

Z-alarm - Ensure information server integrity

Z-alarm is a network monitoring service to assist the managers of geographic information discovery servers to ensure that their facilities are reliably available.

Each node that participates in a spatial data directory, needs to be properly configured to respond to all potential queries. Otherwise people who search these directories will receive failures or spurious results. Also the data directory cannot be relied upon to provide an infrastructure for other geographic information services.

Our robot conducts a suite of individual tests against each Z59.50 target, producing detailed reports and summaries. The tests focus on conformance to the "Z39.50 Application Profile for Geospatial Metadata (GEO)" version 2.2

These tests identify potential mis-configurations of each target by starting with simple queries and progressively building more complex queries based on the results of the previous tests.

The test searches will be recorded as failures if the appropriate response is not received from their server. This is normally due to configuration errors at their end, for example if their server configuration file was missing a mapping for Use Attribute 1012 (metadata date) then date searches would fail.

Poor quality metadata can also manifest as configuration errors. For example, if all of their dataset descriptions were missing the mandatory "metadata date (metd)" field, then searches against that Use Attribute would fail. Similarly, content errors would cause problems, e.g. dates in the wrong format, spatial co-ordinates out-of-range.

See more detail at www.indexgeo.net/zalarm/