

Come as you are Service Registry v0.1, Stateless Catalog v0.1

Hello All,

Compusult's MPP resources are available at <http://mpp.compusult.nf.ca>

Service Registry

Follow the Services Registry link to get to the Register Client administrative forms. The services listed at this site were those registered for the USL project. This list needs to be updated to reflect the servers/services that will be used for MPP-1.

To register your own WMS using the Register Service Client:

- Select the 'Create New Service' button.
- Fill in all the information on the subsequent page.
- Select the 'Save Button'. The updated list of Registered Servers will be redisplayed.
- Select the newly registered server from the list.
- Select the 'Harvest' button at the bottom of the subsequent page to harvest the capabilities from the server.

Please note that the Registry currently harvests WMS 1.0.0 capabilities, which do not contain contact information. We will support WMS Capabilities v1.0.7 during this project at which time the amount of data entry required will be reduced.

Please note that individual layers within a WMS are harvested as **Web Mapping Layer** services allowing you to search for layers as services. WMS servers can be located by searching for services of type **Web Mapping Service**.

You can enter services other than a WMS in the Service Registry, however, there isn't currently any ability to harvest these servers (i.e., you have to manually enter all the service parameters and lists of values). We do plan to add support for harvesting other service types during MPP-1 (e.g., WFS).

Stateless Catalog

Follow the Stateless Catalog Demo link from the Compusult MPP resources page at <http://mpp.compusult.nf.ca> to see a demonstration of the interface.

The Catalog Server can return Brief, Summary and Full result sets, which contain different levels of details about the service. The format of these result sets are defined by the following DTDs:

Brief DTD	http://ogc.compusult.nf.ca/dtd/iso19119md-20001123-brief.dtd
Summary DTD	http://ogc.compusult.nf.ca/dtd/iso19119md-20001123-summary.dtd
Full DTD	http://ogc.compusult.nf.ca/dtd/iso19119md-20001123-full.dtd

There is work underway in the Service Model and Catalog Working Groups to update the

Come as you are Service Registry v0.1, Stateless Catalog v0.1

result formats from the catalog to reflect experience gained from multiple parties using the Stateless Catalog during USL and WMT2. New DTDs will be generated and distributed as this work progresses. We are expecting that changes to these DTDs will be completed by May 15th.

To access the MPP-1 Stateless Catalog Server from your client, use the URL

http://mpp.compusult.nf.ca/cgi-bin/MPP/service_manager/catquery?

HTTP GET Interface

The Stateless Catalog can be searched via HTTP GET using the following CGI parameters:

Name	Description	Valid Values
ESN	Element Set Name	'b', 's', 'f' (for brief, summary and full)
RS	Result Set Format	'XML'
QUERY	OGC Simple Query	See valid search fields in Query Format section below
DOCID	ID of a Service	String (returned in all element sets)
SCHEMA	Schema of results returned	ISO19119

The parameter names were chosen based on existing Z39.50 profile mappings to HTTP/CGI.

The following is an example URL for a search of the stateless catalog:

http://mpp.compusult.nf.ca/cgi-bin/MPP/service_manager/catquery?RS=XML&QUERY=SRS%3D%27EPSG%3A4326%27%0D%0AAND+title+like+%27%25COASTLINES%25%27%0D%0AAND+%28Format%3D%27gif%27+OR+format%3D%27jpeg%27%29%0D%0AAND+ServiceType%3D%27Web+Mapping+Layer%27+%0D%0AAND+Intersects%28LatLongBoundingBox%2C%0D%0A%09%09Envelope%28-160%2C+-50%2C+50%2C+10%29%29%0D%0A%09%09%09&SCHEMA=ISO19119&ESN=b

Come as you are Service Registry v0.1, Stateless Catalog v0.1

XML Post Interface

The Stateless Catalog can also be searched using an XML post interface. The following parameters are defined for this interface:

Name	Description	Valid Values
ElementSetName	Element Set Name	'b', 's', 'f' (for brief, summary and full)
ResultSet	Result Set Format	'XML'
Query	OGC Simple Query	See valid search fields in Query Format section below
ServiceID	ID of a Service	String (returned in all element sets)
Schema	Schema of results returned	ISO19119

The following is a sample XML Post to the Stateless Catalog:

```
<SOAP-ENV:Envelope
  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <CatalogRequest
      xmlns="http://mpp.compusult.nf.ca/">
      <Query>
        SRS='EPSG:4326'
        AND title like '%interstate%'
        AND (Format='gif' OR format='jpeg')
        AND ServiceType='Web Mapping Layer'
        AND Intersects(LatLongBoundingBox,
          Envelope(-160, -50, 50, 10))
      </Query>
      <ElementSetName>s</ElementSetName>
      <ResultSet>XML</ResultSet>
    </CatalogRequest>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Come as you are Service Registry v0.1, Stateless Catalog v0.1

Query Format

Queries are specified based on the OGC Common Catalog Query Language, as described in the OpenGIS Catalog Interface Version 1.0.

The following fields can be included as search terms in the query:

LatLonBoundingBox:

Intersects(LatLonBoundingBox, Envelope(westbound, eastbound, northbound, southbound))

Keyword:

Keyword like '%contains%'

Title:

Title like 'begins_with%'

Abstract:

Abstract like '%ends_with'

Format:

Format = 'GIF'

DCPType:

DCPType = 'Type'

SRS:

SRS = 'EPSG:4326'

ServiceType:

ServiceType = 'Web Mapping Service'

The 'like' operator is not case sensitive, the '=' operator is.

Multiple fields can be searched simultaneously, with terms joined either by AND or OR.

For example:

ServiceType = 'Web Mapping Layer'
AND Intersects(LatLonBoundingBox, Envelope(-160,
-50, 50, 10))
AND Keyword like '%Water%'
AND (SRS = 'EPSG:4236' OR SRS = 'EPSG:6473')
AND (Format = 'GIF' OR Format = 'PNG')