



DELAWARE STATE-WIDE INFORMATION TECHNOLOGY AND ARCHITECTURE STANDARDS

Standard ID:	IN-GIS-001
Title:	Geographic Information Systems
Domain:	Information
Discipline:	GIS
Revision Date:	10/10/2016
Revision no.:	6
Original date:	02/08/2007

I. Authority, Applicability and Purpose

- A. **Authority:** Title 29, Chapter 90C provides broad statutory authority to the Department of Technology and Information to implement statewide and interagency technology solutions, policy, standards and guidelines for the State of Delaware's technology infrastructure. "Technology" means computing and telecommunications systems, their supporting infrastructure and interconnectivity used to acquire, transport, process, analyze, store and disseminate information or data electronically. The term "technology" includes systems and equipment associated with e-government and Internet initiatives.
- B. **Applicability:** Applies to all State of Delaware communications and computing resources. DTI is an Executive Branch Agency and has no authority over the customers in Legislative and Judicial Branches, as well as School Districts, and other Federal and Local Government entities that use these resources. However, all users, including these entities, must agree to abide by all policies, standards promulgated by DTI as a condition of funding, access and continued use of these resources.
- C. **Purpose:** – Due to the importance of geographic information systems in State functions, including the management of resources and the sharing of information, it is necessary to establish acceptable parameters for the storage, transmission and processing of geospatial data. This standard specifies the software products to be employed by the State of Delaware in its use of Geographic Information Systems (GIS) to manage Geospatial Data.

II. Scope

- A. **State of Delaware** – All geographic information system software, regardless of whether internal or external State facing.
- B. **Areas Covered** – All storage, transmission and processing of geospatial information by the State of Delaware.
- C. **Environments** – Data base servers, means of communication, GIS workstations, and GIS processes.

These standards are adopted by the Department of Technology and Information (DTI), through the Technology and Architecture Standards Committee (TASC), and are applicable to all Information Technology use throughout the State of Delaware. Any questions or comments should be directed to dti_tasc@state.de.us.



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- D. This standard applies to the use of geographic and geospatial data and information system tools and technologies.
- E. This standard does not apply to specialized products or extensions used for specific purposes or requirements by Federal agencies.
- F. Contractors or other third parties performing the work at a State site are required to comply with these standards. When contractors are exclusively working off-site and they are creating or updating GIS data only, they are not bound by the *Component* section of this standard.

III. Process

- A. **Adoption** – These standards have been adopted by the Department of Technology and Information (DTI) through the Technology and Architecture Standards Committee (TASC) and are applicable to all Information Technology use throughout the state of Delaware.
- B. **Revision** – Technology is constantly evolving; therefore the standards will need to be regularly reviewed. It is the intent of the TASC to review this standard annually. The TASC is open to suggestions and comments from knowledgeable individuals within the state, although we ask that they be channeled through your Information Resource Manager (IRM).
- C. **Contractors** – Contractors or other third parties are required to comply with these standards when proposing technology solutions to DTI or other state entities. Failure to do so could result in rejection by the Delaware Technology Investment Council. For further guidance, or to seek review of a component that is not rated below, contact the TASC at dti_tasc@state.de.us.
- D. **Implementation responsibility** – DTI and/or the organization's technical staff will implement this standard during the course of normal business activities, including business case review, architectural review, project execution and the design, development, or support of systems.
- E. **Enforcement** – DTI will enforce this standard during the course of normal business activities, including business case and architectural review of proposed projects and during the design, development, or support of systems. This standard may also be enforced by others during the course of their normal business activities, including audits and design reviews.
- F. **Contact us** – Any questions or comments should be directed to dti_tasc@state.de.us.

IV. Definitions/Declarations

A. Definitions

1. "Geospatial data or information" means data or information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the earth. This information may be derived from, among other things, remote sensing, mapping, and surveying technologies.

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2. “Geographic Information System” and “GIS” both mean a system for capturing, storing, analyzing, and managing data and associated attributes which are spatially referenced to the earth.
3. Classifications of GIS tools and technologies
 - Store – The storage of GIS information in electronic format.
 - Analyze – An examination of a geospatial data or information in order to provide new information from what is already known.
 - Manage – Facilitates the collection, storage, publication and use of metadata, geospatial data files and related information.
 - Capture – Any operation that converts geospatial data or information into computer readable form.
 - Display – Any operation that allows a user to view geospatial data or information.

B. Declarations

1. This standard speaks to software products and not data. Please refer to the State of Delaware Standards and Policies page for data-specific policies and standards.
2. The coordination and promotion of GIS software and tools among all levels of government is essential to the efficient and smooth provision of government services to the people of the state of Delaware.
3. Geospatial data and information should be maintained and published in such a manner that they are readily available to all appropriate data users to support state and local government functions.
4. Products listed as “Limited Support” are used in State organizations that MAY be able to offer limited assistance for these products.
5. The Delaware Geographic Data Committee consists of representatives of the State organizations who may have some experience with the products rated as “Limited Support”.



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V. Definition of Ratings

COMPONENT RATING	USAGE NOTES
STANDARD – DTI offers internal support and/or has arranged for external vendor support as well (where applicable). DTI believes the component is robust and solidly positioned in its product life cycle.	These components can be used without explicit DTI approval for both new projects and enhancement of existing systems.
DECLINING – Deprecated - DTI considers the component to be a likely candidate to have support discontinued in the near future. A deprecated element is one becoming invalid or obsolete.	Via the State's waiver process, these components must be explicitly approved by DTI for all projects . They must not be used for minor enhancement and system maintenance without explicit DTI approval via the State's waiver process.
DISALLOWED – DTI declares the component to be unacceptable for use and will actively intervene to disallow its use when discovered.	No waiver requests for new solutions with this component rating will be considered.

- A. Missing Components** – No conclusions should be inferred if a specific component is not listed. Instead, contact the TASC to obtain further information.



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VI. Component Assessments

#	Component	Rating	Comments
<u>1</u>	ESRI Software ⁱ		
a)	ArcGIS Desktop	Standard	Used to Analyze, Capture, Store, Display, Manage Includes ArcInfo, ArcEditor, ArcView, ArcReader, ArcWorkstation, ArcGIS Extensions When in General Availability
		Declining	When in Extended Support or Mature Support
		Disallowed	When retired
b)	ArcGIS Server	Standard	Used to Analyze, Capture, Display, Manage Includes ArcExplorer and ArcSDE When in General Availability
		Declining	When in Extended Support or Mature Support
		Disallowed	When Retired
c)	ArcIMS	Disallowed	Retired

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#	Component	Rating	Comments
d)	ArcSDE 9.1 & below	Disallowed	Retired
e)	ArcPAD	Standard	Used to Capture, Display When in General Availability
		Declining	When in Extended Support or Mature Support
		Disallowed	When Retired
f)	ArcGIS Engine Runtime	Standard	Used to Analyze, Capture, Manage When in General Availability
		Declining	When in Extended Support or Mature Support
		Disallowed	When Retired
	ArcGIS Runtime SDK's	Standard	Used to Analyze, Capture, Manage When in General Availability
		Declining	When in Extended Support or Mature Support
		Disallowed	When Retired
g)	ArcView 3.x	Disallowed	Used to Analyze, Display, Manage
h)	PC Arc/Info /DAK	Disallowed	Retired
i)	SDE 3.x	Disallowed	Retired - replaced by ArcSDE

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#	Component	Rating	Comments
j)	ArcExplorer	Disallowed	Retired
k)	MapObjects	Disallowed	Used to Analyze, Capture Mature Support - Retired
l)	ArcGIS Online	Standard	Used to Analyze, Capture, Display, Manage. Standard for discovery and for web mapping applications, but not for storing data.
m)	ArcGIS API for Javascript Mapping	Standard	API that allows for the Display, query and geoprocessing of data and used to build custom web applications
n)	ArcGIS API for Silverlight Mapping	Declining	In mature support with Esri, retiring on 6/1/2016
o)	ArcGIS API for FLEX	Declining	In mature support with Esri, retiring on 6/1/2016

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#	Component	Rating	Comments
<u>2</u>	Bentley	Standard	
a)	Microstation	Standard	Used to Analyze, Capture, Store, Display
b)	Bentley Map	Standard	Used to Display
c)	Fiber	Standard	Used to Capture, Display
<u>3</u>	HEXAGON/Intergraph (Geomedia) Version 2015 SP1	Standard	Used to Analyze, Capture, Manage When in General Availability
		Declining	When in Extended Support or Mature Support
		Disallowed	Allowed for application use only. Retired for Desktop use 1/1/13
<u>4</u>	MapInfo	Declining	Used to Analyze, Capture, Store, Display, Manage
<u>5</u>	Oracle Spatial	Standard	Used to Analyze, Capture, Store, Display, Manage
<u>6</u>	SQL Server Spatial	Standard	Used to Analyze, Store
<u>7</u>	AutoDesk	Declining	Used to Analyze, Capture, Store, Display, Manage Not recommended for web publication because of ActiveX requirements
<u>8</u>	ERDAS Imagine	Declining	Used to Analyze, Capture, Display, Manage
<u>9</u>	Maptitude	Declining	Used to Analyze, Capture, Store, Display, Manage
<u>11</u>	Google Maps API	Standard	Used to Display
<u>12</u>	Google Earth	Standard	Used to Analyze, Capture, Display

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¹ For ESRI products only:
Support levels correspond with ESRI's product life cycles, which can be found at:
<http://downloads2.esri.com/support/TechArticles/ProductLifeCycle.pdf>
<http://help.arcgis.com/en/shared/product-life-cycle/ProductLifeCycle.pdf>

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