

## SAD SOFTWARE DESIGN

The SAD user interface is designed to provide a Central Monitoring site with a server based system display and system control for a very large complement of system sensors and communications units. The SAD provides expanded sensor system display and control of McQ products. This includes multiple displays of maps, data, and imagery along with command and control of all system units and diagnostic software of system health and target activity. The SAD easily integrates with customer Common Operating Picture systems, exchanging XML data between the SAD server and other customer servers. The server provides many network connectivity and system expansion options. The SAD can connect with distributed users anywhere in the world to view and control the system remotely. A very large database stores the system data for recall and

# Situation Awareness Display Software

Server Based User Interface for McQ Sensor Products



**Situational Awareness Display  
Client Server Software**



**Windows Server with  
McQ SAD Software  
IP Network Interface**

McQ's Situation Awareness Display Server provides the user with a GIS Map Display of Target Activity and Imagery, Command and Control of Large Sensor System Deployments, System Database Management, Communications Management and Control, System Security Management, and integration of other Common Operating Systems and Data Applications.

## SAD Software Features

- Real Time Map Display of McQ RANGER® Sensor Activity, vWatch® Target Video, and rScene® Micro Radar Target Tracks.
- A McQ Base Station Unit receives the sensor and video information and provides an IP Network connection into the SAD server.
- SAD uses Microsoft server software integrated with McQ's server software, McQ's user interface client App, a GIS map server, a Web server, a large database management system, McQ Connection Manager communication controller, McQ OmniPush XML data integration software, and McQ's vWatch® Video Management software.
- High speed parallel processors and many input/output connection ports provide the capacity to monitor and control very large sensor installations.
- The SAD server can provide connectivity through cell networks, Internet Protocol networks, through wireless networks, and through satellite communications networks.
- Many users interface devices such as smart phones and tablets, laptop computers, desktop computers, server systems, and custom Common Operating Picture (COP) systems can be serviced in parallel by the SAD Server.

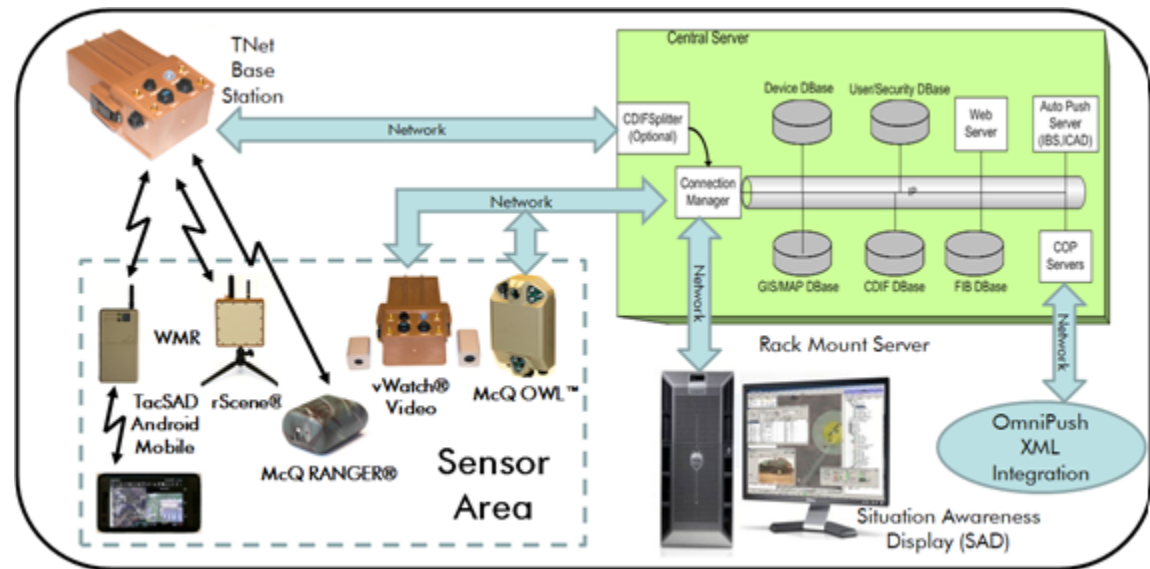


## SAD SOFTWARE OPERATIONS

The SAD software is installed on hardware using Microsoft server software provided by McQ or the customer. The SAD server has the functionality to provide a user display, a keyboard, many serial and IP input/output ports, a very large hard drive storage unit, and a dual core redundant operating system with adequate performance to handle the streaming data from large numbers of McQ sensor and video systems. The McQ SAD server software includes several additional server software programs that provide database management, GIS mapping, Web service, a CDIF protocol routing program, a Connection Manager for controlling all network functions, a OmniPush software program to format sensor and imagery data in XML and other protocols for integration, administrative software to provide security controls and system performance reports, and McQ vWatch video management functions. McQ external sensor network units provide serial CDIF protocol information from McQ system units via an IP network connection to the server.

# SAD System Architecture

## Features



The SAD server architecture integrates the McQ sensor systems into a network structure that provides multiple distributed users access to the sensor system information and to system command and control.

- The SAD network architecture and software design provides the structure for large sensor system applications.
- SAD provides real time target activity monitoring across large geographical areas.
- The very large multi-terabyte SAD database storage provides access to all sensor and video data for review of past target activity and system status.
- The SAD is designed to push all sensor system information to other Common Operating Picture Systems and Data Management Systems
- Extensive security software controls individual information and system access for every individual system user.

Specifications may change due to product enhancements.  
For more information on any of our products or services please visit us on the Web at: [www.mcqinc.com](http://www.mcqinc.com)

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