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SuperGIS Server 3.1a Functionality Matrix

Jan. 2013



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SuperGIS Server 3.1a Functionality Matrix

SuperGIS Server, a comprehensive and server-based GIS, is designed for giving the organizations the ability to create, manage, integrate and distribute a variety of GIS resources over the Internet to support desktop, mobile and web applications. SuperGIS Server 3.1a provides three editions for users to choose; the details of the functionality are listed below.

Overview

| | Su | perGIS Server 3 | 3.1a | AxxGIS Server 10.1 | | |
|-----------------------------------|--------------|-----------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| Support for Spatially Enabled | \checkmark | ✓ | \checkmark | \checkmark | | 1 |
| Databases | v | v | v | v | · · | v |
| Geodatabase Management | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| GIS Web Services | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Web Mapping Applications | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Web Editing | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Geoprocessing | | ✓ | \checkmark | | \checkmark | \checkmark |
| A duama a di Oceanna a constituta | | | | | with | 1 |
| Advanced Geoprocessing | | | v | | extensions | v |
| Mobile Application SDK | | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| *Map Cache Tool | \checkmark | \checkmark | \checkmark | - | - | - |

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

Support for Spatially Enabled Databases

| | Sup | perGIS Server | 3.1a | AxxGIS Server 10.1 | | |
|------------------------------|--------------|---------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| Microsoft SQL Server | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Microsoft SQL Server Express | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Microsoft SQL Azure | | | | \checkmark | \checkmark | \checkmark |
| Oracle | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| PostgreSQL | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Netezza | | | | \checkmark | \checkmark | \checkmark |
| IBM DB2 | | | | \checkmark | \checkmark | \checkmark |
| IBM Informix Dynamic Server | | | | \checkmark | \checkmark | \checkmark |



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GIS Web Services

| | Su | perGIS Server | 3.1a | AxxGIS Server 10.1 | | |
|----------------------------------|--------------|---------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| Geodatabase Replication | ©1 | ©1 | ©1 | \checkmark | \checkmark | \checkmark |
| Feature services (read-only) | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Geometry (for geometric | | | | | | |
| calculations such as calculating | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| areas and lengths) | | | | | | |
| Dynamic Map Services | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Cached Map Services | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Feature services (read and | \checkmark | ✓ | \checkmark | | ✓ | |
| write) | • | v | v | | v | v |
| Geoprocessing (for modeling | | \checkmark | \checkmark | | \checkmark | ~ |
| and analysis of spatial data) | | • | • | | • | • |
| Globe (for 3D and globe | | ⊚2 | ©2 | | \checkmark | \checkmark |
| rendering) | | 82 | <u>©</u> 2 | | • | • |
| Network | | ©3 | ©3 | | | \checkmark |
| Mobile (for Windows Mobile) | | \checkmark | \checkmark | | | \checkmark |
| Keyhole Markup Language | \checkmark | ✓ | \checkmark | | ✓ | \checkmark |
| (KML) | • | • | • | | • | • |
| Web Coverage Service (WCS) | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Web Feature Service (WFS)*and | | | | | | |
| Transactional Web Feature | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Service (WFS-T) | | | | | | |
| Web Map Service (WMS) | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Web Map Tile Service (WMTS) | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |

 $\odot\ensuremath{1}$: It depends on the mechanism of databases.

©2: Globe services can be supported by working with SuperGIS 3D Earth Server that will be released by the end of 2012.

◎3: Network services can be provided by working with either SuperGIS Network Server 3.1a or SuperGIS Network Analyst.



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Web Mapping Applications

| | SuperGIS Server 3.1a | | | AxxGIS Server 10.1 | | |
|-------------|----------------------|--------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| *Viewer | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| JavaScript | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Flex | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Silverlight | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |

* SuperGIS Server 3.1a provides SuperGIS Mobile Viewer for users to view the map services on Android mobile devices.

Web Editing

| | SuperGIS Server 3.1a | | | AxxGIS Server 10.1 | | |
|-------------------|----------------------|--------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| Feature Services | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |
| Geometry Services | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |

Geoprocessing

| | SuperGIS Server 3.1a | | | AxxGIS Server 10.1 | | |
|------------------------|----------------------|--------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| Geoprocessing | | \checkmark | \checkmark | | \checkmark | \checkmark |
| | | | | | With | |
| Advanced Geoprocessing | | | v | | extensions | v |

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 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 SuperGIS toolkit.



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Mobile SDK

| | SuperGIS Server 3.1a | | | AxxGIS Server 10.1 | | |
|----------------|----------------------|--------------|--------------|--------------------|--------------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| iOS | | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Android | | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| | | ✓ | | | | Included in |
| | | | \checkmark | | Enterprise: | Enterprise |
| Windows Mobile | | | v | | optional | optional in |
| | | | | | | workgroup |
| Windows Phone | | | | \checkmark | \checkmark | \checkmark |

Extensions

| | SuperGIS Server 3.1a | | AxxGIS Server 10.1 | | | |
|-----------------------------|----------------------|----------|--------------------|-------|----------|--------------|
| | Value | Standard | Advanced | Basic | Standard | Advanced |
| Spatial Analyst | | Optional | \checkmark | | | \checkmark |
| 3D Analyst | | Optional | \checkmark | | | \checkmark |
| Spatial Statistical Analyst | | Optional | \checkmark | | | \checkmark |
| Network Analyst | | Optional | \checkmark | | Optional | \checkmark |
| Biodiversity Analyst | | Optional | Optional | - | - | - |

 \bigcirc The functions provided with the extensions for SuperGIS Server are listed in Appendix 2.



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SuperGIS Toolkit

| E se l'assellites | | Desktop Std. | Desktop Pro. | |
|-----------------------------|--------------|-----------------|-----------------|--|
| Functionalities | Server Value | Server Standard | Server Advanced | |
| Analysis Tools | | | | |
| Clip | ✓ | √ | \checkmark | |
| Select | ✓ | √ | \checkmark | |
| Table Select | ~ | ✓ | ✓ | |
| Erase | | | ✓ | |
| Intersect | | ✓ | ✓ | |
| Union | | ✓ | ✓ | |
| Buffer | ~ | ✓ | ✓ | |
| Create Thiessen Polygons | | | \checkmark | |
| Conversion Tools | | | | |
| Raster To ASCII | | √ | \checkmark | |
| Raster To Point | | √ | \checkmark | |
| Raster To Polygon | | √ | \checkmark | |
| Raster To Polyline | | √ | \checkmark | |
| ASCII To Raster | | √ | \checkmark | |
| Feature To Raster | | ✓ | ✓ | |
| Data Management Tools | | | | |
| Create Feature Class | ✓ | √ | ~ | |
| Add Line String | ✓ | √ | \checkmark | |
| Add Points | ✓ | √ | \checkmark | |
| Add Polygon | ✓ | √ | \checkmark | |
| Add XY Coordinates | | √ | \checkmark | |
| Copy Features | ✓ | √ | \checkmark | |
| Delete Features | ✓ | √ | \checkmark | |
| Feature Attribute To ASCII | | √ | \checkmark | |
| Feature Envelope To Polygon | | | \checkmark | |
| Feature To Line | | | \checkmark | |
| Feature To Point | | | \checkmark | |
| Feature To Polygon | | | \checkmark | |
| Feature Vertices To Points | | | \checkmark | |
| Multipart To Singlepart | | \checkmark | \checkmark | |
| Polygon To Line | | | \checkmark | |



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| Repair Geometry | | ~ | \checkmark |
|--------------------------|---|--------------|--------------|
| Split Line At Point | | | \checkmark |
| Split Line At Vertices | | | \checkmark |
| Add Field | ✓ | ✓ | \checkmark |
| Delete Field | ✓ | ✓ | \checkmark |
| Merge | | ✓ | ✓ |
| Dissolve | | ✓ | \checkmark |
| Simplify Line | | | \checkmark |
| Simplify Polygon | | | \checkmark |
| Project | | ✓ | \checkmark |
| Flip | | ✓ | \checkmark |
| Mirror | | ✓ | \checkmark |
| Project Raster | | ✓ | \checkmark |
| Rotate | | ✓ | \checkmark |
| Shift | | ✓ | ✓ |
| Clip | | ✓ | \checkmark |
| Convert Cell Type | | ✓ | \checkmark |
| Grayscale | | ✓ | \checkmark |
| Mosaic | | ✓ | \checkmark |
| NDVI | | | \checkmark |
| Pan-sharpen | | ✓ | \checkmark |
| Resample | | \checkmark | \checkmark |
| Spatial Statistics Tools | | | |
| Calculate Areas | | \checkmark | \checkmark |
| Calculate Length | | \checkmark | \checkmark |
| Extensions | | | |
| 3D Analysis Tools | | Optional | Optional |
| Spatial Analysis Tools | | Optional | Optional |
| Network Analysis Tools | | Optional | Optional |



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SuperGIS Extensions

3D Analysis Tools

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

Spatial Analysis Tools

| Conditional: | Con, Set Null | | | | |
|------------------|---|--|--|--|--|
| Density: | Kernel Density, Line Density | | | | |
| | Corridor, Cost Allocation, Cost Back Link, Cost Distance, Euclidean | | | | |
| Distance: | Allocation, Euclidean Direction, Euclidean Distance | | | | |
| | Extract by Attributes, Extract by Circle, Extract by Mask, Extract by | | | | |
| Extraction: | Rectangle, Extract by Polygon, Extract by Point, Extract Values to | | | | |
| | Points | | | | |
| Generalization: | Aggregate, Boundary Clean, Expand, Majority Filter, Nibble, | | | | |
| Generalization: | Region Group, Shrink | | | | |
| Hydrology | Basin, Fill, Flow Accumulation, Flow Direction, Flow Length, Sink, | | | | |
| Hydrology: | Snap Pour Point, Stream Link, Stream Order, Watershed | | | | |
| Interpolation: | IDW, Trend | | | | |
| | Cell Statistics, Combine, Equal to Frequency, Greater than | | | | |
| Local: | Frequency, Less than Frequency, Lowest Position, Popularity, | | | | |
| | Rank | | | | |
| | Logical: Logic-And, Logic-Not, Logic-Or, Logic-XOr, Logic-Is Null | | | | |
| | Trigonometric: ACos, ACosH, ASin, ASinH, ATan, ATan2, ATanH, | | | | |
| Math: | 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 | | | | |
| Neighborhood: | Focal Flow | | | | |
| Raster Creation: | Create Constant Raster, Create Normal Raster, Create Random | | | | |
| Raster Creation. | Raster | | | | |
| Surface: | Aspect, Contour, Curvature, Cut/Fill, Hillshade, Slope, Viewshed | | | | |
| Zonal: | Zonal Fill, Zonal Geometry, Zonal Geometry as Table, Zonal | | | | |
| 2011a1. | Statistics, Zonal Statistics as Table | | | | |



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Network Analysis Tools

| Analysis: | Closest Facilities, Cost Matrix, Location Analysis, Service Area, |
|---------------|---|
| | Shortest Path, Superior Route, Vehicle Routing Problem |
| Locations: | Create Barriers, Create Facilities, Create Incidents, Create Order, |
| | Create Stops, Create Vehicles |
| Network Data: | Network |
| Route Result: | Export to Features, Export Vertices to ASCII |