

[PL #45353] Further information regarding DMCA take-down notice

Michael J Freedman via RT [support at planet-lab.org](mailto:support@planet-lab.org)

Mon Aug 31 15:58:21 EDT 2009

- Previous message: [\[PL #45352\] \[SU#2009-0861\] Contact info for "slice 0"?](#)
- Next message: [\[PL #45353\] Further information regarding DMCA take-down notice](#)
- Messages sorted by: [\[date \]](#) [\[thread \]](#) [\[subject \]](#) [\[author \]](#)

Email Recipients (see <http://www.planet-lab.org/Support>)
Requestor: [mfreed at CS.Princeton.EDU](mailto:mfreed@CS.Princeton.EDU)

=====
Mon Aug 31 15:58:20 2009: Request 45353 was acted upon.
Transaction: Ticket created by [mfreed at CS.Princeton.EDU](mailto:mfreed@CS.Princeton.EDU)
Subject: Further information regarding DMCA take-down notice

New possible information which might shed more light on these DMCA complaints from the VPA. The high-level point is that this remains a false positive, and CoralCDN never transmitted, sent, stored, proxied, etc. actual BitTorrent traffic, and it was indeed just involved with proxying requests to the BitTorrent tracker at denis.stalker.h3q.com.

The BitTorrent tracker protocol does not include both POSTs (for announcing one's address) and GETs (for retrieving meta-data about others), as one should conceptually build RESTful protocols that do state modifications. (Sidenote: As CoralCDN blocks all POST requests, this would have prevented the problem.)

Instead, a BitTorrent tracker's API is basically a single GET request "announce", which has a request string that includes:

```
info_hash: which file/swarm is the client interested in
peer_id: identity of the client
ip: OPTIONAL address of the client
port: port client is listening on
```

See:

- http://wiki.theory.org/BitTorrent_Tracker_Protocol
- http://wiki.theory.org/BitTorrentSpecification#Tracker_Request_Parameters

The problem is that the spec lists IP address as an optional value, even though it does further say:

```
# ip: Optional. The true IP address of the client machine, in dotted quad format or rfc3513 defined hexed IPv6 address. Notes: In general this parameter is not necessary as the address of the client can be determined from the IP address from which the HTTP request came. The parameter is only needed in the case where the IP address that the request came in on is not the IP address of the client. This happens if the client is communicating to the tracker through a proxy (or a transparent web proxy/cache.) ...
```

Of course, that's precisely what is going on here: The BitTorrent client is connecting to the BitTorrent tracker via a HTTP proxy (namely, CoralCDN). Unfortunately, my spot-check of a few requests to the tracker showed that they LACKED this IP field, i.e., the client software did not include this optional parameter:

- http://denis.stalker.h3q.com.6969.nyud.net/announce?info_hash=%853%7c%a2%97%0b%e7k%a8%85%9b%17%9e%19%cac%80%b7%0d%99&peer_id=-UT1820-I7%a7%90%a9
- http://denis.stalker.h3q.com.6969.nyud.net/announce?info_hash=%15%2g%9d%af%86%ac%14%25%04%bT%1e%b5p%a8%94%cd%df%c6&peer_id=-UT1830-%9c%3d%26%a
- http://denis.stalker.h3q.com.6969.nyud.net/announce?info_hash=%99%7c%0%fe%2a%d4Q%94%40%f9%02%9e%1a%0d%93%efc%8d%8d%f4&peer_id=M6-2-0--.%3eT%fc%

Thus, the tracker presumably used CoralCDN's IP address in place of an explicit one specified by the client, and recorded "peer_id"'s network address as being the <coralcdn_IP>:<client_port> pair, where <coralcdn_ip> is a PlanetLab IP address. This tuple is useless, of course, as it's the combination of the proxy's IP and the client port. (And the proxy isn't running BitTorrent, of course.)

I should note that CoralCDN does not try to hide the fact that it is an HTTP proxy -- namely, it includes both X-Forwarded-For and Via headers in the HTTP request it sends on to the server (which is a BitTorrent tracker, in this case) -- but I somewhat doubt that the BitTorrent tracker is smart enough to consider these "de facto standard" headers.

(On further consideration, this actually appears to be a bug in the BitTorrent specification. Without an explicitly-supplied IP address, there's no way this will work if the client is connecting to the tracker over an HTTP proxy, even if the client itself has a publicly-routable IP address.)

So, this complaint might actually be the same false positive as we saw before: namely, a PlanetLab IP address was incorrectly included in the tracker's set of peers. Although it also remains the possibility that this complaint could have originated due to the announced domain of the tracker, as we thought before. Under both scenarios, of course, no

content was stored, cached, sent, proxied, etc. And really, all this did was make the BitTorrent swarm behave worse, as any request to this <coralcdn_ip>:<client_port> would just fail.

Mike Freedman

-
- Previous message: [\[PL #45352\] \[SU#2009-0861\] Contact info for "slice 0"?](#)
 - Next message: [\[PL #45353\] Further information regarding DMCA take-down notice](#)
 - **Messages sorted by:** [\[date \]](#) [\[thread \]](#) [\[subject \]](#) [\[author \]](#)

[More information about the support-community mailing list](#)