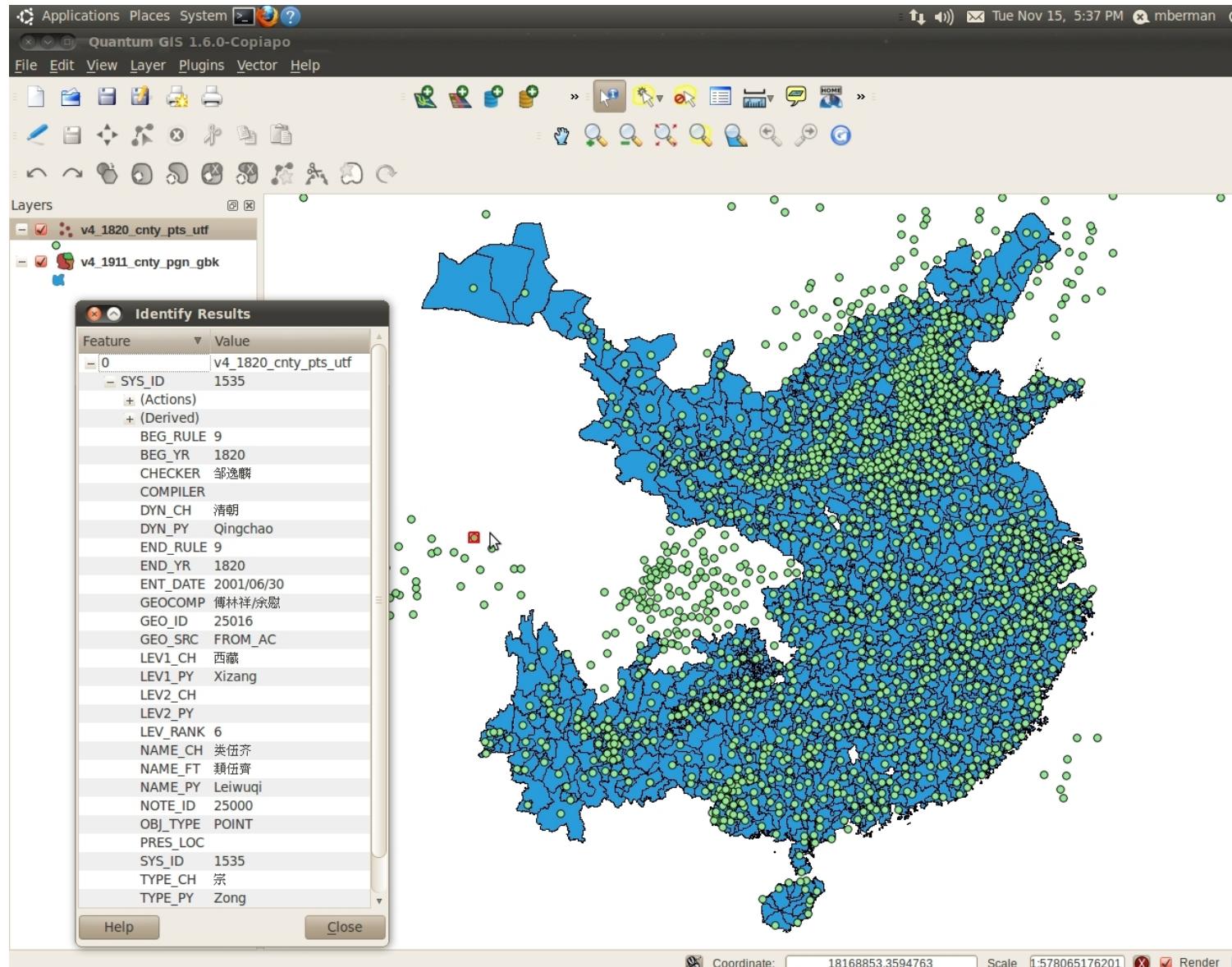


# Qgis

Een korte tour

17-12-2015

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# Wat is een GIS?

- Geographische informatie system
- “Een informatie technologie die zowel ruimtelijke als niet ruimtelijke data weergeeft”  
-Parker 1988-
- Definitie van een GIS is lastig!

Carter (1989:3)

*an institutional entity, reflecting an organizational structure that integrates technology with a database, expertise and continuing financial support over time.*

Parker (1988:1547)

*an information technology which stores, analyses, and displays both spatial and non-spatial data.*

Dueker (1979:106)

*a special case of information systems where the database consists of observations on spatially distributed features, activities, or events, which are definable in space as points, lines, or areas. A GIS manipulates data about these points, lines, and areas to retrieve data for ad hoc queries and analyses.*

Smith *et al.* (1987:13)

*a database system in which most of the data are spatially indexed, and upon which a set of procedures operated in order to answer queries about spatial entities in the database.*

Ozemoy, Smith and Sicherman (1981:92)

*an automated set of functions that provides professionals with advanced capabilities for the storage, retrieval, manipulation, and display of geographically located data.*

Burrough (1986:6)

*a powerful set of tools for collecting, storing, retrieving at will, transforming and displaying spatial data from the real world.*

Cowen (1988:1554)

*a decision support system involving the integration of spatially referenced data in a problem-solving environment.*

Koshkarov, Tikunov and Trofimov (1989:259)

*a system with advanced geo-modelling capabilities.*

Devine and Field (1986:18)

*a form of MIS [Management Information System] that allows map display of the general information.*

DoE (1987:132)

*a system for capturing, storing, checking, manipulating, analysing and displaying data which are spatially referenced to the Earth.*

Aronoff (1989:39)

*any manual or computer based set of procedures used to store and manipulate geographically referenced data.*

# Doel Qgis

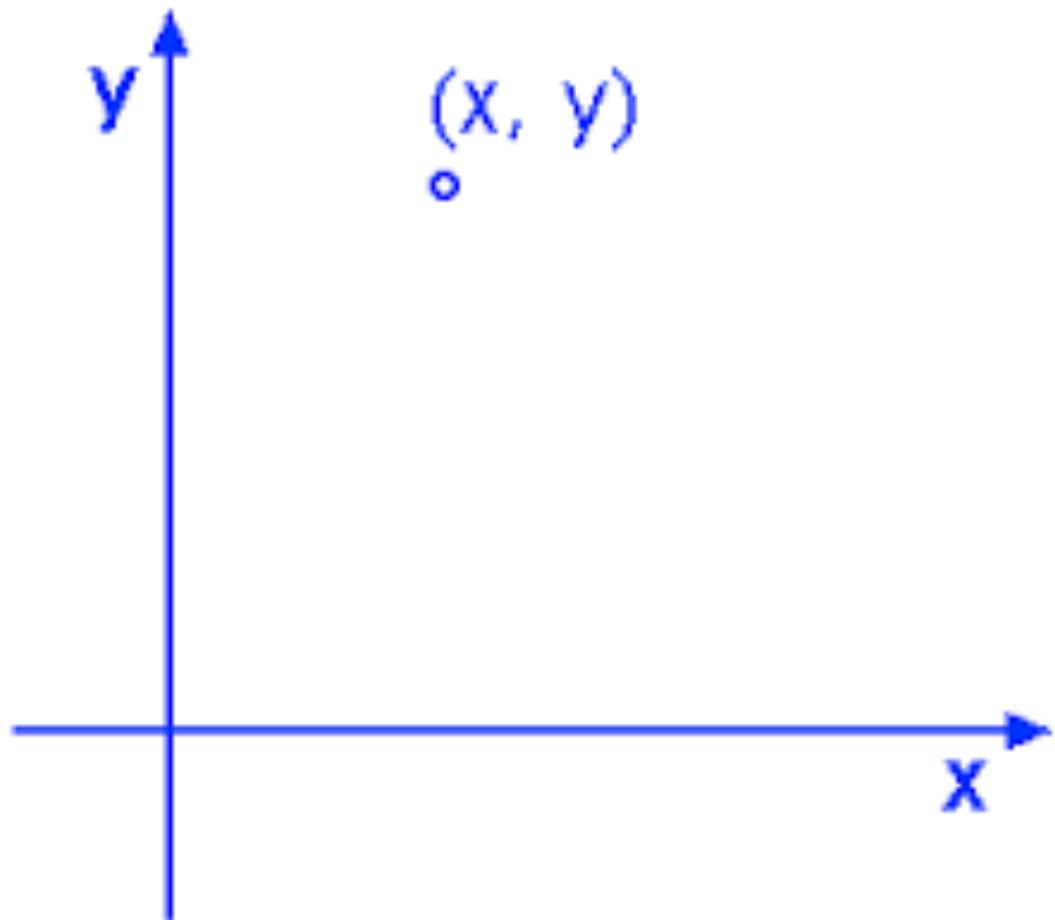
- Het visualizeren van geographische data

Hoe:

- Persoonlijke kaarten maken
- Verspreidingen tonen
- Zelfs mogelijkheden voor 3d
- Zelf iets programmeren
- Er zijn veel bestaande plugins dus naar eigen behoefte aan te passen

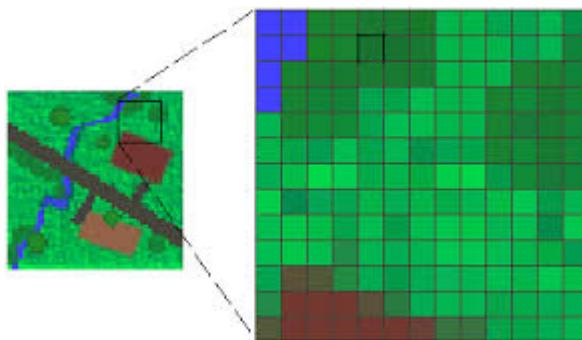
# Input Qgis

- X coordinaat
- Y coordinaat
- Coördinatensysteem



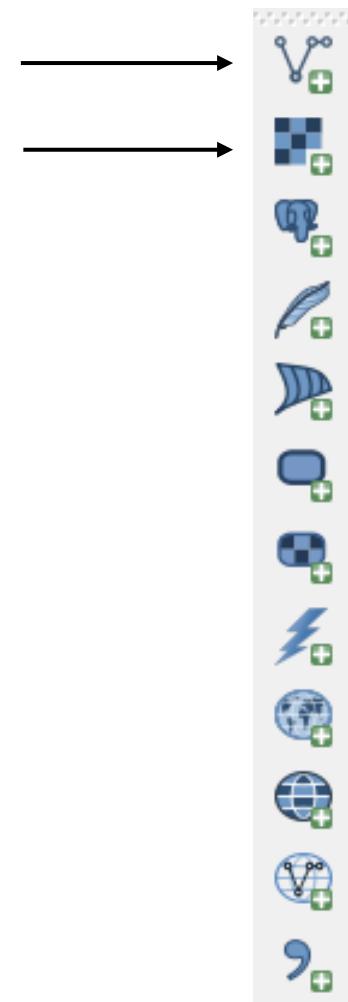
# Data in Qgis

- Raster data



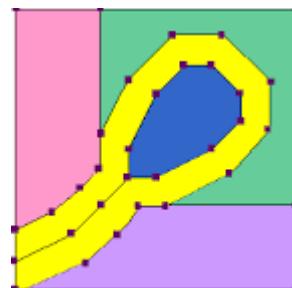
Vector

Raster



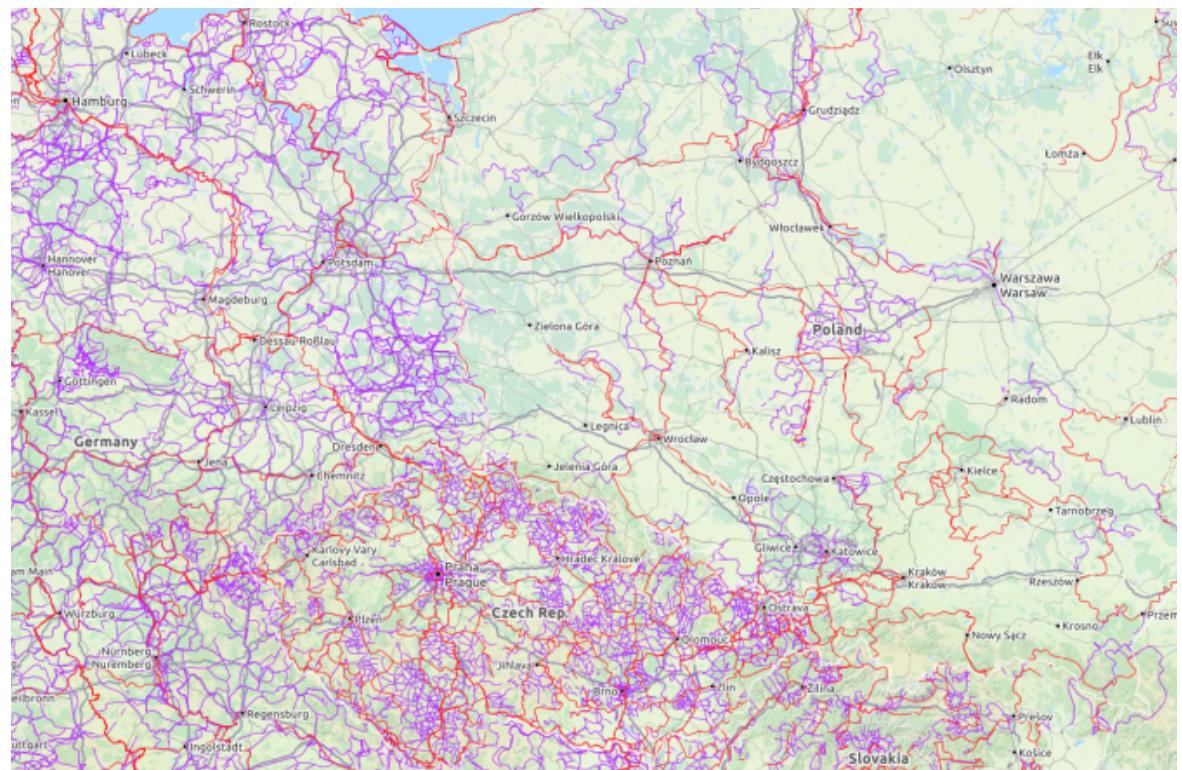
- Vector data

- Punten
- Lijnen
- Polygonen



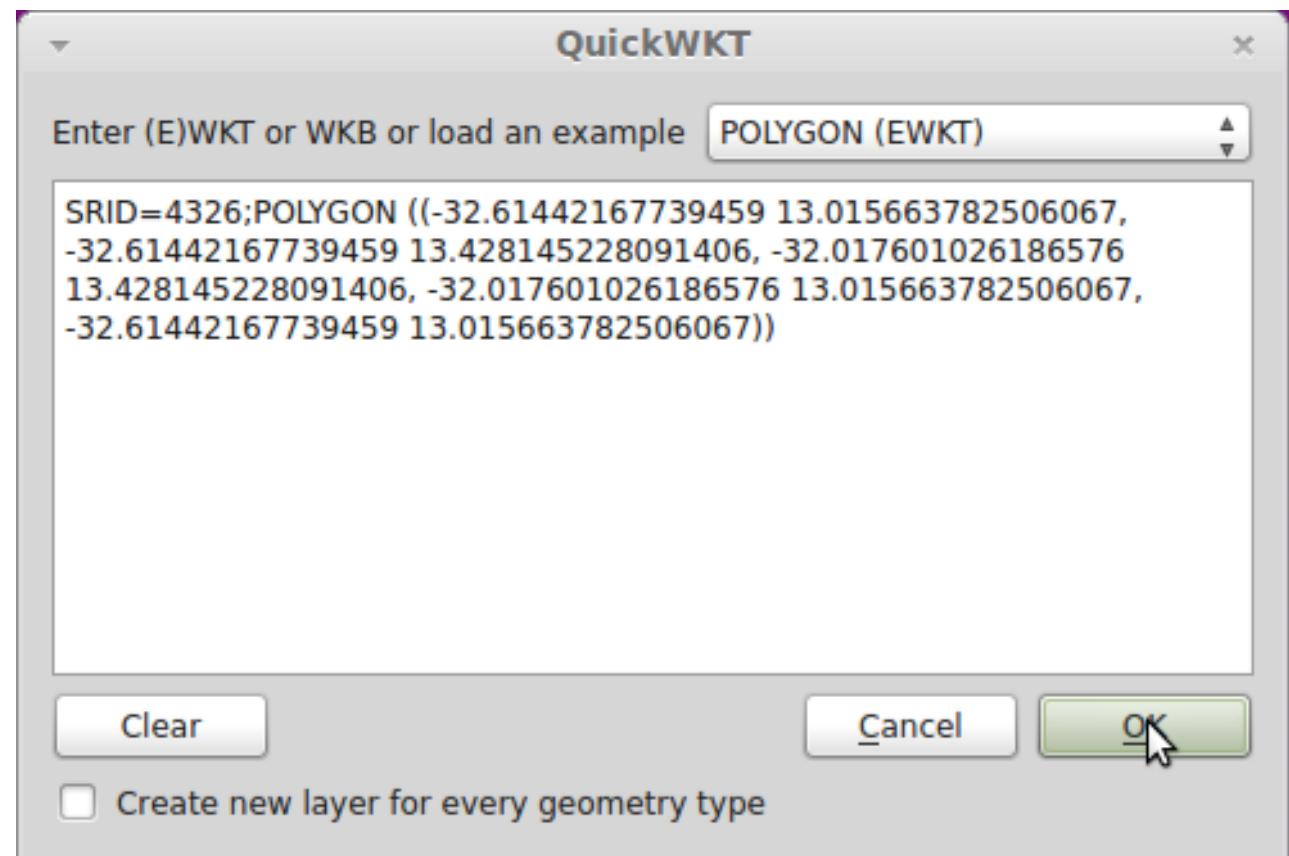
# Bestaande kaarten

- Afhankelijk van coördinatensysteem



# Well known text (WKT)

- Gebaseerd op X- en Y-coordinaten.
- Uiteenlopende 2D geometrie mogelijk



# Database

- Link van database naar qgis



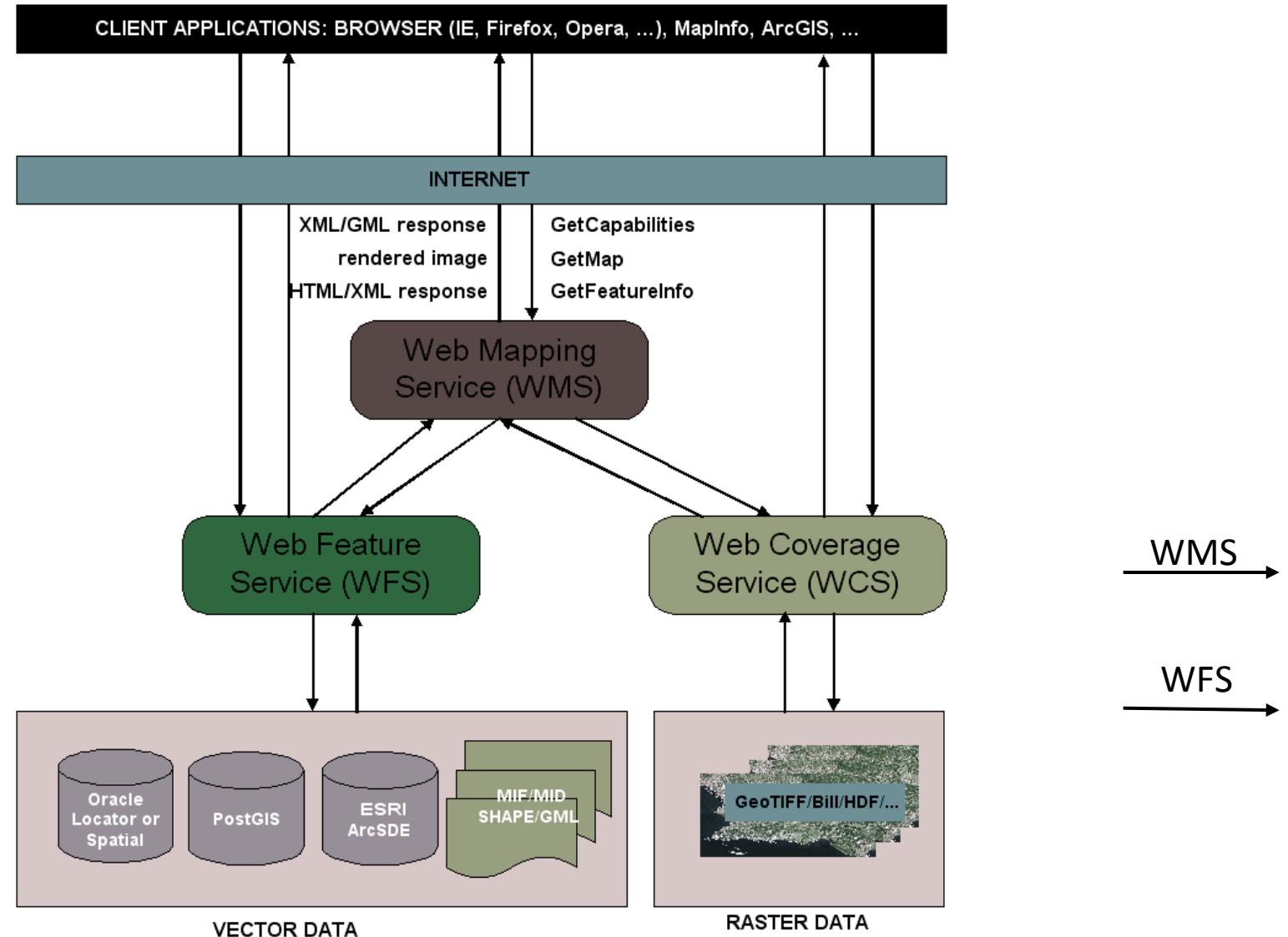
File Edit View Tools Help  
100 rows

	<b>id [PK] serial</b>	<b>position geometry</b>	<b>red smallint</b>	<b>green smallint</b>	<b>blue smallint</b>
<b>1</b>	1	0101000080066	71	71	
<b>2</b>	2	0101000080A76	81	84	
<b>3</b>	3	0101000080371	75	78	
<b>4</b>	4	0101000080885	86	90	
<b>5</b>	5	0101000080481	78	79	
<b>6</b>	6	0101000080186	88	90	
<b>7</b>	7	0101000080E74	76	83	
<b>8</b>	8	0101000080C133	139	142	
<b>9</b>	9	0101000080F85	86	90	
<b>10</b>	10	0101000080566	71	74	
<b>11</b>	11	0101000080E72	76	79	
<b>12</b>	12	0101000080686	86	89	
<b>13</b>	13	0101000080B125	130	129	
<b>14</b>	14	01010000804109	111	112	
<b>15</b>	15	0101000080576	81	81	
<b>16</b>	16	0101000080F66	71	74	
<b>17</b>	17	0101000080883	81	88	
<b>18</b>	18	0101000080B94	99	104	
<b>19</b>	19	0101000080E61	65	68	
<b>20</b>	20	0101000080778	81	83	
<b>21</b>	21	0101000080A68	61	61	
<b>22</b>	22	01010000809105	101	106	

Database →



# Web-basis



# Meta data

- Mogelijk via attributen-tabel

ID	F_CODE	F_CODE_DES	NAM	NAM_DESCRI	TILE_ID	FAC_ID
2067.000	AL020	Built-Up Area	DELFIJL	NULL	11	576.000
2068.000	AL020	Built-Up Area	AALZUM	NULL	11	577.000
2072.000	AL020	Built-Up Area	APPINGEDAM	NULL	11	581.000
2087.000	AL020	Built-Up Area	GRONINGEN	NULL	11	596.000
2091.000	AL020	Built-Up Area	LEEUWARDEN	NULL	11	600.000
2095.000	AL020	Built-Up Area	FRANEKER	NULL	11	604.000
2097.000	AL020	Built-Up Area	TUINDORP-ONNEN	NULL	11	607.000
2099.000	AL020	Built-Up Area	KONINGSBUURT	NULL	11	609.000
2104.000	AL020	Built-Up Area	HOOGEZAND	NULL	11	614.000
2110.000	AL020	Built-Up Area	WINSCHOTEN	NULL	11	620.000

# Nuttige plugins Qgis

- PDOK (publieke dienstverlening op de kaart)

Geoinformatie van de overheid

- INSPIRE plugin

“In het kader van de INSPIRE-richtlijn maken overheidsorganisaties in de Europese lidstaten geo-informatie over 34 thema's vindbaar en als webservice te bekijken en downloaden.” -Geonovum-

Eenvoudig gebruik WMS/WFS via een catalogue (NGR)

# Demonstratie