Test of Compressed WFS Performance
(Data from Oklahoma Conservation Commission)

Times were recorded for retrieving data from a Web Feature Service via the Internet. Zipped HTTP was enabled and disabled and the performance compared.

Bandwidth from the client to the local Internet was about 7.5 Mbps

[measured using http://www.speedtest.net/]

Geoserver was installed on the client and a WFS data store created with the URL -

http://ogi.state.ok.us/geoserver/wfs?request=GetCapabilities&version=1.0.0

The WMS render timeout was changed from 60 secs to 6000 secs to avoid timeouts. Times shown are minutes:seconds

The Geoserver 'Layer Preview' page was used to view layers in 3 formats ..

With each test, compressed WFS was tested first, then uncompressed WFS.

ZIP Code Centroids - **681** points

Output Format	Zipped HTTP	Raw HTTP	Loss from Compressed WFS
Open Layers	0:32	0:28	1.1 times slower
GIF	0:28	0:27	1.04 times slower
PNG	0:28	0:28	same speed

DOQ Centroids - **5,047** points

Output Format	Zipped HTTP	Raw HTTP	Gain from Compressed WFS
Open Layers	0:06	0:44	7.3 times faster
GIF	0:06	0:44	7.3 times faster
PNG	0:06	0:43	7.2 times faster

BLM Centroids - **35,193** points

Output Format	Zipped HTTP	Raw HTTP	Gain from Compressed WFS
Open Layers	0:21	5:28	15.6 times faster
GIF	0:24	5:36	14.0 times faster
PNG	0:21	5:18	15.1 times faster

OGI Sections Centroids - **71,342** points

Output Format	Zipped HTTP	Raw HTTP	Gain from Compressed WFS
Open Layers	0:45	15:59	21.3 times faster
GIF	0:45	11:06	14.8 times faster
PNG	0:48	18:25	32.0 times faster

GIS software was used to retrieve data and display the map ..

DOQ Centroids - **5,047** points

GIS Software	Utilizes Zipped HTTP	Time to retrieve data and show map
Quantum GIS 1.6.0	Yes	6 seconds
MapInfo 10.5	No	2 mins, 13 secs
ArcMap 9.3.1	No	2 mins, 10 secs

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