What is the target audience for FieldSeeker® GIS for Mosquito Control?

FieldSeeker® GIS for Mosquito Control serves the needs of small, medium, and large mosquito control and public health operations but is especially targeted towards enterprise customers. Operations with the following characteristics or needs will benefit from FieldSeeker GIS for Mosquito Control:

• Distributed offices that need to share and edit data concurrently
• Large operations that would experience bottlenecks having to cable up mobile devices to a particular PC to download data
• Need for concurrent data synchronization with mobile devices, possibly wirelessly
• Need for occasional or constant real-time data communication between the office and mobile workers
• Need for a platform for smartphone and Web GIS applications to leverage GIS capabilities without requiring monolithic desktop GIS application
• Need for a platform for hosted data and software applications to reduce capital costs

Will FieldSeeker GIS for Mosquito Control replace Sentinel® GIS?

No. Sentinel GIS continues to be sold, supported, and developed.

Will FieldSeeker GIS for Mosquito Control replace VCMS®?

Yes. Sentinel GIS and FieldSeeker GIS for Mosquito Control have replaced VCMS.

VCMS will continue to be technically supported until 2015. However, no further enhancements or software development will take place for VCMS.

Sentinel GIS continues to be enhanced and developed. Many VCMS users can convert to Sentinel GIS and have all their needs met. See VCMS Conversion Software and Migration Services FAQ for more information (available from Electronic Data Solutions®).

FieldSeeker GIS for Mosquito Control provides a platform solution for VCMS users that is not subject to the limitations of Sentinel GIS. It will serve the needs of large to very large operations. As a hosted solution, it will also serve the needs of small to medium operations.

What Conversion and Migration options are available if I am using VCMS, Sentinel GIS, or DataMaster?

Software conversion and migration services are available from Electronic Data Solutions for current users of VCMS, Sentinel GIS, or DataMaster. For more information, please see the appropriate Conversion and Migration Services FAQ for each software. Please talk to your FieldSeeker GIS sales representative to explore your options and needs.

Will VCMS Software Conversion & Migration Services be available for FieldSeeker GIS for Mosquito Control?

Yes. Data migration will be required from a VCMS database to an SDE geodatabase and FieldSeeker GIS for Mosquito Control database schema.

Some implementation will be required, including installing and configuring ArcGIS® for Server, publishing a map, publishing an ArcGIS for Windows® Mobile service, deploying the Web application, and setting up the mobile devices.

What conversion will be required from Sentinel GIS to FieldSeeker GIS for Mosquito Control?

Some data migration will be required from file geodatabases and current Sentinel GIS database schema to an SDE geodatabase and FieldSeeker GIS for Mosquito Control database schema.

Some implementation will be required, including installing and configuring ArcGIS for Server, publishing a map, publishing an ArcGIS for Windows Mobile service, deploying the Web application, and setting up the mobile devices.

Conversion options from Sentinel GIS to FieldSeeker GIS for Mosquito Control are available.

FieldSeeker Software Comparison

What are the similarities and differences between FieldSeeker GIS for Mosquito Control and Sentinel GIS?

Sentinel GIS is primarily desktop-centric and the mobile portion is built on ArcPad® software. This architecture has certain limitations, including:

• No concurrent or wireless data synchronization – cabled connection to a PC with Sentinel GIS software components (DataLink GIS in particular) is required
• No real-time communication between office and field software
• No ability to provide hosted or cloud-based software solutions

Sentinel GIS is compatible with Esri® SDE technology. SDE (the multi-user geodatabase) does address some of the needs of large to very large operations, including:

• Multiple data viewers and editors can be accessing the data at the same time
• Database versioning, replication, and archival
• Compatibility with standard RDBMS such as SQL Server, Oracle, etc.

SDE technology is part of ArcGIS for Server. Therefore, Sentinel GIS with SDE compatibility provides some of the same benefits provided by the ArcGIS for Server platform that FieldSeeker GIS for Mosquito Control will have. However, the architectural limitations mentioned above remain due to the way Sentinel GIS is implemented on the ArcPad platform, along with the limitations of the ArcPad® API.

FieldSeeker GIS for Mosquito Control does not have these limitations because they are core functions of ArcGIS for Server and ArcGIS for Windows Mobile. The ArcGIS for Server platform provides more capabilities than the ArcGIS Desktop platform alone, and ArcGIS for Windows Mobile provides some capabilities that ArcPad does not.
<table>
<thead>
<tr>
<th>Feature</th>
<th>VCMS</th>
<th>Sentinel GIS</th>
<th>FieldSeeker GIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-user / enterprise</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Desktop / single user</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Web based</td>
<td>NO</td>
<td>NO</td>
<td>YES (Server/Service)</td>
</tr>
<tr>
<td>Mobile</td>
<td>YES / SuperWaba &amp; Power Builder</td>
<td>YES / ArcPad</td>
<td>YES / ArcGIS for Windows Mobile</td>
</tr>
<tr>
<td>Mapping</td>
<td>YES (Desktop Only)</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Customer Service (Service Request)</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>On-screen location maps (Mobile)</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Support</td>
<td>Mature, Live</td>
<td>Current, Live</td>
<td>Current, Live</td>
</tr>
<tr>
<td>Custom Reporting</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Import Data</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Export Data</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

**What are the similarities and differences between FieldSeeker GIS for Mosquito Control and VCMS?**

VCMS works with standard RDBMS, such as SQL Server and SYBASE. VCMS also supports concurrent data synchronization with mobile devices using a Web service, both cabled and wirelessly. It also supports concurrent desktop data viewers and editors.

However, VCMS has limited GIS capabilities on the desktop and none on the mobile. VCMS does not provide a platform for Web mapping, smartphone applications, or cloud-based solutions. In short, VCMS is a very specialized application that cannot easily be leveraged in other ways.

FieldSeeker GIS for Mosquito Control includes the best aspects of VCMS (concurrent data synchronization with mobile devices, including wireless, concurrent data viewers and editors, works with standard RDBMS) with none of the limitations.

**FieldSeeker Architecture**

**What is the framework and architecture for FieldSeeker GIS for Mosquito Control?**

FieldSeeker GIS for Mosquito Control is architected around Esri ArcGIS for Server and ArcGIS for Windows Mobile. ArcGIS for Desktop is also part of the picture to create data, author maps, and manage geodatabases.

The ArcGIS for Server platform directly addresses all the needs outlined above. ArcGIS for Server can be deployed on premise or in the cloud. Flexible cloud-based deployment options are available through the Amazon EC2 Cloud.

**Why does FieldSeeker GIS for Mosquito Control use the Esri ArcGIS platform?**

FieldSeeker GIS for Mosquito Control is based firmly on the Esri ArcGIS platform. This means that we maintain the application, and Esri maintains the platform, which can be leveraged to everyone’s benefit. Consider the following facts about what the ArcGIS platform includes:

- ArcGIS Online
- Ready-to-use maps, apps, and analytics
  - Open data
  - Story maps

**Out-of-the-Box Apps**
- Collector for ArcGIS (iOS and Android)
- Esri Maps for (Microsoft) Office
- Esri Maps for SharePoint
- Explorer for ArcGIS
- Operations Dashboard for ArcGIS
- ArcGIS for Windows Mobile
- Web Application Templates
- Web App Builder
- Story Map Templates

**ArcGIS for Server**
- On-premise at your location
- In the cloud

**ArcGIS Desktop for analysis, cartography, editing, and data management**

**Developer APIs (Application Programmer Interface)**
- iOS
- Android
- NET
- Java
- Mac OS X
- Flex
- WPF
- JavaScript
- Qt
- Silverlight

In short, the ArcGIS platform is a robust and diverse set of applications, services, tools, and APIs that is keeping up with advances in Web technology, mobile computing, cloud infrastructure, and service-oriented architecture. Any solution built on this platform can leverage these strengths.

**What are the Esri software requirements for FieldSeeker GIS for Mosquito Control?**

FieldSeeker GIS for Mosquito Control requires a license of ArcGIS for Server Advanced Workgroup, Standard Enterprise or Advanced Enterprise. ArcGIS for Server can be hosted on-premise or in the cloud.

A license of ArcGIS for Windows Mobile is required for each mobile device. ArcGIS for Server Advanced Enterprise includes unlimited licenses of ArcGIS for Windows Mobile. ArcGIS for Server Advanced Workgroup and Standard Enterprise require the purchase of 5-packs of ArcGIS for Windows Mobile licenses. Individual licenses are not available.
At least one license of ArcGIS Desktop Standard is required to create data and publish maps for use by ArcGIS for Server and ArcGIS for Windows Mobile.

What mobile hardware will work with FieldSeeker GIS for Mosquito Control?

FieldSeeker GIS for Mosquito Control uses ArcGIS for Windows Mobile for field data collection. ArcGIS for Windows Mobile supports a wide range of Windows Mobile and Windows devices:

Windows Mobile Platform
- Windows Mobile 6.5 Professional and Standard editions
- Windows Mobile 6.0, 6.1 Professional and Classic editions
- Windows Mobile 5.0 Pocket PC (with Microsoft Compact Framework 3.5 installed)

For a full list of compatible devices, see the Mosquito Software Compatibility document from Electronic Data Solutions.

Does ArcGIS for Windows Mobile support disconnected editing, or does it have to be connected to the server all times?

Yes, ArcGIS for Windows Mobile supports disconnected, sometimes connected, or always connected scenarios. Field data is collected into a mobile cache and can be synchronized whenever possible or convenient.

Will smartphone platforms be supported with FieldSeeker GIS for Mosquito Control?

Yes. FieldSeeker Mobile for iOS is targeted for release in 2015.

Do I have to buy Esri licenses to use FieldSeeker GIS for Mosquito Control?

Esri software licenses are required, but your organization may already own them. City, County, or State government may already have unused licenses available.

Additionally, ELAs (Enterprise License Agreements) may already be in place with Esri. If you are unsure about license availability at your organization, Electronic Data Solutions can help you find out.

Even if software versions are outdated, old versions can be made current with Esri maintenance agreements.

What is the difference between hosted applications, cloud computing, and SaS (Software as Service)?

Although the idea of cloud computing is relatively easy to understand, this is a difficult question to answer because terms are often used interchangeably, and each term is often used to refer to very different things.

Essentially, cloud computing is the provision of computing as a service over a network (usually the Internet). This means that data, applications, computation, and storage services are provided without the end user having to know the physical location and configuration of the systems that provide the service.

Cloud computing is an umbrella term that refers to everything from Internet-based social media sites such as Facebook and MySpace, through online backup and storage services, SaS solutions such as Salesforce.com, to scalable virtual server environments on elastic compute clouds such as Amazon Web Services.

SaS is a particular kind of cloud computing solution where software is provided as a service, and access is controlled through service-level agreements and subscription plans. Users log in to software using an Internet browser or other thin client. Multiple users and companies can use the same service, but their data and access are logically isolated.

Hosted solutions or applications typically refers to placing an internally used application on a rented platform. An example is an ISP hosting a company Website.

How does FieldSeeker GIS for Mosquito Control leverage cloud computing?

FieldSeeker leverages Esri’s use of Amazon EC2 servers and managed services to provide users with options for deployment that do not require purchasing or owning server hardware.

Is FieldSeeker GIS for Mosquito Control provided as a SaS?

FieldSeeker is not provided as a SaS. It is available for on-premise deployment and in a hosted environment.

Esri Software Platform

What is ArcGIS for Server?

ArcGIS for Server enables GIS within your organization. Web GIS implemented with ArcGIS for Server allows maps and geographic information to be accessed anywhere, anytime, on any device. ArcGIS for Server is designed to support your organization’s specific hardware and security requirements and gives you control over how your GIS platform is deployed, maintained, secured, and used.

What license level of ArcGIS for Server is required for ArcGIS for Windows Mobile?

ArcGIS for Server Advanced Workgroup, Standard or Advanced Enterprise is required.

What is SDE?

Esri SDE technology manages spatial data in a relational database management system (RDBMS) such as SQL Server and enables it to be accessed by Web, mobile, and desktop GIS clients. The geodatabase is the primary data storage model for ArcGIS; it provides a single central location to access and manage spatial data.

The geodatabase is scalable, from a single Desktop client (with perhaps 1-20 mobile devices collecting data), to a few Desktop clients (with perhaps 10-50 mobile devices collecting data), to unlimited Desktop clients with unlimited mobile devices collecting data.

The geodatabase, its benefits, scalability, and relationship to SDE, is discussed more fully at: http://www.esri.com/software/arcgis/geodatabase/index.html

SDE technology enables:
- Multi-user editing
- Mobile and Web access through services

Scalability is achieved by leveraging SDE and RDBMS technology with ArcGIS for Server.
What RDBMS are supported by ArcGIS for Server?

ArcGIS for Server Workgroup support Microsoft SQL Server Express. ArcGIS for Server Enterprise supports a wide range of professional RDBMS:

- Microsoft® SQL Server®
- Oracle®
- PostgreSQL
- IBM® DB2®
- Informix® Dynamic Server

FieldSeeker GIS is fully supported on Microsoft SQL Server 2008 R2 and 2012. Although SDE support other RDBMS', FieldSeeker does not, primarily because Microsoft SQL Server Reporting Services is part of the FieldSeeker solution.

<table>
<thead>
<tr>
<th>Application Scenario</th>
<th>Enterprise</th>
<th>Workgroup</th>
<th>Desktop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Storage</td>
<td>SQL Server</td>
<td>SQL Server Express</td>
<td>SQL Server Express</td>
</tr>
<tr>
<td>Management Interface</td>
<td>ArcCatalog</td>
<td>ArcCatalog</td>
<td>ArcCatalog</td>
</tr>
<tr>
<td>Storage Capacity</td>
<td>Depends on the server</td>
<td>10 GB</td>
<td>10 GB</td>
</tr>
<tr>
<td>Licensing Availability</td>
<td>ArcGIS Server Enterprise</td>
<td>ArcGIS Server Workgroup</td>
<td>ArcGIS Engine ArcInfo ArcEditor</td>
</tr>
<tr>
<td>Supported OS Platform</td>
<td>Windows</td>
<td>Windows</td>
<td>Windows</td>
</tr>
<tr>
<td>Number of Concurrent Users</td>
<td>Unlimited editors and readers</td>
<td>10 editors and readers</td>
<td>1 editor and 3 readers</td>
</tr>
<tr>
<td>Network Application</td>
<td>Intranet and Internet</td>
<td>Intranet and Internet</td>
<td>Desktop and local network use</td>
</tr>
<tr>
<td>Differentiating Characteristics</td>
<td>Supports versioning Supports multiuser editing Supports spatial types Enterprise IT integration</td>
<td>Supports versioning Supports multiuser editing</td>
<td>Supports versioning Supports multiuser editing</td>
</tr>
</tbody>
</table>

What are the costs for ArcGIS for Server?

ArcGIS for Server Advanced Workgroup is $10,000 list price for an on-premise deployment. ArcGIS for Server Standard Enterprise is $20,000 list price for an on-premise deployment. ArcGIS for Server Advanced Enterprise is $40,000 list price for an on-premise deployment. ArcGIS for Server is available as part of an Esri ELA (Enterprise License Agreement).

What are the costs for ArcGIS for Windows Mobile?

ArcGIS for Server Advanced Enterprise includes unlimited ArcGIS for Windows Mobile licenses. Standard Enterprise and Advanced Workgroup do not include ArcGIS for Windows Mobile licenses. Licenses are available in 50-pack deployments or 5-pack deployments. Licenses are $300 each. ArcGIS for Windows Mobile is available as part of an Esri ELA (Enterprise License Agreement).