



Internet Filtering in Bahrain in 2004-2005: A Country Study

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February 2005

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1. EXECUTIVE SUMMARY¹

Bahrain filters a very small number of Internet sites to prevent its citizens from accessing them. The OpenNet Initiative's (ONI) testing of more than 6,000 targeted sites revealed only eight sites blocked from those seeking access from within Bahrain. Three of the blocked sites were pornographic. The other filtered sites covered political and religious topics. When a site is blocked in Bahrain, the person seeking to access it is served one of two "block pages" – Web pages with text indicating that the requested content cannot be accessed. This modest filtering regime is supported by both a legal context and a technical infrastructure. The legal context includes extensive potential controls of media, telecommunications, and the Internet, while the technical infrastructure includes a single primary Internet Service Provider (ISP) and a state-mandated Internet exchange point (IXP); the combination of both the legal context and the technical infrastructure makes filtering relatively easy to implement.

In each case of a blocked site, however, the Bahrain filtering regime leaves accessible to Bahrain's citizens many sites with content similar to those that were blocked. In addition, a simple change in the way the URL is entered in the Web browser (e.g., playboy.com rather than www.playboy.com) can render the otherwise blocked site accessible.

Our testing suggests that Bahrain's filtering efforts have eased recently. Sites that were previously blocked, such as Voice of Bahrain (www.vob.org), are now available. We also documented a change, during the period when our testing was occurring, in the way that block pages are served to those seeking to access filtered content. It is possible that changes may be underway in Bahrain's technical filtering regime, suggesting the need for ongoing testing.

Overall, while Bahrain does implement Internet filtering through its primary ISP, Batelco, the level of blocking is extremely low, indicating that this effort is likely symbolic in nature and does not present a serious challenge for its citizens in finding Internet content. (See Appendixes 3 and 4.) However, the regulatory and technical infrastructure in Bahrain is such that more extensive filtering could be swiftly introduced, should the government choose to do so. In addition, recent arrests of the editors of a Web site, and the blocking of the site, indicate that Bahrain continues to combine technical and legal controls for on-line content.

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¹ The OpenNet Initiative is a collaborative partnership between three leading academic institutions: the <u>Citizen Lab</u> at the Munk Centre for International Studies, University of Toronto, <u>Berkman Center for Internet & Society</u> at Harvard Law School, and the <u>Advanced Network Research Group</u> at the Cambridge Security Programme (Centre for International Studies) at the University of Cambridge. As with all OpenNet Initiative work, these reports represent a large team effort. The work of principal investigators Jonathan L. Zittrain and John G. Palfrey, Jr. on this research report was made possible by a grant from the John D. and Catherine T. MacArthur Foundation's Research and Writing Grants Program of the Program on Global Security and Sustainability.

2. POLITICAL, TECHNICAL, AND LEGAL CONTEXT IN BAHRAIN

A. Sensitive / Controversial Topics for Media Coverage

The Bahraini state has demonstrated sensitivity to criticism of its human rights record (including by closing down the Bahrain Human Rights Centre after a member criticized the Prime Minister).² Specific allegations of human rights violations include reports of torture of detainees under the former head of the security service³ and arrests of pro-democracy activists⁴. This sensitivity has included controls on the Internet by the Bahraini government. The state also blocked the Web site of the Bahrain Freedom Movement, Voice of Bahrain, for a period of time. Reports suggest that Bahrain has been concerned with political opposition, such as the Al-Wefaq Society and the National Democratic Action Society, and with reports of corruption by state officials. In addition, Bahrain has demonstrated concern about criticism of political leaders and its royal family, religious tensions⁵, material seeking to convert Muslims to other religions, and pornography.

B. Internet Infrastructure and Access

Bahrain seeks to expand greatly its telecommunications infrastructure. In 2002, the country had 123,000 Internet users out of a population of 720,000 people⁶; in 2003, Bahrain had an estimated 195,000 Internet users⁷. Bahrain had 108,000 personal computers in 2002.⁸ Digital subscriber lines comprised 2.87% of telephone lines and 10.4% of subscribed Internet accounts.⁹ The Bahrain Telecommunications Company (Batelco) is the dominant ISP.

C. Legal Background

1. General Media Regulation

The press is highly regulated in Bahrain. The state imposed a new press law¹⁰ in 2002 that creates harsh restrictions; many Bahrainis viewed this as a retrenchment from the promise of democracy

² See Indlieb Farazi, *Bahraini Human Rights Centre Dissolved*, Aljazeera.Net, Sept. 29, 2004, *at* http://english.aljazeera.net/NR/exeres/E3D6EEA3-909A-489F-904C-31D497328738.htm.

³ See UK Probes Bahrain Torture Claims, BBC News, Jan. 7, 2000, at http://news.bbc.co.uk/1/hi/uk/593851.stm.

⁴ See *Bahrain: Pro-Democracy Activists Detained*, Human Rights Watch, May 17, 2004, *at* http://hrw.org/english/docs/2004/05/17/bahrai8588.htm.

See Isa Mubarak, Bahraini activists launch web campaign, Reuters UK, Mar. 15, 2005, at http://today.reuters.co.uk/News/NewsArticle.aspx?type=internetNews&storyID=2005-03-15T145059Z_01_BEL553423_RTRIDST_0_OUKIN-RIGHTS-BAHRAIN-INTERNET.XML.

⁶ See Ministry of Transportation, *Telecommunication: General Statistics*, *available at* http://www.transportation.gov.bh/telecom/gen_stati.htm.

⁷ CIA, *The World Fact Book – Bahrain*, *available at* http://www.cia.gov/cia/publications/factbook/geos/ba.html (last updated Nov. 30, 2004).

⁸ Ministry of Transportation, *Telecommunication: General Statistics*.

⁹ Ministry of Transportation, *Telecommunication: General Statistics*.

¹⁰ Press. Print and Publications Law No. 47 of 2002.

created by the elections in 2002.¹¹ The law mandates fines, prison terms, or closure of publications for violations. The press may not "slight the Islamic faith, the unity of the people, the person of the king, or create divisions or religious differences."¹² Journalists convicted of "blaspheming the King, denigrating the state religion, propagating national disunity and sectarianism, or calling to overthrow the political regime, could be jailed for a minimum of six months."¹³ Newspapers face penalties for crimes against state security, inciting regime change, promoting immoral behavior, or denigrating the king or president of Islamic states with which Bahrain has diplomatic relations.¹⁴ The Information Minister can prevent distribution of local and foreign publications, ¹⁵ close newspapers through court proceedings, and seek prosecution of journalists.

Bahraini newspapers thus tend not to address issues such as political corruption, religious sectarian tensions, or criticism of the royal family or political figures. ¹⁷ Informal pressure on journalists is common; the Prime Minister, for example, has stressed "the importance of confirming any information before it was published so that it did not reflect negatively on the Kingdom or its neighbors" and stated that "Freedom must be within the boundaries of protecting the country's interests." ¹⁸ More stringent measures include the recent arrest of the founder and two operators of an on-line discussion forum, www.bahrainonline.org, where users posted allegations about corruption and about discrimination against Shi'a Muslims. ¹⁹ The three men were detained for "criticising the royal family, inciting hatred of the government, spreading false news and rumours that could destabilise the nation, and violating the press code." ²⁰ King Hamad bin Isa al-Khalifa reacted to the arrest by calling on journalists to show self-restraint, stating that "There are no limits to freedom, but this freedom should be based on patriotism." ²¹ While the men were freed on March 14, they still face charges, and Batelco was ordered to block the site permanently. ²² ONI's testing found the site blocked already. The sites is hosted on a server outside the

¹¹ Committee to Protect Journalists, *Attacks on the Press 2003: Bahrain*, *at* http://www.cpi.org/attacks03/mideast03/bahrain.html.

¹² Bahraini Shiite Group Calls on Manama to Lift Press Restrictions, Agence France-Presse, May 2, 2003 (quoting the Press Law).

¹³ Bahrain Issues New Press Law, Gulf News Online, Apr. 11, 2002, at http://www.gulf-news.com/Articles/print.asp?ArticleID=67541.

¹⁴ Internews, *Bahrain* 8, *available at* http://www.internews.org/arab_media_research/bahrain.pdf (quoting summary of the Press Law published in the Bahrain Tribune, Nov. 4, 2002).

¹⁵ Internews, *Bahrain* at 7.

¹⁶ Committee to Protect Journalists, *Attacks on the Press 2003: Bahrain*.

¹⁷ Committee to Protect Journalists, *Attacks on the Press 2003: Bahrain*.

¹⁸ Changes in Press Law to Bring More Freedom, Bahrain Tribune, July 30, 2003.

¹⁹ Mubarak, *Bahraini activists launch Web* campaign; *see Bahraini internet activist arrested*, Aljazeera.net, Feb. 28, 2005, *at* http://english.aljazeera.net/NR/exeres/1D775F6E-C23A-4F8E-91D1-8464C76C9570.htm. ONI's testing found that this site, www.bahrainonline.org, was blocked at both its URL and its IP address.

²⁰ Bahrainis protest arrest of activists, Aljazeera.net, Mar. 11, 2005, at http://english.aljazeera.net/NR/exeres/739E3F1D-7E33-4839-98BF-1EC5561C89ED.htm.

²¹ Mubarak, Bahraini activists launch Web campaign.

²² Bahrain frees website trio, Gulf Daily News, Mar. 15, 2005, at http://gulf-daily-news.com/Story.asp?Article=106763&Sn=BNEW&IssueID=27360.

state; thus, as these arrests demonstrate, Bahrain's legal and technical regimes for Internet content control reinforce each other.²³

Television is also monitored by the state of Bahrain. The state has imposed restrictions on reporters from foreign news organizations. For example, journalists from Qatar's Al-Jazeera satellite channel were barred from working in Bahrain, and the country prevented the channel from covering elections in May 2002.²⁴ Bahrain accused Al-Jazeera of attempting to harm Bahrain and the Information Minister stated it was "a channel penetrated by Zionists."²⁵ The state controls and monitors television broadcasts, though it has agreements with independent news sources, such as BBC World and Middle East Broadcasting Centre, to provide television access to those channels.²⁶ Satellite television dishes are readily available and widely owned; the state does not attempt to control access to satellite channels.²⁷

2. Internet Access Regulation

Bahrain's telecommunications company, Batelco, originally enjoyed a monopoly over telecommunications and Internet services.²⁸ In 2002, Bahrain adopted a new Telecommunications Law²⁹ that establishes a National Telecommunications Plan³⁰ and sets up the Telecommunications Regulatory Authority (TRA)³¹ to implement the Plan.³² The Plan seeks to increase competition in the telecommunications sector and to divest the state of its role as a Batelco shareholder.³³

The TRA promulgates regulations necessary to implement the Telecommunications Law, including issuing licenses, monitoring compliance, publishing standards, and reviewing fees.³⁴ One must obtain a license from the TRA before operating a telecommunications network or offering telecommunications services.³⁵ Licensees must provide the TRA, on request, with information necessary to allow the authority to fulfill its obligations and to exercise its powers.³⁶ Bahrain currently licenses eight

²³ See Claude Salhani, *Politics & Policies: The other Mideast revolt*, United Press International, Mar. 2, 2005, available at http://www.washtimes.com/upi-breaking/20050302-083008-2312r.htm.

²⁴ Bahrain Bans Al Jazeera TV, BBC News, May 10, 2002, at http://news.bbc.co.uk/1/hi/world/middle_east/1980191.stm.

²⁵ Bahrain Bans Al Jazeera TV, BBC News.

²⁶ Internews. *Bahrain* at 3-4.

²⁷ Internews, *Bahrain* at 5.

²⁸ United Nations Economic and Social Commission for Western Asia, *Profile of the Information Society in the Kingdom of Bahrain: 2003* 4 (Nov. 7, 2003), *available at* http://www.escwa.org.lb/wsis/reports/docs/Bahrain-E.pdf.

²⁹ Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law, Oct. 23, 2002, available at http://www.tra.org.bh/en/pdf/Law_48_of_2002.pdf.

³⁰ Minister of Transportation, *The National Telecommunications Plan*, Jan. 8, 2003, *available at* http://www.tra.org.bh/en/pdf/National_Plan_CCA_DC_002.pdf.

³¹ § 2, Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law (establishing the TRA).

³² United Nations Economic and Social Commission for Western Asia, *Profile of the Information Society in the Kingdom of Bahrain*: 2003 at 4.

³³ § 1.1, The National Telecommunications Plan.

³⁴ § 2(c), Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law.

³⁵ § 24(a), Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law; see id. at § 1 (defining "telecommunications network").

³⁶ § 53(a), Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law.

ISPs: Batelco, MTC-Vodafone Bahrain³⁷, Gateway Gulf Internet, Tasameem, Arabian Network Information Services, 2Connect, Lightspeed Communications, and Mena Broadband Services, ³⁸

The Telecommunications Law mandates that the Ministry responsible for telecommunications establish a non-profit "Bahrain Internet Exchange" to aggregate and distribute Internet data to ISPs.³⁹ ISPs must have equal access to the Internet Exchange,⁴⁰ and must use the exchange's facilities for two years after it opens⁴¹. Batelco must connect its network to the Exchange.⁴² The TRA issued a license for the Exchange on March 14, 2004,⁴³ and the Exchange's charter was promulgated on May 4, 2004⁴⁴.

The law also imposes civil and criminal penalties for violations. For example, a person who "uses telecommunications equipment or the telecommunications network intending to send any message in the knowledge that the contents of the message are false, misleading, offensive to public policy or morals, endanger the safety of third parties or prejudice the efficiency of any service... shall be punished by a fine not exceeding ten thousand Dinars."⁴⁵

Operators must, at their own expense, "provide all technical resources, including telecommunications equipment, systems and programs relating to the telecommunications network... to allow security organs to have access to the network for fulfilling the requirements of national security."

3. Internet Content Regulation

In the past, authorities have blocked access to a number of political sites, including those of opposition groups, because the officials claim that these sites incite "sectarianism" and contain "offensive content."⁴⁷ Their criteria for making such determinations, though, are not clear.⁴⁸ In 2002, Batelco's Web site blocking led to protests outside the company's headquarters; the Ministry of Information claimed it

³⁷ MTC-Vodafone received its ISP license on Apr. 22, 2003. *See* Internet Services Provider Class License Granted To MTC Vodafone Bahrain B.S.C., *available at* http://www.tra.org.bh/en/pdf/ISP_Licence_MTC_Vodafone_LSU-LC-023 1-0 (18082003).pdf.

³⁸ Telecommunications Regulatory Authority (TRA) Bahrain, *Licensing: Current Licensees*, *available at* http://www.tra.org.bh/en/licensingcurrent.asp.

³⁹ §§ 41(a), 41(b), *Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law.* The Bahrain Internet Exchange's Web site is "under construction." *See* http://www.bix.bh/.

⁴⁰ § 41(d), Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law.

⁴¹ § 41(h), *Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law*. This provision is likely intended to ensure funding for the Exchange. *See id.* at § 41(e) (noting that the Exchange must aim to become self-supporting and requiring that Exchange users, such as ISPs, bear its operating costs). The Bahraini state is also concerned for the competitive position of the Exchange relative to other Internet exchange points in the region. *See* § 1.9, *The National Telecommunications Plan* (explaining that "the licence issued to enable the establishment of the Bahrain Internet Exchange should provide a period of exclusivity that is sufficient to enable the licensee to be competitive on a regional basis").

⁴² § 1.7, The National Telecommunications Plan.

⁴³ See Telecommunications Regulatory Authority (TRA) Bahrain, *Licensing: Current Licensees*.

⁴⁴ See Charter of the Bahrain Internet Exchange, May 4, 2004, *available at* http://www.transportation.gov.bh/telecom/pdf/BIX%20CHARTER%20ENG%20EDITED%20final%2005-04-04.pdf.

⁴⁵ § 75, Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law.

⁴⁶ § 78, Legislative Decree No. 48 of 2002 Promulgating the Telecommunications Law.

⁴⁷ Bahrain Blocks Opposition Web Sites, BBC News, Mar. 26, 2002, at http://news.bbc.co.uk/1/hi/world/middle_east/1895005.stm.

⁴⁸ Committee to Protect Journalists, Attacks on the Press 2003: Bahrain.

blocked only sites that seek to "create tension between people and to provoke resentful sectarianism."⁴⁹ The Information Minister said that only three or four sites were filtered.⁵⁰ Human rights groups recently reiterated allegations that the Ministry blocks opposition Web sites.⁵¹

In addition, ISPs may implement content regulation. The Batelco Internet Services Web site contains a cryptic statement that says, "If you ever come across sites which require to be locked or if you are offended by an online user, just report the details of the site or the user to guard@batelco.com.bh and we will take the necessary action."⁵²

3. TESTING METHODOLOGY

A. Methods

ONI performs technical testing across multiple levels of access at multiple time intervals in a number of regions around the world. The team analyzes results within the contextual framework of the target state's filtering technology, law, and regulations. To obtain meaningful, accurate results we seek, where possible, to:

- generate lists of domain names and URLs that have been or are likely to be blocked, based upon background research into relevant social and political issues in Bahrain;
- enumerate ISPs and national routing topography;
- determine the type, location, and behavior of the filtering technology;
- · deploy network interrogation and enumeration software at multiple access points; and
- conduct a thorough statistical analysis of results.

Determining which URLs to test is a vital component of our research, as it reveals the filtering system's technical capacity and content areas subject to blocking. ONI employs three types of lists:

 a list of "high impact" sites reported to be blocked or likely to be blocked in the state due to their content (for example, political opposition);

⁵¹ Groups Slam Rights Record, Gulf Daily News, Dec. 11, 2004, at http://www.gulf-daily-news.com/arc_Articles.asp?Article=98588&Sn=BNEW&IssueID=27266 (describing a joint statement by the Bahrain Human Rights Society, Bahrain Society for Freedoms and Support of Democracy, National Committee for Martyrs and Victims of Torture, Bahrain Centre For Human Rights (Dissolved), Al Wefaq National Islamic Society, Islamic Action Society, National Democratic Action Society, Progressive Democratic Forum Society, and Pan Arab Democratic Society).

⁴⁹ Net Ban Sparks Protests in Bahrain, BBC News, May 4, 2002, at http://news.bbc.co.uk/1/hi/world/middle east/1968446.stm.

⁵⁰ Bahrain Blocks Opposition Web sites, BBC News.

⁵² Inet, *Protection*, at http://oldinet.arabian.net/InetServices/protection.asp.

- a "global list" containing a control list of manually categorized Web sites reflecting a range of
 Internet content (for example, news and hacking sites), intended in part to enable comparisons
 across multiple states; and
- a multilingual list of significant key words used to generate much larger lists through search engine queries (including local language search engines).

To explore Internet filtering, we deploy network interrogation devices and applications, which perform the censorship enumeration, at various Internet access levels. These tools download the ONI testing lists and check whether specific URLs and domains are accessible from that point on the network. Interrogation devices are designed to run inside a state (i.e., behind its firewall) to perform specific, sensitive functions with varying degrees of stealth. Similarly, ONI distributes interrogation applications to trusted volunteers who run the software inside the state. For testing, depending upon a series of local factors, ONI obtains network access at multiple levels through a combination of:

- Proxy servers,
- · Long distance dial-up,
- Distributed applications, and
- Dedicated servers.

During initial testing, we use remote computers located in states that filter. These remote computers are located behind the state's firewalls yet allow access to clients connecting from the wider Internet. We attempt to access the URL and domain name lists through these computers to reveal what content is filtered, and how consistently it is blocked. The ONI team also tests these lists from control locations in non-filtered countries. The testing system flags all URLs and domains that are accessible from the control location, but inaccessible from ones inside the target state, as potentially blocked.

In addition, we confirmed our results by having a volunteer within Bahrain test a subset of our lists from a connection within the state.⁵³ This confirmation lends additional strength to our findings; where our results differ from those obtained inside Bahrain, we note this disparity explicitly.

We note there are significant limitations when, as here, we were limited to using only two access levels to test filtering. The remote computers may have returned results that are not representative of the state's overall Internet filtering – for example, the results may only have demonstrated the filtering by a single ISP. Thus, we qualify our analysis to signify this limitation and to indicate the probability that a Web site would be blocked based on results from the specific locations tested.

B. Results Analysis

We carefully analyze the data obtained from testing to document the nature of filtered content, to explore the technical capabilities of the target state, and to determine areas that require in-depth study during testing from inside the state's firewall. In particular, ONI examines the response received over

⁵³ ONI extends its sincere appreciation and gratitude to this volunteer, who remains anonymous as a safety precaution.

HTTP when attempting to access filtered content. As discussed, when content is filtered, users often receive a block page. In other cases, filtering can be less obvious or transparent, appearing to be network errors, redirections, or lengthy timeouts rather than deliberate blocking. We analyze HTTP headers – text sent from the Web server to the browser – to derive information about both the server and the requested page. This information is generally hidden from the end user. However, these headers can indicate whether content was successfully accessed or was inaccessible. If an error occurs, the HTTP protocol returns codes that indicate the type of error in the header. Thus, by analyzing the headers captured during testing, we seek to distinguish between errors caused by Internet filtering and more mundane, unintentional network connection errors.

We classify results in one of four categories:

- URL was accessible both through the local connection and the remote computer (not filtered);
- URL was accessible through the local connection but inaccessible through the remote computer, which returned a different HTTP response code (possibly filtered);
- URL was accessible through the local connection but inaccessible through the remote computer due to a network connection error (possibly filtered, but not definitive); or
- URL was accessible through the local connection but inaccessible through the remote computer; the remote computer returned a block page (filtered).

If a URL is inaccessible through both the local connection and the remote computer, we consider it "dead" and remove it from the results. This result indicates that the URL's content was not available to Internet users generally at the time of our testing, making the URL irrelevant for our purposes.

The ONI team analyzes blocked, unblocked, and uncertain URLs both at an aggregate level (to estimate the overall level of filtering) and at a category level (to indicate what types of content the state seeks to control). We publish state-specific studies, such as this one on Bahrain, that provide background on a state's political and legal system, lists of tested sites, and analysis of results. We do this in order to reveal and analyze, to the greatest extent we can given the data we are able to collect, what information a state blocks and how it does so.

C. Methods Specific to Bahrain

In Bahrain, we tested five servers on the Batelco network. The Batelco servers demonstrated complete filtering consistency during our testing; sites blocked on one server were always blocked on all other servers tested. We found that the Batelco Internet servers return a block page if a requested site is filtered. Thus, when analyzing which sites were blocked, we included only sites where our testing returned this block page. In addition, we validated our proxy server testing with testing from within Bahrain by a volunteer.

D. Topics Tested

Our testing in Bahrain focused on material often blocked by Islamic states and on domestic Bahraini political issues. Topics to which the Bahraini state has demonstrated sensitivity include the state's human rights record, political opposition, pornography, and religious conversion of Muslims.

4. RESULTS AND ANALYSIS

A. Summary

We found that Bahrain's filtering of Web content is quite limited. Our testing of more than 6,000 targeted sites revealed only eight sites blocked.⁵⁴ Three of the blocked sites were pornographic. The other blocked sites included information on political and religious topics that the Bahraini state considers to be sensitive. In each case, however, sites similar to those that were blocked were readily available to Bahrain's citizens in-state. We conclude that Bahrain does not make a significant effort to filter the content its citizens can access on the Internet.

B. Global List Results

Our global list analysis includes testing 753 sites in 31 categories, which we test across all of the states that we study. 55 In Bahrain, we found blocking only of pornographic sites from this list of 753 sites, with three sites out of 36 tested in this category (8.3%) that were filtered: www.sex.com, www.playboy.com, and www.pichunter.com. Our in-state testing confirmed these results and our finding that Bahrain's filtering is not consistent for root domains and IP addresses. Sex.com and its IP address (209.81.7.3) are filtered, but playboy.com and its IP address (209.247.228.201) along with pichunter.com and its IP address (66.230.161.2) remain accessible. Filtering in Bahrain appears to be minimal and symbolic; while sites such as www.playboy.com are blocked, other famous pornographic sites (such as www.hustler.com and www.penthouse.com) are available. In addition, two of the three blocked pornographic sites are accessible by using the simple workaround of entering the root domain (such as playboy.com) rather than the typical URL (such as www.playboy.com).

C. Bahrain-Specific Results

To investigate Internet filtering on topics sensitive to the Bahraini state, we tested three lists: a short, high-impact list; a longer list built from the high-impact set of sites; and a longer list of sites related to separatist, paramilitary, military, intelligence, and political organizations.⁵⁶

⁵⁴ See Appendix 2 for a list of the eight blocked sites.

⁵⁵ See Appendix 3 for categorized results of the global list testing. To provide comparable results across multiple country studies, the majority of the sites in our global list have content only in English.

⁵⁶ See Bob Cromwell, *Separatist, Para-military, Military, Intelligence, and Political Organizations, at* http://www.cromwell-intl.com/security/netusers.html (April 2004).

We found that Bahrain's filtering system returns two different block pages when a user requests a filtered Web site; copies of both are reproduced in Appendix 1. The first reads, "Access Denied (policy_denied) Your system policy has denied access to the requested URL. For assistance, contact your network support team." The second returns the HTTP error code 403 and states "Forbidden You were denied access because: Access denied by access control list." ONI's testing revealed a gradual shift in behavior of the Bahrain proxy servers during the course of our research. Over time, we found that servers began returning the second block page with greater frequency. We believe this indicates a change in the configuration and mechanics of Bahrain's filtering system, but we do not have sufficient information yet to determine the precise contours of, or reasons for, this alteration.

1. High-Impact List

Using our research on topics sensitive to the Bahraini state, we compiled a list of Web sites on these topics to probe whether Bahrain blocked them. This "high-impact" list contains 101 Web sites; only one of these sites (www.bahrainonline.org) was blocked (1%). In-state testing confirmed that this site, its root domain (bahrainonline.org), and its IP address (70.84.12.171) are filtered, reinforcing ONI's conclusion that Bahrain makes a strong effort to prevent access to this site. In addition, our testing found that the site bahrain4u.com is blocked by Bahrain, but the site itself is no longer available. Sites previously blocked, such as the Voice of Bahrain, were not filtered during our testing. Our in-state testing identified an additional blocked site, www.bahraintimes.org, and noted that both the root domain (bahraintimes.org) and associated IP address (69.6.217.227) were filtered as well.⁵⁷ Like the blocking of the bahrainonline.org site, this indicates that the state is serious about preventing users from reaching this content. Overall, though, filtering is minimal even on subjects to which the Bahraini state has expressed sensitivity.

2. Long List

We created a more extensive list of Web sites for testing using the Google search engine and the Open Directory Project (dmoz) 58 Web classification system. This list was based on the topics identified as sensitive to the Bahraini state and on the sites on the high-impact list. We tested 4655 URLs and found six sites blocked (.1%). The six sites comprised three pornographic sites (www.pichunter.com, www.playboy.com, and www.sex.com), one on-line discussion board (www.bahrainonline.org), one site

⁵⁷ Our proxy testing on Jan. 12, 2005 did not identify this site as blocked. It is possible that Bahrain expanded its filtering to include this site, or that our proxy method simply failed to detect this blocking.

⁵⁸ The Open Directory Project (known as "dmoz") is a classification system that constructed a massive taxonomy of Internet content and utilizes volunteer editors to maintain lists of the most useful and content-rich sites in each category. See ODP – Open Directory Project, at http://dmoz.org/.

that hosted extremist content but now has a placeholder page (www.jehad.net),⁵⁹ and one religious conversion site providing "Christian resources about Islam" (www.thekoran.com).⁶⁰

3. SPMIPO List

We tested a list of 711 sites with material related to separatist, military, paramilitary, intelligence, and political organizations, but did not find any of these sites blocked in Bahrain. Bahrain's minimal Internet filtering philosophy also extends to these extremist political and military sites, which were not blocked during our testing.

5. CONCLUSION

Our testing found minimal Internet filtering in Bahrain. In checking content frequently blocked by other Islamic states that we study, we found no blocking of gay and lesbian material, regional media sources, Bahai content, sites expressing critical views of Islam, or material about the state of Israel. We found a single filtered site related to the conversion of Arab Muslims to Christianity, and another single blocked site out of 100 sites returned to a Google query for the Arabic term for "jihad." In the political arena, we found no blocking of the top 100 results of Google searches for the English and Arabic terms for several opposition groups and leaders (including "Al-Wefaq Society," "Bahrain Freedom Movement," "Sheikh Abdel Amir Al-Jamri," "Democratic Progressive Tribune Society," and "National Democratic Action Society"). We also tested the Web site for the Bahrain Centre for Human Rights; the site remained unblocked despite the fact that the site includes coverage of the Centre's closing by the Bahraini state. Results from Google searches in English and Arabic for material about the Centre were also wholly unblocked.

The filtering that does occur in Bahrain is not easily explained, given that sites with similar content and visibility to those which are blocked remain available. For example, we performed a search using the search engine Google for sites that included the Arabic word for jihad. Of the 88 sites that we tested based on this list, only one (www.jehad.net) was blocked. In addition, we found, and testing from within Bahrain confirmed, that the URL jehad.net is not blocked; thus, Bahrain blocks the standard URL for that site, but does not block the root domain. We tested 20 religious conversion sites that are blocked in Saudi Arabia, but found only one (www.thekoran.com) filtered in Bahrain.⁶¹ Our proxy and in-state testing again found that the root URL, thekoran.com, was not blocked. Our global list testing included 37

⁵⁹ Jehad.net now returns a page stating "This domain is for sale!" with links from Trafficz.com; it has been a "links" site since at least Oct. 6, 2003. In the past, though, the site hosted extremist content as late as Nov. 29, 2002. We verified the site's past content using the Internet Archive, available at http://www.archive.org/.

⁶⁰ Thekoran.com redirects users to http://www.thequran.com/home/. Thekoran.com is blocked in Saudi Arabia as well. See OpenNet Initiative, *Internet Filtering in Saudi Arabia in 2004*, § 4(D)(1)(e), *at* http://www.opennetinitiative.net/studies/saudi/.

⁶¹ See OpenNet Initiative, Internet Filtering in Saudi Arabia in 2004, § 4(D)(1)(e).

pornographic Web sites, yet only three were blocked. Finally, the Web engine Alexa classified nine sites as having content similar to www.bahrainonline.org, but none were blocked.⁶²

Thus, we conclude that Bahrain's filtering concentrates on a limited number of sites either because this effort is merely symbolic or because these sites attracted state attention for reasons that are not clear.

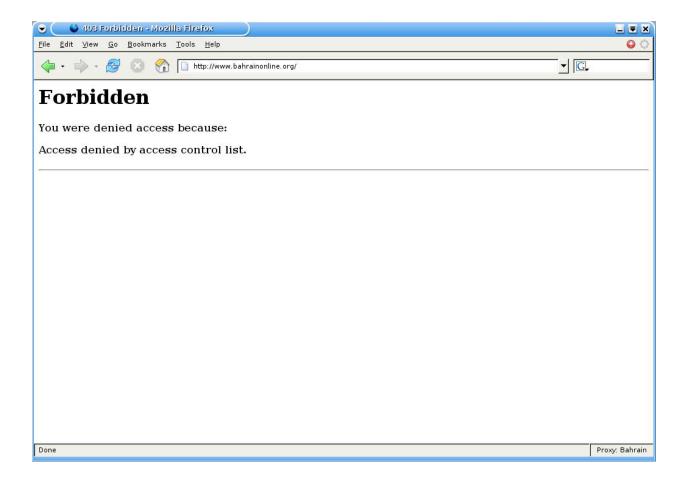
In summary, Bahrain's Web filtering is limited and minimal. The country has moved to unblock previously blocked sites, such as the Voice of Bahrain. In addition, we found only three pornographic sites and five other sites blocked out of over 6,000 tested. Even in the category of pornography, Bahrain's blocking is limited at most – while the country prevents access to www.playboy.com, other sites that are equally well-known (and the root URL playboy.com itself) are available. Similarly, while Bahrain blocks one religious conversion site and one extremist site, many other sites in these categories can be readily accessed. Thus, we conclude that, at the present time, Internet filtering is neither a focus of the Bahraini government nor a major impediment to the efforts of Bahrainis to obtain Internet information. However, the recent arrest of Web site operators in Bahrain, and the centralized controls in place over Bahraini telecommunications and other media infrastructures, make clear that the state retains a strong interest in limiting the information its citizens can access and that a more extensive filtering regime could be introduced swiftly should the government's interests shift.

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⁶² Our proxy testing on Jan. 12, 2005 found www.bahrainonline.org blocked, but found that bahrainonline.org and the corresponding IP address, 70.84.12.171, were not blocked. However, in-country testing later in January 2005 determined that all three are blocked. It is possible that Bahrain expanded its filtering scope in the intervening period, or our proxy method may have failed to detect this additional blocking.

APPENDIX 1

Copy of Batelco (Bahrain) Block Page



APPENDIX 2

Sites Blocked In Bahrain During ONI Testing

URL		
www.bahrainonline.org		
www.bahraintimes.org		
www.bahrain4u.com (Note: this site no longer hosts content, but is still blocked)		
www.jehad.net		
www.pichunter.com		
www.playboy.com		
www.sex.com		
www.thekoran.com		

$\frac{\text{APPENDIX 3}}{\text{Global List Testing Results}}$

Category	No. of Sites	Number of Sites Blocked
	Tested	
Alcohol	22	0
Anonymizers	21	0
Blogging Domains	18	0
Drugs	28	0
E-mail	20	0
Encryption	8	0
Entertainment	27	0
Famous Bloggers	22	0
Filtering Sites	8	0
Free Web Space	11	0
Gambling	26	0
Gay / Lesbian / Bisexual /	38	0
Transgender / Queer Issues		
Government	57	0
Groups (including Usenet)	18	0
Hacking	21	0
Hate Speech	25	0
Human Rights	25	0
Humor	18	0
Major Events	29	0
Miscellaneous	10	0
News Outlets	35	0
Porn	36	3 (8.3%) (www.sex.com, www.playboy.com,
		www.pichunter.com)
Provocative Attire	17	0
Religion (fanatical)	9	0
Religion (normal)	51	0
Search Engines	28	0
Sex Education	28	0
Translation Sites	13	0
Universities	32	0
Weapons / Violence	28	0
Women's Rights	27	0
Total	753	3 (.4%)

APPENDIX 4

Bahrain Background

A. General Description

Bahrain is an archipelago located in the Persian Gulf just east of Saudi Arabia in the Middle East. The country achieved independence from Britain in 1971. Bahrain has a population of roughly 678,000 people (July 2004 estimate).⁶³ Two-thirds of the native population is Shi'a Muslim, though most state and civil leaders are Sunni.⁶⁴ Bahrain's 2004 Gross Domestic Product is estimated at U.S. \$11.29 billion, at a growth rate of 4.9% and an annual per capita figure of U.S. \$16,900.⁶⁵

B. Political System

Bahrain is a hereditary constitutional monarchy, with the Al-Khalifas as the ruling family. The executive branch is composed of the head of state, the head of government, and the cabinet. King Hamad bin Isa Al Khalifa is the chief executive and head of state; he ascended to the throne in 1999 on the death of his father.⁶⁶ The cabinet is appointed by the King and headed by the Prime Minister.⁶⁷

The legislative branch of state consists of a bicameral Parliament, half of which is appointed by the King, the other half of which is chosen by the people through elections.⁶⁸ While political parties are prohibited, social organizations focused on politics are permitted.⁶⁹

The judicial branch is headed by a High Civil Appeals Court. The Higher Judicial Council is established by the constitution to supervise the court system.⁷⁰ The judiciary system is based on diverse legal sources, including Shi'a and Sunni Islamic law and British civil codes.⁷¹ Judicial independence is limited, though, as the King appoints all judges.⁷²

The country has undergone considerable political change in recent years. Bahrain approved a change from a hereditary system to a constitutional monarchy in February 2001.⁷³ After the referendum, King (then Sheikh) Hamad pardoned all political prisoners and abolished both the State Security Law and the State Security Court, which were used to detain defendants without trial.⁷⁴ Freedom of expression is

⁶³ CIA, The World Fact Book – Bahrain.

⁶⁴ U.S. Department of State, *Background Note: Bahrain*, Nov. 2004, *at* http://www.state.gov/r/pa/ei/bgn/26414.htm.

⁶⁵ CIA. The World Fact Book – Bahrain.

⁶⁶ U.S. Department of State, *Background Note: Bahrain*.

⁶⁷ U.S. Department of State, *Background Note: Bahrain*.

⁶⁸ CIA, The World Fact Book – Bahrain.

⁶⁹ CIA, *The World Fact Book – Bahrain;* see Kingdom of Bahrain, *Constitution of the Kingdom of Bahrain*, Article 29, Feb. 14, 2002, *available at* http://www.bahrain.gov.bh/images/constitutione.pdf (requiring that "Group approaches to the authorities may only be made by statutory bodies and corporate persons").

⁷⁰ Kingdom of Bahrain, Constitution of the Kingdom of Bahrain, Article 105(d).

⁷¹ U.S. Department of State, *Background Note: Bahrain; see also CIA, The World Fact Book – Bahrain.*

⁷² Freedom House, *Freedom in the World 2003: Bahrain*, June 12, 2003, *at* http://www.freedomhouse.org/research/freeworld/2003/countryratings/bahrain.htm.

⁷³ U.S. Department of State, *Background Note: Bahrain*.

⁷⁴ U.S. Department of State, *Background Note: Bahrain.*

guaranteed by the new constitution, but only in a qualified fashion. Article 23 of the 2002 Constitution states, "Everyone has the right to express his opinion and publish it by word of mouth, in writing or otherwise under the rules and conditions laid down by law, provided that the fundamental beliefs of Islamic doctrine are not infringed, the unity of the people is not prejudiced, and discord or sectarianism is not aroused."75 Article 24 provides that "With due regard for the provisions of [Article 23], the freedom of the press, printing and publishing is guaranteed under the rules and conditions laid down by law."76 King Hamad has worked to improve civil rights and to expand democratic reform. For example, in 2002, municipal elections were held, and this year, legislative elections will be held, with an emphasis on the inclusion of women in the state's government.77 The cabinet formed after the 2002 elections included a critic of the regime, Majed Alawi, who is the former head of the Bahrain Freedom Movement.78

Though generally peaceful, Bahrain has witnessed some political turmoil in recent years. Politically, Shi'a activists were involved in periodic unrest from 1994 to 1997, seeking the return of an elected legislature and a reduction in unemployment.⁷⁹ The country also has a number of leftist and extremist Islamic groups.⁸⁰ In 1996, several Bahraini hotels and restaurants were victims of bombings, leading to the detention of over 1,000 people without trial.⁸¹ In September 2004, the state arrested Abdal-Hadi al-Khawajah, deputy director of the Bahrain Human Rights Centre, for criticizing the Prime Minister and closed the Center after it held a seminar on the effects of poverty on Bahrain's political and social stability.⁸² Al-Khawajah was sentenced to a prison term of one year for inciting hatred against the state, but was pardoned by the King.⁸³

⁷⁵ Kingdom of Bahrain, Constitution of the Kingdom of Bahrain, Article 23.

⁷⁶ Kingdom of Bahrain, Constitution of the Kingdom of Bahrain, Article 24.

⁷⁷ CIA, The World Fact Book – Bahrain.

⁷⁸ Freedom House, *Freedom in the World 2003: Bahrain.*

⁷⁹ CIA. The World Fact Book – Bahrain.

⁸⁰ CIA, The World Fact Book – Bahrain.

⁸¹ U.S. Department of State, *Background Note: Bahrain*.

⁸² Bahrain Arrests Rights Centre Activist; Shuts Club For Political Meetings, BBC Monitoring International Reports, Sept. 26, 2004 (transcribing an Al-Jazeera telephone interview with the director of the Bahrain Human Rights Centre on Sept. 26, 2004).

⁸³ Bahraini Rights Activist Pardoned by King, Aljazeera.com, Nov. 21, 2004, at http://www.aljazeera.com/cgi-bin/news_service/middle_east_full_story.asp?service_ID=5646.