How to Integrate with Oversi P2P Server

Oversi, an Israel-based company, markets a product doing peer-to-peer (P2P) caching. Their technology is software running on servers. The purpose of their product is the savings of huge amounts of P2P bandwidth over an expensive ISP international WAN link. Instead of ADSL, or any home internet, subscribers doing P2P requests from peers in other countries can use Oversi. Their product modifies the P2P tracker to their servers that tells from which peers the subscribers should get the P2P traffic. All the peers in the tracker list are in local servers, which is also an Oversi servers farm. Using Oversi and a ProxySG policy, ISPs can save huge amounts of international P2P bandwidth.

How it Works

Oversi software is installed on a number of servers, depending on how much traffic and load the system needs to support. In one case study, they deployed on 32 Dell servers also doing clustering.

There are 3 components to the Oversi system:

- **Monitoring** – This component stays closest to the Internet Gateway to monitor P2P traffic going in and out, then it asks the Oversi servers to retrieve the P2P traffic and cache it locally.
- **Tracking** – This component sends the subscriber's system the tracker file. This tracker file tells which servers, among all the Oversi servers, have each particular piece of P2P traffic.
- **Clustering (with OverSi software)** – This component provides the main function including retrieving P2P traffic, caching it, and serving it to the P2P client.

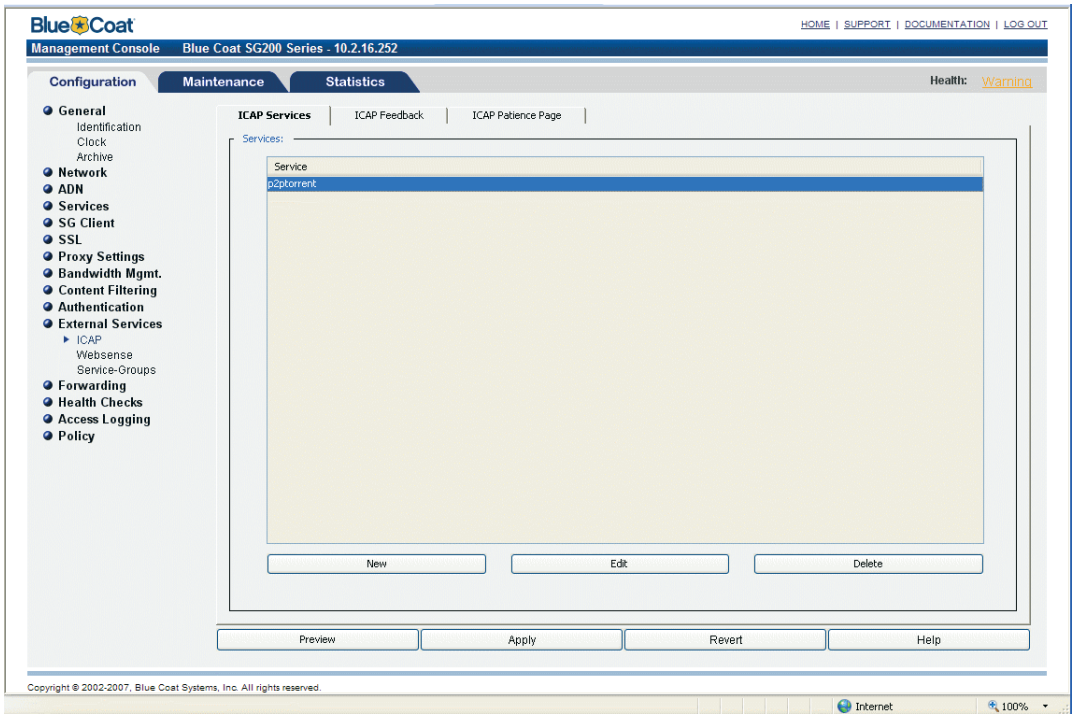
How Does the Oversi P2P Product Integrate with ProxySG?

What Oversi software needs from the ProxySG is help sending the tracker file (.torrent) to their Oversi server so that it can modify the tracker file to include their tracker data.

The ProxySG uses the Internet Content Adaption Protocol (ICAP) to send the tracker file; only the RESPONSE mode is used.

Creating the Policy and Integrating it with Oversi

Next are step-by-step instructions, and screenshots, for how to configure and test the integration.

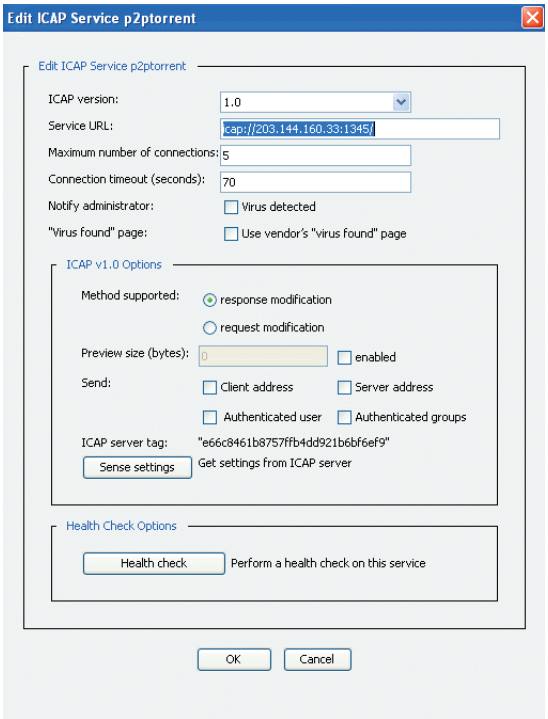


1. Begin by going to **External Services > ICAP** in the Management Console. Click **New** and create an ICAP service; this example names the service **p2ptorrent**. Click **Apply** to finish.

2. Install the following CPL policy using the **Policy > Policy Files** page.

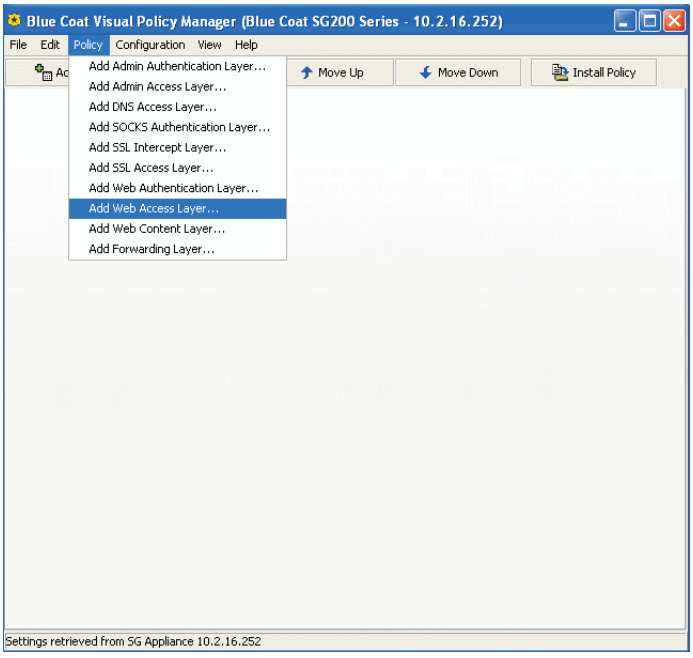
<Cache>
condition=HTTPMIMETypes1 response.icap_service(p2ptorrent,fail_open) trace.request(yes) trace.rules(all) trace.destination("icap.html") ; Rule 1

define condition HTTPMIMETypes1
response.header.Content-Type="application/x-bittorrent"
end condition HTTPMIMETypes1



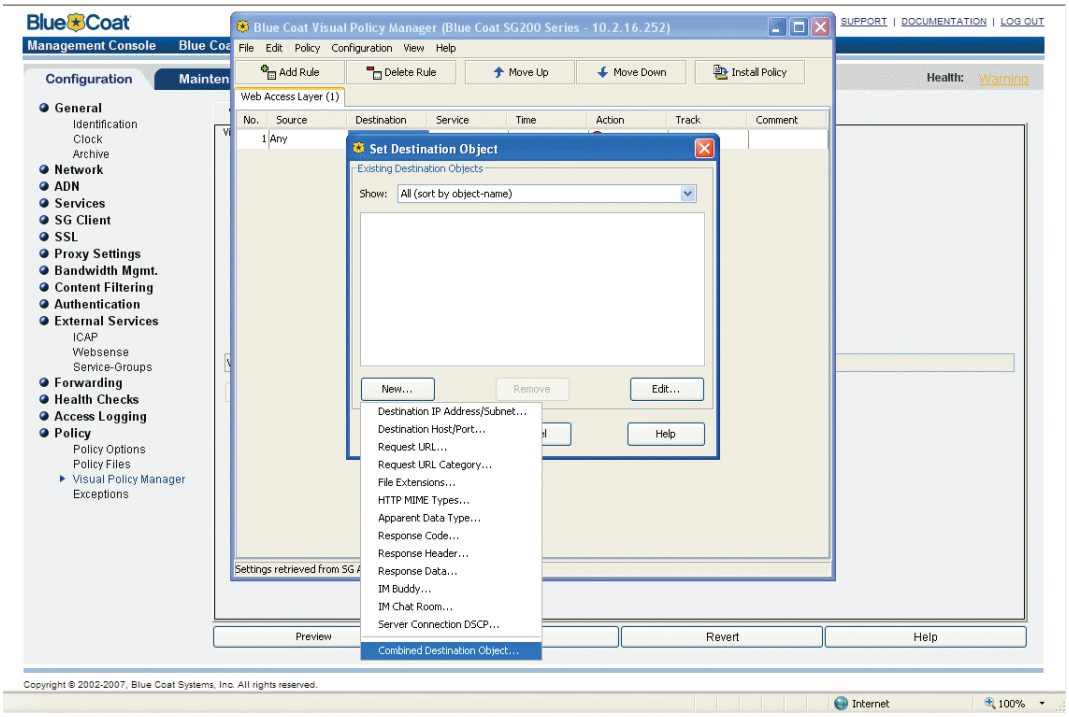
3. Ensure that the ICAP service is in RESPONSE mode (**Method supported** option; this may be the greyed-out default as in the example above) and pointing to the Oversi server IP address and port.

   Next, create a list of URLs of P2P sites to send the tracker files to in uncompressed format. There are three parts to doing this, described in steps 4, 5, and 6.

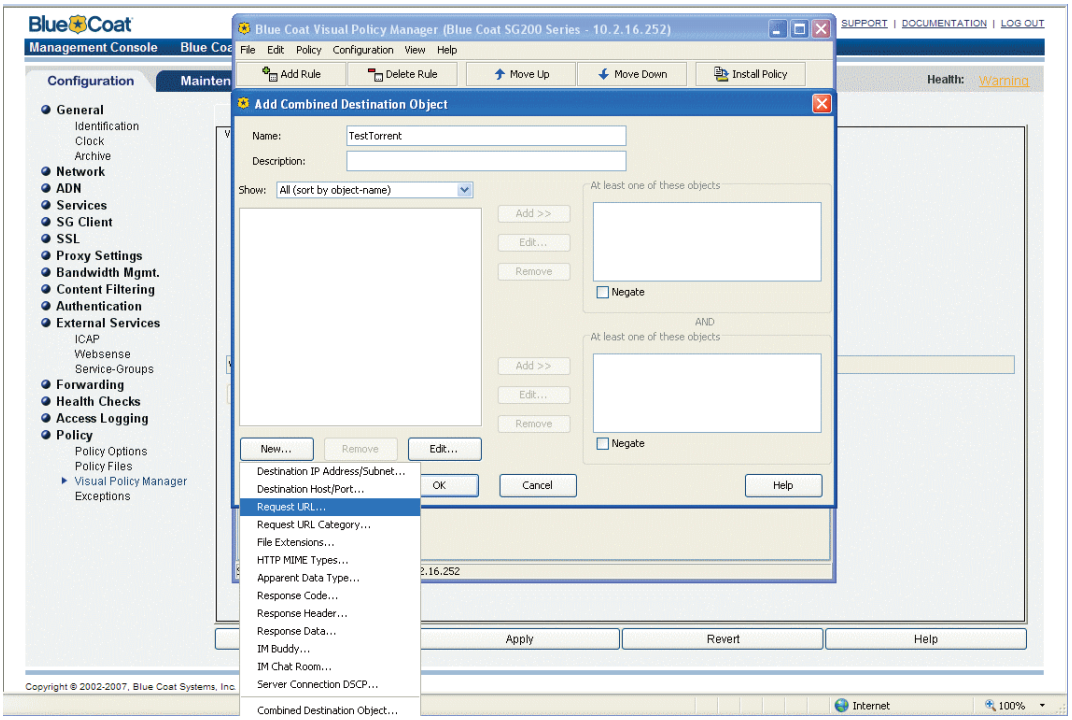


4. Using VPM, create a Web Access Layer: Open the **Policy** menu and select **Add Web Access Layer**.

5. Specify the list of destination URLs for the new Web Access Layer:

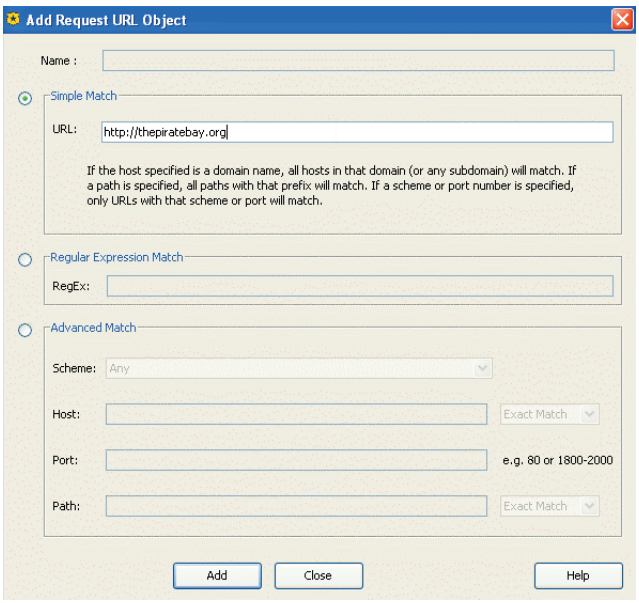


a) Right-click the **Destination** object and choose **Set**. The Set Destination Object dialog opens.

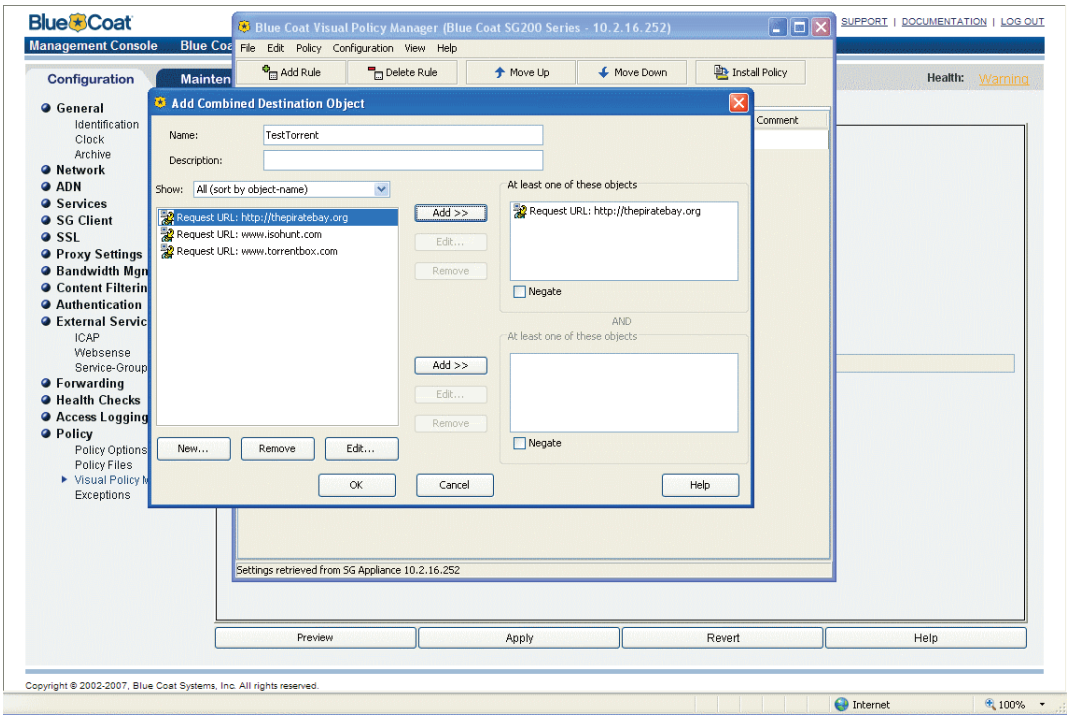


b) In the Set Destination Object dialog, click **New** and choose **Combined Destination Object**. The Add Combined Destination Object dialog opens; this example names the new object TestTorrent.

c) Click **New** and choose **Request URL**. The Add Request URL Object dialog opens.

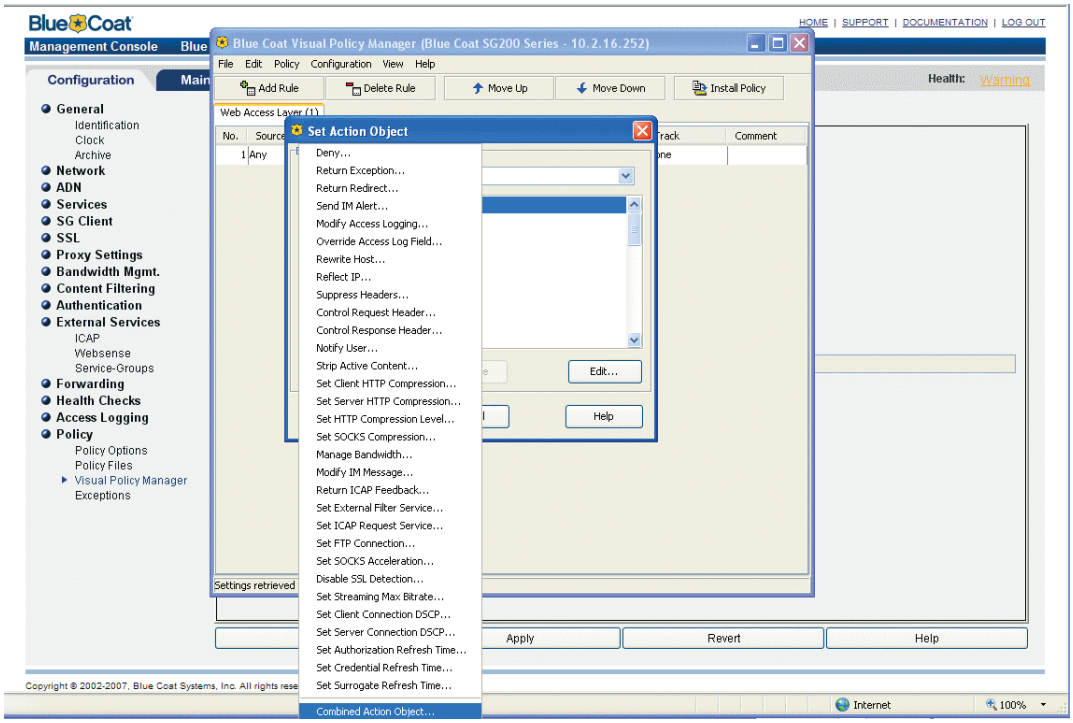


d) In the Add Request URL Object dialog, enter the P2P URLs for the policy; after each entry click **Add**; when you are finished, click **Close**.

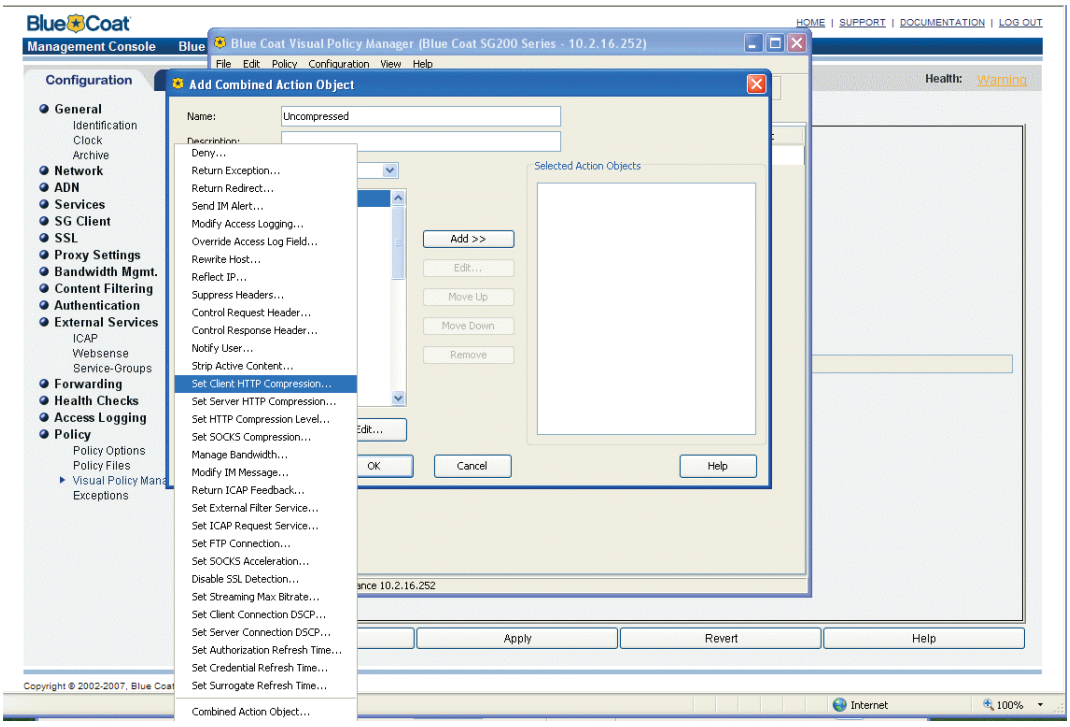


e) Add the URLs to the TestTorrent combined destination object by selecting them, one at a time, and clicking **Add>>** at the top. When you are finished, click **OK**.

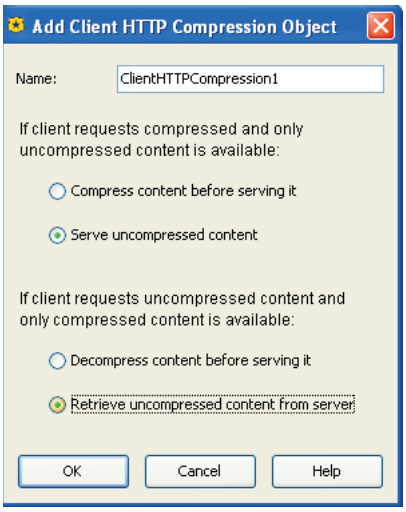
6. Set the action for the new Web Access Layer to Uncompressed:



a) Right-click the **Action** object and choose **Set**. The Set Action Object dialog opens.

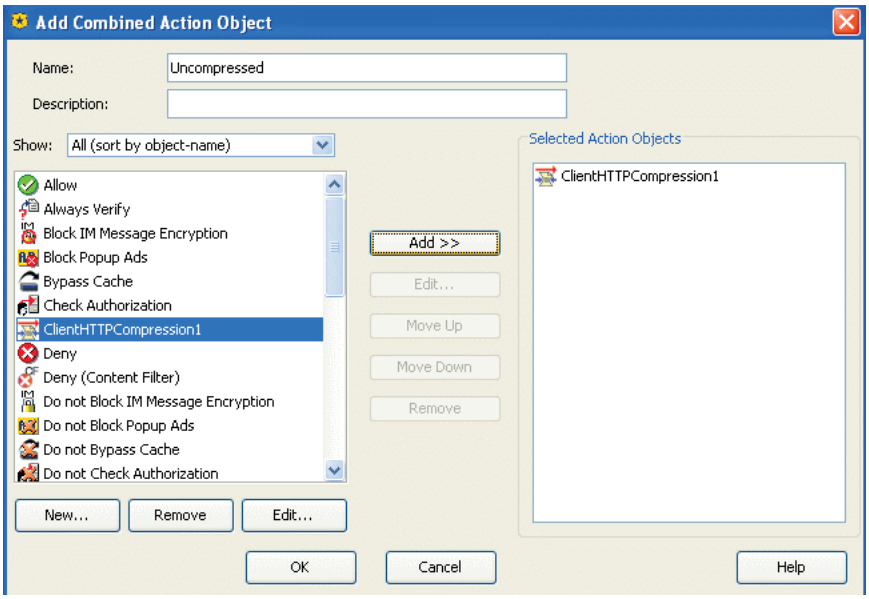


b) In the Set Action Object dialog, click **New** and select **Combined Action Object**. The Add Combined Action Object dialog opens; this example names the new object Uncompressed.



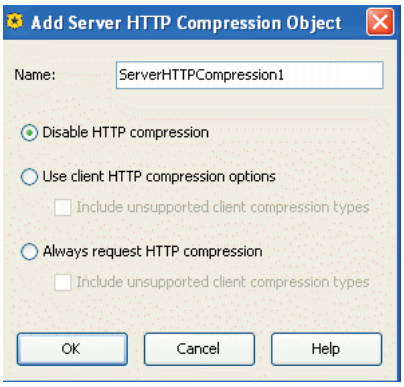
c) Click **New** and choose **Set Client HTTP Compression**. The Add Client HTTP Compression Object dialog opens.

d) In the Add Client HTTP Compression Object dialog select the **Serve Uncompressed Content** and **Retrieve uncompressed content from server** radio buttons and click **OK**.

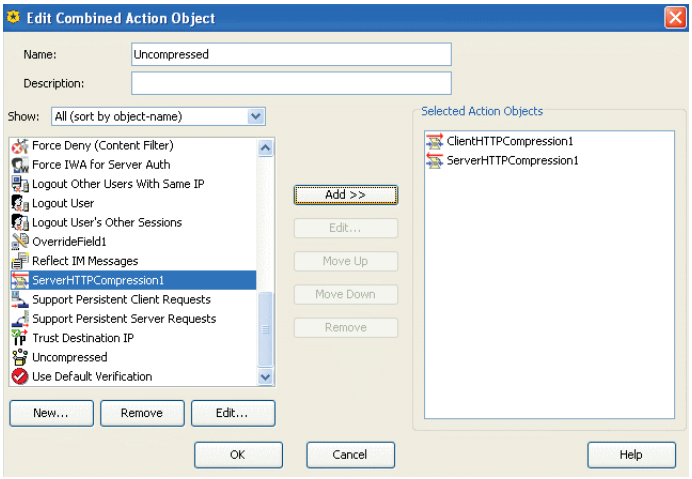


e) Add the new Client HTTP Compression object to the Uncompressed combined action object by clicking **Add>>**.

f) Repeat to add another action object to Uncompressed by again clicking **New** and this time selecting **Server HTTP Compression Object**. The Add Server HTTP Compression dialog opens.



g) In the Add Server HTTP Compression dialog, select the **Disable HTTP compression** radio button and click **OK**.

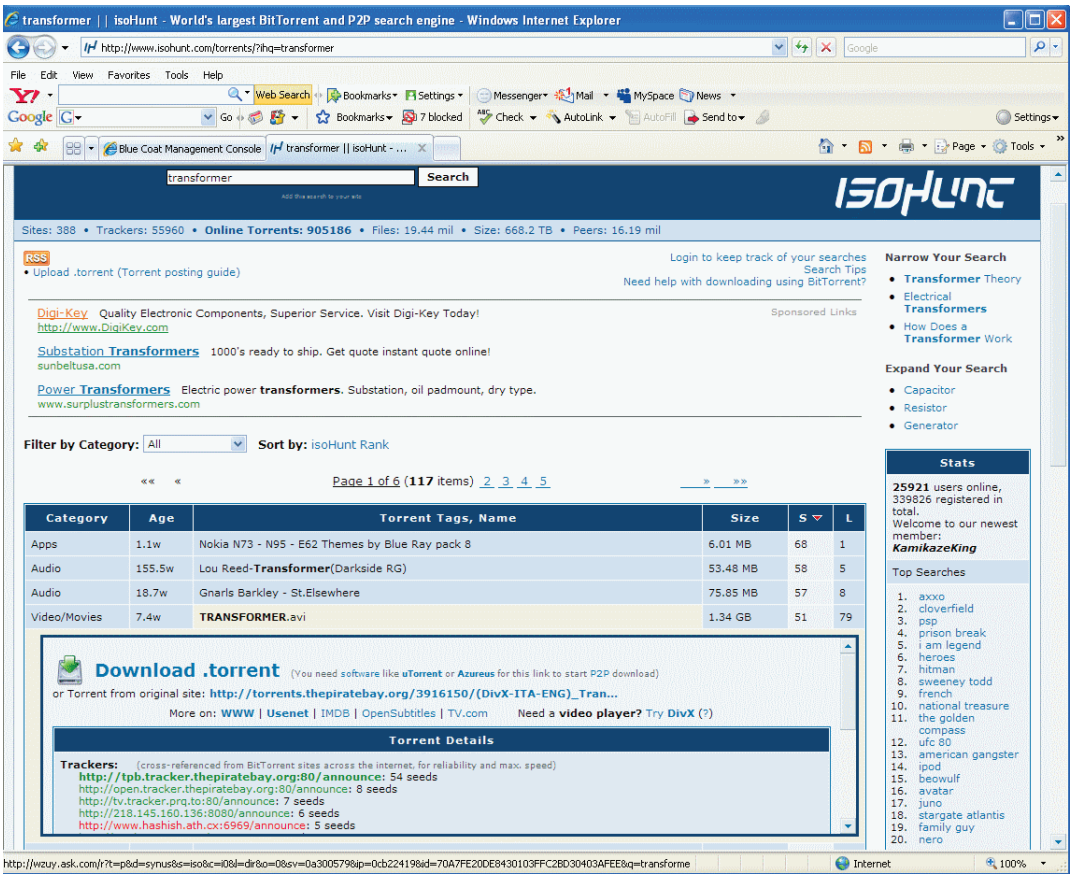


h) Add this object to Uncompressed by clicking the **Add>>** button. Click **OK** twice to set the action to the newly-created combined action Uncompressed.

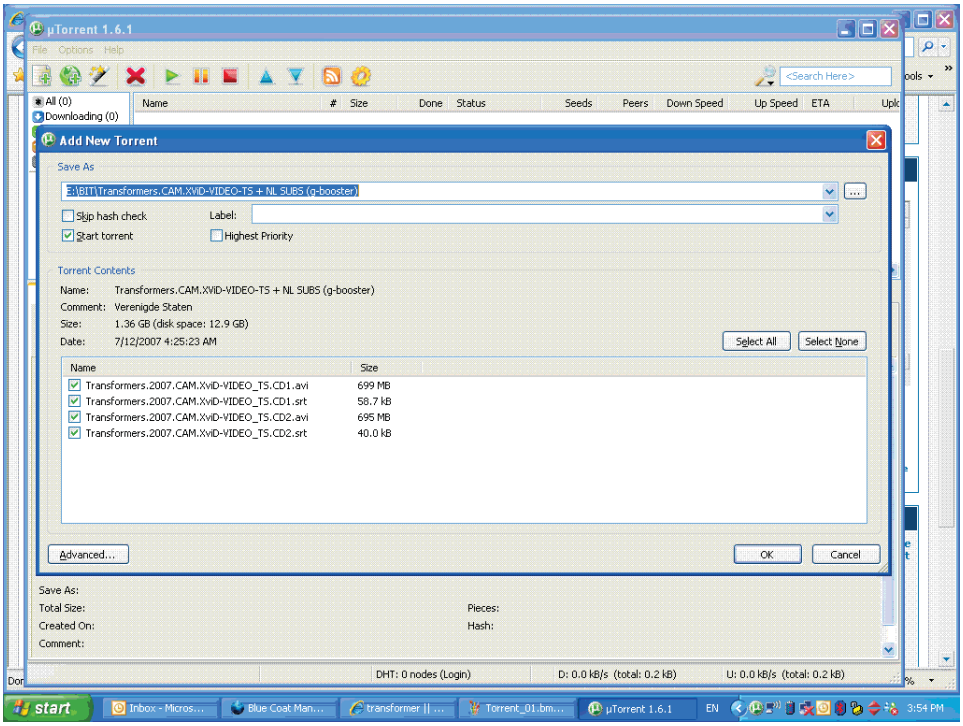
Testing the Configuration

To test the configuration, do the following.

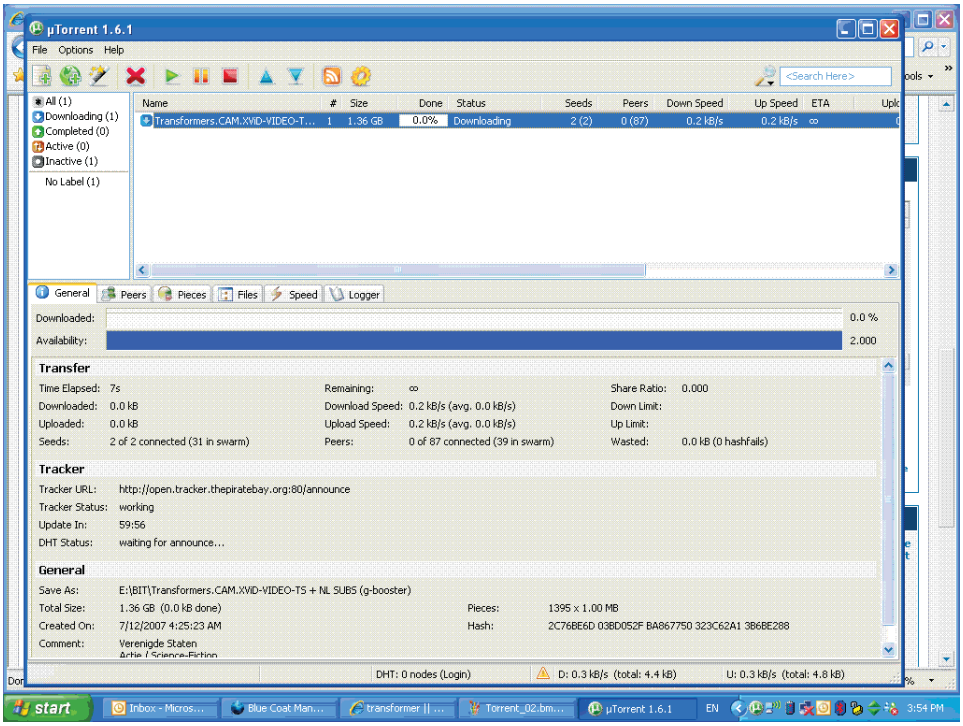
1. Browse to the P2P download site; this example uses the www.isohunt.com website.



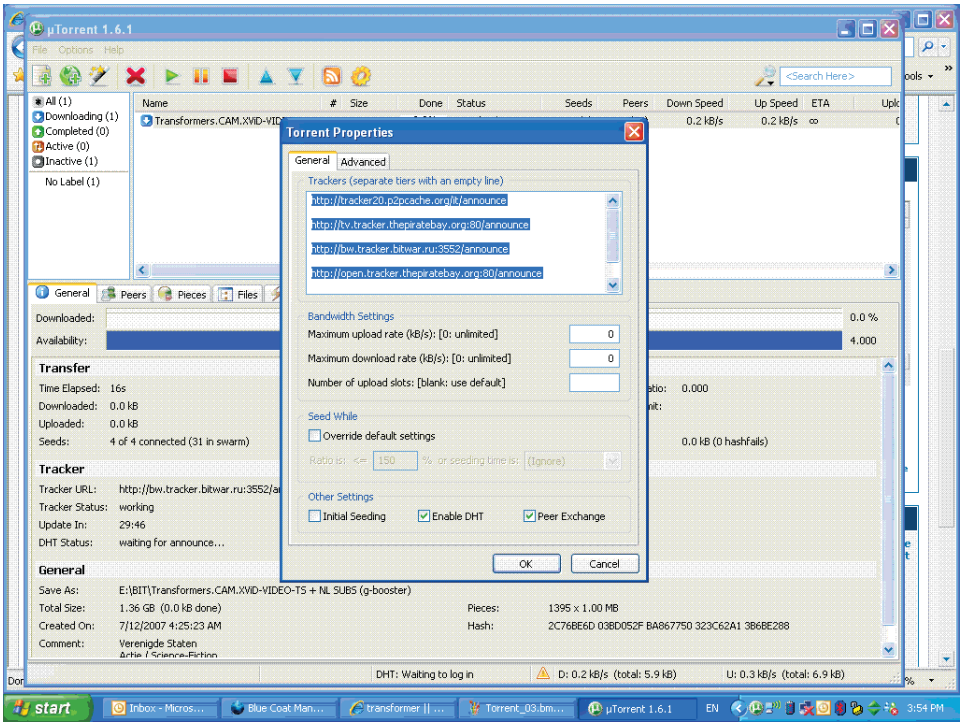
2. Choose the content you want; a Download file area opens. This example shows results for the Video/Movies **Transformer** Torrent Tag (.torrent).



3. Download the .torrent file and open it; this test uses the uTorrent P2P client for downloading.



4. Once downloaded, open the .torrent file; you see this page in the uTorrent client. Choose the items you want and start downloading the P2P content.



5. To check whether ProxySG sent this .torrent file to Oversi successfully, just double click the downloading file listed in the torrent client.

   It should show http://tracker20.p2pcache.org/it/announce, the Oversi tracker server on top of the list over other trackers.

Conclusion

Once installed successfully, subscribers get the P2P content via the Oversi tracker and Oversi server farm. The ISP now saves P2P bandwidth from international peers.

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