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# **SuperGIS Server 3.3 Functionality Matrix**

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## SuperGIS Server 3.3 Functionality Matrix

SuperGIS Server, a comprehensive and server-based GIS, is designed for the organizations to create, manage, integrate and distribute a variety of GIS resources, such as maps and geodatabases, over the Internet to support desktop, mobile and web applications. SuperGIS Server 3.3 provides 3 editions for users to choose from. Followings are the details of the functionality.

### Overview

	SuperGIS Server 3.3		
	Value	Standard	Advanced
<b>Support for Spatially Enabled Databases</b>	✓	✓	✓
<b>Geodatabase Management</b>	✓	✓	✓
<b>GIS Web Services</b>	✓	✓	✓
<b>*Feature Service</b>	✓	✓	✓
<b>Web Mapping Applications</b>	✓	✓	✓
<b>**Geoprocessing</b>	✓	✓	✓
<b>***Map Cache Tool</b>	✓	✓	✓
<b>Mobile Application SDK</b>		✓	✓
<b>Built-in GIS Extensions</b>			✓

\* The feature service available in Value edition is read-only.

\*\* The geoprocessing services you can publish depend on the edition of SuperGIS Server you have.

\*\*\* SuperGIS Server Map Cache Tool is an independent map cache generating tool provided with SuperGIS Server.

### Support for Spatially Enabled Databases

	SuperGIS Server 3.3		
	Value	Standard	Advanced
<b>Microsoft SQL Server</b>	✓	✓	✓
<b>Microsoft SQL Server Express</b>	✓	✓	✓
<b>Oracle</b>	✓	✓	✓
<b>PostgreSQL</b>	✓	✓	✓



## GIS Web Services

	SuperGIS Server 3.3		
	Value	Standard	Advanced
<b>Geodatabase Replication</b>	☉1	☉1	☉1
<b>Geometry (for geometric calculations such as calculating areas and lengths)</b>	✓	✓	✓
<b>Dynamic Map Services</b>	✓	✓	✓
<b>Cached Map Services</b>	✓	✓	✓
<b>Geoprocessing (for modeling and analysis of spatial data)</b>		✓	✓
<b>Network</b>		☉2	☉2
<b>Mobile (for Windows Mobile)</b>		✓	✓
<b>Keyhole Markup Language (KML)</b>	✓	✓	✓
<b>Web Coverage Service (WCS)</b>	✓	✓	✓
<b>Web Feature Service (WFS)*and Transactional Web Feature Service (WFS-T)</b>	✓	✓	✓
<b>Web Map Service (WMS)</b>	✓	✓	✓
<b>Web Map Tile Service (WMTS)</b>	✓	✓	✓

☉1: It depends on the mechanism of databases.

☉2: Network services can be provided by working with either SuperGIS Network Server 3.3 or SuperGIS Network Analyst.

## Web Mapping Applications

	SuperGIS Server 3.3		
	Value	Standard	Advanced
<b>*Viewer</b>	✓	✓	✓
<b>JavaScript</b>	✓	✓	✓
<b>Flex</b>	✓	✓	✓
<b>Silverlight</b>	✓	✓	✓

\* SuperGIS Server 3.3 provides SuperGIS Mobile Viewer for users to view the map services on Android mobile devices.



## Feature Service

	SuperGIS Server 3.3		
	Value	Standard	Advanced
Read-only	✓	✓	✓
Read and Write		✓	✓

## Geoprocessing

	SuperGIS Server 3.3		
	Value	Standard	Advanced
Geoprocessing	✓	✓	✓
Advanced Geoprocessing			✓

- © Geoprocessing services require the process you define with SuperGIS Toolkit in SuperGIS Desktop. The geoprocessing services you can publish depend on the edition of SuperGIS Server you have. SuperGIS Server Value edition can publish the basic analysis process. SuperGIS Server Standard edition can publish the process defined with SuperGIS Toolkit Standard level, and SuperGIS Server Advanced edition can also publish the additional functions with Professional level tools. The details of the functions provided by SuperGIS Toolkit are listed in Appendix 1, and Supergeo will keep improving and adding more tools to SuperGIS toolkit.

## Mobile SDK

	SuperGIS Server 3.3		
	Value	Standard	Advanced
iOS		✓	✓
Android		✓	✓
Windows Mobile		✓	✓

## Extensions

	SuperGIS Server 3.3		
	Value	Standard	Advanced
Spatial Analyst		Optional	✓
3D Analyst		Optional	✓
Spatial Statistical Analyst		Optional	✓
Network Analyst		Optional	✓
Biodiversity Analyst			✓

- © The functions provided with the extensions for SuperGIS Server are listed in Appendix 2.

**SuperGIS Toolkit**

Functions	Server Value	Server Std.	Server Adv.
<b>Analysis Tools (18)</b>			
Clip	✓	✓	✓
Select	✓	✓	✓
Select By Location	✓	✓	✓
Split			✓
Table Select	✓	✓	✓
Erase			✓
Intersect		✓	✓
Spatial Join		✓	✓
Union		✓	✓
Buffer	✓	✓	✓
Create Thiessen Polygons			✓
Generate Near Table			✓
Multiple Ring Buffer		✓	✓
Near			✓
Point Distance			✓
Frequency			✓
Summary Statistics		✓	✓
Tabulate Intersection			✓
<b>Conversion Tools (20)</b>			
GPX To Feature Class		✓	✓
LAS To ASCII			✓
LAS To Point			✓
LAS To Raster			✓
Raster To ASCII		✓	✓
Raster To Point		✓	✓
Raster To Polygon		✓	✓
Raster To Polyline		✓	✓
WFS To Feature Class		✓	✓
CAD To Feature Class		✓	✓
Feature Class To CAD		✓	✓
Feature Class To Feature Class	✓	✓	✓
Feature Class To Geodatabase	✓	✓	✓
Raster To Geodatabase	✓	✓	✓
Table To Geodatabase	✓	✓	✓



Table To Table	✓	✓	✓
Layer To KML		✓	✓
Map To PDF		✓	✓
ASCII To Raster		✓	✓
Feature To Raster		✓	✓
<b>Data Management Tools (63)</b>			
Create Feature Class	✓	✓	✓
Create Fishnet			✓
Create Random Points			✓
Add Line String	✓	✓	✓
Add Points	✓	✓	✓
Add Polygon	✓	✓	✓
Add XY Coordinates		✓	✓
Copy Features	✓	✓	✓
Delete Features	✓	✓	✓
Feature Attribute To ASCII		✓	✓
Feature Envelope To Polygon			✓
Feature To Line			✓
Feature To Point			✓
Feature To Polygon			✓
Feature Vertices To Points			✓
Locate Points Along Polylines		✓	✓
Multipart To Singlepart		✓	✓
Polygon To Line			✓
Repair Geometry		✓	✓
Split Line At Point			✓
Split Line At Vertices			✓
Unsplit Line			✓
XY To Line		✓	✓
Add Field	✓	✓	✓
Calculate Field	✓	✓	✓
Delete Field	✓	✓	✓
Transpose Time Fields			✓
Append		✓	✓
Merge		✓	✓
Center Line			✓
Dissolve		✓	✓
Simplify Line			✓



Simplify Polygon			✓
Smooth			✓
Project		✓	✓
Flip		✓	✓
Mirror		✓	✓
Project Raster		✓	✓
Rotate		✓	✓
Shift		✓	✓
Define Projection	✓	✓	✓
Clip		✓	✓
Colormap To RGB			✓
Convert Cell Type		✓	✓
Grayscale		✓	✓
Mosaic		✓	✓
NDVI			✓
Pan-sharpen		✓	✓
Resample		✓	✓
Stack Bands		✓	✓
Average Nearest Neighbor		✓	✓
Central Feature		✓	✓
Calculate Areas		✓	✓
Calculate Length		✓	✓
Copy Rows	✓	✓	✓
Create Table	✓	✓	✓
Delete Rows	✓	✓	✓
Get Count	✓	✓	✓
Join Field		✓	✓
Pivot Table			✓
Set Field Value	✓	✓	✓
Build			✓
Clean			✓
<b>Extensions</b>			
3D Analysis Tools (27)		Optional	✓
Network Analysis Tools (19)		Optional	✓
Spatial Analysis Tools (106)		Optional	✓
Spatial Statistical Tools (9)		Optional	✓
Biodiversity Tools (5)			✓



## SuperGIS Extensions

### 3D Analysis Tools

<b>Conversion:</b>	Raster to TIN
<b>Raster Interpolation:</b>	IDW, Trend
<b>Raster Math:</b>	Int, Minus, Divide, Plus, Times
<b>Raster Surface</b>	Aspect, Contour Curvature, Cut/Fill, Hillshade, Slope, Viewshed

### Spatial Analysis Tools

<b>Conditional:</b>	Con, Set Null
<b>Density:</b>	Kernel Density, Line Density
<b>Distance:</b>	Corridor, Cost Allocation, Cost Back Link, Cost Distance, Euclidean Allocation, Euclidean Direction, Euclidean Distance
<b>Extraction:</b>	Extract by Attributes, Extract by Circle, Extract by Mask, Extract by Rectangle, Extract by Polygon, Extract by Point, Extract Values to Points
<b>Generalization:</b>	Aggregate, Boundary Clean, Expand, Majority Filter, Nibble, Region Group, Shrink
<b>Hydrology:</b>	Basin, Fill, Flow Accumulation, Flow Direction, Flow Length, Sink, Snap Pour Point, Stream Link, Stream Order, Watershed
<b>Interpolation:</b>	IDW, Trend
<b>Local:</b>	Cell Statistics, Combine, Equal to Frequency, Greater than Frequency, Less than Frequency, Lowest Position, Popularity, Rank
<b>Math:</b>	Logical: Logic-And, Logic-Not, Logic-Or, Logic-XOr, Logic-Is Null
	Trigonometric: ACos, ACosH, ASin, ASinH, ATan, ATan2, ATanH, Cos, CosH, Sin, SinH, Tan, TanH
	Abs, Ceil, Divide, Exp, Exp10, Exp2, Float, Int, Ln, Log10, Log2, Minus, Mod, Nagate, Plus, Power, Round Down, Round Up, Square, Square Root, Times
<b>Neighborhood:</b>	Focal Flow
<b>Raster Creation:</b>	Create Constant Raster, Create Normal Raster, Create Random Raster
<b>Surface:</b>	Aspect, Contour, Curvature, Cut/Fill, Hillshade, Slope, Viewshed
<b>Zonal:</b>	Zonal Fill, Zonal Geometry, Zonal Geometry as Table, Zonal Statistics, Zonal Statistics as Table

### Network Analysis Tools

<b>Analysis:</b>	Closest Facilities, Cost Matrix, Location Analysis, Service Area, Shortest Path, Superior Route, Vehicle Routing Problem
<b>Locations:</b>	Create Barriers, Create Facilities, Create Incidents, Create Order, Create





	Stops, Create Vehicles
<b>Network Data:</b>	Network
<b>Route Result:</b>	Export to Features, Export Vertices to ASCII

### Spatial Statistical Analysis Tools

<b>Data Analysis:</b>	Field Regression, Field Regression As Table, Field Statistics
<b>Kriging:</b>	Calculate Z-Value, Calculate Z-Value As Raster, Create Distance Search, Create Sample Dataset, Create Statistical Model, Create Statistical Model by Dataset