The Citizen Lab

The Canadian Connection: One Year Later

In the November 2011 report, *The Canadian Connection: An investigation of Syrian government and Hezbullah web hosting in Canada*, the Citizen Lab examined the use of web servers based in Canada, the U.S., and European countries to host Syrian government websites and websites of the Lebanese political party Hezbullah. We explored the complex ethical, political, and legal issues raised by provision of web hosting services to entities associated with repressive regimes and human rights abuses. Since the publication of that report, Citizen Lab has continued to monitor legal and technical developments related to web hosting.

This update details our findings that, while many of the websites we examined in 2011 have changed hosting providers, a number of Syrian government and Hezbullah websites still maintain an online presence through the services of North American and European web hosts.

In the report, the Citizen Lab documented a significant number of Syrian government websites hosted by Canada-based web servers, including the websites of the Ministry of Culture, Ministry of Transport, Ministry of Electricity, and Syrian Patent Office, which raised questions regarding the applicability to web hosting of existing sanctions regimes against Syria. We also found that the Syrian TV station, Addounia TV, which is sanctioned by Canada[1] and the European Union[2] for inciting violence against Syrian citizens, used Canada-based web servers to host its website addounia.tv.

Moreover, we found that the website for Hezbullah's official media arm, Al-Manar, was hosted on Canada- and U.S.-based web servers and employed Canada-based web servers to stream its TV broadcast globally, while the website and radio stream of Hezbullah radio station Al-Nour were hosted by U.S.-based web hosts.

The U.S. and Canada classify Hezbullah as a terrorist organization,[3] while Al-Manar satellite broadcasts have been banned by the U.S., France, Spain, and Germany as well as the European Union.[4] The United States includes Al-Manar and Al-Nour on its Specially Designated Nationals and Blocked Persons List,[5] a list of entities with which U.S. persons are generally prohibited from dealing, and the assets of which are blocked.

A number of changes in web hosting of these entities have taken place since November 2011.

Notably, over the past year changes in hosting of Syrian government websites have taken place that may have been prompted at least in part by Syrian government action, rather than as a result of Western reaction.

Several Syrian government websites have moved to local hosting after a government mandate demanded that all websites of government and public authorities must be hosted within Syria. The Arabic text of the mandate (number 7944/15) was issued by the Syrian prime minister's office on June 7, 2012 and published by state-run media.[6] It stated:

Due to the fact that there are so many security vulnerabilities with websites belonging to some public organizations, we order all ministries, institutions, companies and all other public organizations to take the following necessary measures:

- All Syrian government websites must be moved to hosting servers within the borders of the Syrian Arab Republic. The National Agency for Network Services can provide assistance in this regard by having the websites hosted on their available servers;

- All websites must conduct web server security reviews to be performed at least once a year by Syria's Center for Information Security at the National Agency for Network Services; and,

- All security vulnerabilities found on government websites must be fixed immediately in coordination with the Center for Information Security at the National Agency for Network Services.

As of October 2, 2012, most of the Syrian government websites that we reported in The Canadian Connection to be hosted on North American and European servers have indeed been moved to servers on the Syrian network. We also found, however, that some Syrian government websites remain hosted in North America and Europe.

Organizations whose websites are hosted in the U.S. include:

- Sana News Agency (sana.sy, hosted on SoftLayer Technologies, Texas);

- The official state mouthpiece run by the Ministry of Information;

- The Ministry of Woqf (Religious Affairs) (mow.gov.sy hosted on HostDime.com, Florida);

- The Ministry of Economy and Trade, Syrian Patent Office (spo.gov.sy hosted on PrivateSystems Networks, New Jersey);

- The Hama City government (hama.gov.sy hosted on WeHostWebSites.com, Colorado);

- The Prime Minister's Office; General Authority for Development (gcb.gov.sy hosted on Jumpline, New York); and

- The Ministry of Religious Affairs (Endowment) in the city of Aleppo (aleppowakf.gov.sy hosted on Secured Private Network, California).

Additionally, some websites have switched among North American- and European-based hosts. The website of Syria's General Commission for Competition and Antimonopoly (www.competition.gov.sy), formerly hosted on U.S. servers, is now hosted on Canadian servers (IWeb Technologies, Quebec).

Also, Addounia.tv, previously hosted by Canada-based iWeb Technologies, was moved first to servers in Germany operated by hosting company LeaseWeb, and currently hosted on servers in the Netherlands operated by hosting company Interactive 3D. Addounia TV has been using webstreaming as an alternative way to broadcast its content after the two Middle East satellite operators, Nilesat and Arabsat, took it off the air on July 19, 2012 at the request of the Arab League.[7]

Hezbullah-affiliated sites have also made changes to their hosting providers. Hezbullah's primary website Almanar.com.lb is now hosted on UK-based servers instead of in North America, though Al-Manar TV still uses U.S. servers to livestream its broadcast at IP address 38.96.175.90. Additionally, the website of the "Islamic Resistance In Lebanon – Hezbullah" (http://moqawama.org), which refers to itself as the "official website of the Islamic Resistance in Lebanon," moved from U.S. web servers to web hosting services in the UK (ServerSpace Limited at IP 31.24.33.158).

Hezbullah's radio station Al-Nour (alnour.com.lb), however, which broadcasts from Lebanon and offers audio streaming of its live broadcasts (http://www.almanar.com.lb/manarlive.php), is still hosted on U.S. servers (eNET at IP 64.79.68.246) and uses U.S.-based servers to livestream its broadcast online at nour.itw-hosting.net (IP 216.152.133.16).
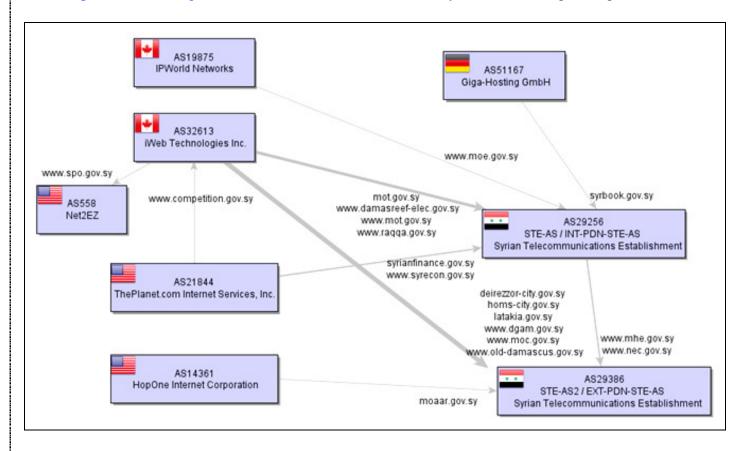
CONCLUSION

Globally distributed web hosting remains a very complex and highly nuanced issue.

Important developments that have occurred since the publication of *The Canadian Connection* include the Syrian government's issuance of a mandate that government websites be moved to local hosting; migration of the Addounia TV website and live streaming services from North America to servers based in Europe; and movement of segments of Hezbullah's online services from North America to Europe.

Such developments suggest that these entities' website operators are increasingly considering political jurisdiction when they make decisions about web hosting. The international community should likewise heighten its attention to this matter.

We continue to urge governments, civil society, and the private sector to carefully consider the role and responsibilities of web hosting companies — including through development of proper guidance to this industry — in international efforts to curb repressive regimes and entities associated with human rights abuses.
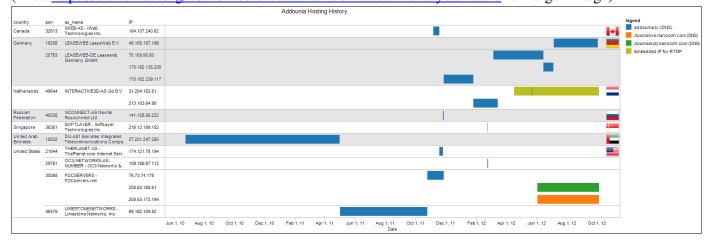
Figure 1: Website hosting changes since Nov 2011 to October 2012 (based on DNS and ASN lookups.)
(Visit https://citizenlab.org/2012/11/the-canadian-connection-one-year-later/ for larger image)

Arrows represent changes in the IP addresses the .gov.sy domain names resolve to. Boxes represent Autonomous Systems — a collection of network resources (e.g. IP addresses) under the control of a single organization.
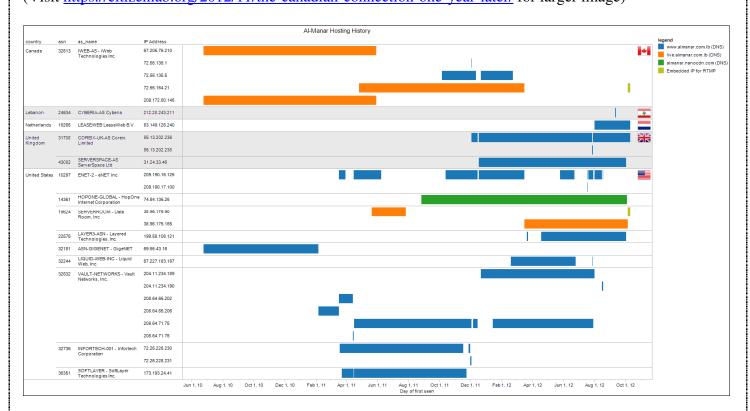
Figure 2: History of Addounia TV (addounia.tv) web hosting based on its DNS History.
(Visit https://citizenlab.org/2012/11/the-canadian-connection-one-year-later/ for larger image)

This timeline of domains and IPs related to Addounia TV shows the Autonomous Systems (see note at Figure 1) they correspond to. Historical information was not available for all domains or IP address usage, so this diagram is not fully comprehensive. The IP address used for RTMP (streaming video) is embedded in the web page at http://addounia.tv/index.php?page=live.

Figure 3: History of Hezbullah's TV channel Al-Manar web hosting based on its DNS History.
(Visit https://citizenlab.org/2012/11/the-canadian-connection-one-year-later/ for larger image)

This timeline of domains and IPs related to Al-Manar shows the Autonomous Systems (see note at Figure 1) they correspond to. Historical information was not available for all domains or IP address usage, so this diagram is not fully comprehensive. The IP addresses used for RTMP (streaming video) were embedded in the web page at http://www.almanar.com.lb/manarlive.php

Figure 4: All non-Syrian hosted .gov.sy sites based on a scan done on July 13, 2012.

Individual IP	Hostname	ASN Num	ASN Name	Country Name
67.205.85.166	www.damasreef-elec.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
72.18.131.37	www.hama.gov.sy	30475	WEHOSTSITESCOM – WeHostWebSites.com	United States

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66.7.198.11	www.mow.gov.sy	33182	DIMENOC—HOSTDIME – HostDime.com, Inc.	United States
209.97.212.140	www.moe.gov.sy	19875	IPWORLDNET – IPWorld Networks	Canada
184.107.58.236	www.raqqa.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
174.120.51.2	www.syrecon.gov.sy	21844	THEPLANET-AS – ThePlanet.com Internet Services, Inc.	United States
174.120.51.2	www.competition.gov.sy	21844	THEPLANET-AS - ThePlanet.com Internet Services, Inc.	United States
66.84.14.67	gcb.gov.sy	11343	383INCCMHTOWN – 383inc	United States
184.107.128.156	latakia.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
174.142.53.8	www.dgam.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
174.142.53.8	www.mot.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
174.142.53.8	peegt.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
70.84.218.92	syrianfinance.gov.sy	21844	THEPLANET-AS – ThePlanet.com Internet Services, Inc.	United States
67.205.85.166	homs-city.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
67.205.85.166	deirezzor-city.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
67.205.85.166	palmyra-city.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
193.200.241.246	syrbook.gov.sy	51167	GIGA-HOSTING Giga-Hosting GmbH	Germany
184.107.58.236	www.raqqa.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
209.160.33.125	moaar.gov.sy	14361	HOPONE-GLOBAL – HopOne Internet Corporation	United States
174.120.51.2	www.competition.gov.sy	21844	THEPLANET-AS – ThePlanet.com Internet Services, Inc.	United States
174.142.53.8	mot.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
174.142.53.8	www.moc.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
67.205.85.166	www.old-	32613	IWEB-AS – iWeb Technologies	Canada

	damascus.gov.sy		Inc.	
67.205.85.166	www.old-damascus.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
67.205.85.166	www.latakia-city.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada

Figure 5: All non-Syrian hosted .gov.sy sites based on a scan done on October 3, 2012

Individual IP	Hostname	ASN Num	ASN Name	Country Name
72.18.131.37	www.hama.gov.sy	30475	WEHOSTSITESCOM – WeHostWebSites.com	United States
66.7.198.11	www.mow.gov.sy	33182	DIMENOC – HostDime.com, Inc.	United States
184.107.73.247	www.competition.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
66.84.14.67	gcb.gov.sy	11343	383INCCMHTOWN – 383inc	United States
209.160.33.125	moaar.gov.sy *	14361	HOPONE-GLOBAL – HopOne Internet Corporation	United States
184.107.73.247	www.competition.gov.sy	32613	IWEB-AS – iWeb Technologies Inc.	Canada
108.160.155.227	www.spo.gov.sy	558	NET2EZ – Net2EZ	United States
208.43.232.81	sana.sy	36351	SOFTLAYER – SoftLayer Technologies Inc.	United States
46.165.197.199	addounia.tv	16265	LEASEWEB LeaseWeb B.V.	Germany
31.24.33.158	moqawama.org	43082	SERVERSPACE-AS ServerSpace Ltd	United Kingdom
208.94.146.70	www.al-nour.net	16552	TIGGEE – Tiggee LLC	United States
64.34.196.35	nour.itw-hosting.net	13768	PEER1 – Peer 1 Network Inc.	United States
74.84.135.25	nanocdn.com	14361	HOPONE-GLOBAL – HopOne Internet Corporation	United States

*moaar.gov.sy started resolving to 91.144.20.67 (Syria) as of October 31, 2012.

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FOOTNOTES

[1] Department of Justice Canada, Special Economic Measures (Syria) Regulations, SOR/2011-114, http://laws-lois.justice.gc.ca/eng/regulations/SOR-2011-114/FullText.html.

[2] Council of the European Union, Decision 2011/628/CFSP, September 23, 2011, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:247:0017:0021:EN:PDF.

[3] See U.S. Department of State, "Foreign Terrorist Organizations," September 28, 2012, http://www.state.gov/j/ct/rls/other/des/123085.htm; Department of Justice Canada, Regulations Establishing a List of Entities, SOR/2002-284, July 23, 2002, last amended August 20, 2012, http://laws-lois.justice.gc.ca/eng/regulations/SOR-2002-284/page-1.html#h-1. Notably, however, the European Union does not currently list Hezbullah as a terrorist organization, despite international pressure on the EU to list the entity. See Laurence Norman and Gordon Fairclough, "Pressure Mounts for EU to Put Hezbollah on Terror List," Wall Street Journal, September 7, 2012, http://online.wsj.com/article/SB10000872396390444273704577637324167941662.html.

[4] Ben Saul and Dr. Daniel Joyce, International Approaches to the Regulation of Al-Manar Television and Terrorism-related content, June 2010, http://www.acma.gov.au/webwr/_assets/main/lib310780/intntl_approaches-regulation-al-manar_tv_and_terrorism-related_content.pdf.

[5] U.S. Department of Treasury, Office of Foreign Assets Control, "Specially Designated Nationals and Blocked Persons," November 8, 2012, http://www.treasury.gov/ofac/downloads/t11sdn.pdf.

[6] The Arabic text of the mandate was printed by local state-run newspaper including Thawra newspaper at http://thawraonline.sy/index.php/news-list/local-news/6759-2012-06-27-18-46-25 and Tishreen newspaper at http://tishreen.news.sy/tishreen/public/read/266184.

[7] Syrian state news agency SANA, http://sns.sy/sns/?path=news/read/56613 (Arabic).