



# Visualising and using real-time data

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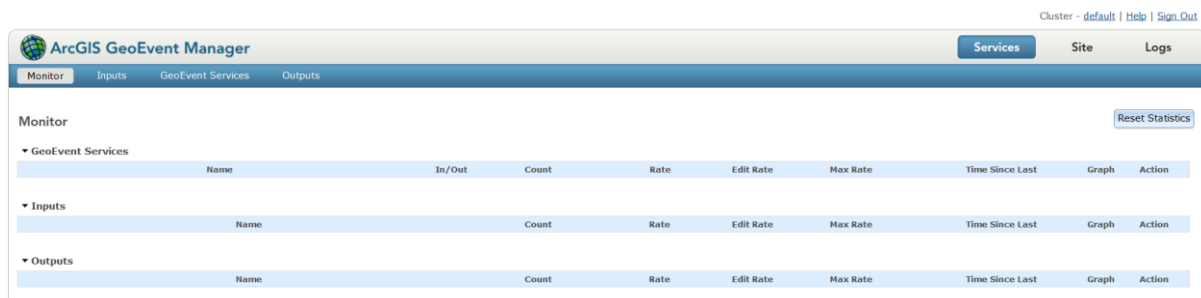
## Visualising and using real-time data

Esri provides a wide variety of ways to visualise and analyse real-time data. Both web and desktop client applications are available, as well as the ability to integrate real-time services directly with ArcGIS for Server.

One of the applications that supports real-time data visualisation is ArcGIS for Server's GeoEvent Extension, which enables real-time event-based data streams to be integrated as data sources in your enterprise GIS.

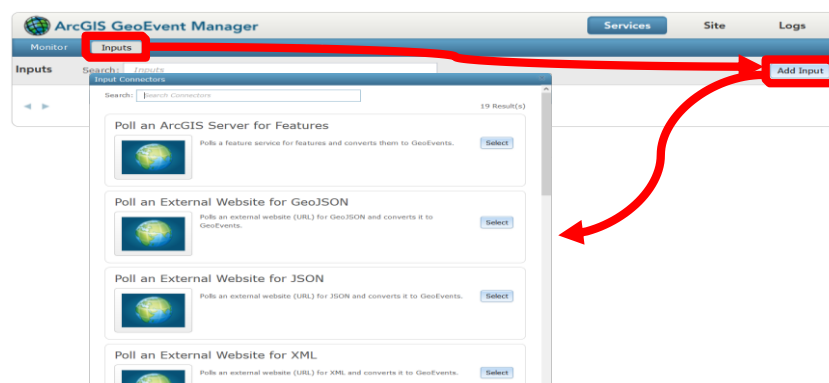
Event data can be filtered, processed, and sent to multiple destinations, allowing you to connect with virtually any type of streaming data and automatically alert personnel when specified conditions occur, all in real-time.

GeoEvent Extension features a web application (ArcGIS GeoEvent Manager) to configure everything needed to generate real-time data streaming in GeoEvent Services.

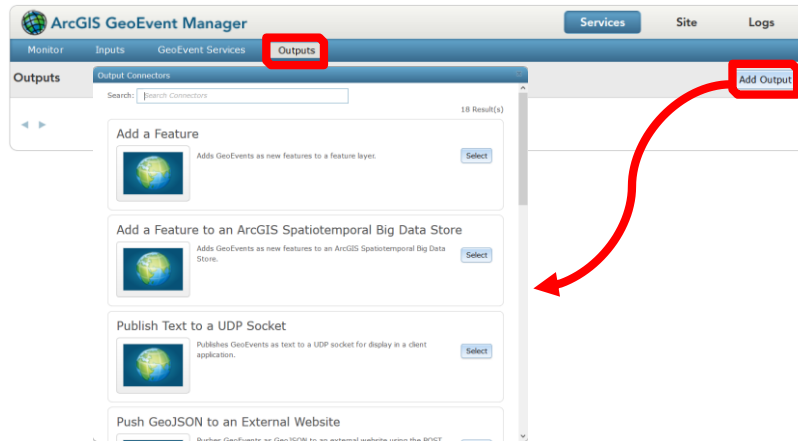


Interface of ArcGIS GeoEvent Manager

The GeoEvent Extension includes connectors for creating both input connectors and output connectors. Several connectors are provided for common data formats (text, RSS, Esri feature JSON and generic JSON) and data communication channels (system file, HTTP, TCP, UDP, WebSocket and Esri feature service).

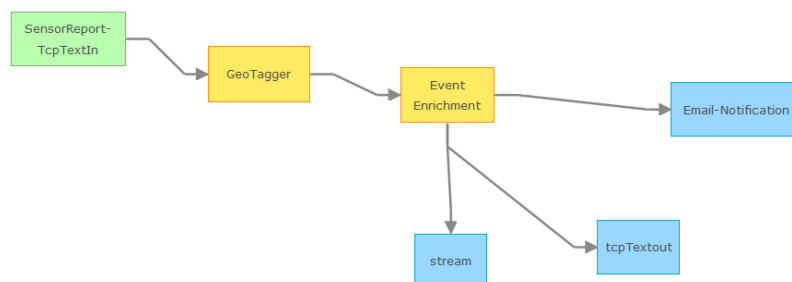
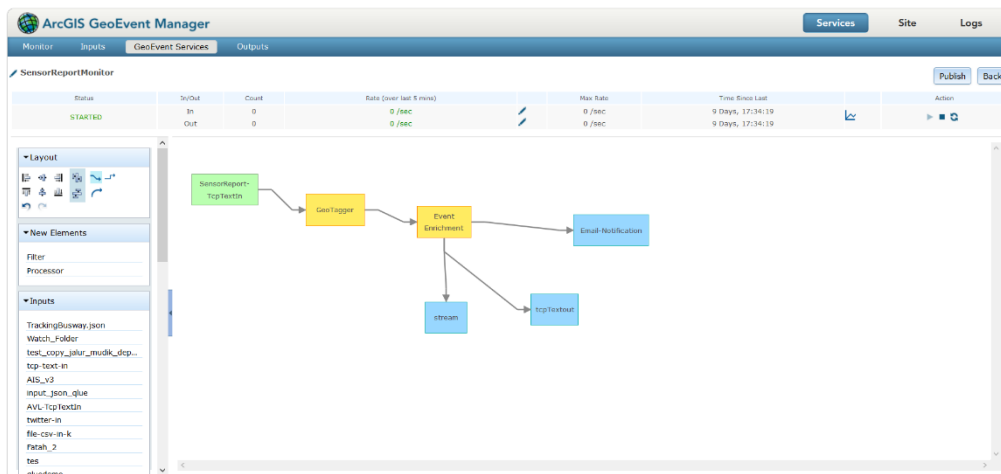


Input connectors



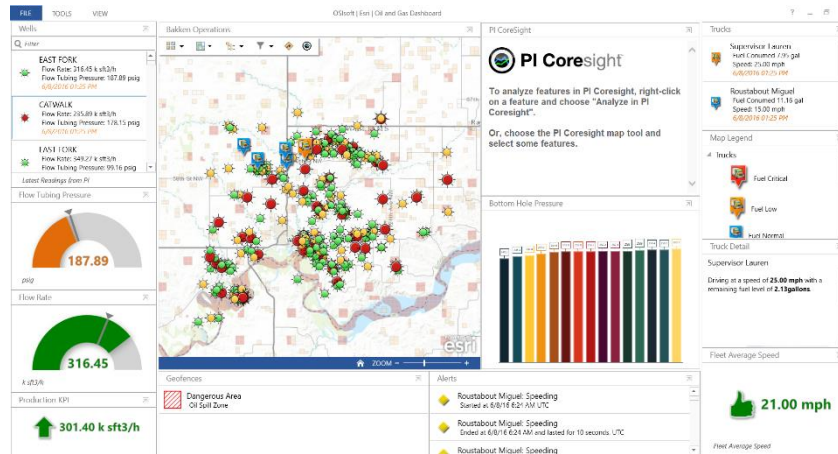
Output connectors

GeoEvent Services are created using a simple graphic interface similar to ModelBuilder. The service designer capabilities in ArcGIS GeoEvent Manager allow analysts to add inputs and outputs to a GeoEvent Service. These services can also contain filters and processors configured by a service designer.



Streaming data from the GeoEvent Extension can be utilised by the entire ArcGIS system to bring everyday GIS applications to life. The GeoEvent Extension enables the integration of streaming data into an enterprise GIS by updating feature services and other online content.

The features and content can then be visualised on Operations Dashboard for ArcGIS (or any ArcGIS viewer) to display the most up-to-date information on events as they unfold.



Example of stream services consumed on Operations Dashboard for ArcGIS (OSISOFT-ESRI Oil and Gas Dashboard)