



GIS & Image  
Processing  
Engineering

**MOZILLA** comme framework géographique

***MozMapTK***



GIS & Image  
Processing  
Engineering

# Des utilisations de Mozilla



*Et d'autres...*



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# Les langages de Mozilla

XUL : Description d'interface utilisateur

JavaScript : Dynamique de l'interface

SVG : Dessin vectoriel

CSS: Habillage et personnalisation de l'interface

Méthode AJAX et Web 2.0 de développement  
+  
Puissance et Robustesse d'une application  
desktop

The image shows a desktop environment with two windows. The left window, titled 'XUL Parser', contains the following XUL code:

```
<vbox flex="1">
  <hbox>
    <textbox flex="1"/>
    <button label="GO!"/>
  </hbox>
  <browser flex="1" src="http://mozilla.org"/>
</vbox>
```

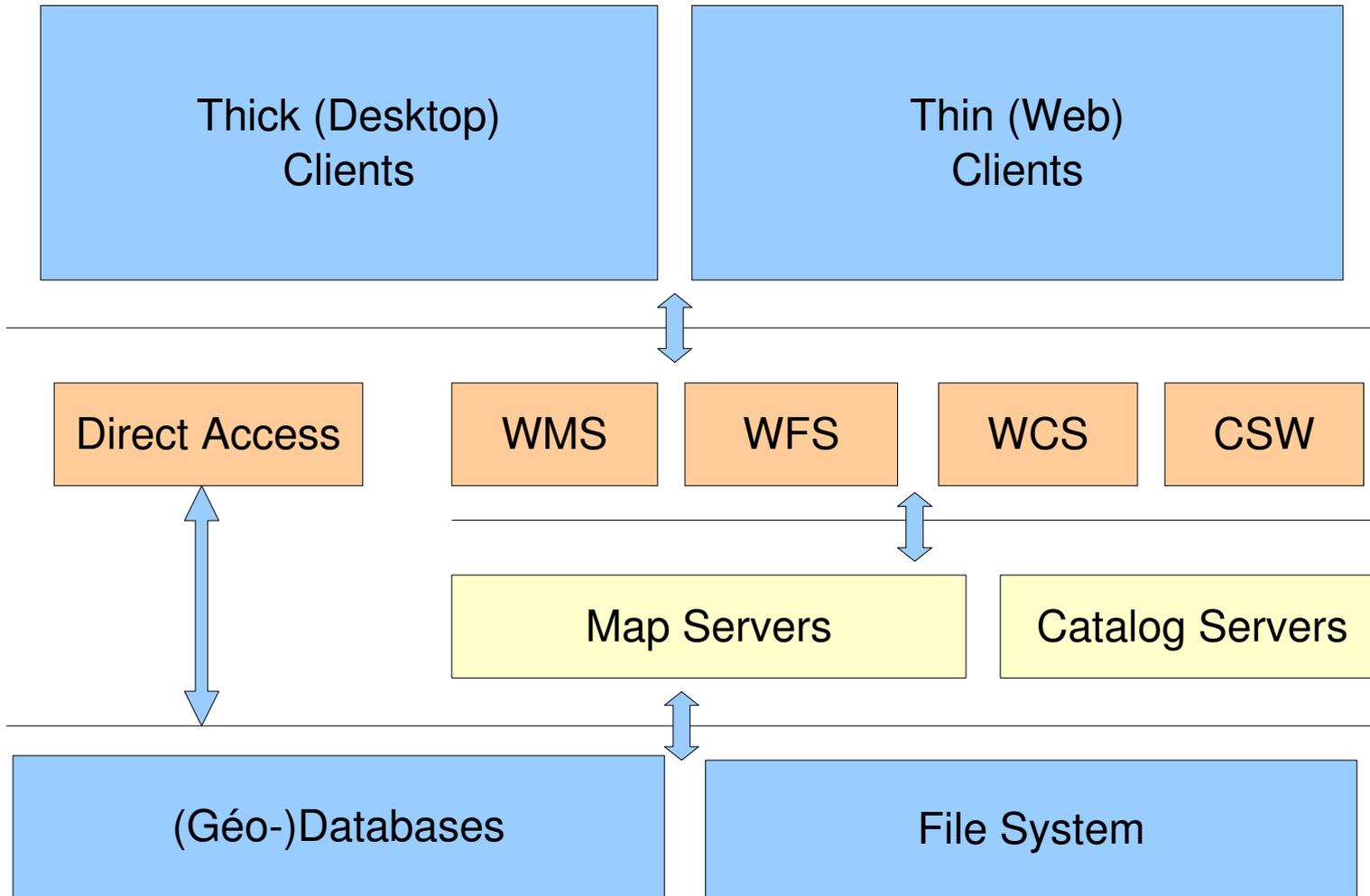
The right window, titled 'MMtkDemo v0.0.1', displays the Mozilla.org homepage. It features a search bar, navigation links (Products, Support, Store, Developers, About), and a main banner for Firefox & Thunderbird. Below the banner are sections for Mozilla Foundation, Mozilla Store, Other Mozilla Software, Announcements, mozillaZine News, and Developer News.

At the bottom left of the desktop, there is a logo for '3|iz mmtkDemo'.

Un navigateur simplement

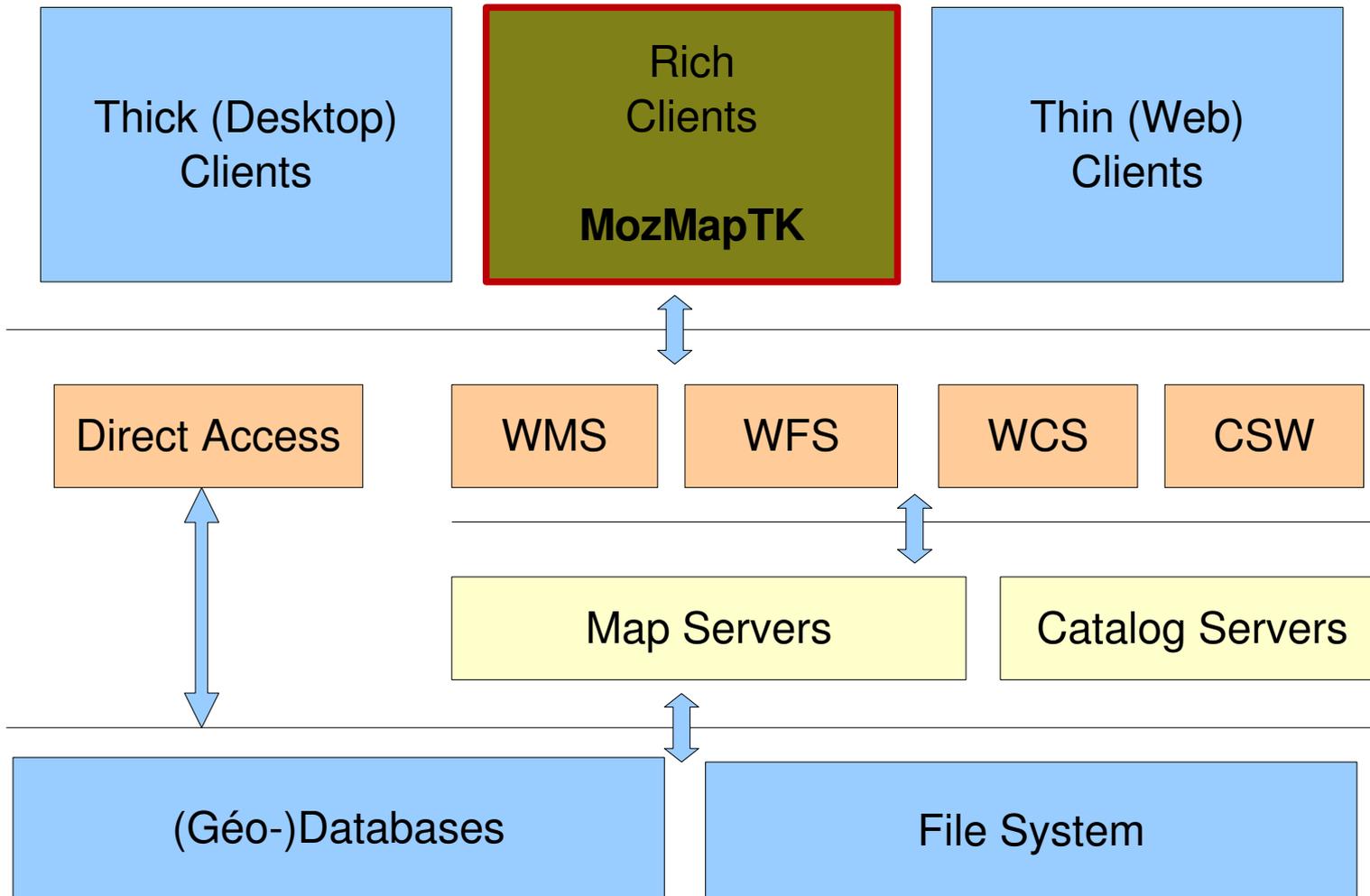


# Architecture logiciel SDI





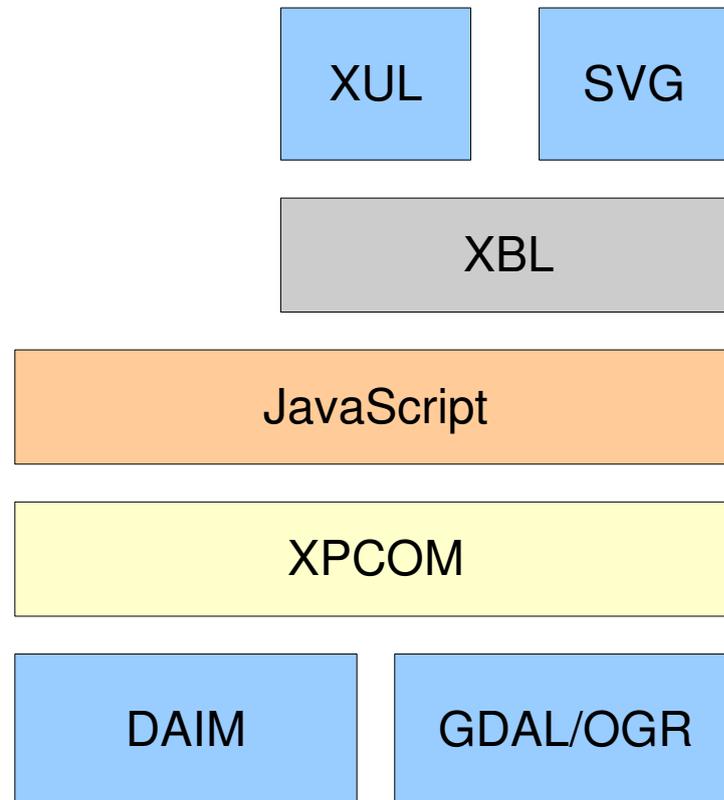
# Position dans l'architecture logiciel SDI



# Extension du langage

XPCOM : Extension des capacités logiciels

XBL : Création de nouveaux *Widgets*





# Démos MozMapToolKit

The screenshot displays two windows from the MozMapToolKit application. The left window, titled "XUL Parser", contains the following XML code:

```
<map id="test">
  <vectorLayer type="OGR"
    src="PG:host=inspiron
      port=5432
      dbname=Brazil
      user=postgres
      password=toto"
    idxInSrc="1"/>
</map>
<mapdisplay map="test"/>
```

Below the code is a "Parse" button. The right window, titled "MMtkDemo v0.0.1", shows a map of Brazil with its state boundaries. A small white rectangle highlights a specific region in the central part of the country. The word "Outils" is visible in the top-left corner of the map window.

In the bottom-left corner of the application area, there is a logo for "3liz" and the text "mmtkDemo".

Accéder et afficher une table PostGIS



# Démos MozMapToolKit

XUL Parser

```
<map id="test">
  <vectorLayer type="OGR"
    src="PG:host=inspiron
      port=5432
      dbname=Brazil
      user=postgres
      password=toto"
    idxInSrc="1"
    fill="green"
    stroke="yellow"/>
</map>
<mapdisplay map="test"/>
```

Parse

MmtkDemo v0.0.1

Outils



The map shows the geographical outline of Brazil, filled with a solid green color. The borders between states are highlighted with a thin yellow line. The map is displayed within a window titled 'MmtkDemo v0.0.1' with a sub-header 'Outils'.



mmtkDemo

Habiller la couche vectorielle



# Démos MozMapToolKit

XUL Parser

```
<map id="test">
  <vectorLayer type="OGR"
    src="/home/reluc/GIS/data/states.shp"
    name="states"
    fill="yellow"
    fill-opacity="1"
    stroke="black"/>
  <vectorLayer type="OGR"
    src="/home/reluc/GIS/data/rivers.shp"
    idxInSrc="0"
    stroke="blue"/>
  <vectorLayer type="OGR"
    src="/home/reluc/GIS/data/cities.shp"
    name="cities"
    fill="red"/>
</map>
<mapdisplay map="test"/>
```

Parse

MMtkDemo v0.0.1

Outils



mmtkDemo

Accéder et afficher des Shape Files



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# Démos MozMapToolKit

XUL Parser

```
<map id="test">
  <vectorLayer type="OGR"
    src="/home/reluc/GIS/data/states.shp"
    name="states"
    fill="yellow"
    fill-opacity="1"
    stroke="black"/>
  <vectorLayer type="OGR"
    src="/home/reluc/GIS/data/rivers.shp"
    idxInSrc="0"
    stroke="blue"/>
  <vectorLayer type="OGR"
    src="/home/reluc/GIS/data/cities.shp"
    name="cities"
    fill="red"
    filter="NAME='Mexico City'"/>
</map>
<mapdisplay map="test"/>
```

Parse

MMtkDemo v0.0.1

Outils





mmtkDemo

Filtrer une couche



# Démos MozMapToolKit

XUL Parser

```
<map id="test" srs="EPSG:4326">
  <background type="WMS"
src="http://www2.demis.nl/wms/wms.asp?wms=World\
version="1.1.1"
layers="Bathymetry,Topography,Coastlines,Hillshading
styles=""
format="image/png"/>
  <vectorLayer type="OGR"
  src="/home/reluc/GIS/data/states.shp"
  name="states"
  fill="yellow"
  fill-opacity="0.5"
  stroke="black"/>
  <vectorLayer type="OGR"
  src="/home/reluc/GIS/data/rivers.shp"
  idxInSrc="0"
  stroke="blue"/>
  <vectorLayer type="OGR"
  src="/home/reluc/GIS/data/cities.shp"
  name="cities"
  fill="red"
  filter="NAME='Mexico City'"/>
</map>
<mapdisplay map="test"/>
```

Parse

MMtkDemo v0.0.1

Outils



www.demis.nl



mmtkDemo

Ajouter un fond WMS et transparence

# Démos MozMapToolKit

The screenshot displays the MozMapToolKit interface, which is divided into two main windows: 'XUL Parser' and 'MMtkDemo v0.0.1'.

The 'XUL Parser' window contains the following XML code:

```
<vectorLayer type="OGR"
  src="/home/reluc/GIS/data/rivers.shp"
  idxInSrc="0"
  stroke="blue"/>
<vectorLayer type="OGR"
  src="/home/reluc/GIS/data/cities.shp"
  name="cities"
  fill="red"
  filter="NAME='Mexico City'"/>
</map>
<vbox flex="1">
  <zoomtoolbox display="testDisplay"/>
  <hbox flex="1" align="stretch">
    <vbox flex="1" align="stretch">
      <maptree display="testDisplay" flex="1"/>
    </vbox>
    <vbox width="500px" style="border:solid 1px
  black;">
      <mapdisplay id="testDisplay"
        map="test"
        displayHeight="500px"
        displayWidth="500px"/>
    </vbox>
  </hbox>
</vbox>
```

The 'MMtkDemo v0.0.1' window shows a map of Mexico with a red dot indicating Mexico City. The map is displayed within a frame that includes a 'layers' panel on the left and a 'Outils' (Tools) panel at the top. The 'layers' panel lists 'cities', 'rivers', and 'states', each with a visibility toggle and a zoom control. The 'Outils' panel contains icons for zooming and other map navigation functions.

In the bottom left corner of the interface, there is a logo for '3liz' and the text 'mmtkDemo'.

Outil de manipulation de cartes

# Démos MozMapToolKit

The image shows a screenshot of the MozMapToolKit demo application. On the left, a window titled "XUL Parser" displays XML code for configuring a map. The code defines two vector layers: "rivers" (blue lines) and "cities" (red dots, filtered to Mexico City). It also defines a zoom toolbox and a map display area. A "Parse" button is visible at the bottom of the XUL Parser window. On the right, a window titled "MMtkDemo v0.0.1" displays a map of Mexico. The map shows a topographic background with overlaid layers for "cities" (a red dot in Mexico City), "rivers" (blue lines), and "states" (black outlines). A "layers" panel on the left of the map window allows toggling these layers on and off. The map window also includes a "Outils" toolbar with zoom and pan icons. A logo for "3liz" and "mmtkDemo" is visible in the bottom left corner of the application window.

```
<vectorLayer type="OGR"
  src="/home/reluc/GIS/data/rivers.shp"
  idxInSrc="0"
  stroke="blue"/>
<vectorLayer type="OGR"
  src="/home/reluc/GIS/data/cities.shp"
  name="cities"
  fill="red"
  filter="NAME='Mexico City'"/>
</map>
<vbox flex="1">
  <zoomtoolbox display="testDisplay"/>
  <hbox flex="1" align="stretch">
    <vbox flex="1" align="stretch">
      <maptree display="testDisplay" flex="1"/>
    </vbox>
    <vbox width="500px" style="border:solid 1px
black;">
      <mapdisplay id="testDisplay"
        map="test"
        displayHeight="500px"
        displayWidth="500px"/>
    </vbox>
  </hbox>
</vbox>
```

Zoom, déplacement de couches...



# Démos MozMapToolKit

XUL Parser

```
<map id="test" srs="EPSG:27582">
  <background type="WMS"
src="http://www.geosignal.org/cgi-bin/wmsmap?"
version="1.1.1"
layers="RASTER500K"
styles=""
format="image/png"/>
  <vectorLayer type="WFS"
src="http://cartorisque.prim.net/wfs/56?"
name="ALEA_INONDATION_SYNTHESE"
stroke="#333399"
fill="blue"
fill-opacity="0.5"/>
</map>
<vbox flex="1">
  <hbox>
    <spacer flex="1"/>
    <zoomtoolbox display="testDisplay"/>
  </hbox>
  <vbox flex="1" align="center">
    <mapdisplay id="testDisplay"
      map="test"
      displayHeight="600px"
      displayWidth="600px"/>
  </vbox>
</vbox>
```

Parse

MmTkDemo v0.0.1

Outils





mmtkDemo

Accès et affichage WFS



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