

# Thinking Outside the Box

— Linking Map Features to Documents



eB GIS-Connect



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Does your organization use Geographical Information Systems (GIS)?

Are you under constant and increasing pressure to improve the service you provide?

Are you being asked to do more work with the same or fewer resources than previously?

Do you want to minimize operational risk?

If so, get excited about eB GIS-Connect — an application from Spescom Software that is designed to help you make more efficient use of your most valuable resource — time.

Imagine sitting in front of an Internet Browser open into your GIS system. You can see a wealth of information about the location of buildings, landscape topology, schematics of services such as underground gas mains and telephone cables, the position of roads, signal boxes, bridges and so on. What you won't see however, is information about the layout of a building, fire exits, lift shafts, details of the activities taking place in the building, the presence of hazardous substances, geologists' reports on the land itself, a history of planning applications for the site, facilities for tourists, and a hundred and one other items of information that you may need to do your job.

Today you either have to log into a different facility, possibly a document repository or database, or go to a paper archive or even worse send for archive information that is held off site. This has an impact on your time and can be frustrating, especially when both sets of information are already stored somewhere in the computer system. What you would really like to be able to do is simply click on the building or site in the GIS system and automatically drill down into a list of documents, drawings and schematics that contain the information you need.

Now Spescom Software has integrated eB, its suite of integrated document and configuration management solutions with ESRI's ArcIMS 3 mapping software which is part of the ArcGIS 8.0 suite. This allows you to get all the information you need about a

particular asset by starting from a map. Type in a grid reference or the name of a region and mouse click on a map item, for instance, an electricity sub station. The system will then produce a list of all the assets associated with the sub station building. By clicking on say, transformers, all of the documents, drawings, schematics, parts lists and so on, associated with them will be displayed.

If you want to work the other way around, you can. So, if you have to modify all transformers of a particular type, you can start from the functional specification of the transformer and get the system to identify all the locations with which this document is associated.

Spescom Software has called this new application eB GIS-Connect and it is designed to save you and your organization time and money, by helping you improve personal productivity, minimizing operational risk and in the case of the emergency services, perhaps making the difference between life and death.

## The Customer Experience

Customers already using eB GIS-Connect include local and state government organizations, energy and water utilities and the emergency services. The benefits they have derived from using eB GIS-Connect are extensive and include the following:

**Instantaneous retrieval of maps and associated documents** — in the past, research for maps plus associated documents typically took 1.5 days. With eB GIS-Connect, rapid access to documents in context to map information has resulted in an improvement in retrieval time to 4 hours per project.

**Cost savings** — immediate access to documents from the map interface means increased staff productivity and reduced photocopying and distribution costs.

**Reduced operational risk** — the ability to find all of the documents that are in context to a particular map feature, whether it's a road, a bridge, a building or something else and to find them in seconds can be critically important, especially in emergency situations.

**Lower levels of staff turnover** — the ease with which documents can be retrieved by navigating a map and clicking on the desired location, rather than having to move to a different system where users need to know document reference numbers, has resulted in increased job satisfaction and improved staff morale.

**Smoother business processes** — information is available anywhere, anytime, even if someone else is using it. Located within a secure document repository, documents can be viewed by authorized users simultaneously and because documents are accessed via a Web browser, users no longer need to travel to a central point or wait for photocopies to be sent to them. The access facility can also be extended to suppliers, sub contractors and customers.

**Improved quality of decision making** — rapid access to information has encouraged individuals at all levels of the organization to carry out their own informal research projects prior to making decisions. Adding the geographic dimension in context to the documents makes it possible to see the relationship visually and make more effective, timely decisions.

**Increased levels of customer satisfaction** — customers, both internal and external, receive the correct information, quickly and conveniently.

**“As a local government organization, City of Winston-Salem is constantly looking at ways to improve services to the public and improve efficiency and productivity within its own departments. Spescom Software's GIS-Connect technology is expected to significantly contribute to these objectives. It's easy ability to link documents with spatial information such as maps and, vice versa, to link maps with documents, will enable users to locate important and often vital information fast. This technology will definitely add substantial value to our existing document management and GIS systems.”**

City of Winston-Salem



*With eB GIS-Connect you can select map data and find related documents quickly and easily.*



*eB GIS-Connect's powerful document viewing capability offers enhanced detail and clarity.*



## About Spescom Software

Spescom Software develops robust, scalable and highly innovative solutions that manage, control and disseminate the knowledge contained within an organization's documents, enabling our customers to gain e-business competitive advantage. We are leaders in providing a comprehensive set of tools and applications that enable our customers, partners and ourselves to rapidly define and deploy integrated solutions that capture, organize, store and provide rapid access to accurate information in the context of customers, assets, products and processes.

Spescom Software designs its solutions to allow users to work intuitively, to work from the familiar to the unfamiliar. The eB GIS-Connect application achieves this by allowing those users more familiar with maps to work from maps to documents and vice versa, for those who are more at home with documents.

## eB GIS-Connect Technical Specifications

### System Requirements

GIS-Connect is an application that combines ArcIMS 3.0 or higher, and eB Version 12.4

### Hardware Configuration

eB Application Server with Web Connect and Web Server/Manager

eB Database Server

ArcIMS Application Server

ArcIMS Spatial Server

GIS-Connect clients

All ArcIMS components (typical installation connecting to existing eB Servers)

### System Software

#### Operating System

Microsoft Windows NT-Intel® 4.0 with Service Pack 6a, and Option Pack or Windows 2000® (hereafter collectively referred to as Windows)

### Web Server

Web server is mandatory.

GIS-Connect is fully supported on these web servers:

Microsoft IIS 4.0 for Windows NT Server using a

Servlet Engine

Microsoft IIS 5.0 for Windows 2000 using a Servlet Engine

*Note:* Microsoft Personal Web Server is not supported.

### Database

The eB Version 12.2 Database Server supports the following SQL Databases:

Oracle for NT 8.1.7

Microsoft SQL Server 7.0 with Service Pack 2 or

Microsoft SQL Server 2000

### Middleware

The eB Version 12.4 Application Server requires the following components:

Microsoft Message Queue Server

Microsoft Transaction Server Version 2.0 or higher

### Getting Started

#### Servlet Engine

The ArcIMS components of GIS-Connect requires a Servlet Engine if the web server does not support servlets natively.

### Java Runtime Environment

JRE is a prerequisite for installing ArcIMS. JRE 1.3 is included on the ArcIMS CD.

### Web Browser for GIS-Connect

Microsoft Internet Explorer 5.5

### Spescom Software, Inc.

9339 Carroll Park Drive  
San Diego, CA 92121 USA  
Tel: +1 (858) 625 3000  
Toll Free: +1(800) 992 6784  
Facsimile: +1 (858) 546 7671  
www.spescomsoftware.com  
email: info-us@spescom.com

### Spescom Software Ltd

Spescom House  
53-55 Uxbridge Road  
Ealing, London W5 5SA UK  
Tel: +44 (0) 20 8231 2800  
Facsimile: +44 (0) 20 8231 2830  
www.spescomsoftware.co.uk  
email: info-uk@spescom.com

### Spescom Software SA

Spescom Park, Cnr. Alexandra  
Avenue & Second Road, Halfway  
House, Midrand 1685 South Africa  
Telephone +27 (11) 266 1500  
Facsimile +27 (11) 266 1555  
www.spescomsoftware.co.za  
email: info-sa@spescom.com