SuperGIS Server 3 Functionality

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Introduction

SuperGIS Server gives you the ability to manage and integrate GIS resources that you possess. You can host GIS resources on your SuperGIS Server and distribute them as GIS services over the web. Then users can use various client applications, such as SuperGIS Desktop, SuperPad, mobile applications and web applications, to interact with your GIS services.

This document is a guide for illustrating the edition of SuperGIS Server that best fits demands of your organization.

Selecting the Appropriate SuperGIS Server Editions

SuperGIS Server offers three editions for selecting, including Value edition, Standard edition and Advanced edition. In selecting the appropriate SuperGIS Server edition, the demands and capabilities you need are the important references.

If you have the demands listed below, Value edition can fit your needs.

1. I need the geodatabases to store a large quantity of spatial data for my organization and a basic management tool to assist me in managing.
2. I would like to distribute the file-based data or data stored in geodatabases over the Internet to support SuperGIS Desktop, SuperPad or web browsers.
3. I would like to publish maps cohering with OGC standards for using on the SuperGIS Desktop, SuperPad and other software supporting OGC standards.
4. I would like to provide web editing functions for clients to edit and update features via the desktop, mobile or web.
5. I would like to use JavaScript to customize the functions of my GIS website for fitting the needs of my business.
6. I would like to use Adobe Flex and Microsoft Silverlight technologies for creating rich interactive GIS websites.
7. I would like to distribute my maps to Google Earth for overlaying.
8. I would like to integrate seamlessly the services from different servers as my own GIS services to be published.

If you have the demands listed below, Standard edition can fit your needs.

1. I need the advanced spatial processing functionality to help me read spatial data and make spatial decisions. Besides, sometimes I would need to take the data from various servers into consideration at the same time. Also, I need an operation procedure in which the input data might be from various servers or the results of the other operation, and I

might add some custom commands into operation procedure. Moreover, it would be better that the operation procedure can be saved, and I can apply the operation procedure repeatedly.

2. In fact, our organization processes raster data more frequently, and we need remote sensing functionality to help us process the data. Moreover, we also need to publish large quantities of raster data effectively and share the data with other users.
3. I hope to publish 3D terrain data or 3D model to 3D viewer on the front end to display and manipulate.
4. We need to develop our own simple mobile applications but need fewer functions than SuperPad. We need the application which can connect to the spatial data and services from our servers, and the spatial data and services provided by the server can be published rapidly for field surveyors to use.

If you have the demands listed below, Advanced edition can fit your needs.

1. I would like to distribute the capabilities for processing 3D data.
2. I would like to distribute the capabilities for processing biodiversity analysis.
3. I would like to distribute the capabilities for processing network analysis.
4. I would like to distribute the capabilities for processing spatial analysis.
5. I would like to distribute the capabilities for processing spatial statistical analysis.

Functionality Matrix

SuperGIS Server functionality is provided via three editions: Value, Standard and Advanced. In the matrix below, functionality is classified into categories. For more details about each category, see the Functionality Matrix Details section of this document.

Editions / Functionality	**Value**	**Standard**	**Advanced**
Geodatabase Management	◎	◎	◎
GIS Web Services	◎	◎	◎
Web Mapping API	◎	◎	◎
Web Editing	◎	◎	◎
Extensions			◎

Functionality Matrix Details

Geodatabase Management

SuperGIS Server assists you in managing the spatial data stored in a variety of database management systems. With SuperGIS Server, not only you can create, read, manage and load spatial data into geodatabases but also concurrent multiuser are supported to use the spatial data in geodatabases.

	Editions		
Functionality	**Value**	**Standard**	**Advanced**
Geodatabase Management	◎	◎	◎

Three editions support the following database management systems (DBMS):

- Microsoft® Access
- Microsoft® SQL Server®
- Oracle®

GIS Web Services

SuperGIS Server gives you the ability to distribute GIS Web services to share GIS resources and functionality over a local network or the web. Client users can use SuperGIS Desktop, SuperPad and web applications developed by Web Mapping API to obtain the needed spatial information.

The matrix below shows that each edition of SuperGIS Server supports the types of Web services.

	Editions		
Functionality	**Value**	**Standard**	**Advanced**
GIS Web Services			
Feature	◎	◎	◎
Geoprocessing		◎	◎
Image		◎	◎
Globe		◎	◎
Map	◎	◎	◎
KML	◎	◎	◎

WCS	◎	◎	◎
WFS	◎	◎	◎
WMS	◎	◎	◎

- Feature: For web editing
- Geoprocessing: For modeling and analysis of spatial data, including
  - Buffer
  - Dissolve
  - Merge
  - Clip
  - Intersect
  - Union
  - Model Builder (the application for creating geoprocessing models)
- Image: For providing numerous image processing functions, including
  - Classify Pixel
  - Color Map
  - Convert Pixel Type
  - Convolution Filter
  - Extract Bands
  - Grayscale
  - Histogram
  - Image Algebra
  - NDVI
  - Ortho-rectification
  - Pan-sharpen
  - Sampler2D
  - Spectral Matrix
  - Stack Bands
  - Stretching
  - Trend
  - Visualize Elevation
  - Watermark Encryption
  - Merge
  - Mosaic
- Globe: For 3D and globe rendering
- Map: For publishing the cached and optimized map services that can be used in SuperGIS Desktop, SuperPad and Web applications.

- * KML: Keyhole Markup Language, enabling maps distributed by SuperGIS Server to be added into Google Earth
- * WCS: Web Coverage Service
- * WFS: Web Feature Service
- * WMS: Web Mapping Service

* Supports OGC Standards

Web Mapping API

SuperGIS Server provides four types of Web mapping applications for application developers building custom web-based applications. The matrix below shows that each editions of SuperGIS Server provides the types of Web Mapping API.

	Editions		
Functionality	**Value**	**Standard**	**Advanced**
Web Mapping API			
SuperGIS Server API for JavaScript	◎	◎	◎
SuperGIS Server API for Flex	◎	◎	◎
SuperGIS Server API for Silverlight	◎	◎	◎
SuperGIS Server Mobile SDK		◎	◎

- SuperGIS Server API for JavaScript: This API assists you in easily embedding lightweight mapping functionality into a Web application without coding experience.
- SuperGIS Server API for Flex: This API gives you access to services published with SuperGIS Server in applications that use the Adobe Flex framework.
- SuperGIS Server API for Silverlight: This API works with Microsoft Silverlight to allow you to build rich internet applications that perform mapping, queries, and geoprocessing.
- SuperGIS Server Mobile SDK: This API allows developers to customize mobile applications that enable field workers to connect services distributed from SuperGIS Server in the field.

Web Editing

This functionality enables users to edit, create and delete spatial and attribute data stored in the geodatabase via the feature service. Feature services support geodatabase editing across the Internet. Through this service, users can edit and update geo data from the client-end applications listed below:

- Web browsers
- SuperPad
- SuperGIS Desktop

	Editions		
Functionality	**Value**	**Standard**	**Advanced**
Web Editing	◎	◎	◎

Extensions

SuperGIS Server allows you to supplement SuperGIS Server functionality by adding SuperGIS Server Extensions. SuperGIS Server Extensions are only included with SuperGIS Server Advanced edition.

	Editions		
Functionality	**Value**	**Standard**	**Advanced**
Extensions			◎

SuperGIS Server Advanced has the following optional SuperGIS Server Extensions to add more capabilities.

- 3D extension
- Biodiversity extension
- Network extension
- Spatial extension
- Spatial Statistical extension

For more information about SuperGIS Server, visit www.supergeotek.com or contact SuperGeo Reseller in your country or directly email us staff@supergeotek.com.