

**From:** Roger Dingledine  
**To:** [REDACTED] (b) (6)  
**Subject:** Re: Tor and Saudi Arabia  
**Date:** Thursday, October 02, 2008 1:36:09 AM

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On Tue, Sep 23, 2008 at 08:36:12PM -0400, Roger Dingledine wrote:  
> A) Can you forward this mail to Jeremiah, and introduce me? I'm planning  
> to be in La Jolla for some subset of Oct 21-24.

Hi Kelly, Ken,

Do you know Jeremiah's contact info? I haven't heard from Ali, and I do  
in fact plan to be in San Diego on these days, so I should track him down.

Thanks,  
--Roger

**From:** Ken Berman  
**To:** Roger Dingledine; Kelly DeYoe; [REDACTED] Jeremiah Young  
**Cc:** Ali Alvami  
**Subject:** RE: Tor and Saudi Arabia  
**Date:** Thursday, October 02, 2008 8:17:17 AM

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Jeremiah - hope you can see Roger when he is in town. Ken

-----Original Message-----

From: Roger Dingledine [mailto:[REDACTED]]  
Sent: Thursday, October 02, 2008 12:36 AM  
To: Kelly DeYoe; Ken Berman; [REDACTED]  
Subject: Re: Tor and Saudi Arabia

On Tue, Sep 23, 2008 at 08:36:12PM -0400, Roger Dingledine wrote:  
> A) Can you forward this mail to Jeremiah, and introduce me? I'm planning  
> to be in La Jolla for some subset of Oct 21-24.

Hi Kelly, Ken,

Do you know Jeremiah's contact info? I haven't heard from Ali, and I do  
in fact plan to be in San Diego on these days, so I should track him down.

Thanks,  
--Roger

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Ken Berman](#); [REDACTED]  
**Subject:** Re: tor blocked in uae  
**Date:** Wednesday, May 30, 2007 2:34:15 AM

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On Fri, Mar 16, 2007 at 07:51:10PM -0400, Roger Dingledine wrote:  
> BTW, connections to the Tor network appear to be blocked in UAE now,  
> as of a few days ago.

Turns out this was a false alarm. We get period reports from people who fail to use Tor correctly and immediately assume a massive conspiracy on their network. I recently talked in person to somebody who lives in UAE and he explains that it's been working fine for \*him\* the whole time. And there's apparently just one public ISP there (not counting the one that foreigners use), so I'm pretty willing to believe that it's been working.

So, newer conclusion: there are no known networks that filter the Tor network (though plenty that filter the Tor website).

--Roger

**From:** [Roger Dingledine](#)  
**To:** [Ken Berman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor call?  
**Date:** Tuesday, August 22, 2006 3:40:02 PM

---

On Tue, Aug 22, 2006 at 10:12:07AM -0400, Ken Berman wrote:  
> Can we make it 4 instead??

Sure, I can do 3pm or 4pm. I'll assume it's 4pm unless I hear otherwise.

I'm actually hanging out at the beach this week, pretending I'm having a vacation, so I won't have as much to report this time. :)

Main results are that all four of the folks we were hoping to hit for funding have come through. (How much did Shava enumerate about this?) So I've offered Nick a job starting at the beginning of October, and we've got a bit of money scheduled for Matt (to work on Vidalia), Sasha at CMU (who's working on Foxtor, a better Firefox plugin for Tor), and Shishir at Cambridge University (to work on a Tor package for Windows that fits on a USB stick -- like Torpark but built by a security person who documents things). Plus we get to keep Shava. :)

We've also been adding new features to the new Tor version -- we've been too busy adding stuff and fixing stuff to actually put out the release yet, but hopefully soon.

And one of my previous tasks was to flesh out the blocking design document to the point that Bennett can help -- but I've since realized that I need to do a lot more on it before people actually understand what I have in mind. The current skeleton is here:  
<http://tor.eff.org/svn/trunk/doc/design-paper/blocking.tex>  
but I need to take a few days (once I get back from the beach and once I've put out the new Tor development release) to flesh it out rather than just list a bunch of topics and tradeoffs I ought to flesh out.

Now that we have more funding ramping up, my plan is for Nick and me to work hard on the design doc once he joins back for real in October, and we'll have a simple prototype for the blocking-resistant design done by the end of 2006. I call it a simple prototype because it will have two flaws: first, this prototype will only work for people like me and Bennett, who don't mind futzing with things; and second, it will be missing the part where we prevent the adversary from enumerating all the "bridge" relays (Tor clients who've signed up to relay traffic from blocked countries). We're going to have to build a bag of tricks for that, as we discussed in the last conference call, and I don't yet have a sense of what tricks will be most useful / easiest to deploy. We'll learn that as we go.

Ok, that's enough email for now. :)  
--Roger

**From:** [Roger Dingleline](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Bennett Haselton](#)  
**Subject:** Re: TOR conference call tomorrow, Thursday 7/6 3 pm EDT / 12 noon PDT  
**Date:** Wednesday, July 05, 2006 11:08:47 PM

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On Wed, Jul 05, 2006 at 05:33:05PM -0400, Kelly DeYoe wrote:  
> Although we can discuss any and all relevant topics relating to TOR  
> development, I'd like us to especially focus on the work we've outlined  
> for Bennett, to make sure he has a clear idea of what we need from him  
> to help direct the later anti-censorship development efforts.

Great. I'll forward to Bennett the previous mail I wrote, so he'll have some advance warning.

Also, Kelly, it is spelled "Tor", not "TOR". Only Germans and people who haven't looked at our website say it in all-caps. :)

Thanks,  
--Roger

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Bennett Haselton](#); [Ken Berman](#); [Hiu Ho](#); [Betty Pruitt](#)  
**Subject:** Re: TOR conference call tomorrow, Thursday 7/6 3 pm EDT / 12 noon PDT  
**Date:** Thursday, July 06, 2006 5:13:55 PM

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The SOUPS conference wasn't advertised very broadly.

If you're on the CHI mailing list, you'd have heard about it:

<http://listserv.acm.org/scripts/wa.exe?A2=ind0510c&I=chi-announcements&P=713>

I knew about it from last year, when I was invited personally by the chair (Lorrie Cranor), presumably because I was part of the DIMACS workshop on Usability:

<http://dimacs.rutgers.edu/Workshops/Tools/abstracts.html>  
which again I was part of because they asked me to be.

SOUPS is actually an offshoot of the CHI community ("computer human interaction") in general, so that is where you would hear about it normally.

Other upcoming conferences include Black Hat and Defcon, as well as Wikimania at Harvard right before it.

There's also WPES and ACM CCS in Washington DC at the end of October: <http://freehaven.net/wpes2006/> which is more academic but will have some great people there.

A company called "Centra" is coordinating a conference for the CIA in DC on Sept 20-21, entitled "Esoteric uses of the internet", and they want me to speak. I could hook you up with them if you would like.

On Nov 2-3 2006, the Ontario Privacy Commission is doing a gathering for government and companies and so on about identity theft and identity management, and there will be some good people there I hope.

Codecon is rumored to be scheduled for Feb 2-3 in San Francisco. This is a great gathering of people-who-actually-write-code. I hear Shmoocon will be March 22-25 but this is obviously pretty far out.

Lastly, the two mailing lists I hear most not-entirely-academic security-related conferences on are p2p-hackers and pet:

<http://lists.zooko.com/mailman/listinfo/p2p-hackers>  
<https://mailman.alldigital.co.uk/mailman/listinfo/pet>

p2p-hackers is pretty high traffic, but pet has been mostly announcements so far.

Hope that helps,  
--Roger

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Ken Berman](#); [Hiu Ho](#)  
**Subject:** Re: TOR contract kickoff meeting, Monday June 5th, 3pm EDT  
**Date:** Monday, June 05, 2006 5:37:09 PM

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On Fri, Jun 02, 2006 at 06:02:37PM -0400, Kelly DeYoe wrote:

- > We had pretty extensive discussions about goals and objectives just to
- > define the scope of work for the contract, but it has been awhile, so
- > let's just plan to review everything and lay out both short-term and
- > long-term goals.

My notes from the call:

- Windows XP bug (Mike in Toronto via Bell Canada funding)
- Tor GUI: Vidalia (Matt Edman/Justin Hipple, RPI)
- Changes to Tor internals to make relaying easier (Roger)
- Including incentives (Roger)
- Design doc (Bennett)
  - Have people just ask for volunteer IPs directly at first, until we decide that it's gotten censored / that the adversary is collecting IPs.
  - A way to manually enter them via social network.
  - etc?
- Make Vidalia better / add censorship stuff in (Hiu)  
<http://vidalia-project.net/>  
The authors can be found via email (feel free to cc me if you like) or on #vidalia at irc.oftc.net

An outline for a design doc coming soon...

--Roger

**From:** Roger Dingleline  
**To:** [redacted] (b) (6)  
**Cc:** [redacted] Hiu Ho  
**Subject:** Re: TOR contract kickoff meeting, Monday June 5th, 3pm EDT  
**Date:** Monday, June 05, 2006 5:24:25 PM

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Hi folks,

Here is an introduction for Shava Nerad (Tor's new executive director) and IBB. Ken Berman is the head guy, and he talks to press weekly and would love to have a name and phone number to hand them off to. I mentioned that Shava is pretty sure we don't want weekly mass-media press articles yet, but that she can still make great use of talking to journalists.

Shava, can you provide number/contact info you want to hand out?

Thanks,  
--Roger



**From:** Shava Nerad  
**To:** Roger Dingledine; Ken Berman  
**Cc:** Kelly DeYoa; Hiu Ho  
**Subject:** Re: TOR contract kickoff meeting, Monday June 5th, 3pm EDT  
**Date:** Monday, June 05, 2006 7:11:40 PM

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At 04:24 PM 6/5/2006, Roger Dingledine wrote:

>Hi folks,

>

>Here is an introduction for Shava Nerad (Tor's new executive director) and  
>IBB. Ken Berman is the head guy, and he talks to press weekly and would  
>love to have a name and phone number to hand them off to. I mentioned that  
>Shava is pretty sure we don't want weekly mass-media press articles yet,  
>but that she can still make great use of talking to journalists.

>

>Shava, can you provide number/contact info you want to hand out?

Hi everyone! Contact info in .sig. Mailing address:

(b) (6)

I am planning a trip down to DC in probably mid-July, if you'd like to get together in person. I'm visiting family in NoVA, and the dates are flexible, so if there's a better time for all of you, I'd be happy to cater!

I'll probably be meeting with Markle and Benton and a few professional "old friends" while I'm down there also -- if you folks have any suggestions on who we should be contacting to get some matching funds for your project, I'm hoping to fill up our dance card as soon as we can, to make development more efficient.

Meanwhile I'm quite happy to do PR contacts. My personal goals with Tor this year are to get us better plugged in with the journalistic community and digital divide amelioration, part of my personal background.

I'm on two panels at the Democracy and Independence journalism conference at U/Mass later this month -- is anyone from there going? -- would you like me to talk up this contract while I'm there? <http://www.mediagiraffe.org/>

Thanks!

Shava Nerad  
Executive Director  
<http://tor.eff.org/>

(b) (6)  
(b) (6) (cell)

**From:** Ken Berman  
**To:** Andrew Lewman; Kelly DeYoe; (b) (6)  
**Subject:** RE: Tor Contract  
**Date:** Wednesday, February 08, 2012 4:29:52 PM

---

Wanted to let you guys know that I will be leaving BBG in four weeks, going over to the Dept of Commerce as Deputy CIO for Trade, so want to make sure we connect before I go. Naturally, I have mixed feelings, since I know the space of circumvention, but it was an opportunity to good to pass up.....

Anyway, "your" work is with our Office of Contracts, part of \$1.5 in work we need them to award NOW. Meeting with the head of Contracts to get all this work, including yours, moving.

Ken

-----Original Message-----

From: Andrew Lewman [mailto:(b) (6)]  
Sent: Wednesday, February 08, 2012 2:05 PM  
To: Kelly DeYoe  
Cc: Ken Berman  
Subject: Re: Tor Contract

On Wed, 4 Jan 2012 22:16:12 +0000  
Kelly DeYoe <(b) (6)> wrote:

- > We're having another go round with the folks in Contracts and the
- > General Counsel's office to get the statement of work right for the
- > solicitation, we expect it to be finalized and put out for bid soon.
- > Tor Solutions Group will receive a RFP from the Contracting Officer.

Hello,

I haven't heard from BBG Contracts, nor seen anything appear on fbo.gov from BBG. Is it worth having a phone call discussion?

--

Andrew  
<http://tpo.is/contact>  
pgp 0x74ED336B

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#); [Ken Berman](#)  
**Subject:** Re: Tor Contract  
**Date:** Tuesday, December 06, 2011 2:34:41 PM

---

On Thu, 20 Oct 2011 09:34:53 -0400  
Kelly DeYoe <[\[REDACTED\]](#)> wrote:

> We already attempted to do so, and were shot down.

Hello Ken and Kelly,

Any word on the funding situation? I realize Congress has not passed a budget nor a continuing resolution as of yet.

--

Andrew  
pgp 0x74ED336B

**From:** Andrew Lewman  
**To:** Ken Berman  
**Cc:** [REDACTED]  
**Subject:** Re: Tor Contract  
**Date:** Wednesday, February 08, 2012 10:27:47 PM

---

On Wed, 8 Feb 2012 21:29:49 +0000  
Ken Berman <[REDACTED]> wrote:

> Wanted to let you guys know that I will be leaving BBG in four weeks,  
> going over to the Dept of Commerce as Deputy CIO for Trade, so want  
> to make sure we connect before I go. Naturally, I have mixed  
> feelings, since I know the space of circumvention, but it was an  
> opportunity to good to pass up.....

This is big news. Congrats!

> Anyway, "your" work is with our Office of Contracts, part of \$1.5 in  
> work we need them to award NOW. Meeting with the head of Contracts to  
> get all this work, including yours, moving.

Woo, thanks.

I'm still available for a phone call if you have the time.

--  
Andrew  
<http://tpo.is/contact>  
pgp 0x74ED336B

**From:** [Ken Berman](#)  
**To:** [Andrew Lewman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** RE: Tor Contract  
**Date:** Tuesday, October 18, 2011 5:04:43 PM

---

Yep, a little waiting, I'm afraid.....

-----Original Message-----

**From:** Andrew Lewman [[mailto:\[REDACTED\]](mailto:[REDACTED])] (b) (6)  
**Sent:** Tuesday, October 18, 2011 3:58 PM  
**To:** Ken Berman  
**Cc:** Kelly DeYoe  
**Subject:** Re: Tor Contract

On Tue, Oct 18, 2011 at 03:43:56PM -0400, [REDACTED] (b) (6) wrote 0.6K bytes in 25 lines about:  
: Andrew - it is our hope to issue an SOW under the new IDIQ, either Task 1 or 5, and that you will be highly qualified for.

awesome. any thoughts on timeline or are we awaiting a budget from congress again?

--

Andrew  
pgp key: 0x74ED336B

**From:** [Ken Berman](#)  
**To:** [Andrew Lewman](#); [Kelly DeYoe](#)  
**Subject:** RE: Tor Contract  
**Date:** Tuesday, October 18, 2011 4:43:56 PM

---

Andrew - it is our hope to issue an SOW under the new IDIQ, either Task 1 or 5, and that you will be highly qualified for.  
Ken

-----Original Message-----

From: Andrew Lewman [mailto:[\(b\) \(6\)](#)]  
Sent: Monday, October 17, 2011 4:02 PM  
To: Ken Berman; Kelly DeYoe  
Subject: Tor Contract

Hello Ken and Kelly,

I hope you had a good meeting with Roger and Jake on Friday. Our current contract expires today. I haven't heard back from Diane Sturgis yet, so I thought I'd ask you two directly about the proposal and new contract status.

If there is anything I need to do, I'm all ears.

Thanks.

--

Andrew  
pgp 0x74ED336B

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Ken Berman](#)  
**Subject:** Re: Tor Contract  
**Date:** Wednesday, February 08, 2012 2:04:40 PM

---

On Wed, 4 Jan 2012 22:16:12 +0000  
Kelly DeYoe <[\\_\\_\\_\\_\\_](#)> wrote:

- > We're having another go round with the folks in Contracts and the
- > General Counsel's office to get the statement of work right for the
- > solicitation, we expect it to be finalized and put out for bid soon.
- > Tor Solutions Group will receive a RFP from the Contracting Officer.

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<http://tpo.is/contact>  
pgp 0x74ED336B

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Ken Berman](#)  
**Subject:** Re: Tor Contract  
**Date:** Thursday, October 20, 2011 10:43:44 AM

---

On Thursday, October 20, 2011 09:34:53 Kelly DeYoe wrote:  
> We already attempted to do so, and were shot down.

Ok. I appreciate the attempt. I look forward to the future.

--

Andrew  
pgp 0x74ED336B



**From:** [Andrew Lewman](#)  
**To:** [Ken Berman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor Contract  
**Date:** Wednesday, January 04, 2012 4:15:16 PM

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On Tue, 6 Dec 2011 16:23:46 -0500

Ken Berman <[\[REDACTED\]](#)> wrote:

> Andrew - we are moving paperwork thru our system for an award. It is  
> now with our lawyers, hope to put it out there before xmas. Ken

Santa didn't leave me a contract under my tree. Any word on progress?

--

Andrew  
<http://tpo.is/contact>  
pgp 0x74ED336B

**From:** [Andrew Lewman](#)  
**To:** [Ken Berman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor Contract  
**Date:** Wednesday, October 19, 2011 9:28:42 PM

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On Tuesday, October 18, 2011 16:04:43 Ken Berman wrote:  
> Yep, a little waiting, I'm afraid.....

Fun times. Any chance we can extend the last contract by a month or whatever we expect the waiting period to be for congress?

--

Andrew  
pgp 0x74ED336B

**From:** [Andrew Lewman](#)  
**To:** [Ken Berman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor Contract  
**Date:** Tuesday, October 18, 2011 4:57:45 PM

---

On Tue, Oct 18, 2011 at 03:43:56PM -0400, (b) (6) wrote 0.6K bytes in 25 lines about:  
: Andrew - it is our hope to issue an SOW under the new IDIQ, either Task 1 or 5, and that you will be highly qualified for.

awesome. any thoughts on timeline or are we awaiting a budget from congress again?

--

Andrew  
pgp key: 0x74ED336B

**From:** [Ken Berman](#)  
**To:** [Roger Dingledine](#)  
**Cc:** [Andrew Lewman](#); [Kelly DeYoe](#)  
**Subject:** RE: Tor Contract  
**Date:** Thursday, February 09, 2012 7:31:00 AM

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Roger - no secrets, everyone here knows, and most of our contractors/collaborators.  
Ken

-----Original Message-----

From: Roger Dingledine [mailto:[\(b\) \(6\)](#)]  
Sent: Wednesday, February 08, 2012 10:49 PM  
To: Ken Berman  
Cc: Andrew Lewman; Kelly DeYoe  
Subject: Re: Tor Contract

On Wed, Feb 08, 2012 at 09:29:49PM +0000, Ken Berman wrote:  
> Wanted to let you guys know that I will be leaving BBG in four weeks,  
>going over to the Dept of Commerce as Deputy CIO for Trade, so want to  
>make sure we connect before I go. Naturally, I have mixed feelings,  
>since I know the space of circumvention, but it was an opportunity to  
>good to pass up.....

Wow! I guess nothing stays the same forever. Congrats on having an opportunity too good to pass up then. :)

That said, we sure will be sad to see you go. I was just remarking to Andrew the other day about how many funders in this space only want to fund shiny new extensions, and BBG has been one of the few that recognize the importance of funding core development.

How public is the news of your transition? It seems there's a lot of "don't tell anybody else but" going on in DC these days, so I want to make sure to check before I share the news.

> Anyway, "your" work is with our Office of Contracts, part of \$1.5 in  
>work we need them to award NOW. Meeting with the head of Contracts to  
>get all this work, including yours, moving.

Great. Andrew, let me know if there's anything I should do to help here.

--Roger

**From:** [Ken Berman](#)  
**To:** [Andrew Lewman](#); [Kelly DeYoe](#)  
**Subject:** RE: Tor Contract  
**Date:** Tuesday, December 06, 2011 4:23:46 PM

---

Andrew - we are moving paperwork thru our system for an award. It is now with our lawyers, hope to put it out there before xmas.  
Ken

-----Original Message-----

**From:** Andrew Lewman [<mailto:> (b) (6)]  
**Sent:** Tuesday, December 06, 2011 2:35 PM  
**To:** Kelly DeYoe; Ken Berman  
**Subject:** Re: Tor Contract

On Thu, 20 Oct 2011 09:34:53 -0400  
Kelly DeYoe <(b) (6)> wrote:

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Hello Ken and Kelly,

Any word on the funding situation? I realize Congress has not passed a budget nor a continuing resolution as of yet.

--

Andrew  
pgp 0x74ED336B

**From:** [Roger Dingleline](#)  
**To:** [Ken Berman](#)  
**Cc:** [Andrew Lewman](#); [Kelly DeYoe](#)  
**Subject:** Re: Tor Contract  
**Date:** Wednesday, February 08, 2012 10:48:50 PM

---

On Wed, Feb 08, 2012 at 09:29:49PM +0000, Ken Berman wrote:  
> Wanted to let you guys know that I will be leaving BBG in four weeks,  
>going over to the Dept of Commerce as Deputy CIO for Trade, so want  
>to make sure we connect before I go. Naturally, I have mixed feelings,  
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**From:** [Andrew Lewman](#)  
**To:** [Ken Berman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor Contract  
**Date:** Tuesday, December 06, 2011 4:31:19 PM

---

On Tue, 6 Dec 2011 16:23:46 -0500

Ken Berman <[\(b\) \(6\)](#)> wrote:

> Andrew - we are moving paperwork thru our system for an award. It is  
> now with our lawyers, hope to put it out there before xmas. Ken

Awesome. Thanks.

--

Andrew  
pgp 0x74ED336B

**From:** Roger Dingledine  
**To:** Kelly DeYoe  
**Cc:** [REDACTED]  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, September 17, 2012 9:51:41 AM

---

On Tue, Aug 21, 2012 at 10:29:36PM -0400, Roger Dingledine wrote:

- > [REDACTED] (b) (6) is up and operational.
- >
- > It gives out only one bridge address for now, but that bridge should be
- > stable and fast enough to handle basically whatever you throw at it.
- > (Or at least, by the time it has enough users to fill it up, one of them
- > is probably working for gfw.)

We've had three requests to yangcong since we set up the "count how many requests we get" metrics. I'm guessing that means you haven't given the address out to a wide audience yet. :)

I've also realized that since these bridges don't publish to bridgedb, we don't get any usage stats from them. I've opened <https://trac.torproject.org/projects/tor/ticket/6852> so by the time they start seeing more use, we should be ready to get usage stats from them manually.

--Roger



**From:** Kelly DeYoe  
**To:** Roger Dingledine; Andrew Lewman  
**Subject:** RE: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:14:09 PM

---

Roger, can you give me that number so I can call you there? If Andrew can't call in successfully, I'll need to call you both from here.

-k

---

From: Roger Dingledine [ (b) (6) ]  
Sent: Wednesday, August 01, 2012 4:09 PM  
To: Andrew Lewman  
Cc: Kelly DeYoe  
Subject: Re: Tor exit relay / bridge questions

On Wed, Aug 01, 2012 at 04:02:18PM -0400, Andrew Lewman wrote:

> >  
> > Please call in to the conference bridge at (b) (6) code  
> > (b) (6) We've been having some trouble with the bridge lately, so if  
> > you only get hold music and we don't all get connected together,  
> > please send me an email with a number I can call you back at.  
>  
> Well, I don't get hold music. It takes the pin and doubles all of the  
> numbers when I try to put them in. It tells me I'm entering  
> (b) (6) and then fails.

My cell phone doesn't work here -- but I'm on Peter Eckersley's phone now. Listening to hold music though.

--Roger

**From:** Roger Dingledine  
**To:** Kelly DeYoe  
**Cc:** [REDACTED]  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Tuesday, August 21, 2012 10:30:40 PM

---

On Mon, Aug 06, 2012 at 07:03:17PM +0000, Kelly DeYoe wrote:

> 1. Please do the latter, allow email from any email address to receive a reply with bridges, not just from gmail.

>

> 2. The Chinese services would like the address 'yangcong' for the email responder mailbox name, it means onion.

Hi Kelly,

[REDACTED] (b) (6) is up and operational.

It gives out only one bridge address for now, but that bridge should be stable and fast enough to handle basically whatever you throw at it. (Or at least, by the time it has enough users to fill it up, one of them is probably working for gfw.)

We've set up our new "bridgeguard" tool on this bridge:

<https://github.com/NullHypothesis/brdgrd#readme>

Bridgeguard is a bridge-side hack to manipulate the TCP window so clients will split their SSL client hello over multiple TCP packets -- thus gfw won't notice the cipher list that the client offers, and even Tor 0.2.2 clients won't trigger a probe (and thus a block).

Remember that once a bad person learns about the email address, they can discover the bridge address and block it. When that happens (and potentially quite a bit later, when we notice and can confirm that it happened), I expect we'll change the text to explain that if you want a \*working\* bridge, you'll have to go back to wherever you found this email address and ask for a new one. Then we'll set up a second email alias with a new bridge address, and repeat.

To that end, I've avoided lining up all 75 bridge addresses quite yet -- it would be a waste to set them up and not use them yet. We have our next few 100mbit private bridges up and running (and they're configuring Bridgeguard now), but hopefully we won't need to use them for a while.

In the future we might set up Obfsproxy bridges instead, now that we have the Tor Obfsproxy Browser Bundle building nicely again:

<https://blog.torproject.org/blog/new-tor-browser-and-obfsproxy-bundles>

Lots of options as we go forward.

--Roger

**From:** Kelly DeYoe  
**To:** Andrew Lewman  
**Cc:** Roger Dingleline  
**Subject:** RE: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:12:25 PM

---

We're having trouble using the bridge, and Roger seems to have a pretty bad connection when I call him directly. Is there a number I can call you, Andrew? And Roger, is there another number I can call you as well?

-k

---

From: Andrew Lewman [redacted] (b) (6)  
Sent: Wednesday, August 01, 2012 4:02 PM  
To: Kelly DeYoe  
Cc: Roger Dingleline  
Subject: Re: Tor exit relay / bridge questions

On Mon, 30 Jul 2012 22:29:45 +0000  
Kelly DeYoe <[redacted] (b) (6)> wrote:

- > Ok, let's say 16:00 EDT on Wednesday then.
- >
- > Please call in to the conference bridge at [redacted] (b) (6) code
- > [redacted] (b) (6) We've been having some trouble with the bridge lately, so if
- > you only get hold music and we don't all get connected together,
- > please send me an email with a number I can call you back at.

Well, I don't get hold music. It takes the pin and doubles all of the numbers when I try to put them in. It tells me I'm entering [redacted] (b) (6) and then fails.

--  
Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** Roger Dingledine  
**To:** Kelly DeYoe  
**Cc:** [REDACTED] Moritz Bartl  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Thursday, August 16, 2012 3:51:19 AM  
**Attachments:** task-6329-output-2012-08-16.txt

---

On Mon, Aug 06, 2012 at 07:13:14PM +0000, Kelly DeYoe wrote:  
> Thanks, these graphs look good (and I notice are now on the metrics portal too), and will be helpful in allowing us to show measurable progress.

Hi Kelly,

Here's another update on our progress.

The 'fast exit count' graphs are now updated daily at  
<https://metrics.torproject.org/fast-exits.html>  
We're up to 28 or so.

If we squint and allow more than 2 relays on a given /24 (since many of our current fast relays are actually 4-6 relays trying to fill a 1gb link), we're at 39 (and these 39 are 50-55% of our exit weights currently).

You can get an updated list whenever you like via the instructions at  
<https://trac.torproject.org/projects/tor/ticket/6498#comment:4>  
I've attached this hour's output of that script to this mail.

Sathya has started working on automating the tracking and diversity measurements of fast exits:  
<http://torstats.herokuapp.com/>  
(It's an early prototype -- I think the data isn't updated automatically yet.)

And we're working on figuring out what diversity measurements are actually meaningful at  
<https://trac.torproject.org/projects/tor/ticket/6460>

We're in the process of funding Moritz Bartl, the torservers.net guy, to fill our new Tor Relay Coordinator position. His responsibilities will include 1) keep current relay operators happy; 2) find new relay operators, and new good hosting locations, so we grow our relay population, especially fast exit relays; and 3) make sure our statistics and metrics work provides good feedback to both our relay operators and our funders.

We've started talking to Wau Holland Foundation in Germany about having them be our European distributor-of-funds-to-exit-relay-operators, since many Europeans want to receive their money via European bank transfer rather than check. We're also moving forward at deciding how best to structure our (legal and contractual) relationship with the exit relay operators.

I've launched a campaign to get more US university-based fast exits -- I have buy-in for 500mbit+ nodes at UPenn, UMich, CMU, and Georgia Tech: <https://lists.torproject.org/pipermail/tor-relays/2012-August/001543.html> with several more research groups looking into it too.

So that's the good news: if we squint enough, we're on track to meet our "30% of the exits running by the 60 day mark" goal, and we have more fast exits in the works.

The bad news is we probably can't (and probably shouldn't) keep up this pace of growth. We've added about 10% to the capacity of the network over the past two months, and added about 20% to the actual load handled by exits. Also, as I explained on the phone a few weeks back, we want to leave space to discover and fund great new hosting situations over the course of the year. And finally, at this growth pace we've started to see hints of the "second-order effects" I speculated about in my response to the original RFQ, where high-capacity relays draw traffic away from the current relays, and our algorithms for maximizing performance shift load so much that 10mbit-and-under relays see less use and we risk having them drop out. We must grow the available capacity in concert with increased network load.

All that said, I'm not sure quite what revised timeline to propose. Since we seem on track for meeting something resembling our first milestone, I'm going to try to wait a bit longer (and get some more intuition) before guessing what roll-out timeframes we can achieve next. Hopefully that works for you?

Thanks,  
--Roger

**From:** Kelly DeYoe  
**To:** Roger Dingledine  
**Cc:** (b) (6)  
**Subject:** RE: Tor exit relay / bridge questions  
**Date:** Friday, July 27, 2012 5:39:55 PM

---

Hey Roger, glad to see the discussion going on, I read through a bunch of it, and was happy it didn't devolve into paranoia about funders wanting to snoop traffic or anything. Also happy to hear about your plans for "rolling out", I think starting with the existing exit relays and making sure they're in a good position is an excellent first step.

And to answer your two questions...

First, I'll admit the no more than 2 servers per /24 was a bit of contractual laziness on my part, in that it was easier to put that into the contract than to attempt to spell out more stringent requirements for server diversity. My main concern is really that someone doesn't try to put 10 Tor relays in the same subnet on the same physical hardware. So if the DFRI folks have a single /24, but are putting the Tor relays on different hardware, in different data centers, with different network connectivity, and there are no single points of failure, or at least we're aware of them and can live with them, I think it would be ok. I'd like to approve any of these on a case-by-case basis, and would like to see a documented plan and network diagram though. Also, how's the IP routing going to work?

Second, I think we don't currently have plans for distributing the Tor bridges ourselves, but I think it is something we might want to consider. We should discuss this a bit further before we decide how to proceed I think.

If you and Andrew are both available for a conference call sometime soon, I think we should hold a kick-off call and discuss these and any other questions some more there. Just let me know when might be a good time for it.

(I'd also hoped to make it out to Seattle for FOCI, but doesn't look like that is going to happen.)

-k

---

**From:** Roger Dingledine (b) (6)  
**Sent:** Thursday, July 26, 2012 4:22 AM  
**To:** Kelly DeYoe  
**Cc:** (b) (6)  
**Subject:** Tor exit relay / bridge questions

Hi Kelly,

We're continuing the process of setting up the exit relays and bridges BBG asked for. You can follow along with the discussions at <https://lists.torproject.org/pipermail/tor-relays/2012-July/001433.html>

The Tor network doesn't have many 100mbit exit relays as it is, and it turns out many of the ones currently running are not in particularly stable situations. So we're starting out focusing on strengthening the hosting situations for the current exit relay operators. That will take us to about 25 exits -- I'll let you know as we develop a plan for the other 100. :)

I have two questions for you:

- The contract says "To ensure diversity of IP addresses, no more

than 2 servers may reside in the same /24 IP subset". This constraint totally makes sense for bridges, and in general it's a good idea for public relays because it is related to various diversity metrics, but it turns out there are some cases where it makes less sense. For background, several of our large exit relay operators have found that they can handle abuse much better when they get the ISP to SWIP the netblock to them -- meaning it shows up as theirs on a whois query. The DFRI group in Sweden (a nonprofit set up to run Swedish exit relays) pulled some strings to get a /24 block SWIPed to them, and they're planning to rig things on the backend so they have servers in different cities (and different data centers) yet all the addresses come from their /24, so they can handle abuse complaints themselves. If we want to have them running four exits, how important is it that they go outside their current /24?

- Do you want us to distribute the 75 bridges automatically via our bridgedb service (via https, gmail, etc) or just tell you their addresses privately? There are tradeoffs with each approach (and I'm happy to help you decide), but we should figure it out before we set more of them up. The simple way to decide is: do you have plans to give out their addresses yourself?

(More generally, the scarce resource for bridges is address space, not bandwidth. Most places in the world don't need bridges yet, and in the one place that does (China), I expect seventy-five static fast bridges will get blocked after a while. So I think the longer-term strategy should be to investigate borrowing whole netblocks and redirecting them into bridges en masse. But rather than trying to rework our contract terms in the next few weeks, I figure the easiest approach is to meet the contract terms; then when we've got the exit relay question under control we can start experimenting with more useful bridge solutions.)

Thanks!  
--Roger

**From:** [Roger Dingledine](#)  
**To:** [Andrew Lewman](#); [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Saturday, August 11, 2012 11:04:06 PM

---

On Tue, Aug 07, 2012 at 05:21:16AM -0400, Roger Dingledine wrote:  
> Given that, I wonder if we should skip the email autoresponder and just  
> have you tell everybody a secret bridge address directly? I bet it would  
> be more intuitive to everybody how to handle it safely.

Two benefits to having it be an email address are:

- We can give out more complex bridge lines, like for obfs2 bridges or when bridges want authentication or key fingerprints down the road.
- If we decide to stop serving bridge addresses from that email address, we can still respond with some text explaining that they're going to have to find a newer email address.

I think those are good enough reasons to give it a go.

--Roger



**From:** [Andrew Lewman](#)  
**To:** [Roger Dingledine](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Tuesday, August 07, 2012 8:13:25 AM

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On Tue, Aug 07, 2012 at 05:21:16AM -0400, (b) (6) wrote 1.4K bytes in 35 lines about:  
: Since the bridges are static, big, and rare, I'm planning to give out  
: only one or a few at first, and we'll see how long until it's blocked.

It'll be fun to find out.

: > > 2. The Chinese services would like the address 'yangcong' for the  
: > > email responder mailbox name, it means onion.  
: >  
: > Are we just creating (b) (6) or are there more  
: > addresses?  
:  
: I'm guessing they'd be happier with (b) (6)

We can't do that though, so @bridges.torproject.org is it unless we register another domain name.

--  
Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** Roger Dingledine  
**To:** Andrew Lewman  
**Cc:** Kelly DeYoe  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Tuesday, August 07, 2012 5:22:16 AM

---

On Mon, Aug 06, 2012 at 03:25:53PM -0400, Andrew Lewman wrote:

> On Mon, 6 Aug 2012 19:03:17 +0000  
> Kelly DeYoe <[REDACTED]> wrote:  
>  
> > 1. Please do the latter, allow email from any email address to  
> > receive a reply with bridges, not just from gmail.  
>  
> I'll state the obvious, by allowing any address, China can create 1000  
> fake accounts and enumerate this set of bridges pretty quickly.

Since the bridges are static, big, and rare, I'm planning to give out only one or a few at first, and we'll see how long until it's blocked.

That's especially important for now, since if anybody uses a Tor 0.2.2.x client to talk to the bridge from within China, it will trigger a follow-up probe and subsequent temporary (12 hour) block.

So I guess I'll state obvious too: the security here comes from the secrecy of this email address. You have to tell it to some right people without telling any wrong people. Once the wrong people hear about it, it's useless basically forever after.

Given that, I wonder if we should skip the email autoresponder and just have you tell everybody a secret bridge address directly? I bet it would be more intuitive to everybody how to handle it safely.

> > 2. The Chinese services would like the address 'yangcong' for the  
> > email responder mailbox name, it means onion.  
>  
> Are we just creating [REDACTED] (b) (6) or are there more  
> addresses?

I'm guessing they'd be happier with [REDACTED] (b) (6)

--Roger

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Roger Dingledine](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, August 06, 2012 3:26:50 PM

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On Mon, 6 Aug 2012 19:03:17 +0000  
Kelly DeYoe <[\(b\) \(6\)](#)> wrote:

- > 1. Please do the latter, allow email from any email address to
- > receive a reply with bridges, not just from gmail.

I'll state the obvious, by allowing any address, China can create 1000 fake accounts and enumerate this set of bridges pretty quickly.

- > 2. The Chinese services would like the address 'yangcong' for the
- > email responder mailbox name, it means onion.

Are we just creating [\(b\) \(6\)](#) or are there more addresses?

--

Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** (b) (4) (b) (5)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Friday, August 03, 2012 5:29:16 AM

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On Tue, Jul 31, 2012 at 05:59:38PM -0400, Roger Dingledine wrote:  
> I've opened <https://trac.torproject.org/projects/tor/ticket/6498> for us  
> to start tracking how many relays this is.

And here's our first (internal) graph showing progress:  
<https://trac.torproject.org/projects/tor/attachment/ticket/6498/fast-exits-2months-2012-08-02.png>

So far we've gone from around 8 qualifying relays to nearly 20. Plenty farther to go of course, but our progress is now visible. :)

Thanks,  
--Roger

**From:** Roger Dingledine  
**To:** Kelly DeYoe  
**Cc:** [REDACTED]  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Thursday, August 02, 2012 4:27:48 AM

---

On Thu, Jul 26, 2012 at 04:22:06AM -0400, Roger Dingledine wrote:  
> - Do you want us to distribute the 75 bridges automatically via our  
> bridgedb service (via https, gmail, etc) or just tell you their addresses  
> privately? There are tradeoffs with each approach (and I'm happy to help  
> you decide), but we should figure it out before we set more of them  
> up. The simple way to decide is: do you have plans to give out their  
> addresses yourself?

Hi Kelly,

We decided today that we'd set up a separate email autoresponder for these bridges:

<https://trac.torproject.org/projects/tor/ticket/6513>

Two questions for you:

1) Should we limit ourselves to answering only mails from gmail (which stops people from playing tricks like forging the From: as whitehouse.gov and making us spam random people with bridge addresses), or accept them from anywhere (which is more convenient)? If down the road we want to turn on the "answer different email addresses with different bridges" feature of bridgedb, we'll want the former; until then the latter might make it more fun to use.

2) What shall we name the email address?

--Roger

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Andrew Lewman](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:15:50 PM

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On Wed, Aug 01, 2012 at 08:14:08PM +0000, Kelly DeYoe wrote:  
> Roger, can you give me that number so I can call you there? If Andrew can't call in successfully, I'll need to call you both from here.

Andrew's phone number can be found on  
<https://www.torproject.org/press/press> -- it's

(b) (6)

--Roger

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Andrew Lewman](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:15:11 PM

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On Wed, Aug 01, 2012 at 08:14:08PM +0000, Kelly DeYoe wrote:

> Roger, can you give me that number so I can call you there? If Andrew can't call in successfully, I'll need to call you both from here.

I'm at Peter Eckersley's phone at EFF:

(b) (6)

--Roger

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Roger Dingleline](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:14:25 PM

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On Wed, Aug 01, 2012 at 08:12:23PM +0000, (b) (6) wrote 1.0K bytes in 31 lines about:  
: We're having trouble using the bridge, and Roger seems to have a pretty bad connection when I call  
him directly. Is there a number I can call you, Andrew? And Roger, is there another number I can call  
you as well?

(b) (6) is me. Or we can use Tor's conf line.

--

Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475



**From:** [Roger Dingleline](#)  
**To:** [Andrew Lewman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:10:53 PM

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On Wed, Aug 01, 2012 at 04:02:18PM -0400, Andrew Lewman wrote:

> >  
> > Please call in to the conference bridge at (b) (6) code  
> > (b) (6) We've been having some trouble with the bridge lately, so if  
> > you only get hold music and we don't all get connected together,  
> > please send me an email with a number I can call you back at.  
>  
> Well, I don't get hold music. It takes the pin and doubles all of the  
> numbers when I try to put them in. It tells me I'm entering  
> (b) (6) and then fails.

My cell phone doesn't work here -- but I'm on Peter Eckersley's phone now. Listening to hold music though.

--Roger

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Roger Dingleline](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Wednesday, August 01, 2012 4:02:41 PM

---

On Mon, 30 Jul 2012 22:29:45 +0000

Kelly DeYoe <[\(b\) \(6\)](#)> wrote:

- > Ok, let's say 16:00 EDT on Wednesday then.
- >
- > Please call in to the conference bridge at [\(b\) \(6\)](#) code
- > [\(b\) \(6\)](#) We've been having some trouble with the bridge lately, so if
- > you only get hold music and we don't all get connected together,
- > please send me an email with a number I can call you back at.

Well, I don't get hold music. It takes the pin and doubles all of the numbers when I try to put them in. It tells me I'm entering [\(b\) \(6\)](#) and then fails.

--

Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** Roger Dingledine  
**To:** Kelly DeYoe  
**Cc:** [REDACTED]  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Tuesday, July 31, 2012 6:00:34 PM

---

On Fri, Jul 27, 2012 at 09:39:54PM +0000, Kelly DeYoe wrote:

> Hey Roger, glad to see the discussion going on, I read through a bunch  
> of it, and was happy it didn't devolve into paranoia about funders wanting  
> to snoop traffic or anything. Also happy to hear about your plans for  
> "rolling out", I think starting with the existing exit relays and making  
> sure they're in a good position is an excellent first step.

Here are two more thoughts we should discuss, based on the ongoing discussions with relay operators:

1) I had a long chat this weekend with an exit relay operator in Europe who has taken great pains to obscure the location of their ISP. ("Our noc is on the Isle of Man, our abuse phone number is on a satellite network typically used by the IDF", etc.) They peer with a lot of really great places in Europe, and all of their bandwidth is free because it comes through personal connections. This is exactly the sort of group who should be running good stable exit relays to provide diversity, but they also don't want to have anything to do with our money (and especially your money). I told them I'd be happy to donate the money to a European nonprofit of their choice, while the exits stay up. But it brings me to another realization: I think the question should be "how many 100mbit relays are there that exit to the four ports BBG listed?", not "how many are called out in the list as sponsored by Tor?" Dividing into two groups is going to cause problems, especially for the ones who stay up because of our continued encouragement and engagement but who will shut down if we name them in the "sponsored" list. Another example is the ipredator exit relays in Sweden: they deliberately leave off contact info from their relays, and generally aim to stay independent, but some Tor people provide support for them in private.

I've opened <https://trac.torproject.org/projects/tor/ticket/6498> for us to start tracking how many relays this is.

2) We've started to reach out to the broader communities -- for example, universities are great places to run exit relays, if you can get a professor to sign on, and a student to do the work of keeping the network admins happy. Currently we've got a big exit at BU. I've worked with the exit relay operator at Waterloo to bump his node up to 100mbit, and I'm talking to the network admin at Rutgers who currently runs a small exit. I'm exploring "we give you a conference travel stipend for the year if you keep your exit relay up" as an incentive scheme for interested students. But we're not going to have all these things sorted out during the summer. If we have to have all our exits up and funded in the next few months, we're trading off the diversity and sustainability that university exits can offer.

More generally, I'm beginning to believe that the only way we can reliably reach the scale you want in the timeframe you want is to get current exit relay operators to expand their relays. (I say 'reliably' because we can for sure accept random people who are happy to take our money, but without a track record it's much less clear that they will be able to keep their exits up; and I also worry that they're signing

up for the wrong reasons.) I wonder how we should handle these "rampup" tradeoffs -- allocate all the money to five or ten groups that can scale us up, or save some for the more diverse locations and operators we'll find if we give ourselves more time.

--Roger

**From:** [Andrew Lewman](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** [Roger Dingleline](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, July 30, 2012 6:45:56 PM

---

On Mon, 30 Jul 2012 22:29:45 +0000  
Kelly DeYoe <[\(b\) \(6\)](#)> wrote:

> Ok, let's say 16:00 EDT on Wednesday then.

Sounds good. Talk to you then.

--

Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** [Roger Dingledine](#)  
**To:** [Andrew Lewman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, July 30, 2012 4:11:34 PM

---

On Mon, Jul 30, 2012 at 04:08:15PM -0400, Andrew Lewman wrote:

> On Mon, 30 Jul 2012 15:19:46 -0400

> Roger Dingledine <[\(b\) \(3\)](#)> wrote:

> > > I can be open afternoons if needed. How about Wednesday at 16:00?

> >

> > That works for me. Tuesday afternoon (say, anytime 13:30 EDT or later)

> > would be even better, since I'm visiting EFF all of Wednesday.

>

> I can't do Tuesday because I'm at DHS all day.

Sounds good. Wednesday afternoon it is then (assuming Kelly can do it).

I can do anytime 13:00 EDT or later on Wednesday.

--Roger

**From:** [Andrew Lewman](#)  
**To:** [Roger Dingledine](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, July 30, 2012 4:08:25 PM

---

On Mon, 30 Jul 2012 15:19:46 -0400

Roger Dingledine <[\\_\\_\\_\\_\\_](#)> wrote:

> > I can be open afternoons if needed. How about Wednesday at 16:00?

>

> That works for me. Tuesday afternoon (say, anytime 13:30 EDT or later)

> would be even better, since I'm visiting EFF all of Wednesday.

I can't do Tuesday because I'm at DHS all day.

--

Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** [Roger Dingledine](#)  
**To:** [Andrew Lewman](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, July 30, 2012 3:20:41 PM

---

On Mon, Jul 30, 2012 at 02:12:25PM -0400, Andrew Lewman wrote:

> > On Fri, Jul 27, 2012 at 09:39:54PM +0000, Kelly DeYoe wrote:  
> > > If you and Andrew are both available for a conference call sometime  
> > > soon, I think we should hold a kick-off call and discuss these and  
> > > any other questions some more there. Just let me know when might be  
> > > a good time for it.  
> >  
> > I can do whenever next week. I'd prefer mid or late afternoon EDT,  
> > since I'm on PDT for the week.  
> >  
> > I think Andrew is stuffed with conference calls next week already, so  
> > I'll let him tell us his constraints.  
>  
> I can be open afternoons if needed. How about Wednesday at 16:00?

That works for me. Tuesday afternoon (say, anytime 13:30 EDT or later) would be even better, since I'm visiting EFF all of Wednesday.

Thanks,  
--Roger



**From:** [Andrew Lewman](#)  
**To:** [Roger Dingledine](#)  
**Cc:** [Kelly DeYoe](#)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, July 30, 2012 2:12:37 PM

---

On Fri, 27 Jul 2012 19:52:22 -0400  
Roger Dingledine <[\\_\\_\\_\\_\\_](#)> wrote:

> On Fri, Jul 27, 2012 at 09:39:54PM +0000, Kelly DeYoe wrote:  
> > If you and Andrew are both available for a conference call sometime  
> > soon, I think we should hold a kick-off call and discuss these and  
> > any other questions some more there. Just let me know when might be  
> > a good time for it.  
>  
> I can do whenever next week. I'd prefer mid or late afternoon EDT,  
> since I'm on PDT for the week.  
>  
> I think Andrew is stuffed with conference calls next week already, so  
> I'll let him tell us his constraints.

I can be open afternoons if needed. How about Wednesday at 16:00?

--  
Andrew  
<http://tpo.is/contact>  
pgp 0x6B4D6475

**From:** [Roger Dingledine](#)  
**To:** [Kelly DeYoe](#)  
**Cc:** (b) (6)  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Friday, July 27, 2012 7:53:16 PM

---

On Fri, Jul 27, 2012 at 09:39:54PM +0000, Kelly DeYoe wrote:  
> If you and Andrew are both available for a conference call sometime  
> soon, I think we should hold a kick-off call and discuss these and any  
> other questions some more there. Just let me know when might be a good  
> time for it.

I can do whenever next week. I'd prefer mid or late afternoon EDT,  
since I'm on PDT for the week.

I think Andrew is stuffed with conference calls next week already, so I'll  
let him tell us his constraints.

> (I'd also hoped to make it out to Seattle for FOCI, but doesn't look  
> like that is going to happen.)

Too bad -- it's going to be a fun crowd. :)

--Roger

**From:** Kelly DeYoe  
**To:** Roger Dingledine  
**Cc:** (b) (6)  
**Subject:** RE: Tor exit relay / bridge questions  
**Date:** Monday, August 06, 2012 3:03:18 PM

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1. Please do the latter, allow email from any email address to receive a reply with bridges, not just from gmail.

2. The Chinese services would like the address 'yangcong' for the email responder mailbox name, it means onion.

-k

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**From:** Roger Dingledine [(b) (6)]  
**Sent:** Thursday, August 02, 2012 4:26 AM  
**To:** Kelly DeYoe  
**Cc:** (b) (6)  
**Subject:** Re: Tor exit relay / bridge questions

On Thu, Jul 26, 2012 at 04:22:06AM -0400, Roger Dingledine wrote:  
> - Do you want us to distribute the 75 bridges automatically via our  
> bridgedb service (via https, gmail, etc) or just tell you their addresses  
> privately? There are tradeoffs with each approach (and I'm happy to help  
> you decide), but we should figure it out before we set more of them  
> up. The simple way to decide is: do you have plans to give out their  
> addresses yourself?

Hi Kelly,

We decided today that we'd set up a separate email autoresponder for these bridges:

<https://trac.torproject.org/projects/tor/ticket/6513>

Two questions for you:

1) Should we limit ourselves to answering only mails from gmail (which stops people from playing tricks like forging the From: as whitehouse.gov and making us spam random people with bridge addresses), or accept them from anywhere (which is more convenient)? If down the road we want to turn on the "answer different email addresses with different bridges" feature of bridgedb, we'll want the former; until then the latter might make it more fun to use.

2) What shall we name the email address?

--Roger

**From:** Roger Dingedine  
**To:** Kelly DeYoe  
**Cc:** [REDACTED] Moritz Bartl  
**Subject:** Re: Tor exit relay / bridge questions  
**Date:** Monday, September 17, 2012 7:45:57 PM

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On Thu, Aug 16, 2012 at 03:50:15AM -0400, Roger Dingedine wrote:

- > The 'fast exit count' graphs are now updated daily at
- > <https://metrics.torproject.org/fast-exits.html>
- > We're up to 28 or so.

We're up to 34 qualifying fast exits:

[https://compass.torproject.org/?family=&ases=&country=&exits=fast\\_exits\\_only&top=-1](https://compass.torproject.org/?family=&ases=&country=&exits=fast_exits_only&top=-1)

and the number is 55 if we ignore /24 diversity requirements:

[https://compass.torproject.org/?family=&ases=&country=&exits=fast\\_exits\\_only\\_any\\_network&top=-1](https://compass.torproject.org/?family=&ases=&country=&exits=fast_exits_only_any_network&top=-1)

Then there are a further 32 that "almost" qualify, for example because they don't have the two extra ports in their exit policy, or their bandwidth is a bit under 100mbit.

Looked at it another way, these 34 exits are roughly 50% of the exit probabilities. The whole set of 87 relays I talk about above are nearly 80% of the exit probabilities.

- > You can get an updated list whenever you like via the instructions at
- > <https://trac.torproject.org/projects/tor/ticket/6498#comment:4>
- > I've attached this hour's output of that script to this mail.

These tools are now up and operational at  
<https://compass.torproject.org/>

Check out the "group by AS" and "group by country" options, as the beginning of our explorations into other diversity metrics.

- > We've started talking to Wau Holland Foundation in Germany about having
- > them be our European distributor-of-funds-to-exit-relay-operators,
- > since many Europeans want to receive their money via European bank
- > transfer rather than check. We're also moving forward at deciding how
- > best to structure our (legal and contractual) relationship with the exit
- > relay operators.

Still ongoing. I had a good chat with one of the CCC people this weekend, who is going to meet with the Wau Holland board on Friday to confirm that they can do it.

As we (should have) expected, it's messier than we thought from a legal perspective to have Tor giving money to exit relay operators; so passing the money through Wau Holland will hopefully help us reduce those issues.

- > The bad news is we probably can't (and probably shouldn't) keep up this
- > pace of growth. We've added about 10% to the capacity of the network over
- > the past two months, and added about 20% to the actual load handled by
- > exits.

Karsten added

<https://metrics.torproject.org/network.html#bandwidth-flags>  
for easier tracking of exit bandwidth capacity and history.

Advertised exit bandwidth is up  $1700/1000 = 70\%$  since start-of-project,  
and actual used bandwidth by exits is up  $1000/625 = 60\%$ :

<https://metrics.torproject.org/network.html?graph=bandwidth-flags&start=2012-06-17&end=2012-09-17#bandwidth-flags>

- > All that said, I'm not sure quite what revised timeline to propose. Since
- > we seem on track for meeting something resembling our first milestone,
- > I'm going to try to wait a bit longer (and get some more intuition)
- > before guessing what roll-out timeframes we can achieve next. Hopefully
- > that works for you?

Ok: we have now diverged from the original envisioned numbers. We have  
way more growth than the original "10%" you had been thinking of, but  
we also don't have the 75 qualifying exits that the timeline specified.  
Should we try to amend the contract, or just proceed with continuing  
to grow the network?

--Roger