Metacat ADMIN (via browser)

USER (via browser)

x.0 Admin can load spatial layers (vectors and rasters) as define which layers can be viewed by the users. Additionally the admin can define which of the EML attributes/elemnts can be exposed on the maps (eg. title, dates, summary etc)

x.0 request a map with all the metacat entries and when ones is selected the a link to the metacat entry (using the default skin) is returned

x.0 typical metacat (string) search, where each document can be viewed spatially along with the other coverages made available by the Metacat admin

x.0 User may insert spatial objects embeded in EML, that are stored in the spatial DB

HTTP Server (Apache)

Java Servlet Engine (Tomcat)

<<Metacat Spatial>>

Map Renderer

Mapbuilder,SVG - GIS
Flash - GIS,AJAX - GIS

x.0 acting as a WMS/WMF, renderer connects via GML to Geoserver and renders the map to the browser. The map will contain the link back to the document information stored in Metacat

x.0 bounding coordinates or point coordinates registered in geoserver with a link back to metacat ID

Metacat Servlet

Geoserver Servlet

x.0 For a spatial request that requires info from the Metacat Document (eg, by a desktop application) the requested info is read from metacat into an attribute of the spatial layer. These attributes that will be available will be determined by the Metacat admin.

RDBMS

FS

metacat

postgis

x.0 command line tool for loading shapefiles

1.0 raster info is stored on the FS and is pointed at by EML

x.0 request a map with all the metacat entries and when ones is selected the spatial attributes that were defined by the Metacat admin a will be available for analysis within the GIS

Desktop Gis

UDIG
ARCGIS
GEOTOOLS

x.0 Using a GIS library like Geotools, Morpho will be able to view, query, and potentially edit (spatial) data stored in Metacat Spatial

Morpho

Future work/considerations:

Morpho interaction (edit data, view data load data)
Oracle Spatial
SDE

Questions/considerations:

Which Attributes need to be stored in the geodatabase