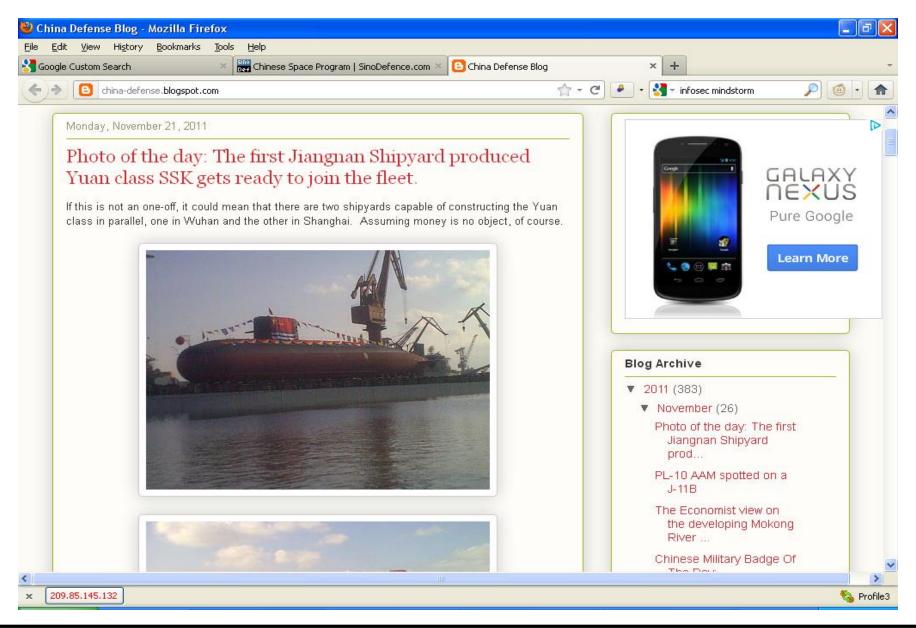






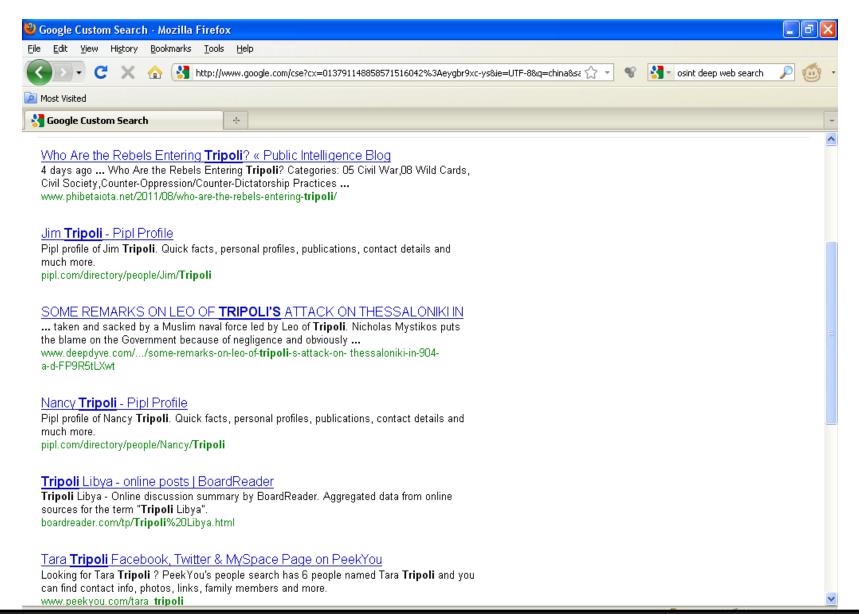




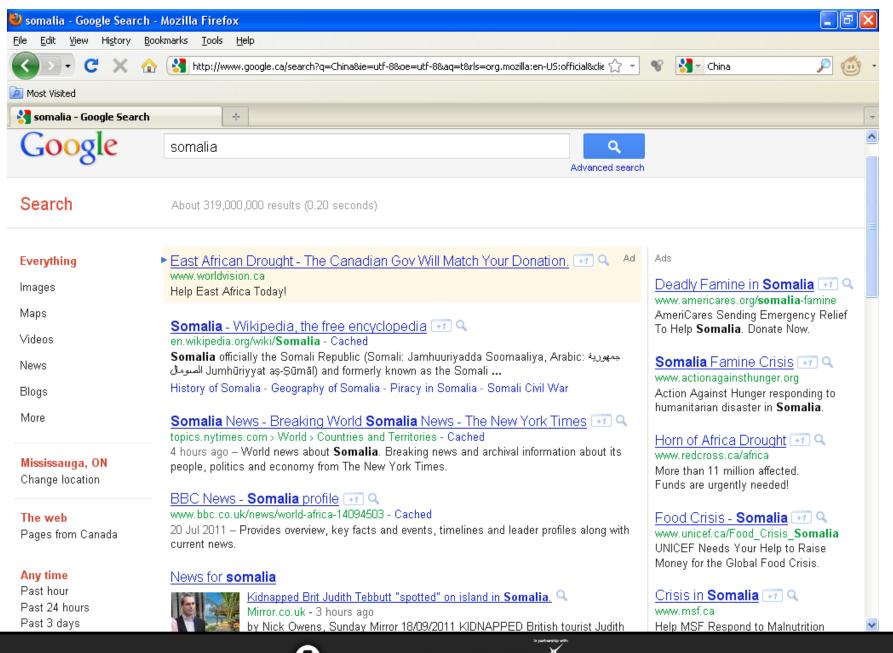




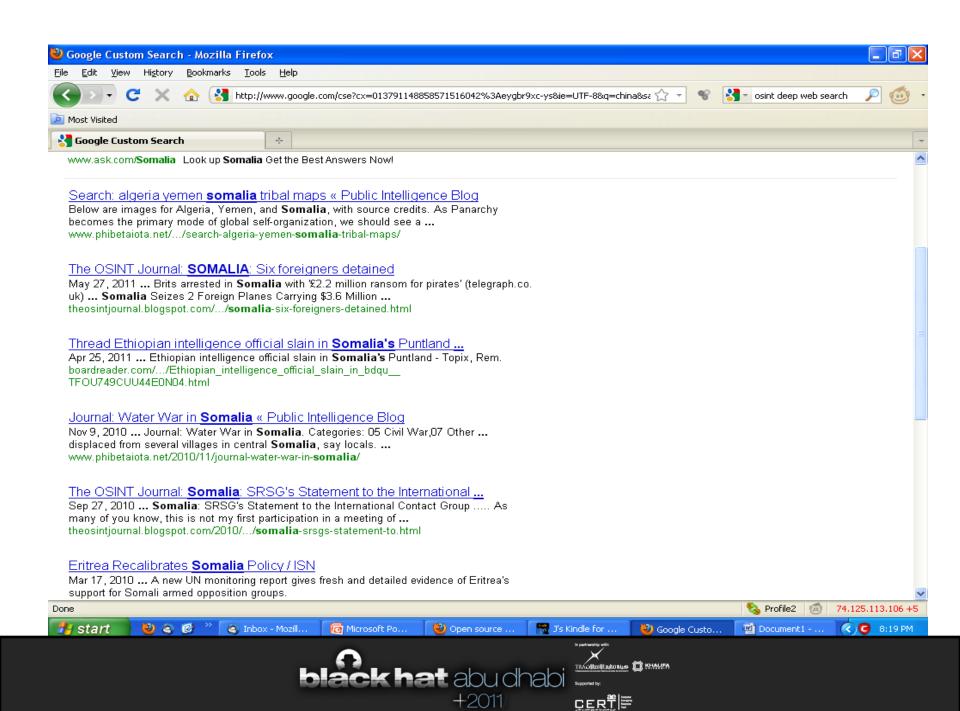


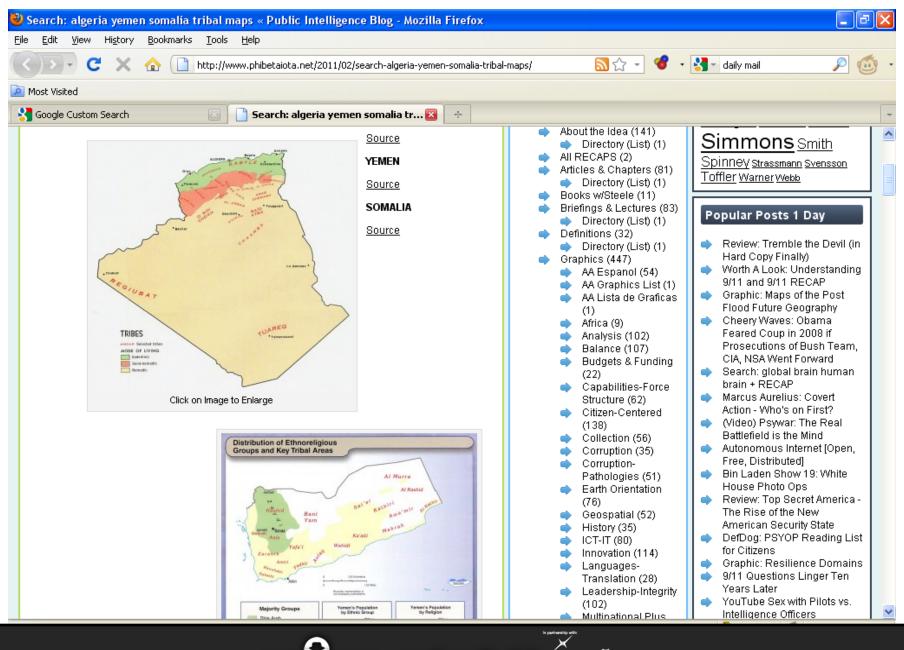




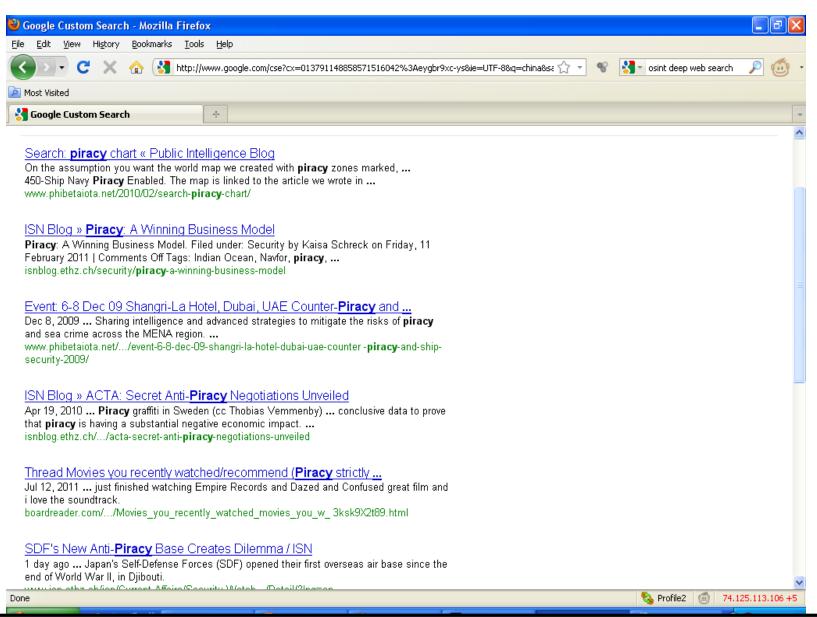




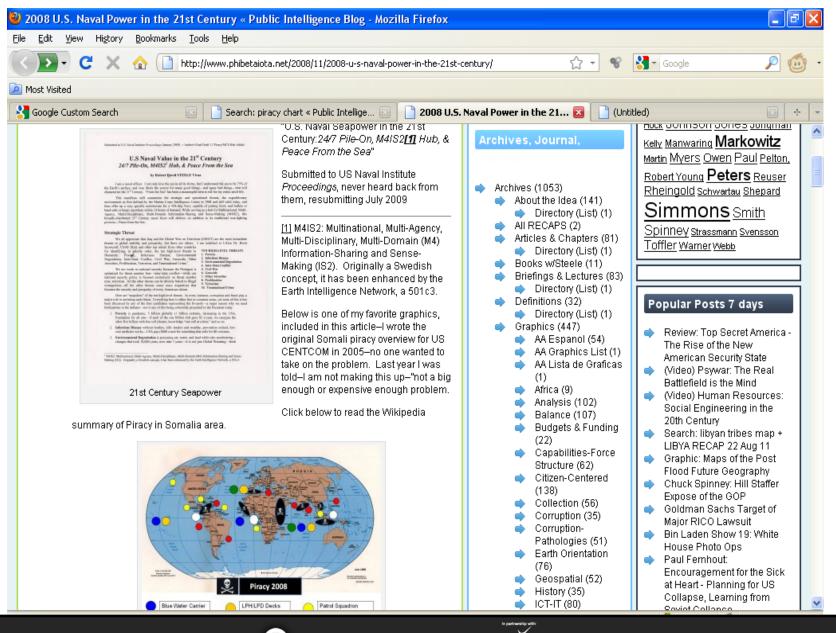




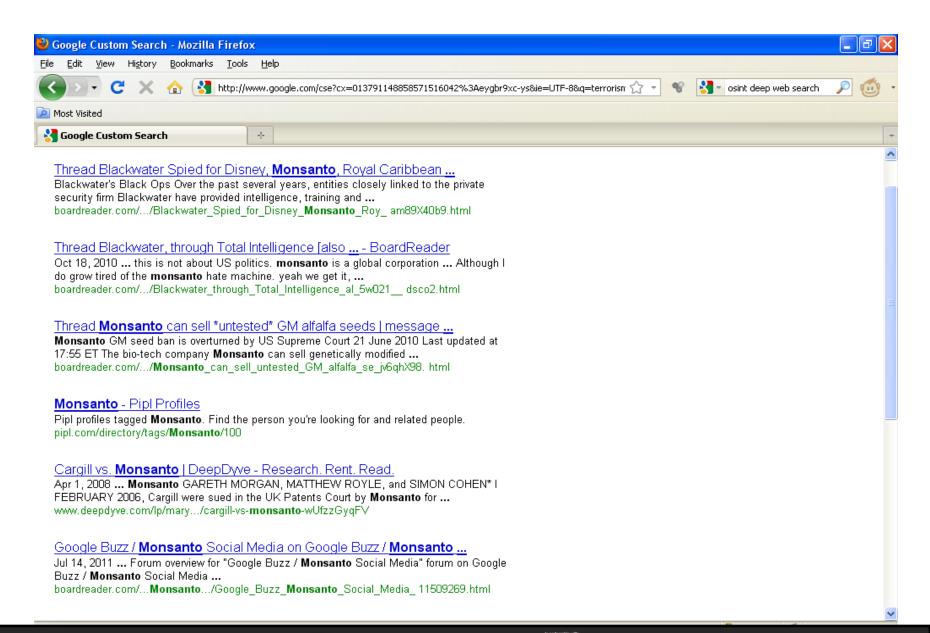




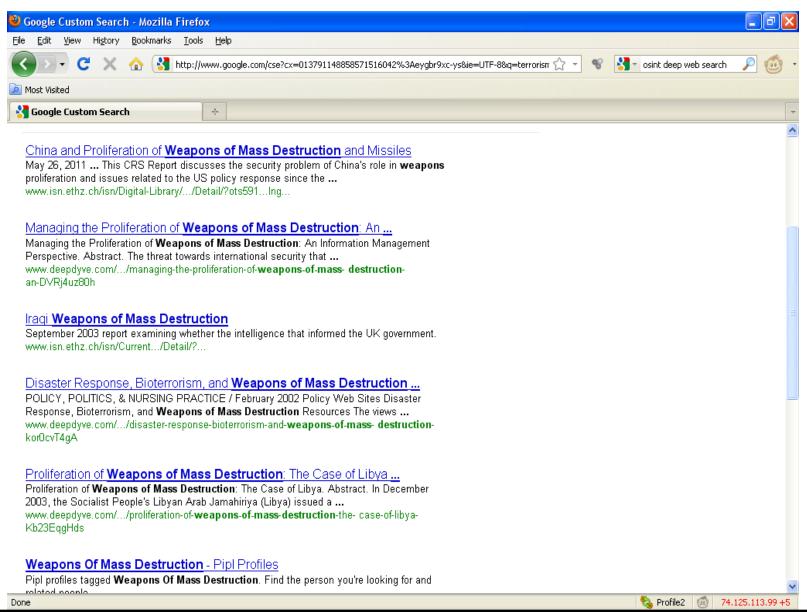




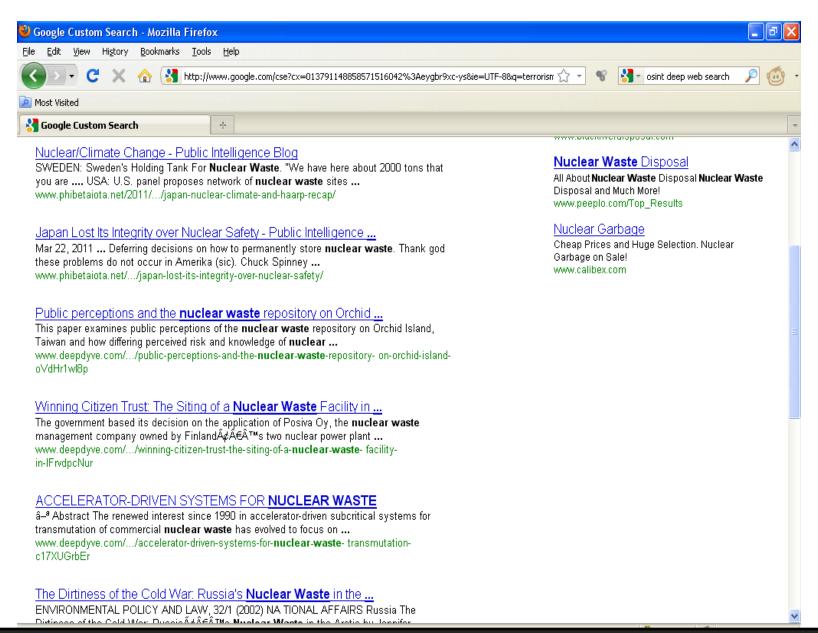




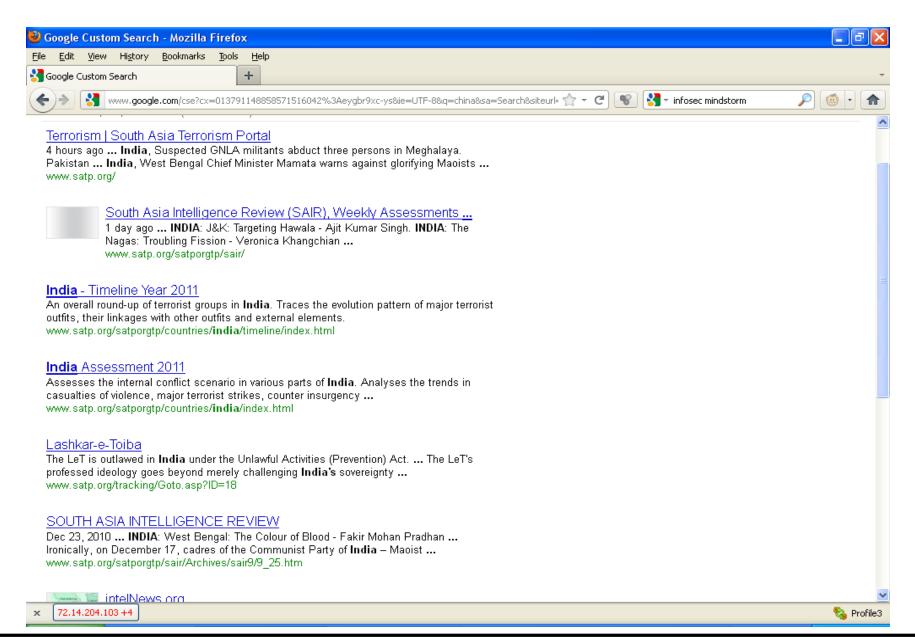




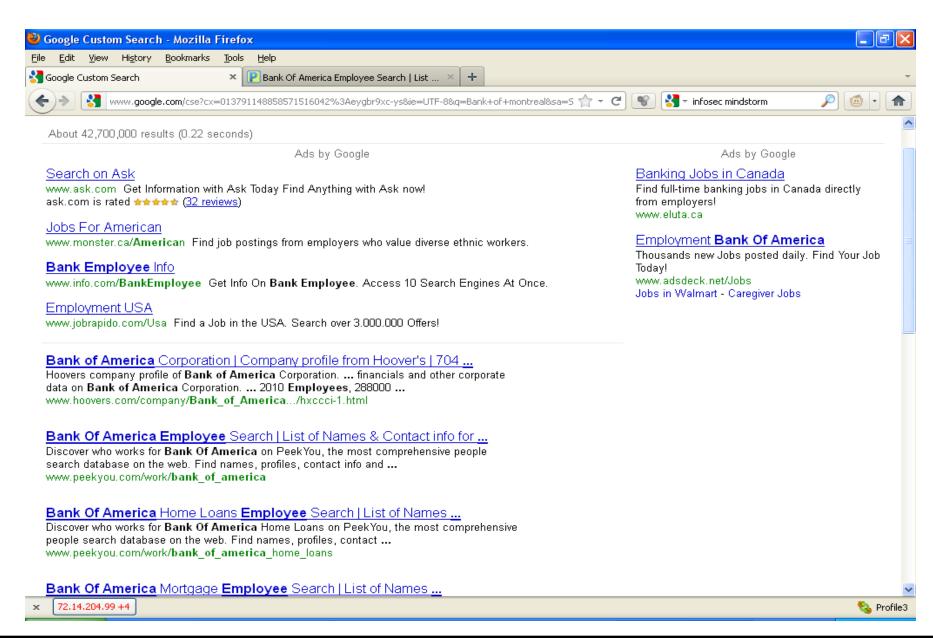




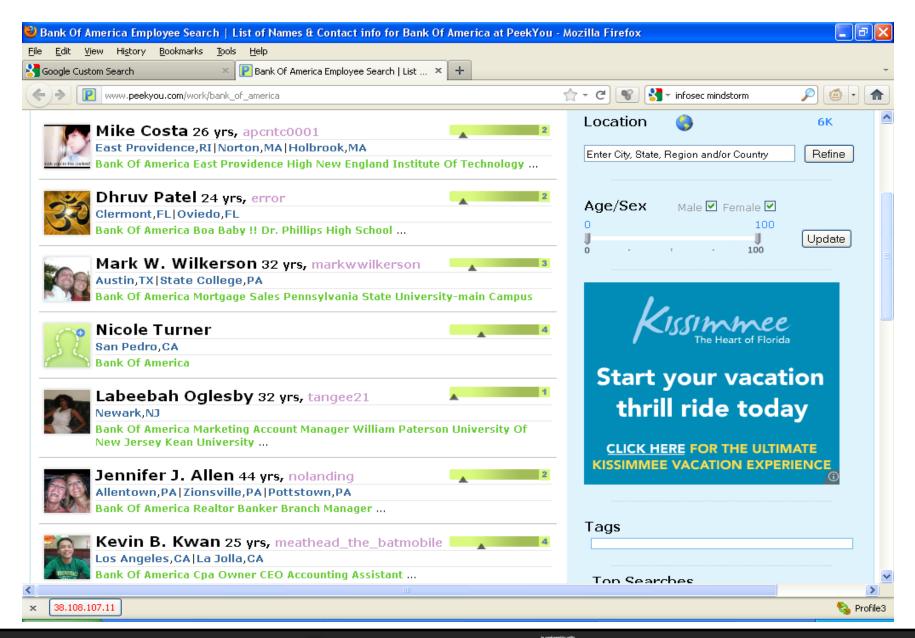


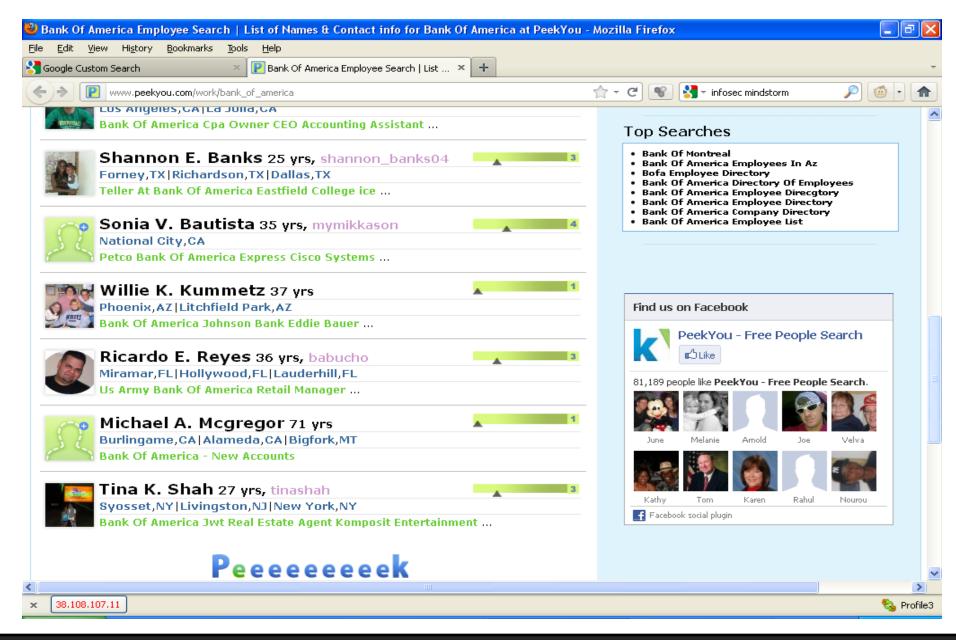


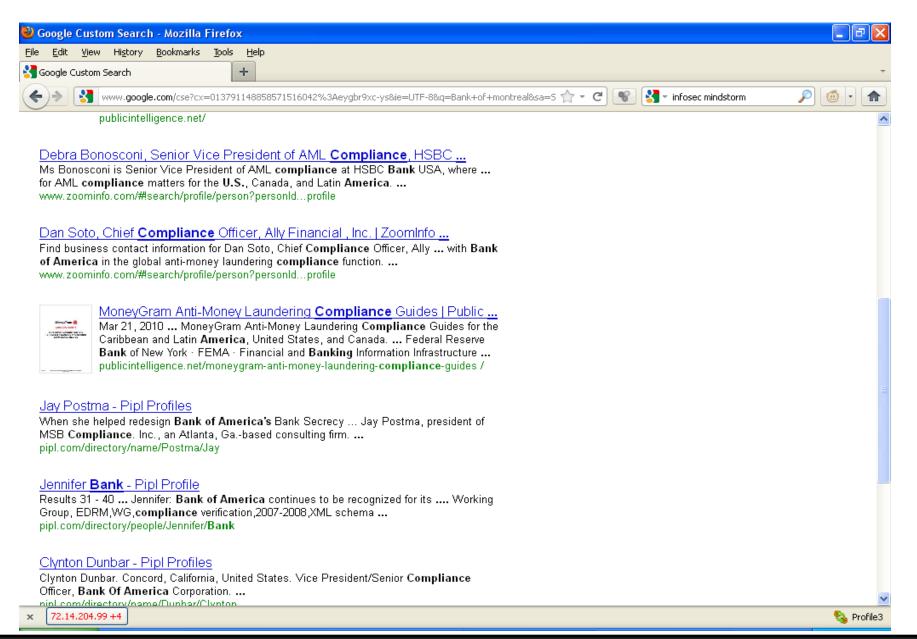




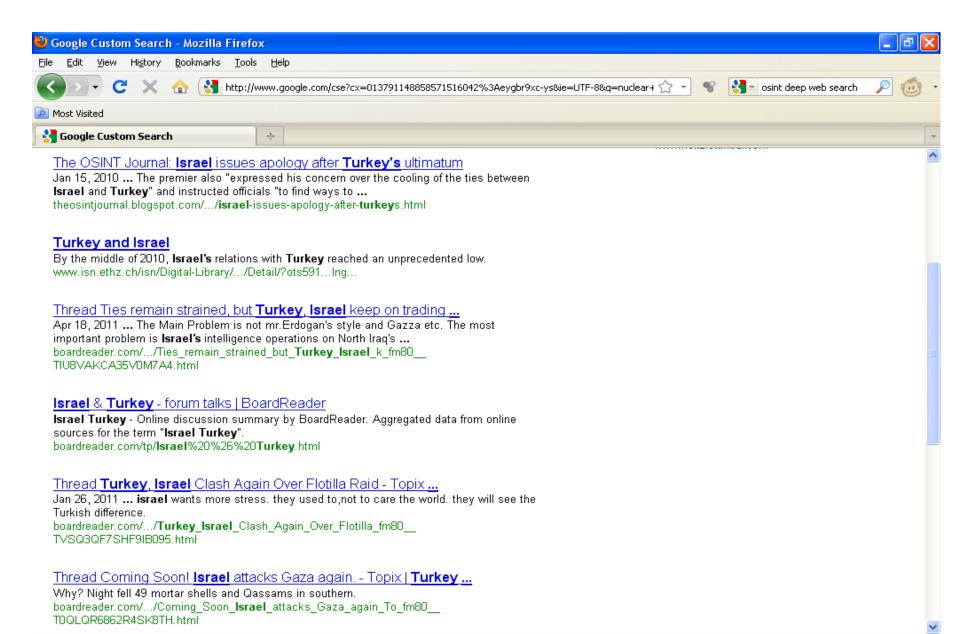


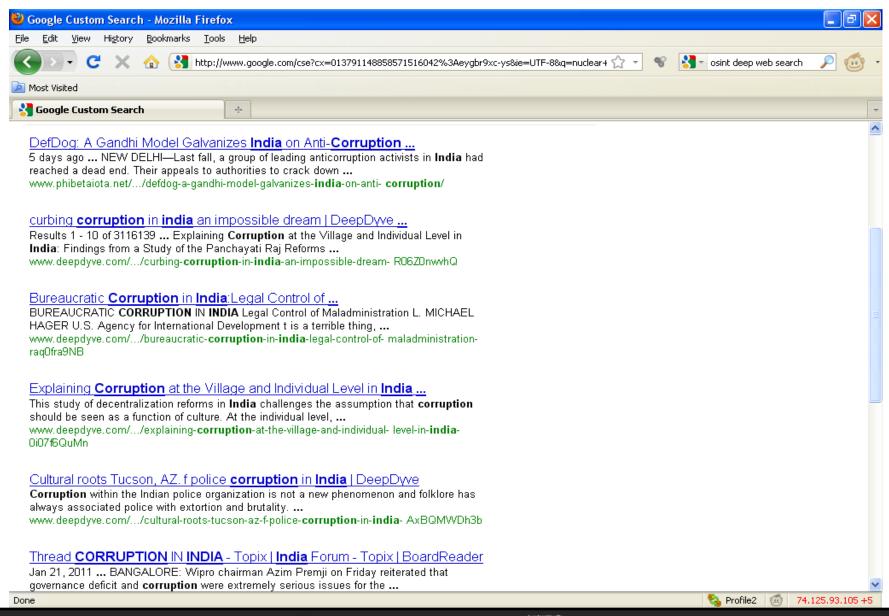




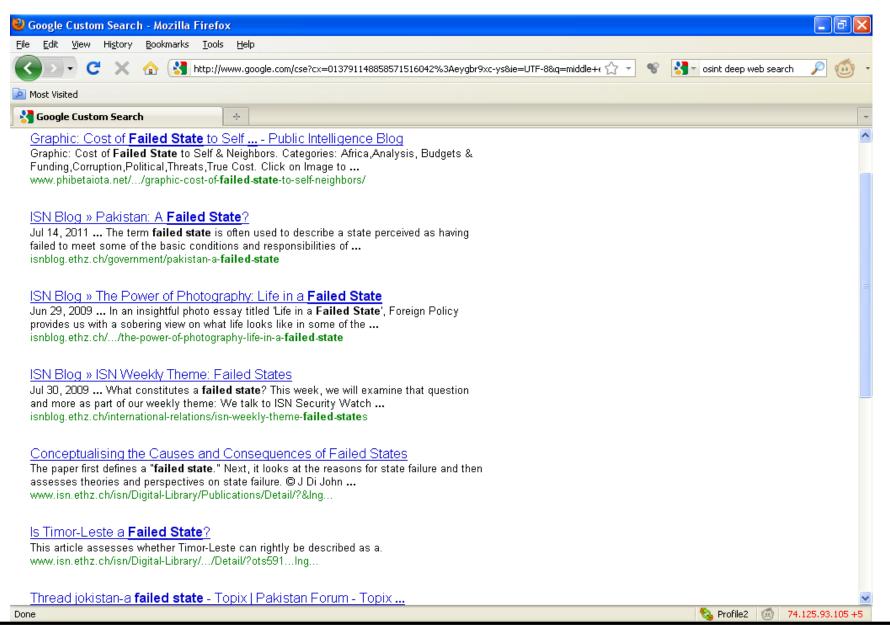




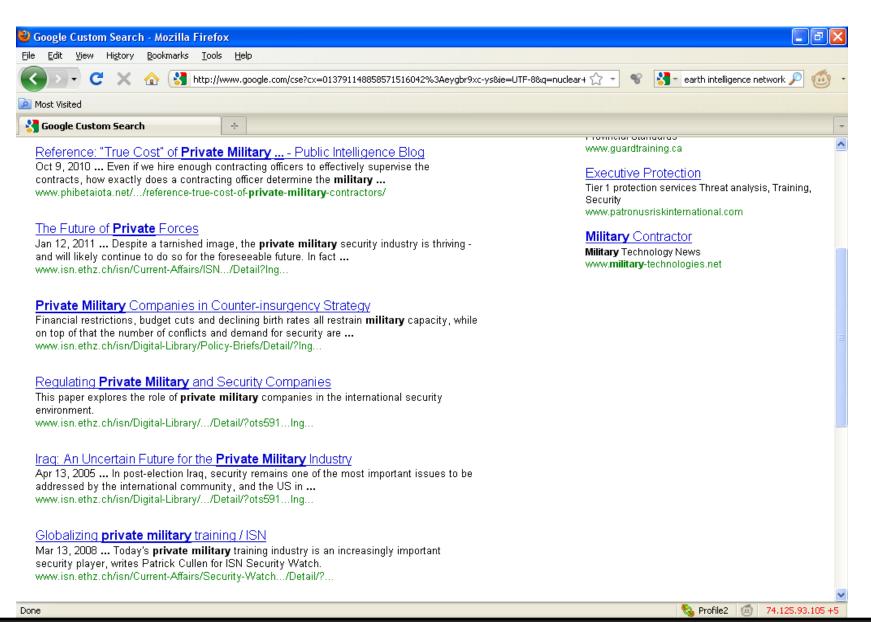














## Pastebin and collaborative tools intelligence web search



What is a pastebin?

 A site that allows users to post snippets of text for others to view. Different pastebin sites can be targeted towards different audiences.

Initially used to share source code.

 These days a number of pastebin sites are used to post spam and also by various parties (including Anonymous and Lulzsec) to leak/ post information.

 I have built up a list of pastebin sites from the most popular ones, to lesser known sites that are run through in my custom search.  The list of sites is regularly updated; it is not available to the public as it is confidential; examples of the sites being searched can be found on my blog.

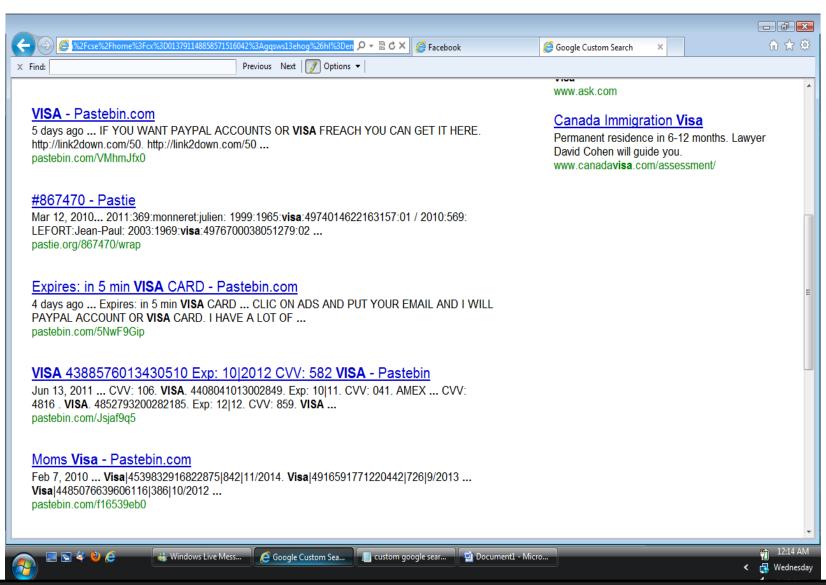
 Searches turn up everything from credit card numbers, leaked databases and vulnerable sites among other things.  Some searches that have generated interesting results include the following:

- Defense Industries
- VISA
- Police
- NASA
- Air Force
- World of Warcraft
- Passport Number

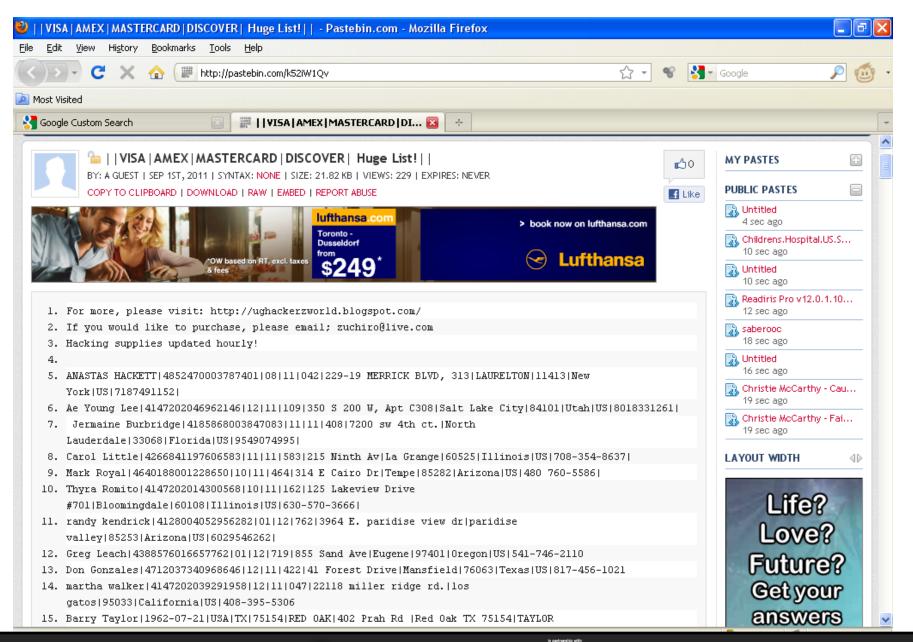


## Credit Card Numbers and Sellers





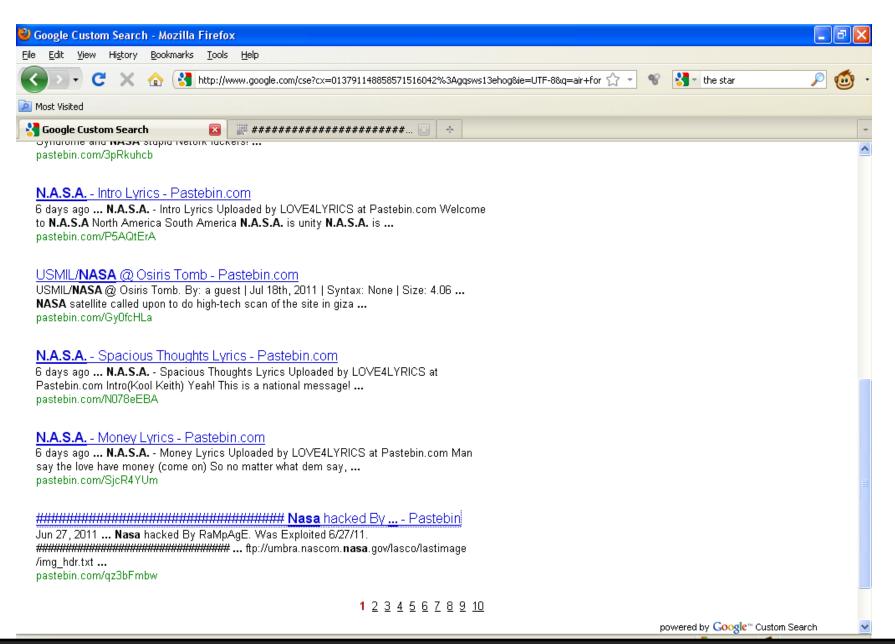




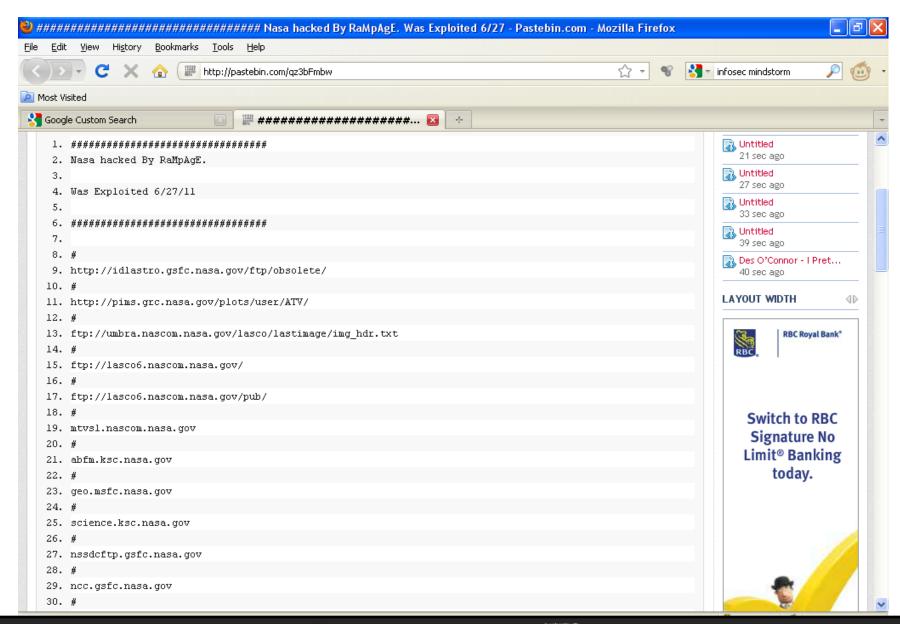


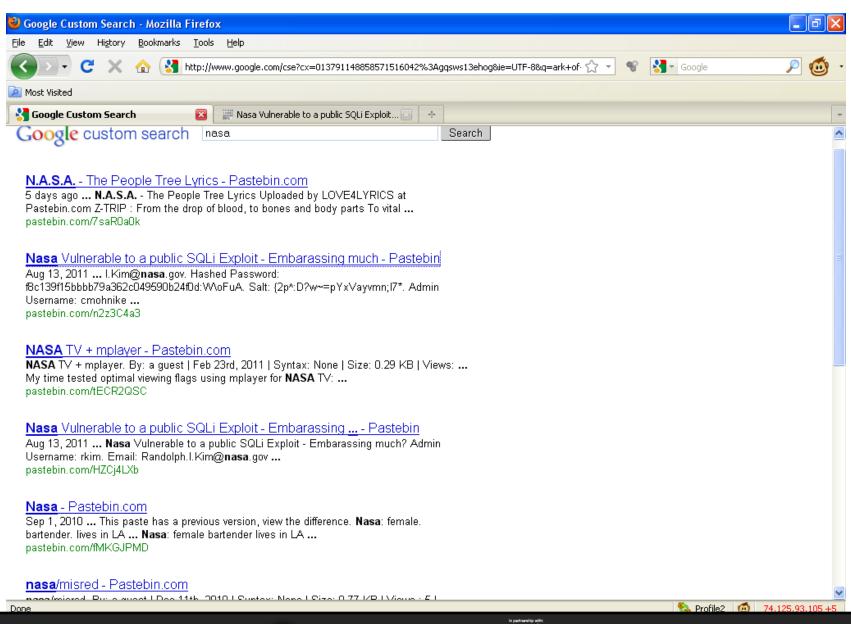
## Hacked and Vulnerable Sites



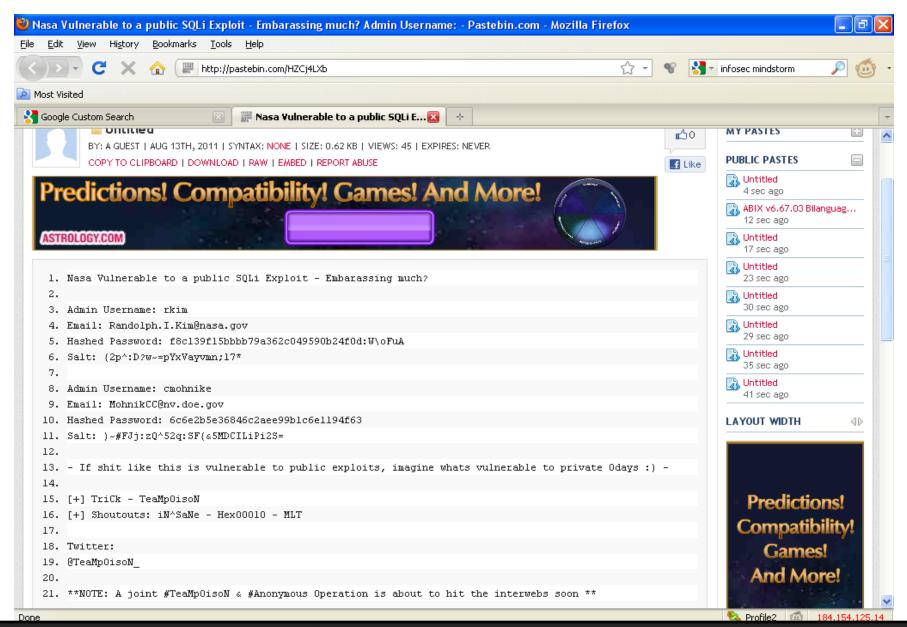


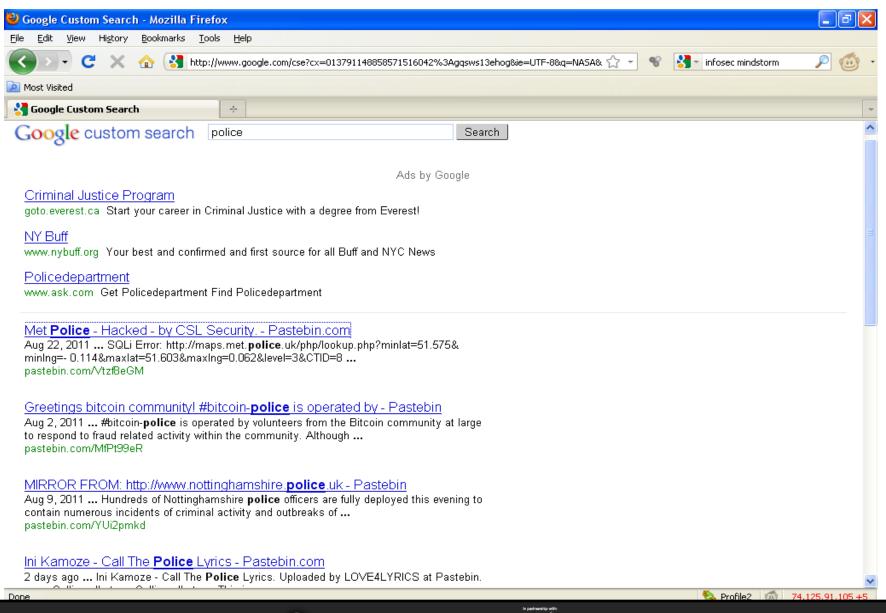




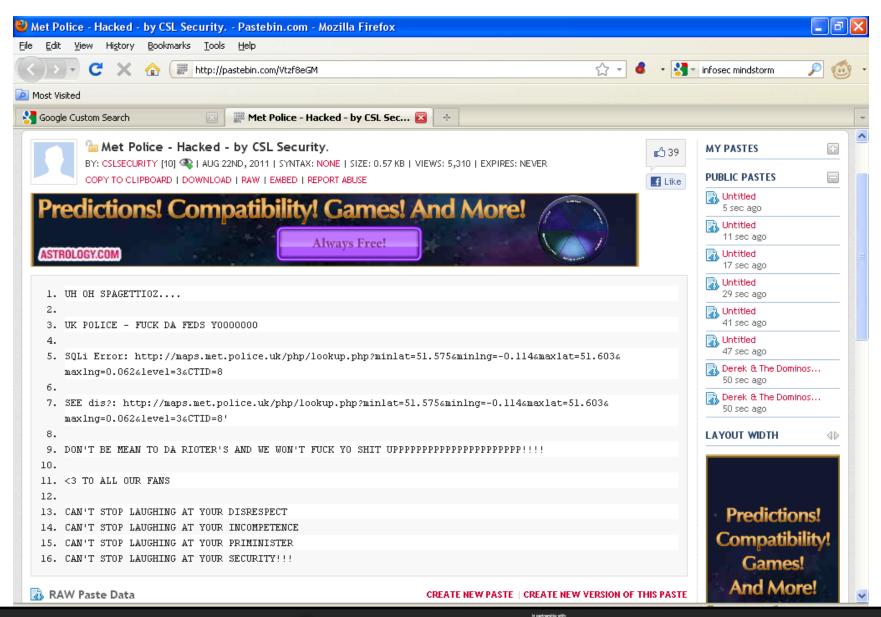


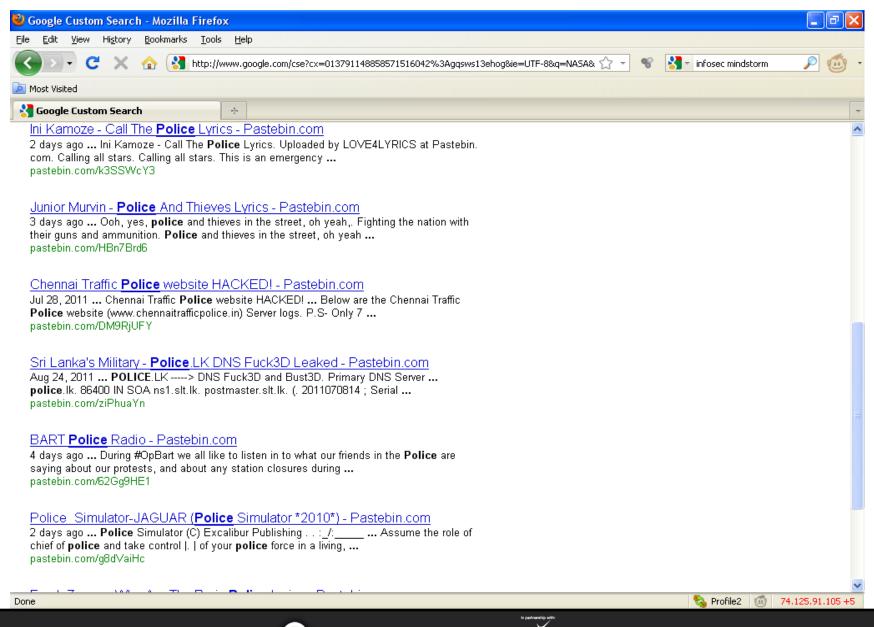




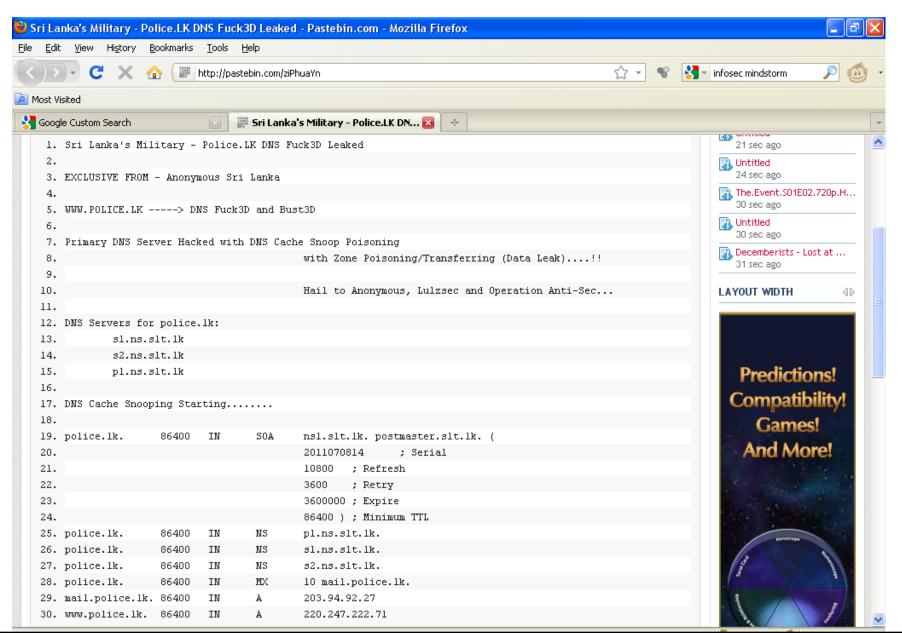






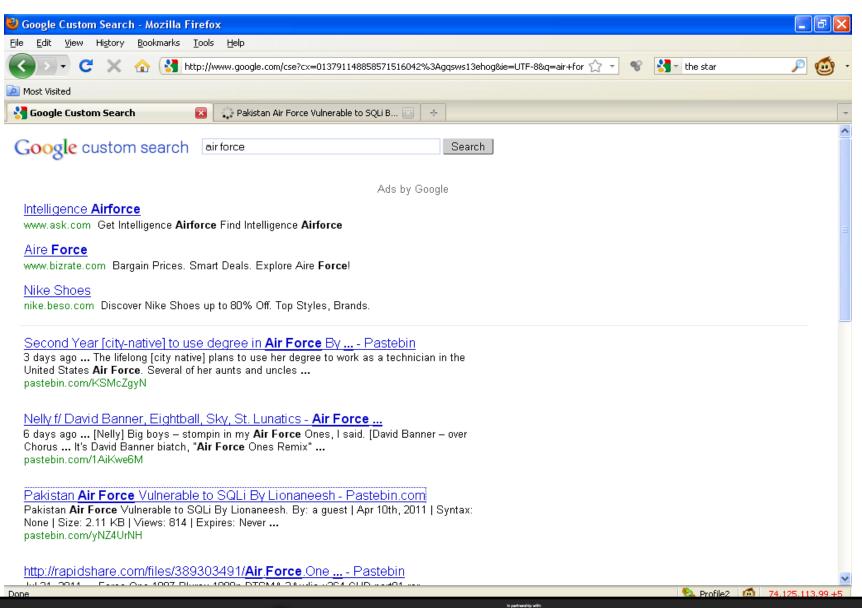




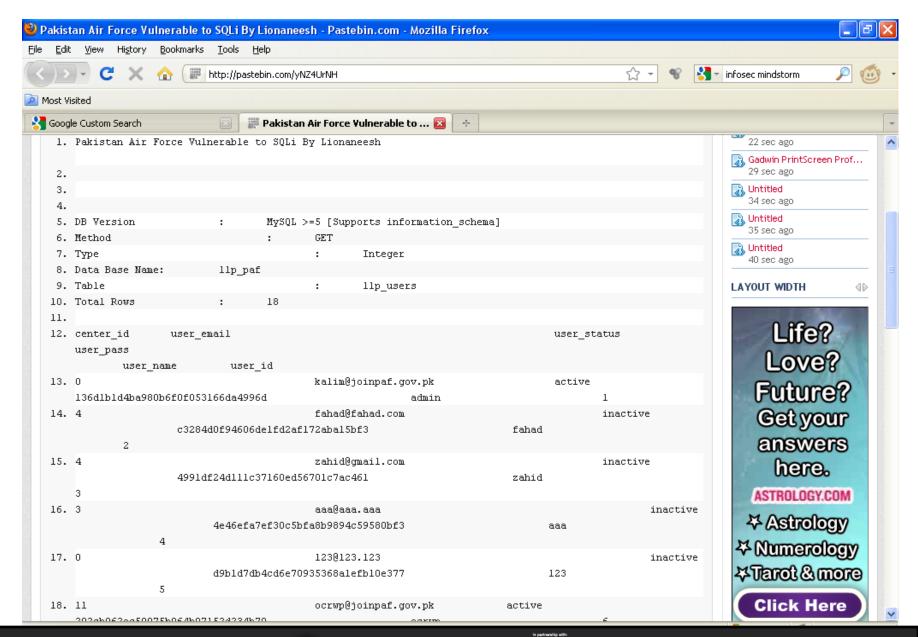








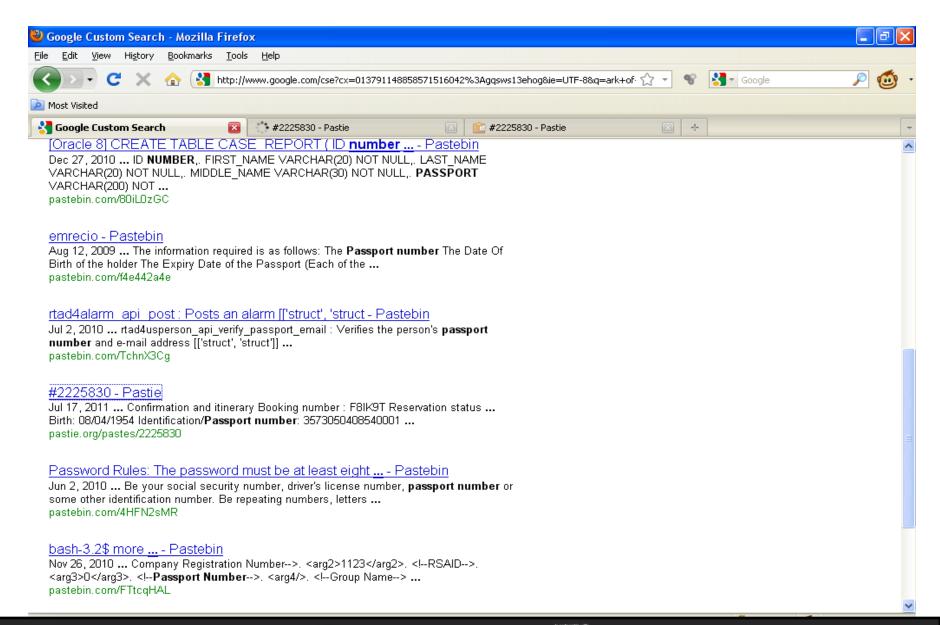






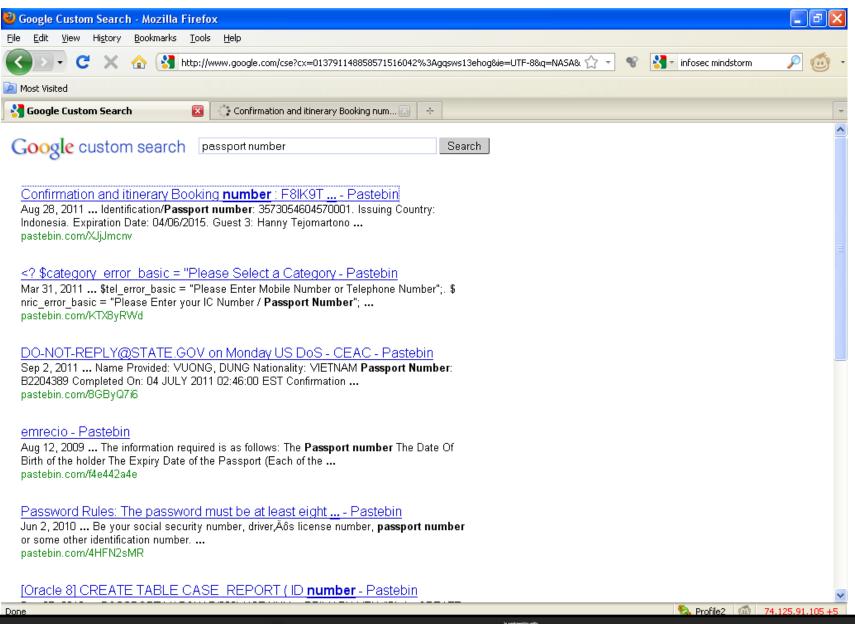
## Passport Numbers & related information



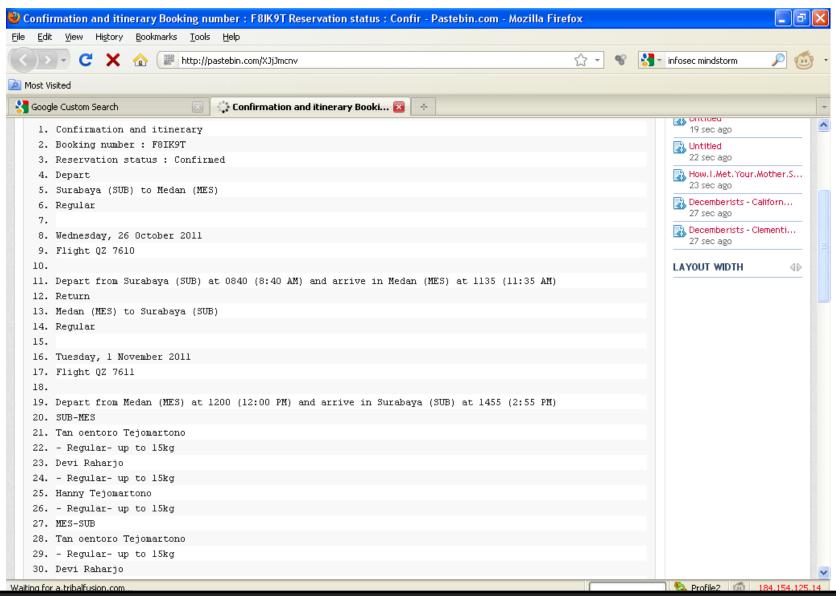


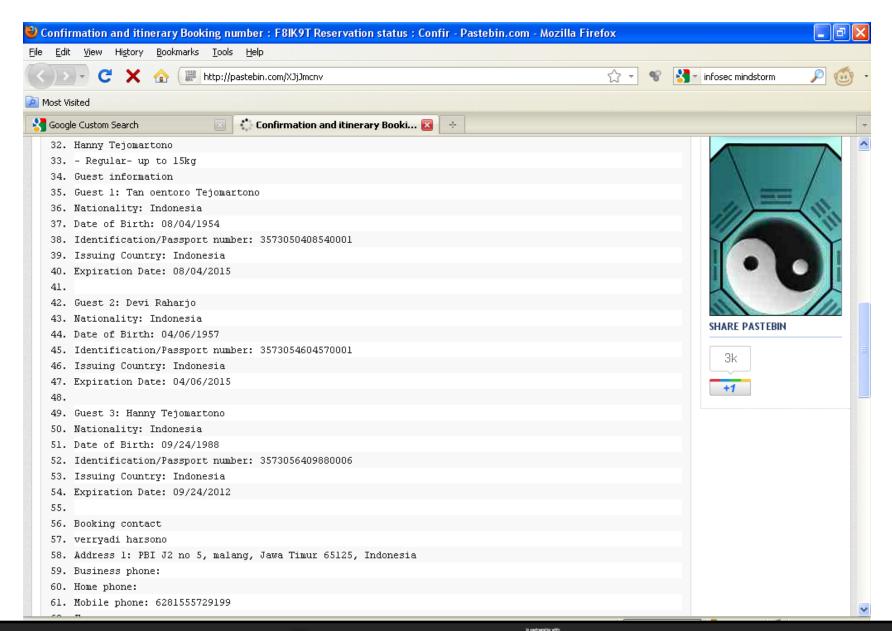


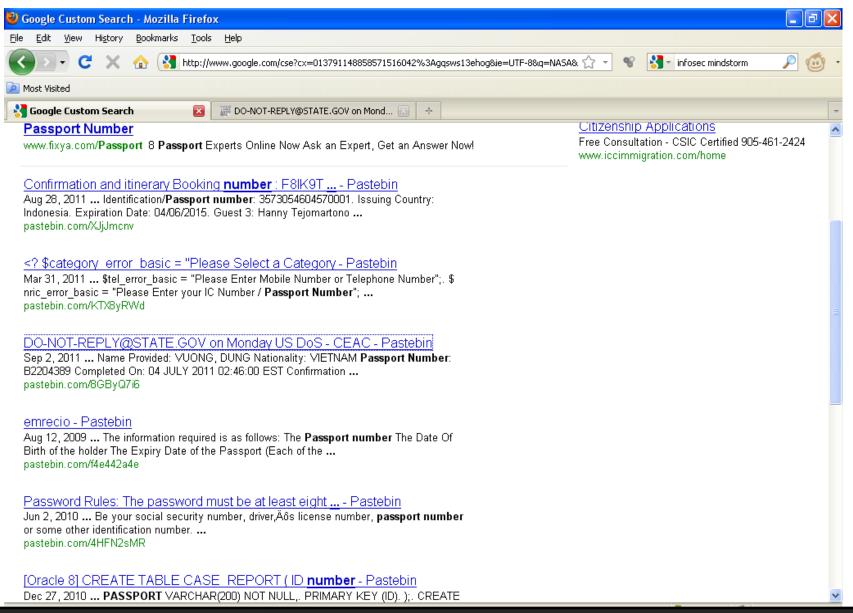




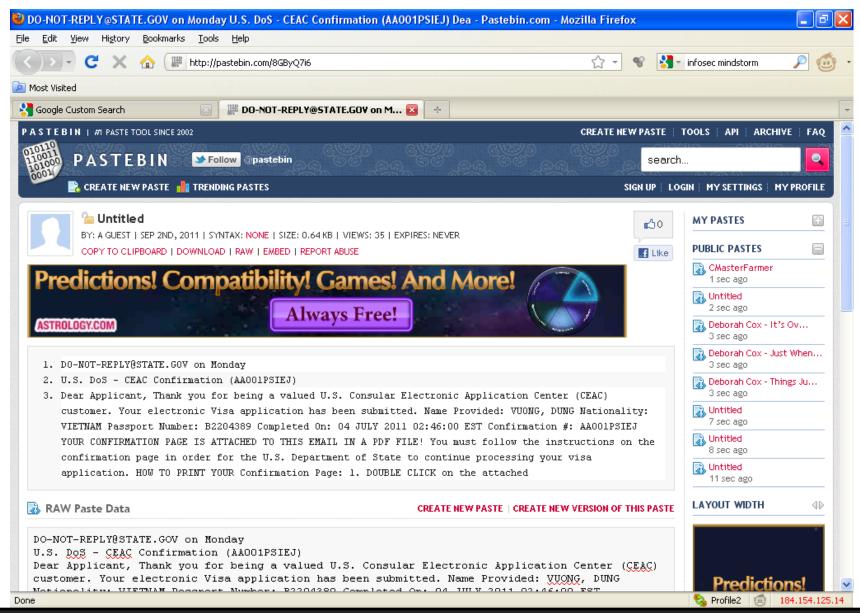




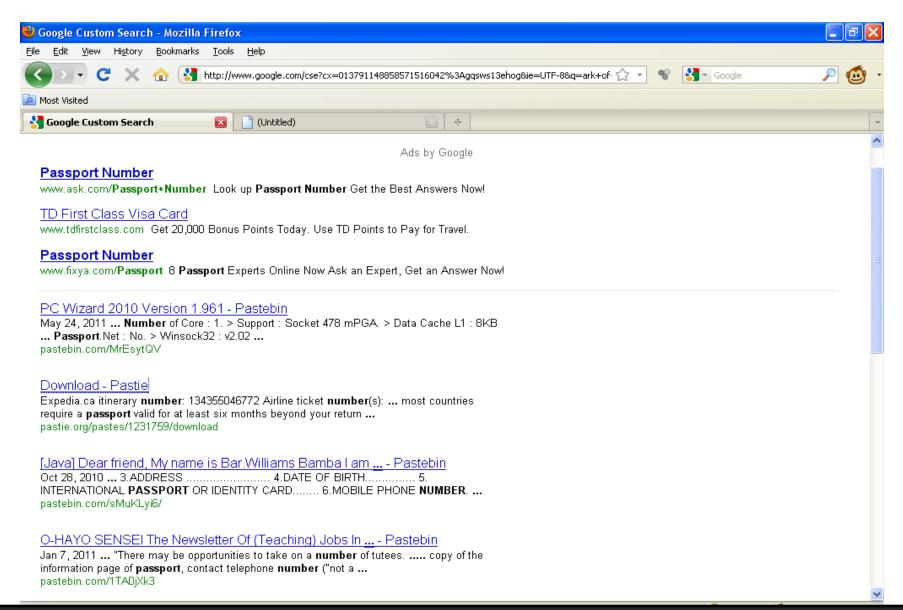




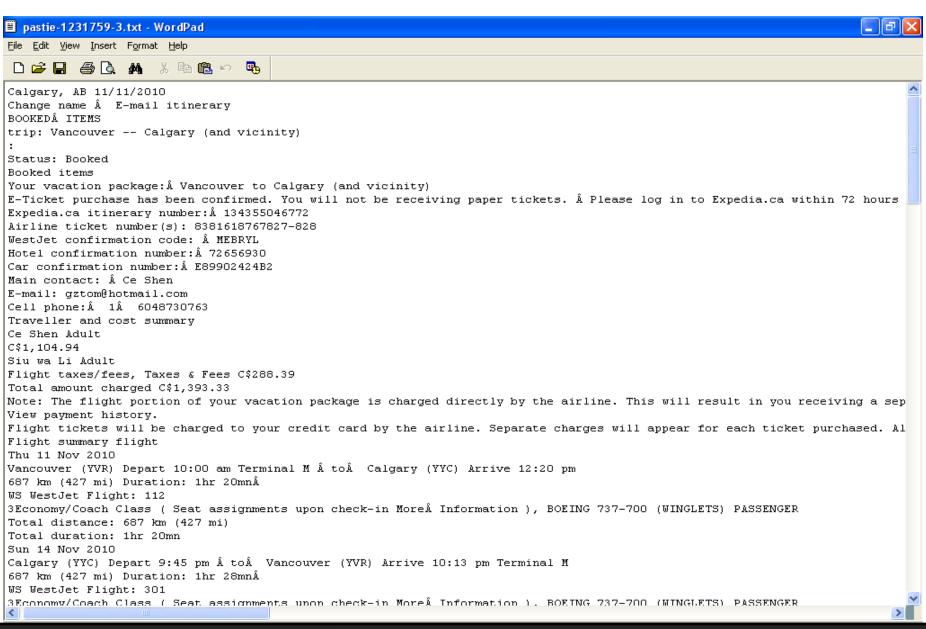




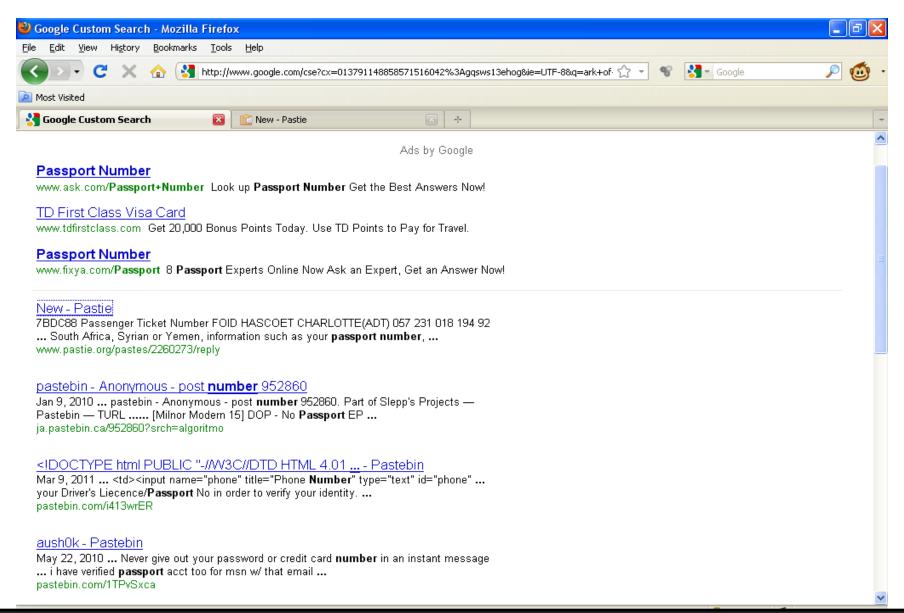






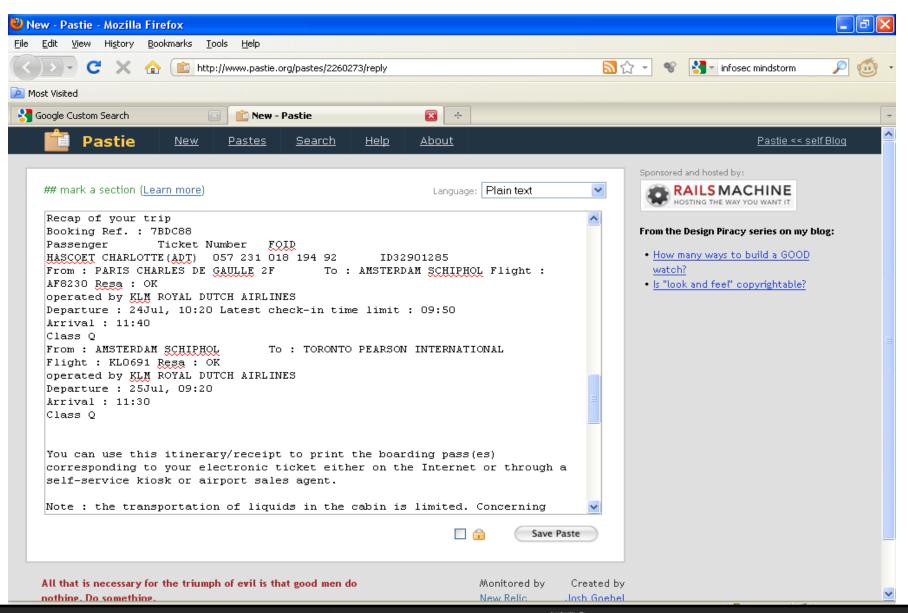




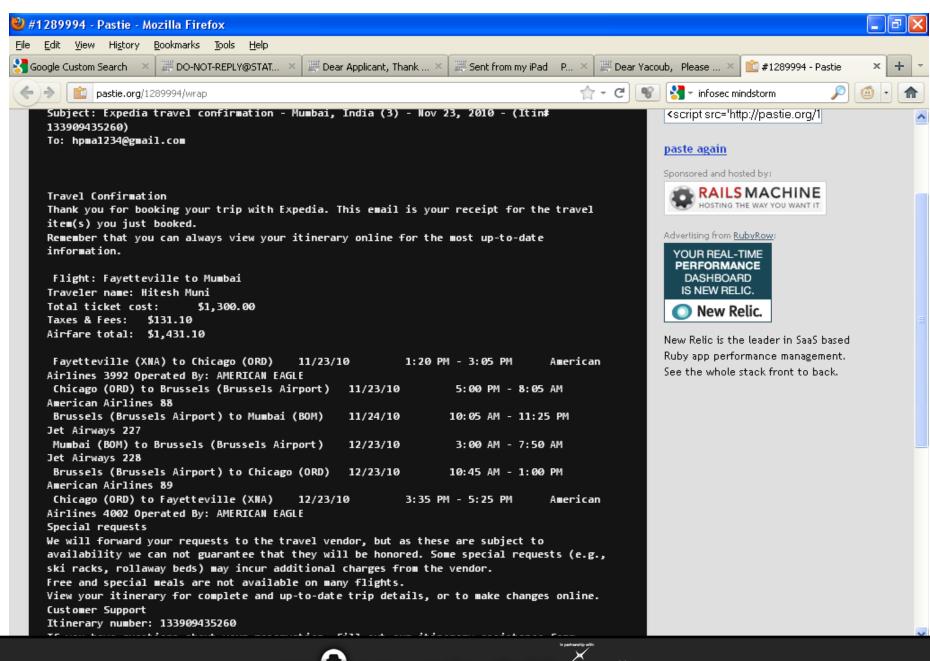




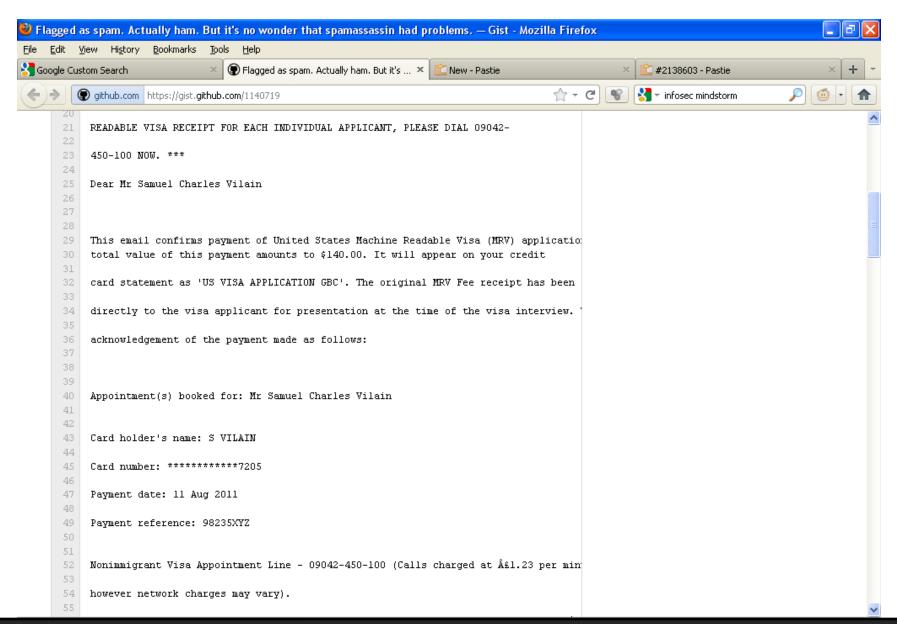


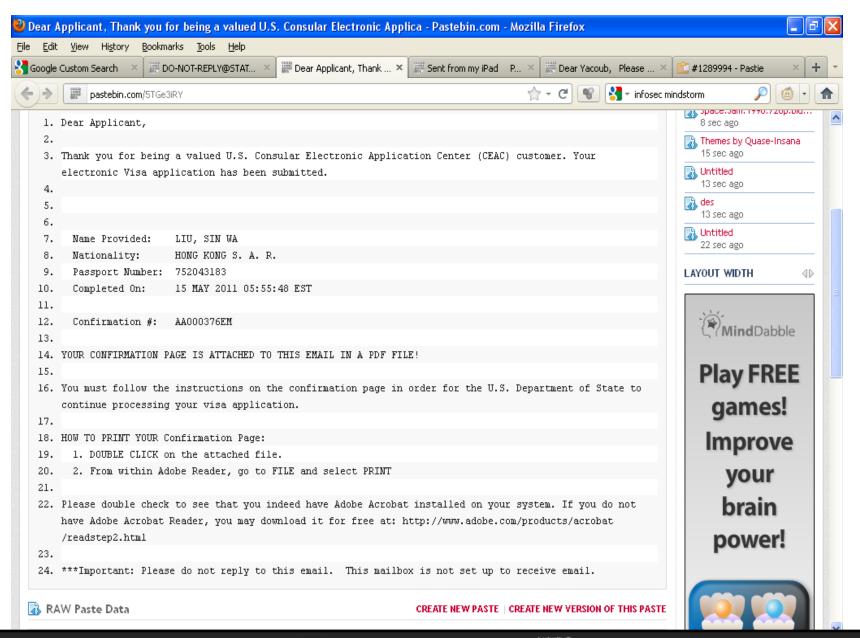


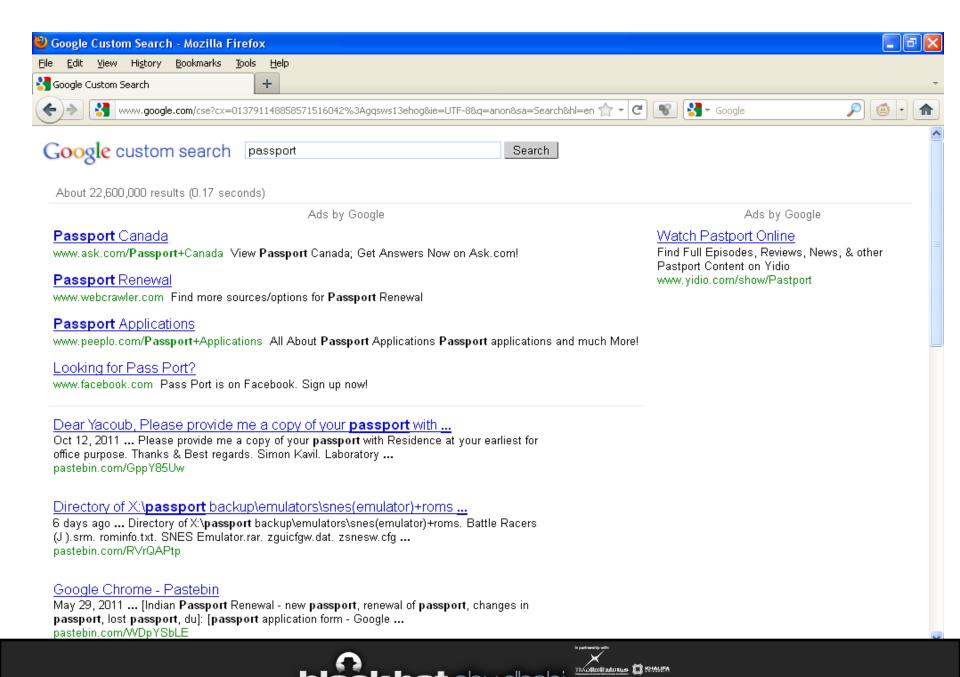






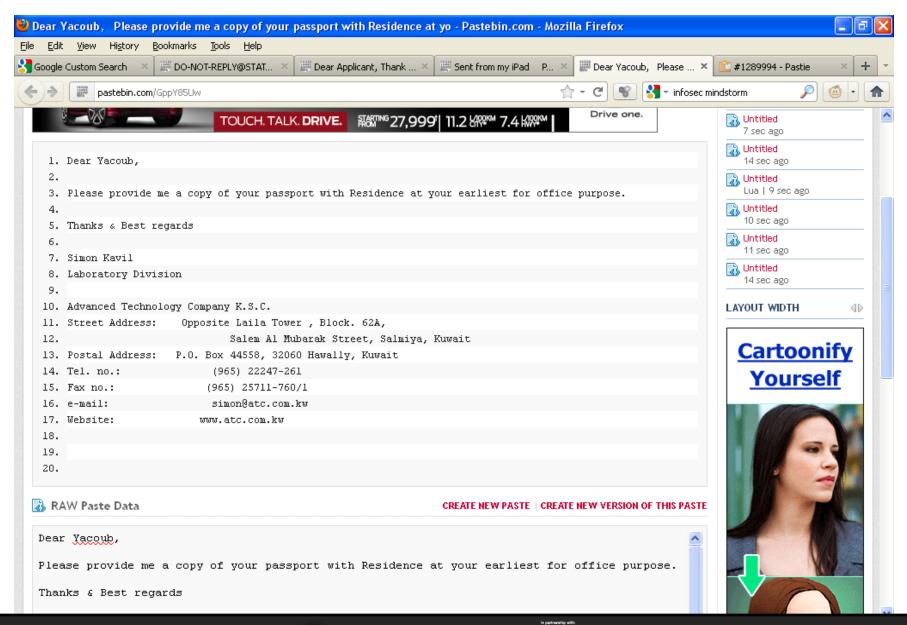






+2011

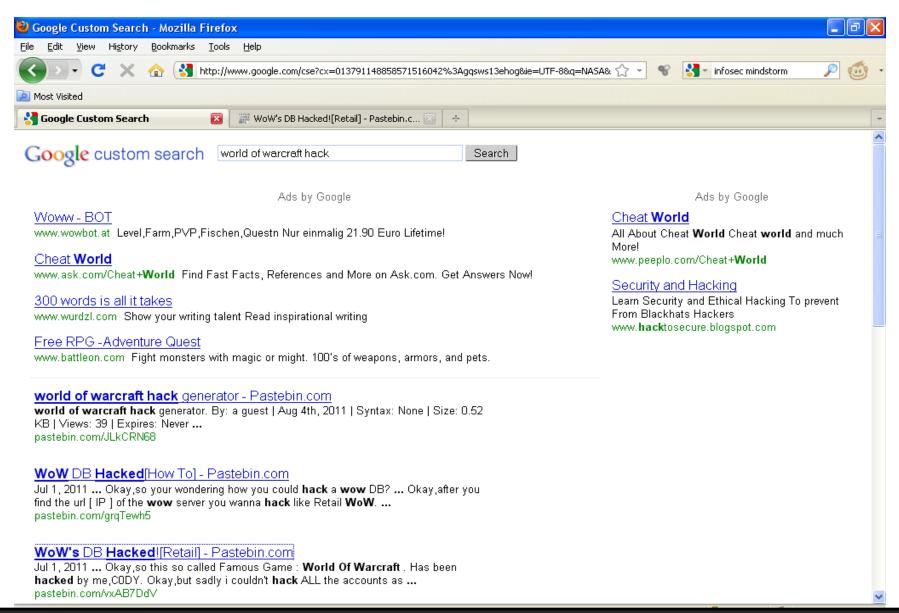
CERT



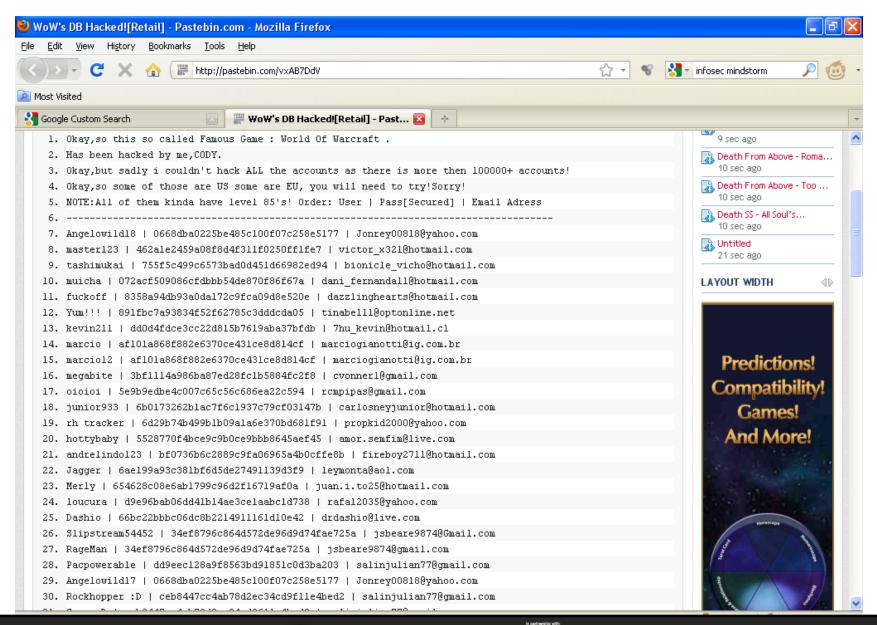


## Databases & other Confidential information

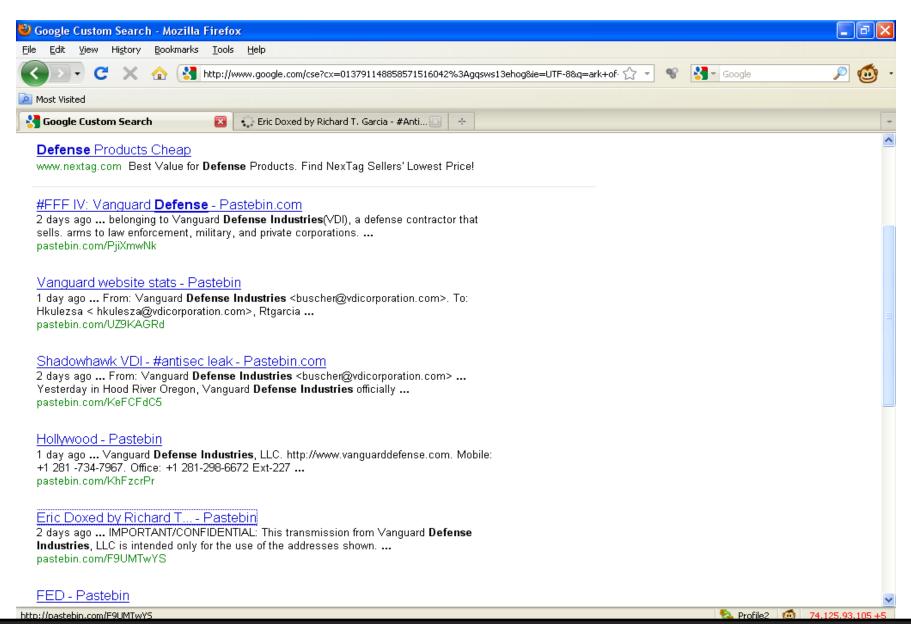




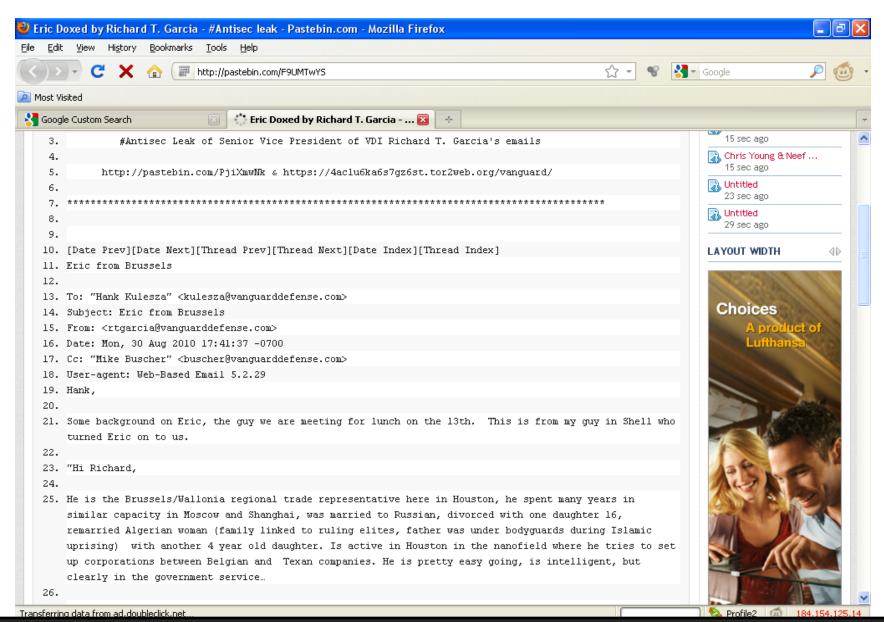


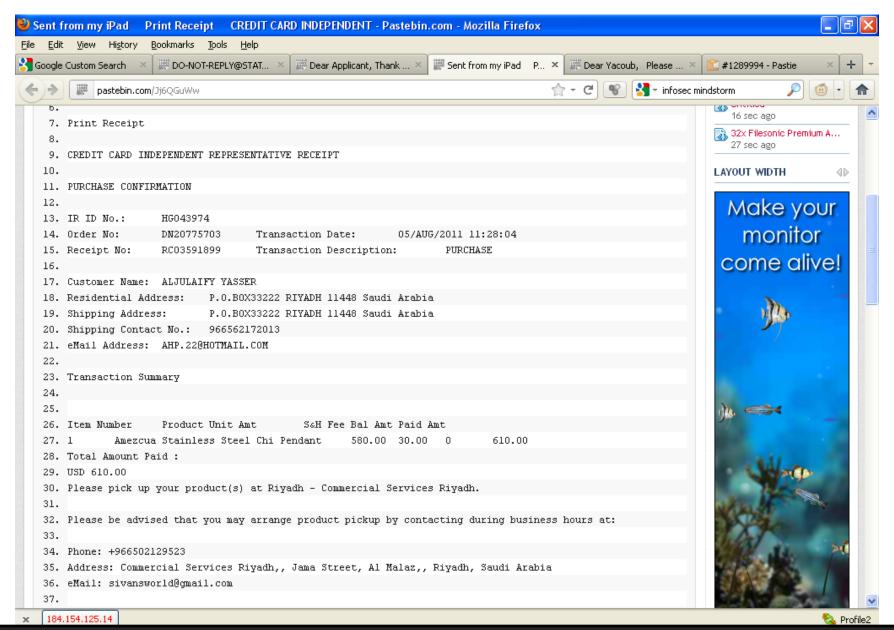




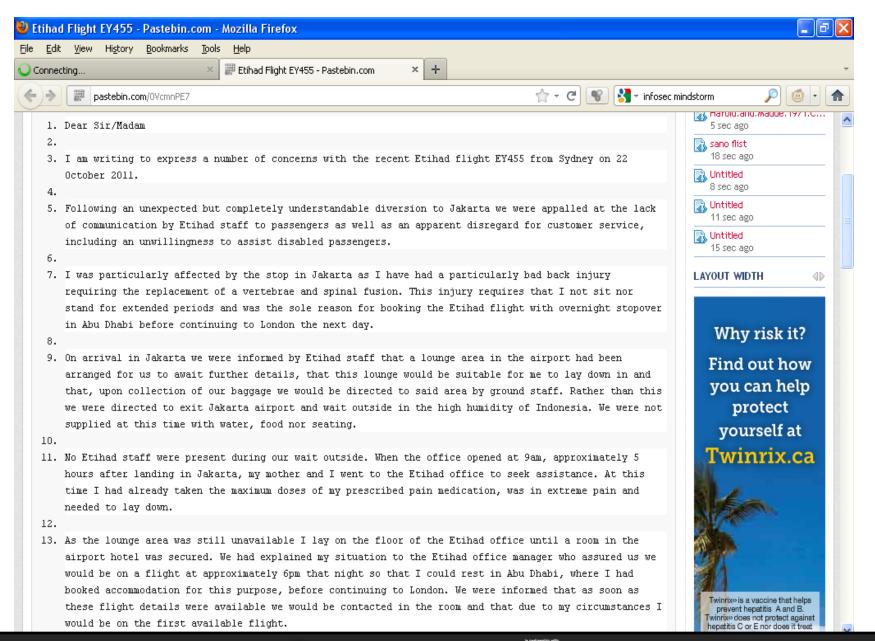


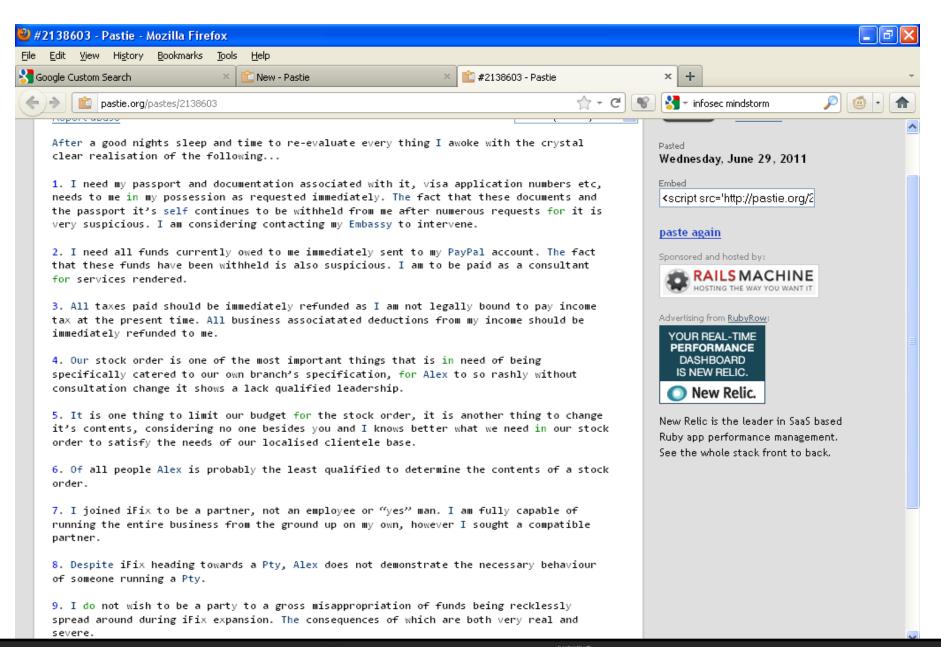


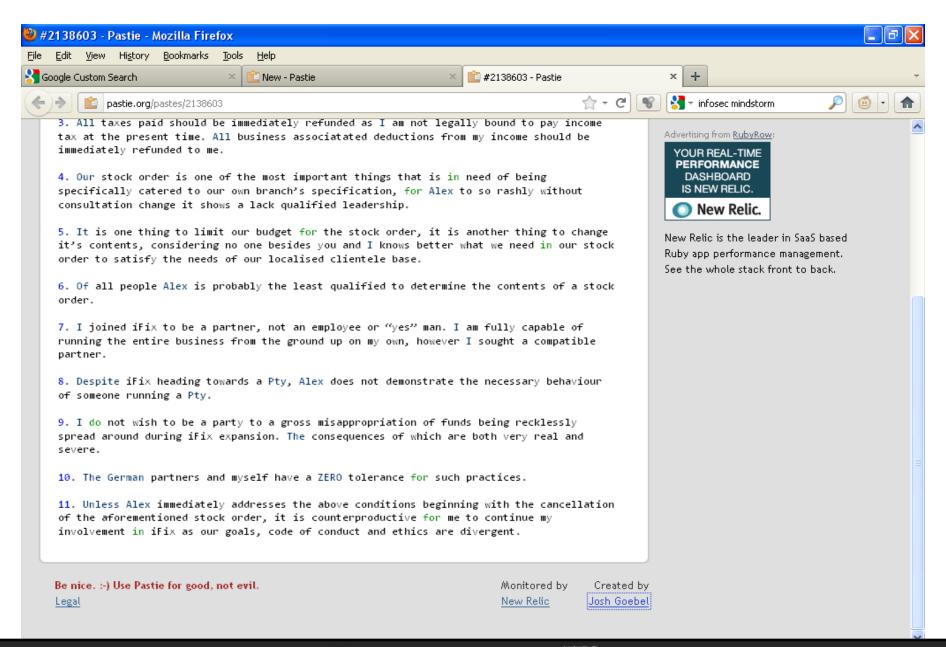


















Aug 25, 2011 ... COM - World's Software Giant DNS Fuck3D Leaked ... with Zone Poisoning/ Transferring (Data Leak). ..... 207.46.31.61 docs.microsoft.com

pastebin.com/ngzkbrk3

#### **Leaked** internal google dart email — Gist

Sep 10, 2011 ... Leaked internal google dart... created October 10, 2011; gist: .... Subject: "Future of Javascript" doc from our internal "JavaScript Summit" ... https://gist.github.com/1208618

#### boxxy pasta - Pastebin.com

Jan 19, 2011 ... [[Image:Boxxy-Dox-Thumb.png|thumb|Documents pastebin leaked by the CBCR.]] [[Image:Xenu-astley-docs.png|thumb|XenuAstley, being ... pastebin.com/59g8EupQ

#### CS: Global Offensive Beta Leak Download - Pastebin.com

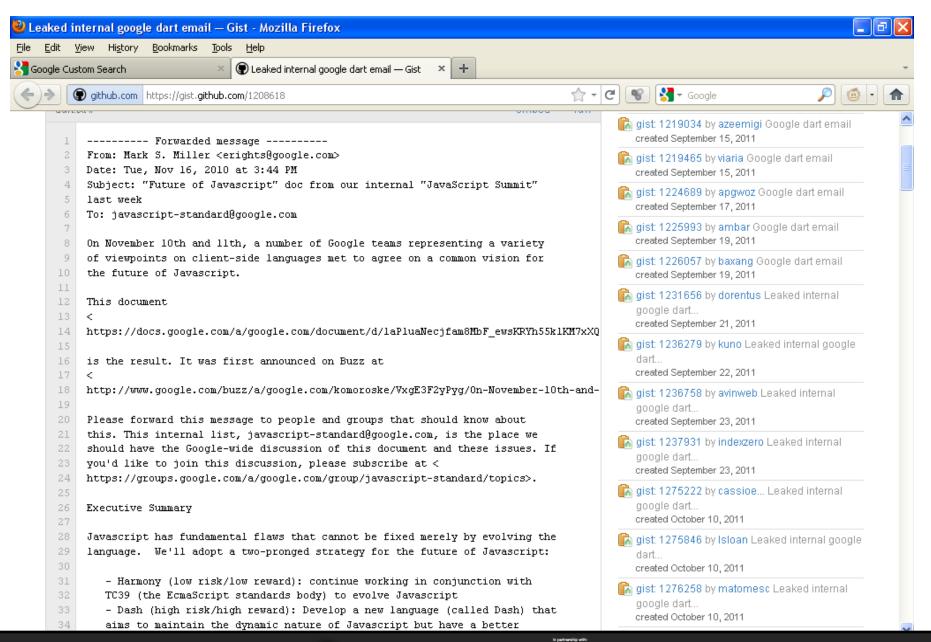
Oct 29, 2011... sec ago; Untitled22 sec ago; Utilities for google docsJavaScript | 24 sec ago; Untitled28 sec ago ... CS: Global Offensive Beta Leak Download ... pastebin.com/4EdDqrYP

#### Re: Re: "LulzSec Exposed" - Pastebin.com

Jun 6, 2011 ... http://www.scribd.com/doc/57141513/Consequences .... and as such the person who leaked those logs (m. nerva) has been completely hacked ... pastebin.com/EXrSpFA6

**1** 2 3 4 5 6 7 8 9 10





## Social Networking Intel/ Footprint web search



 There are currently more than 60 sites in the custom search. Examples include flickr, linkedin, facebook and Hi5.

 The list of sites is regularly updated; it is not available to the public as it is confidential; examples of the sites being searched can be found on my blog.  Searches turn up everything an individual's personal social media page, to events where they were attending or volunteered at.

 I also came across individuals who worked at their organizations or people who knew them personally/ friends.

 Useful for reconnaissance activitiesintelligence gathering.

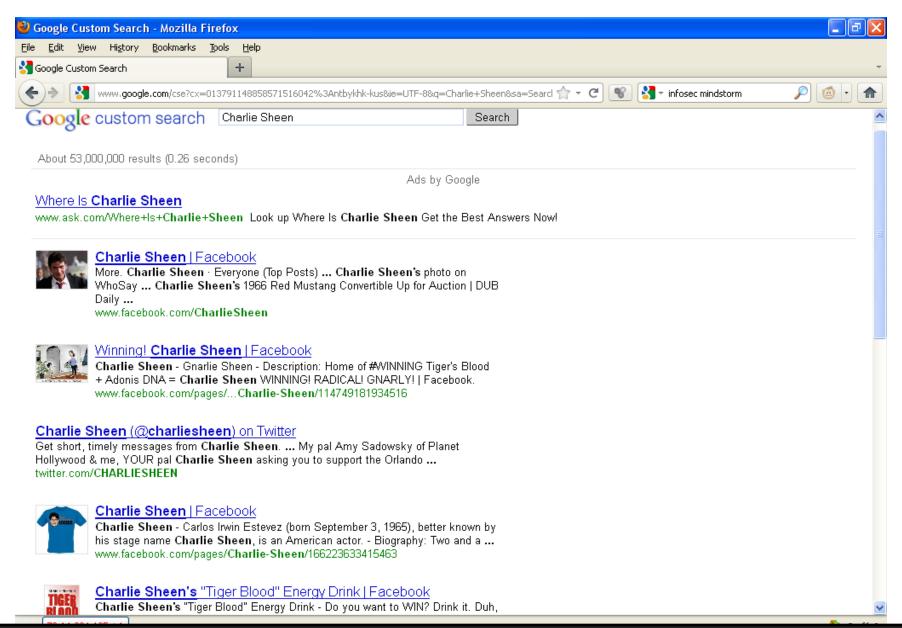


 If you are a pen tester useful for finding potential targets.

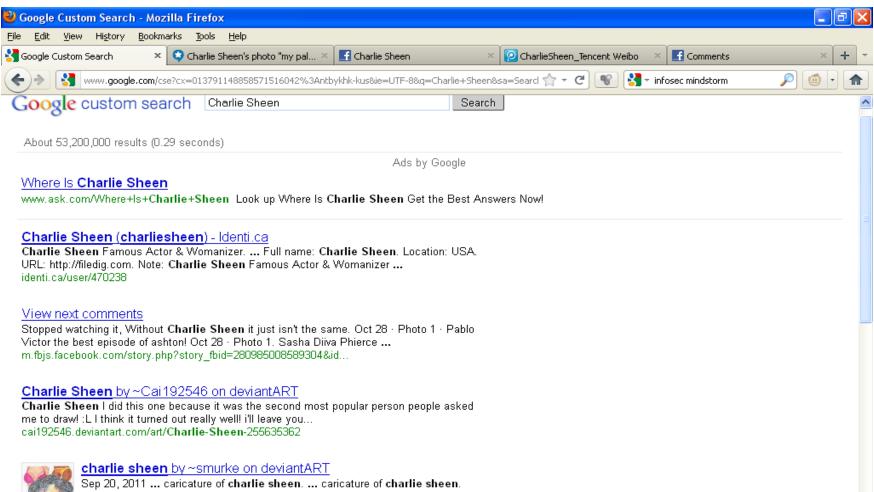
 Was surprised was actually able to get significant information on individuals even if they did not have a direct social media presence themselves.

 In some cases enough information to potentially get an introduction to a person.









Sep 20, 2011 ... caricature of **charlie sheen**. ... caricature of **charlie sheen**. More... No comments have been added yet. x :icon: Add a Comment: ... smurke.deviantart.com/art/**charlie-sheen**-259431995

#### Search for "Charlie Sheen" - FilmAffinity

49 results Filmaffinity com AKA movieaffinity com is a website that finds:
72.14.204.105 +4

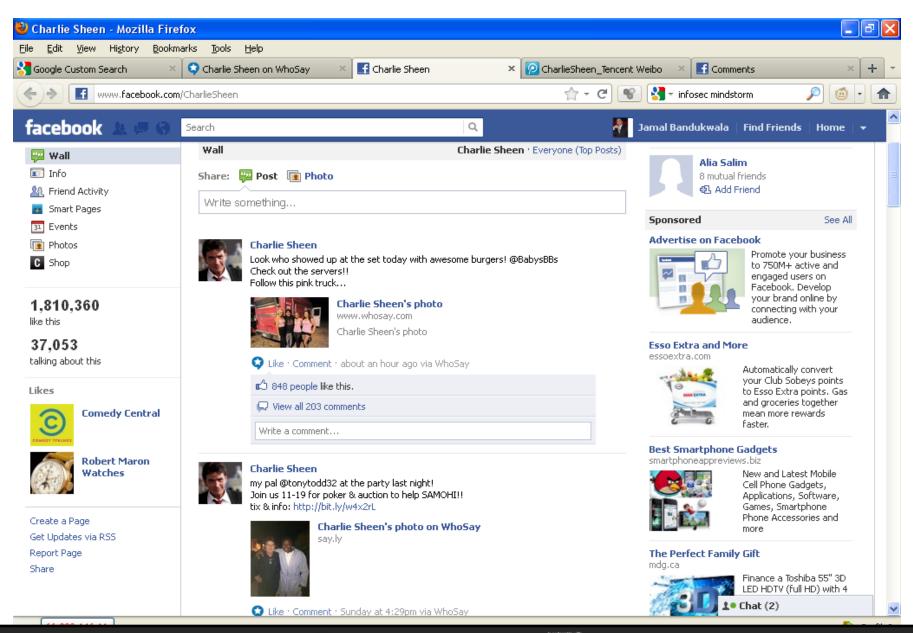


Profile3

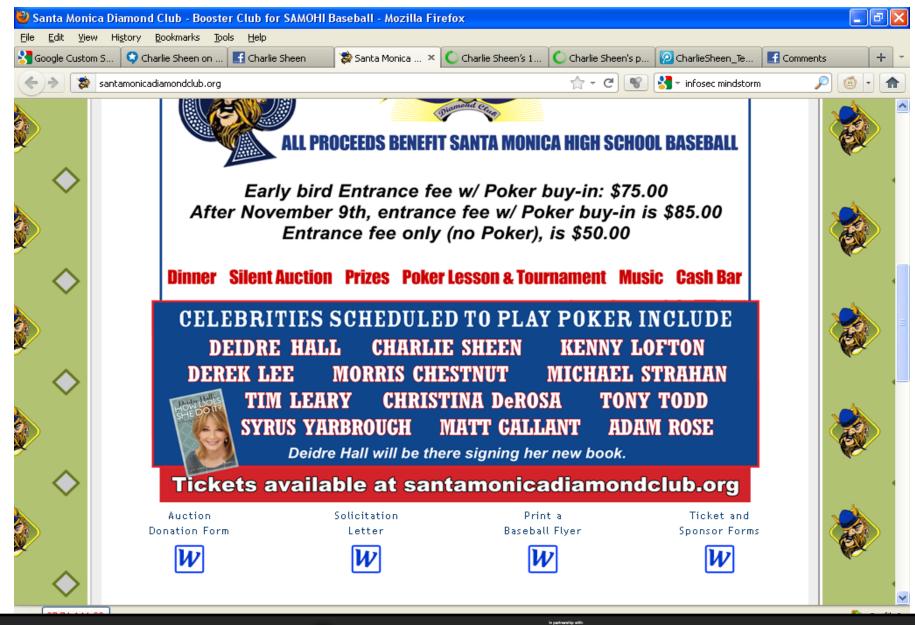




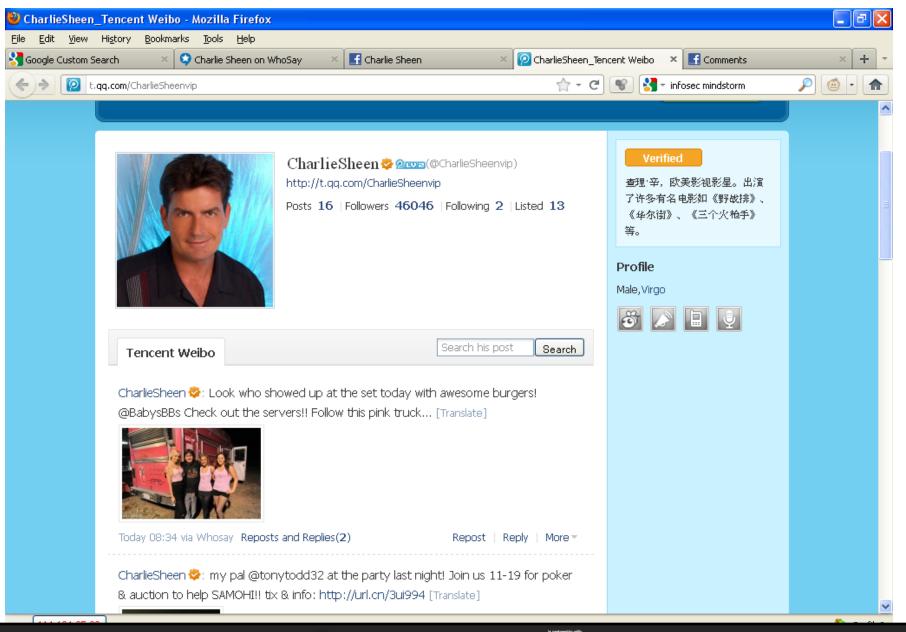








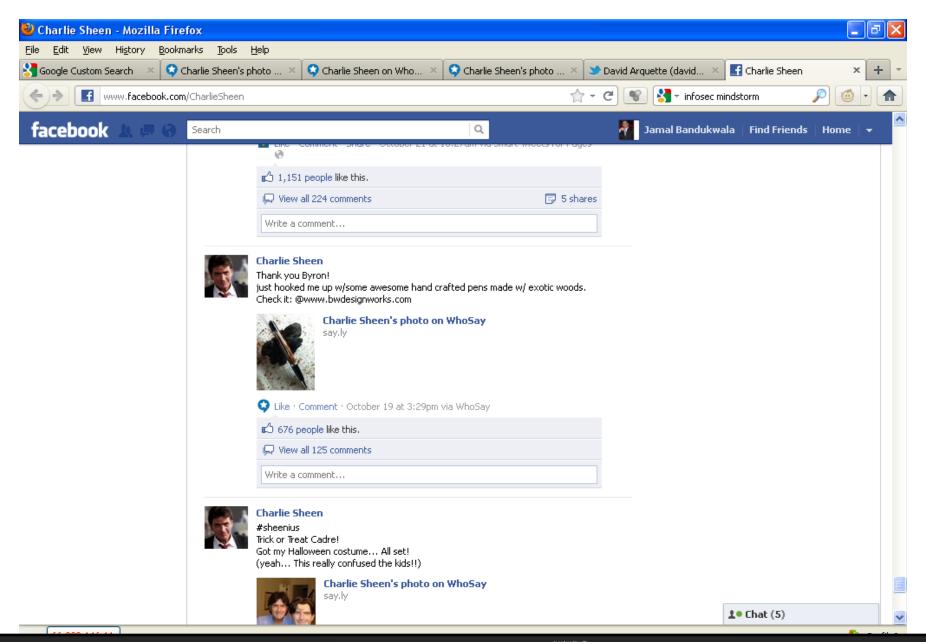




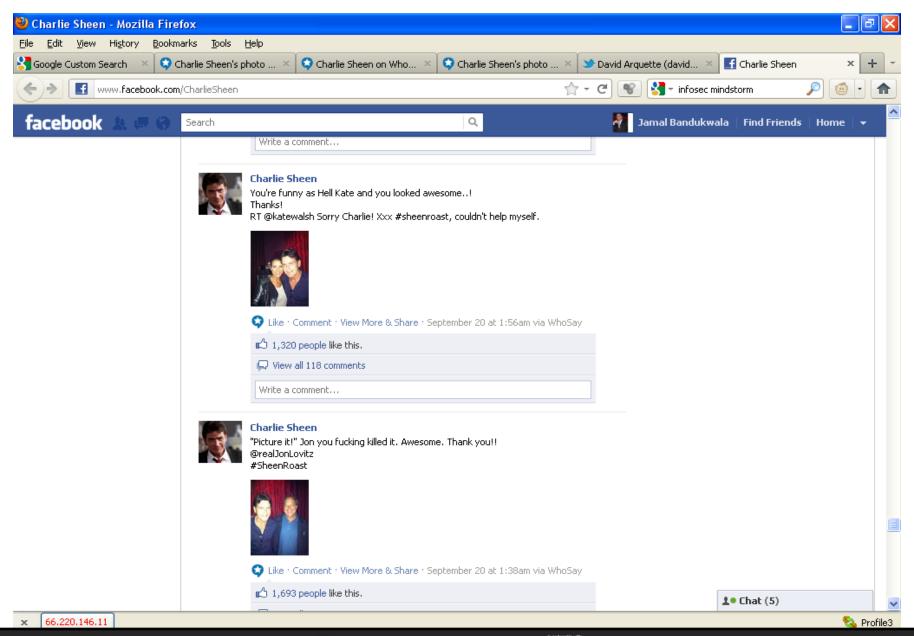


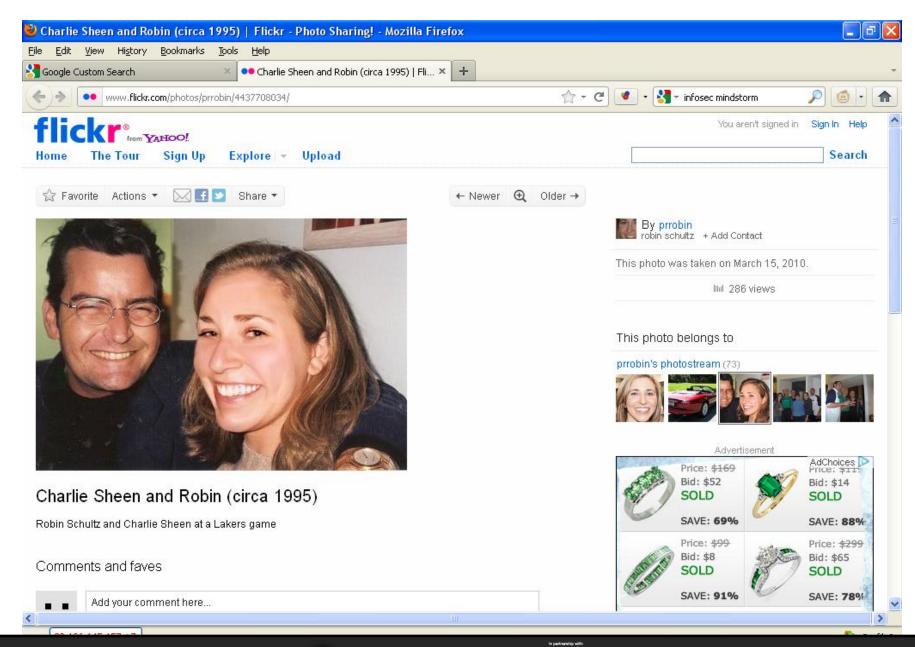


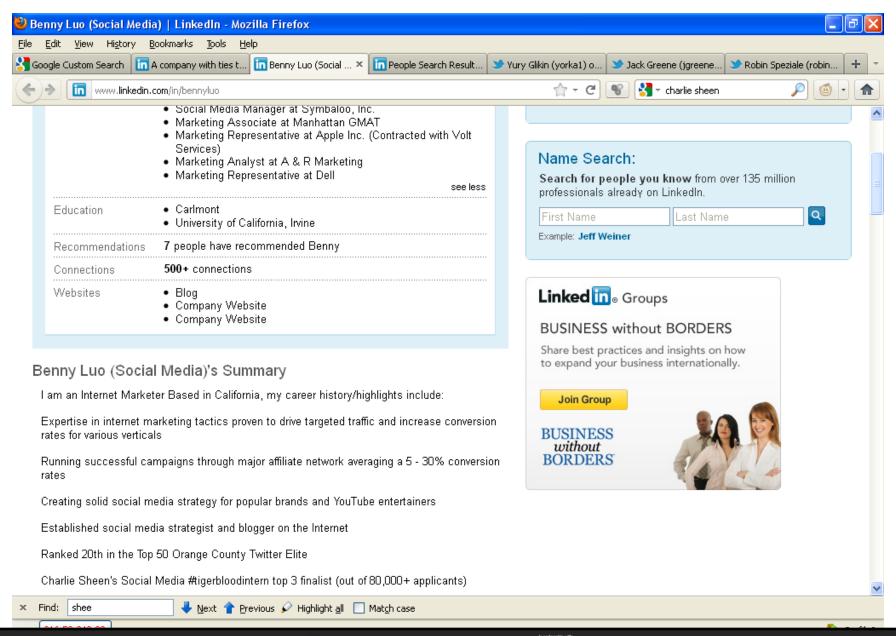




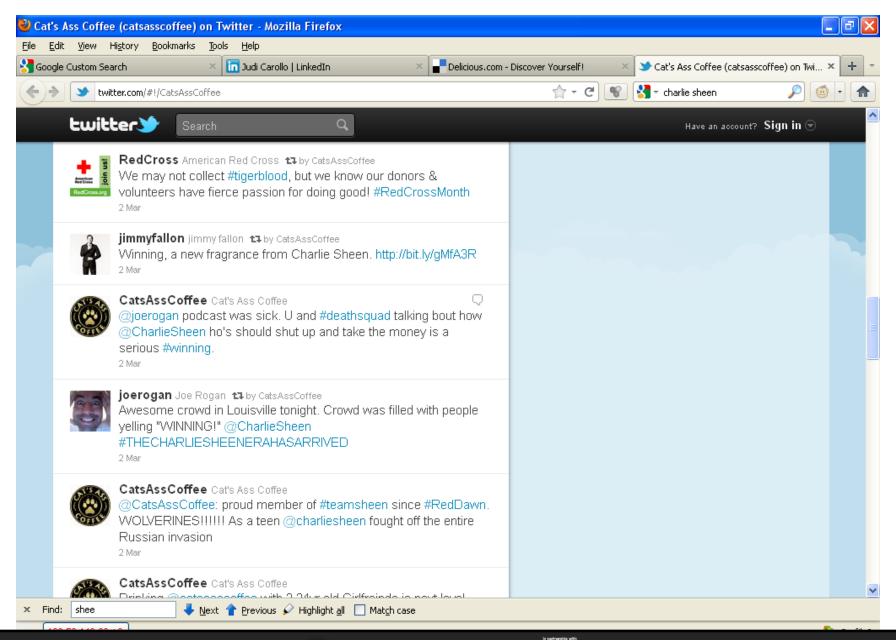


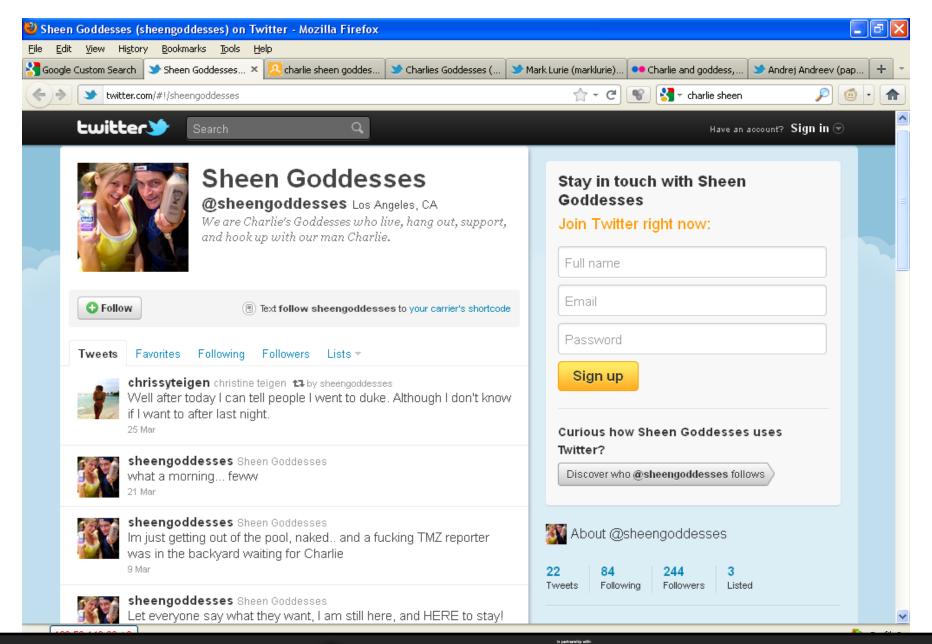




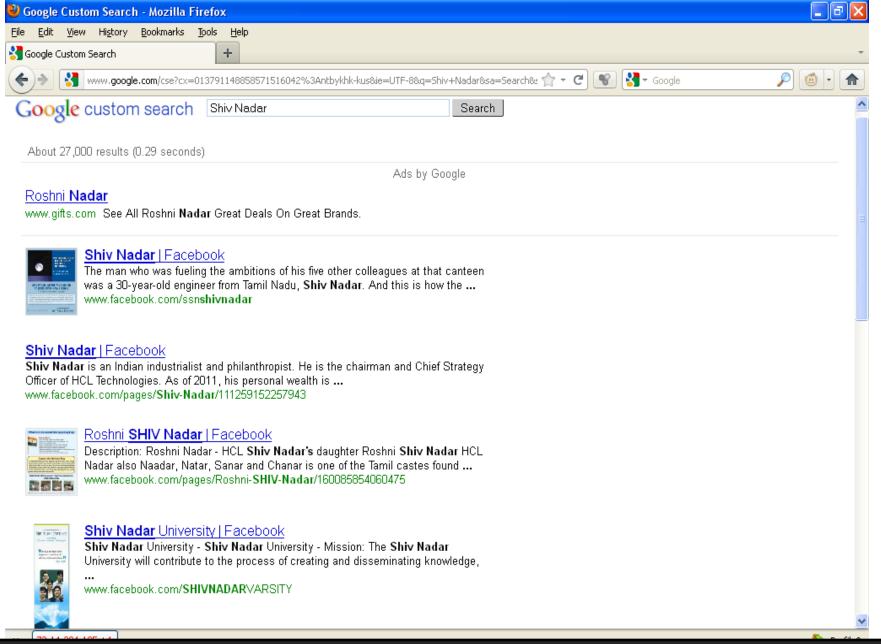


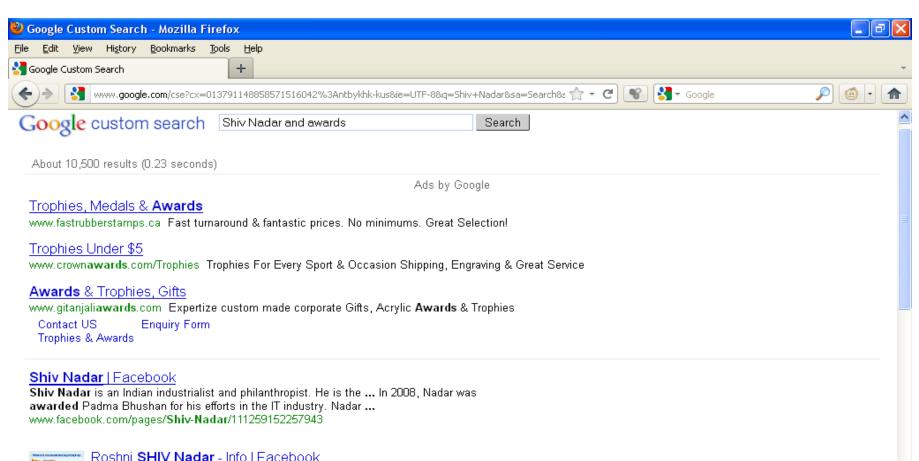














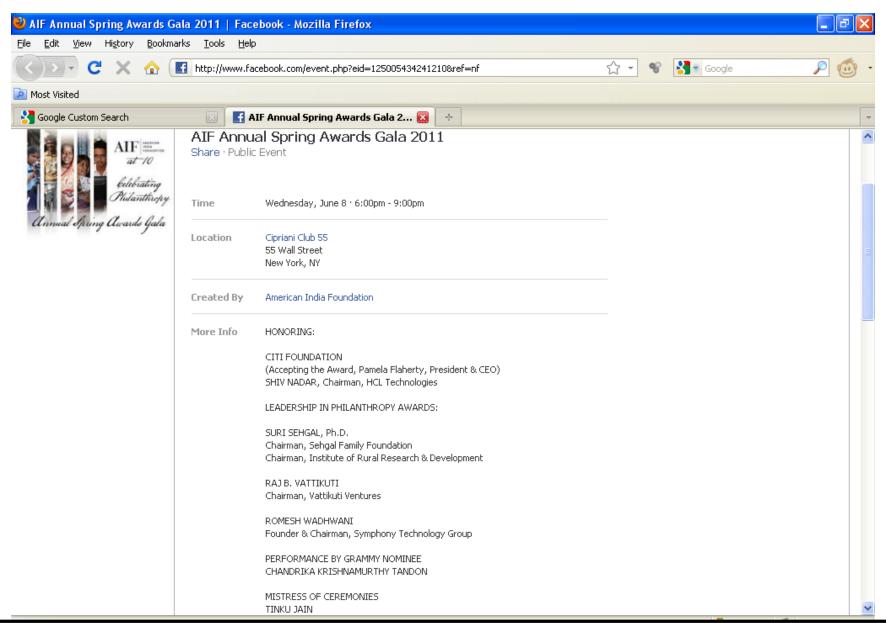
#### Roshni SHIV Nadar - Info | Facebook

Description: Roshni Nadar - HCL Shiv Nadar's daughter Roshni Shiv Nadar HCL ... Master and the first chess player to be honoured with the Arjuna Award, ... www.facebook.com/pages/Roshni-SHIV-Nadar/160085854060475?...

#### AIF Annual Spring Awards Gala 2011 | Facebook

(Accepting the Award, Pamela Flaherty, President & CEO) SHIV NADAR, Chairman, HCL Technologies ... LEADERSHIP IN PHILANTHROPY AWARDS: ... www.facebook.com/event.php?eid=125005434241210













## **Invisible Attacks**

 A malicious party could hijack an existing researcher's identity and offer a custom search targeted at a very specific audience (ie a select group of senior executives).

 The attacker could use the search to provide legitimate results most of the time and by doing so build a level of trust into the search engine.  Attacker could enter a temporary site into the engine and then with the custom search in built capabilities promote the results from the newly entered malicious site to the top of the list.

 The actor would promote the malicious url for a short period of time and then remove the url from the custom search altogether.

- Makes it difficult for investigators/ analysts to:
- capture samples.
- identify source of infection(due to trust factor) and short time to live.
- Depending on the malware determine whether the malicious code is in the environment at all.

## Currently use my research

 My Google Custom Searches are currently used by individuals at various private and government intelligence agencies, organizations and departments including:

Lascar Intelligence

Bund Deutscher Kriminalbeamter (German Police)

British Department of Defense

US Army

iSIGHT Risk Management

## Final Thoughts

Is All Hope lost? Should we all panic?

 That great philosopher Chicken Little said- The Sky is Falling down. In this case he was wrong.

 We can find a lot of information on the internet including things like credit card numbers, and passport information.  Even if you do not have your own social media/ web 2.0 presence, others in your network can put information about you on the web.

 With the information available out there it may be possible to engineer/ create opportunities for meetings with various individuals including political and business power brokers.  Running the appropriate searches generates useful political, social, economic and related intelligence.

 Useful for generating information on competing actors, entities and organizations.

 Can be used to possibly obtain information on upcoming threats (both internet based and others) and take the appropriate actions to combat these.



 Can even use these customized searches with a honeytrap if you suspect an individual in your organization is leaking/ stealing information. You set up the trap and then use the searches to see if the 'fake' information becomes available here.

 Yes it's not a good thing that so much information is out there, but you can take actions to counter this and protect your organization.  These same searches can also be used to gather intelligence, anticipate and counter possible threats to an organization.

 The custom search engine owner/ creator and the individual using the searches are both only limited by the content in the search engine and their imagination. The possibilities of what you can find are endless.

## Bibliography

- Bandukwala, Jamal. http://infosecmindstorm.blogspot.com/ (Last visited, Nov 16 2011)
- Google. Google Custom Search APIs and Tools Developer's Guide. http://code.google.com/apis/customsearch/docs/dev\_guide.html (Last visited, Nov 16 2011)
- Jiang, Rui, Google. Improved On-Demand Indexing. Google Custom Search Blog. http://googlecustomsearch.blogspot.com/2011/06/improved-on-demand-indexing.html?utm\_source=feedburner&utm\_medium=feed&utm\_campaign=Feed%3A+blogspot%2FSyga+%28Google+Custom+Search%29 (Last visited, Nov 16 2011)

- Shiv Nadar. Wikipedia.com http://en.wikipedia.org/wiki/Shiv\_Nadar (Last visited, Nov 16 2011)
- Pastebin. Wikipedia.com http://en.wikipedia.org/wiki/Pastebin (Last visited, Nov 16 2011)
- Washington Times. CIA mines 'rich' content from blogs.
   http://www.washingtontimes.com/news/2006/apr/18/20060418-110124-3694r/ (Last visited, Nov 16 2011)
- Zelster, Lenny. Pastebin used for sharing stolen data.
   http://blog.zeltser.com/post/7033873645/pastebin-used-for-sharing-stolen-data) (Last visited, Nov 16 2011)

### Thank You!



# Please turn in your completed feedback form at the registration desk.

