

FAAR[®] Integration Toolkit

The **FAAR[®] Integration Toolkit (FIT)** allows two-way communication between FAAR and other applications. With FIT, you can easily add a spatial data component to existing software such as work order management, one call or field inspection applications. FIT provides a simple—yet powerful—interface that allows your application and FAAR to work together to create a system more powerful than two stand-alone applications.

Let's examine how FAAR and your application work together through FIT. First, consider how an application might wish to control FAAR. Since FAAR's primary purpose is to display GIS data, FIT provides a straightforward method for a client program to request that FAAR open a view at a specific geographic location. If the calling application does not know the explicit coordinate of the object in question, FIT also provides access to FAAR's spatial indexes, which allows the calling application to determine the geographic coordinate based on some other piece of information. For example, assume that your program wishes to open a FAAR window displaying a particular street address. FIT will provide a means to determine the coordinate of that address and that coordinate can be passed on to FAAR for use as the center of a new view.

Another component of FIT is FAAR's dynamic class functionality, which allows other applications to add customized symbols to FAAR's graphic display. Each dynamic class is represented by a text file. Each line in the text file consists of an XY coordinate, a field

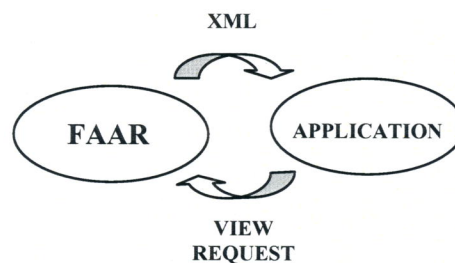
used to determine the symbol to display at that location, and flyover text to display as the user moves the mouse over that particular symbol. As the name implies, dynamic classes can change over time and are re-drawn every time the file is updated. Dynamic classes are ideal for displaying information that changes rapidly, either in position, as in the case of the location of a vehicle, or in state, such as a switch that may change from open to closed.

Communication in the opposite direction is also possible. Presumably, the user wants to take some action in FAAR and then indicate to another application that some action has taken place. The most likely user interaction is simply clicking at a location, or drawing a polygon around an area of interest. When this occurs, FAAR passes all relevant data to the other application.

As FAAR doesn't know in advance exactly what the user is interested in, the solution is for FAAR to pass everything it knows to the other application. This includes the point itself, all the information associated with objects near that point, the currently visible classes

and layers and other status information.

All this information is formatted as a well-defined XML file and is passed to the application through a command line call. The receiving application then applies its own logic to filter out the important information from the XML and respond to the user's action. If the application requires the data in a different format, a simple intermediary program can be created to extract data from the XML and pass it to the application as needed.



Let the **FAAR Integration Toolkit** bring the power of your GIS data to your field applications.

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