

Qgis

Een korte tour

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The screenshot displays the Quantum GIS 1.6.0-Copiapó interface. The main map area shows a geographical map of China with a blue polygonal layer and a green point layer. The 'Layers' panel on the left lists two layers: 'v4_1820_cnty_pts_utf' and 'v4_1911_cnty_pgn_gbk'. An 'Identify Results' dialog box is open, showing the following data for a selected feature:

Feature	Value
0	v4_1820_cnty_pts_utf
SYS_ID	1535
(Actions)	
(Derived)	
BEG_RULE	9
BEG_YR	1820
CHECKER	邹逸麟
COMPILER	
DYN_CH	清朝
DYN_PY	Qingchao
END_RULE	9
END_YR	1820
ENT_DATE	2001/06/30
GEOCOMP	傅林祥/徐慰
GEO_ID	25016
GEO_SRC	FROM_AC
LEV1_CH	西藏
LEV1_PY	Xizang
LEV2_CH	
LEV2_PY	
LEV_RANK	6
NAME_CH	类伍齐
NAME_FT	類伍齊
NAME_PY	Leiwuqi
NOTE_ID	25000
OBJ_TYPE	POINT
PRES_LOC	
SYS_ID	1535
TYPE_CH	宗
TYPE_PY	Zong

The status bar at the bottom shows the coordinate as 18168853.3594763, a scale of 1:578065176201, and the 'Render' checkbox is checked.

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.

Koshkarirov, 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

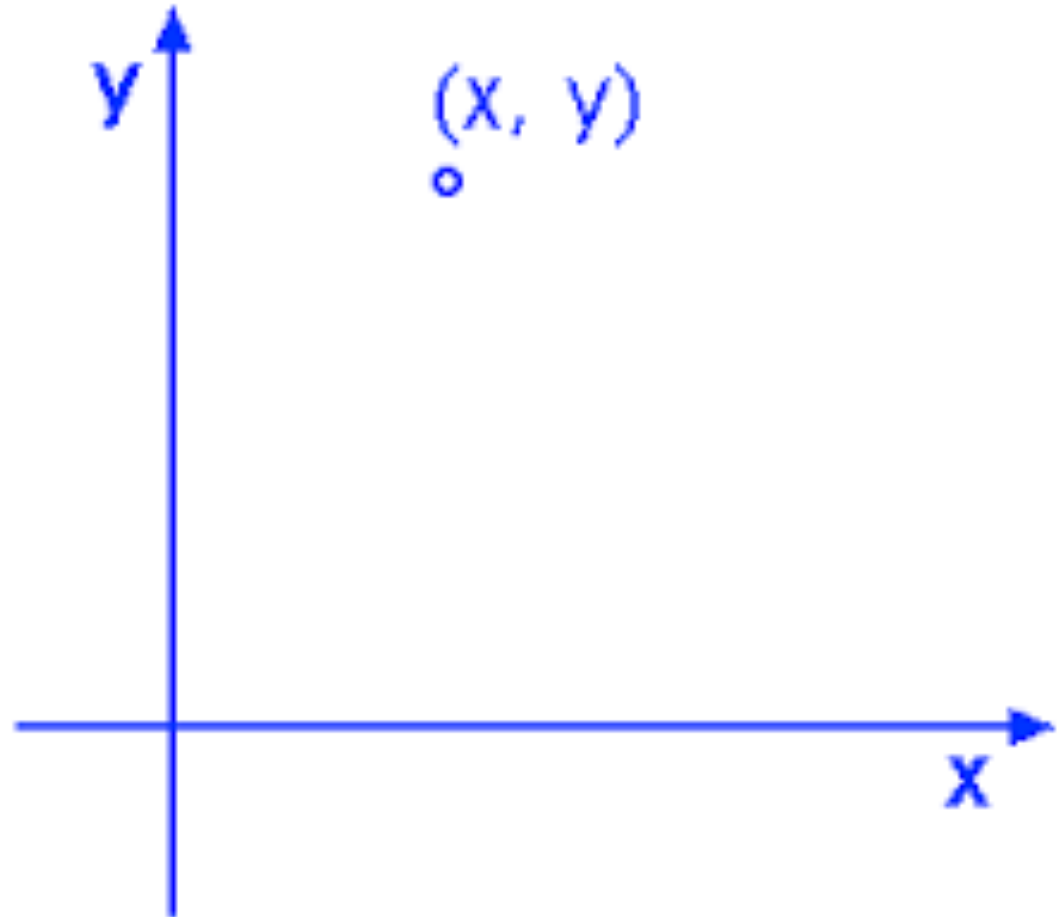
- Het visualizeren van geographische data

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

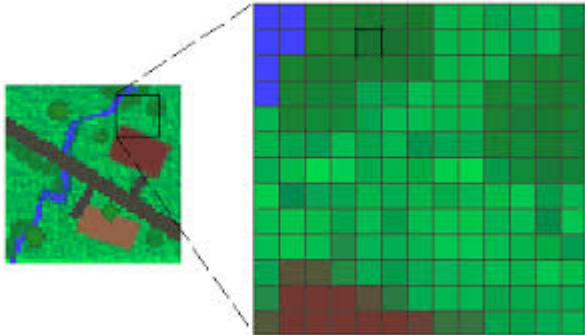
Input Qgis

- X coordinaat
- Y coordinaat
- Coördinatensysteem



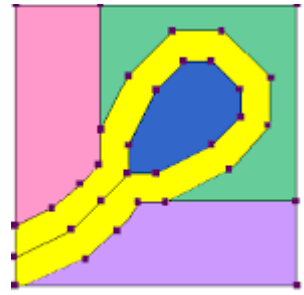
Data in Qgis

- Raster data



- Vector data

- Punten
- Lijnen
- Polygonen



Vector

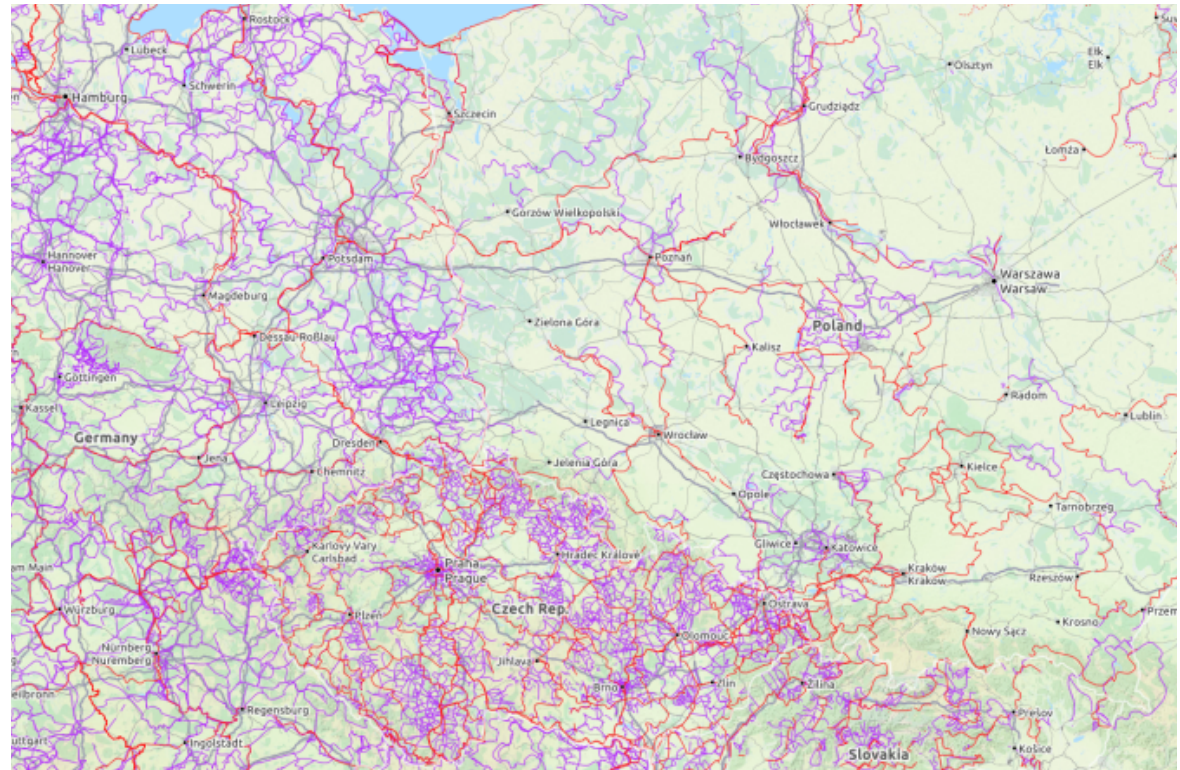


Raster



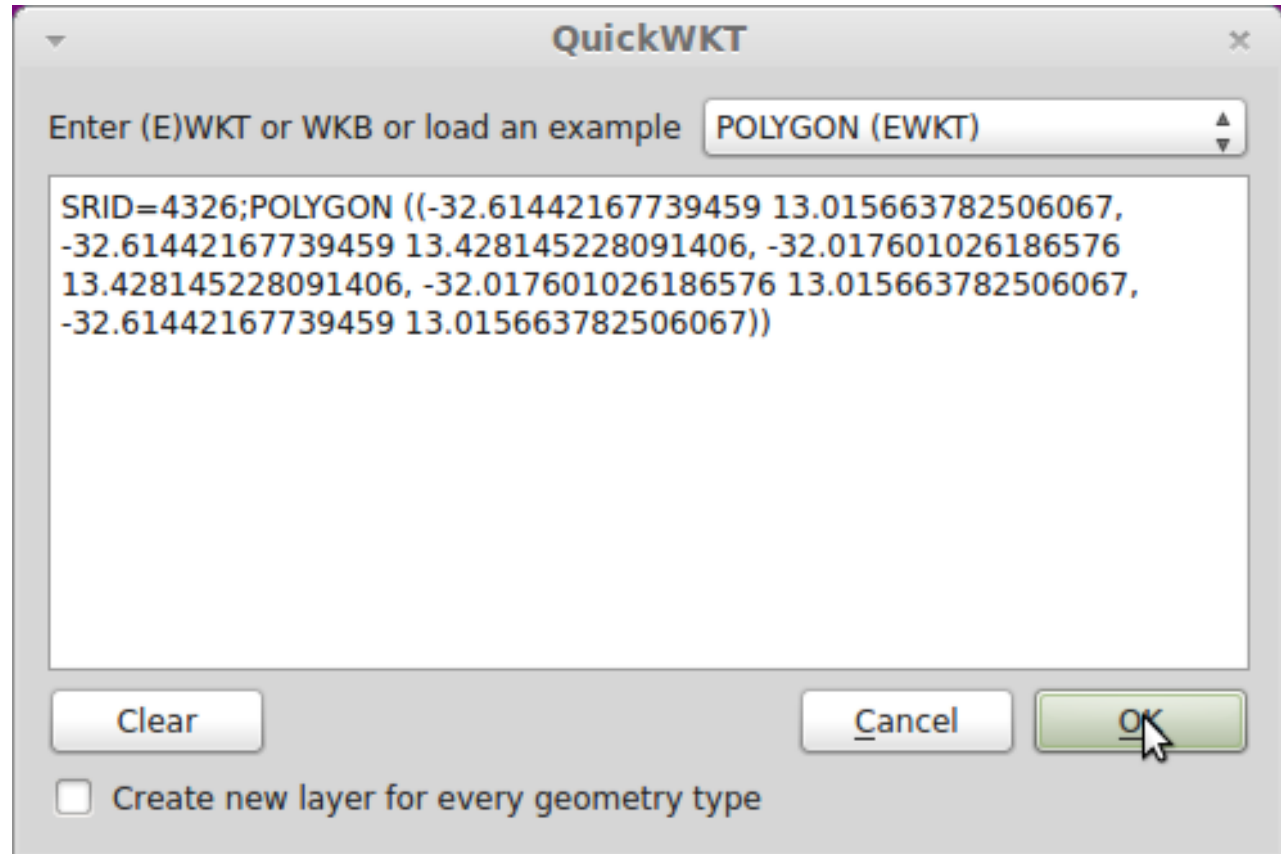
Bestaande kaarten

- Afhankelijk van
coördinatensysteem



Well known text (WKT)

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



Database

- Link van database naar qgis

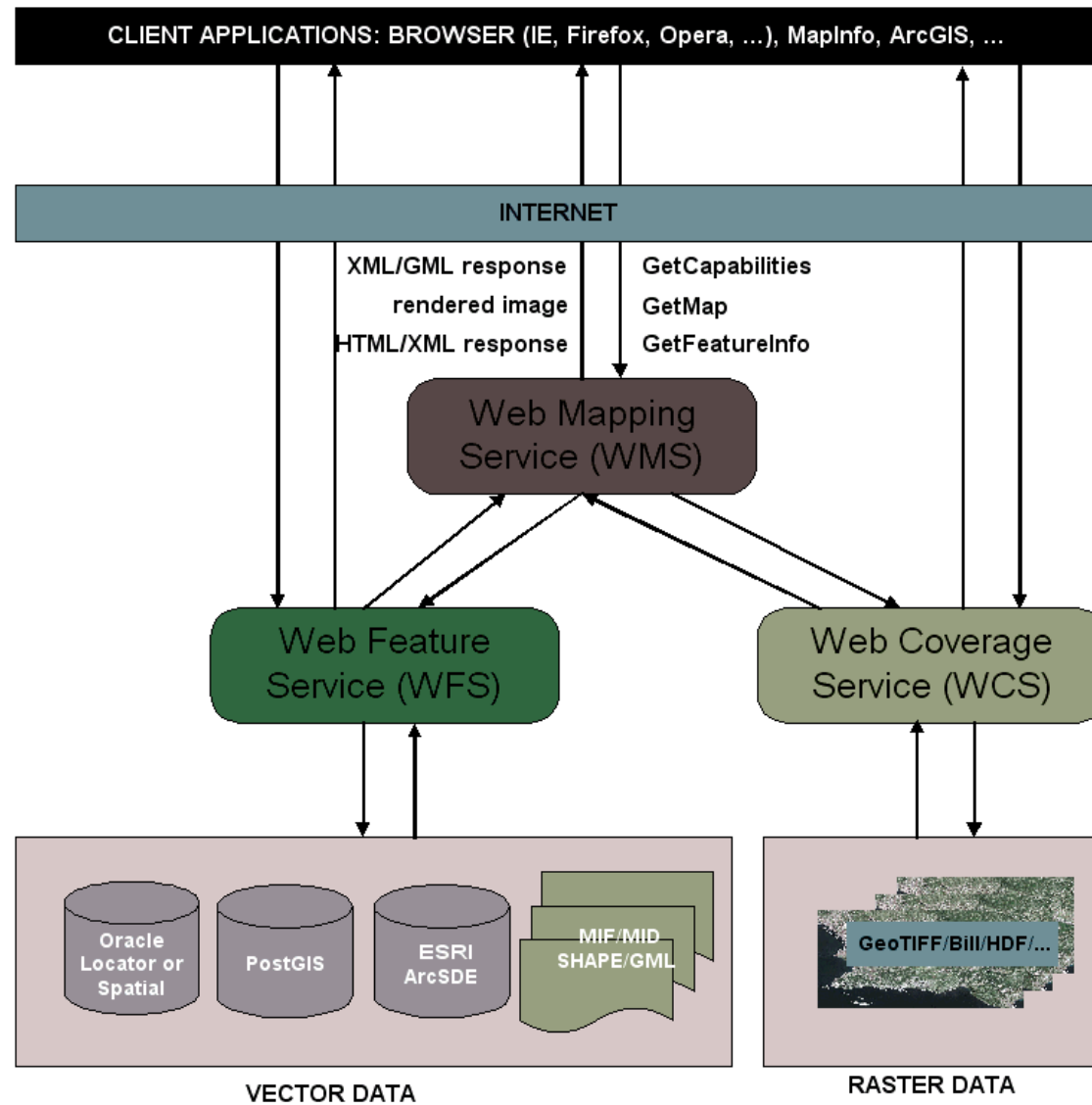


	id [PK] serial	position geometry	red smallint	green smallint	blue smallint
1	1	01010000800	66	71	71
2	2	0101000080A	76	81	84
3	3	01010000803	71	75	78
4	4	01010000808	85	86	90
5	5	01010000804	81	78	79
6	6	01010000801	86	88	90
7	7	0101000080E	74	76	83
8	8	0101000080C	133	139	142
9	9	0101000080F	85	86	90
10	10	01010000805	66	71	74
11	11	0101000080E	72	76	79
12	12	01010000806	86	86	89
13	13	0101000080B	125	130	129
14	14	01010000804	109	111	112
15	15	01010000805	76	81	81
16	16	0101000080F	66	71	74
17	17	01010000808	83	81	88
18	18	0101000080B	94	99	104
19	19	0101000080E	61	65	68
20	20	01010000807	78	81	83
21	21	0101000080A	68	61	61
22	22	01010000809	105	101	106

Database
→



Web-basis



WMS →

WFS →



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	<i>NULL</i>	11	576.000
2068.000	AL020	Built-Up Area	AALZUM	<i>NULL</i>	11	577.000
2072.000	AL020	Built-Up Area	APPINGEDAM	<i>NULL</i>	11	581.000
2087.000	AL020	Built-Up Area	GRONINGEN	<i>NULL</i>	11	596.000
2091.000	AL020	Built-Up Area	LEEWARDEN	<i>NULL</i>	11	600.000
2095.000	AL020	Built-Up Area	FRANEKER	<i>NULL</i>	11	604.000
2097.000	AL020	Built-Up Area	TUINDORP-ONNEN	<i>NULL</i>	11	607.000
2099.000	AL020	Built-Up Area	KONINGSBUURT	<i>NULL</i>	11	609.000
2104.000	AL020	Built-Up Area	HOOGEZAND	<i>NULL</i>	11	614.000
2110.000	AL020	Built-Up Area	WINSCHOTEN	<i>NULL</i>	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