

State Agency Internet/Intranet Mapping Application Process, Standards and Guidelines

An increasing number of state agencies are using internet mapping to serve GIS applications to the public and agency staff. The GIS Technical Committee expects the development of both internet and intranet mapping applications to increase rapidly over the next few years. Recognizing that the technology and existing infrastructure present many opportunities for state agencies to partner in the development of internet/intranet mapping applications and to share resources, the Committee has developed standards and guidelines for the development of internet/intranet mapping applications. A general standard process to guide application development has also been developed. A standing subcommittee, i.e., IMS Subcommittee, of the GIS Technical Committee will guide the implementation and evolution of the process, standards and guidelines. The IMS Subcommittee will consider waivers to the standards and guidelines on a case-by-case basis.

1) Standards and Guidelines

1. Preliminary plans for application development must be documented and posted on the MeGIS website prior to the initiation of development. This includes the development of specific tools or functions that may be useful to other agencies. An email must be sent to the GIS Technical Committee to announce the proposed development and the document should be updated once the development is complete. New internet map services will be published on the MeGIS “Maps” web page to facilitate discovery of existing services.
2. The application will use the graphical user interface framework and tools established by the IMS Subcommittee. The application’s graphical user interface will include a link to metadata for all geospatial data included in the IMS applications
3. Geospatial data will not be duplicated for the purposes of application development. Applications will draw from published geospatial data sources being managed directly or indirectly by the owner to ensure that correct and current data is viewed.

MeGIS will make standard performance driven generalized base map layers and documentation required by the IMS Subcommittee available in SDE format for agencies and their contractors to use for application development. Agencies must contribute any additional “generalized layers” with the documentation required by the IMS Subcommittee.

4. The standard geospatial data format for IMS applications is SDE or Oracle Spatial format.

5. All data being published through IMS must be published for download with full metadata through the MeGIS data catalog unless the data source is protected by statute or has been deemed to be sensitive by the GIS Executive Council.
6. Agencies will establish guidelines for the use and representation of agency data through Internet mapping applications and internet map services. Agencies will establish standard cartography/symbology for agency geospatial data to be used in internet mapping applications. The geospatial data will be published as an internet map service including appropriate ISO keywords.
7. Agencies will use existing agency internet map services for applications. Agencies will not duplicate existing internet map services including MeGIS base map services without the approval of the producing.
8. The application must be documented such that third party developers can undertake data updates and the migration of applications to higher revisions of the supporting software (e.g., ArcIMS, ArcSDE), Oracle Spatial) without unnecessary rework or research.

2) Process for application development:

Step 1 Complete and post the “IMS Application Document”

Step 2 Notify the GIS Technical Committee about the proposed application.

Step 3 Meet with MeGIS and other affected agencies to discuss usage of existing geospatial map services and arrangements for hosting the application.

Step 4 Application development

Step 5 Update IMS Application Document and publish new internet map services, if any.

IMS Application Documentation – draft version

Agency Bureau/Division/Office

Primary Contact Phone

Email

Application Name

Intranet application Internet application

Targeted audience & estimated number of users:

Status

in production in development/testing being planned

If in production, the url is

Public access Secure login

Platform

ArcIMS other:

Out-of-the-box application of software custom application

Type of Client

HTML Java Other

If customized, programming languages used

HTML Visual basic Java others:

Type of Virtual Server

Imager Feature Metadata

Application resides on

MeGIS server Agency server

Source database for basemap – more than one can be checked off

ArcSDE (MeGIS) ArcSDE (agency) Oracle Spatial
(agency)
 MeGIS map service

Source database for other GIS thematic layers – more than one can be checked off

ArcSDE (MeGIS) ArcSDE (agency) Other (specify)

Application draws from databases on servers not addressed above? Yes No

If yes: database software:

contents:

location:

Developers(list below):

in-house

consultant

Name

Phone

Email

