Emergency Management Decision Support System

Product Support

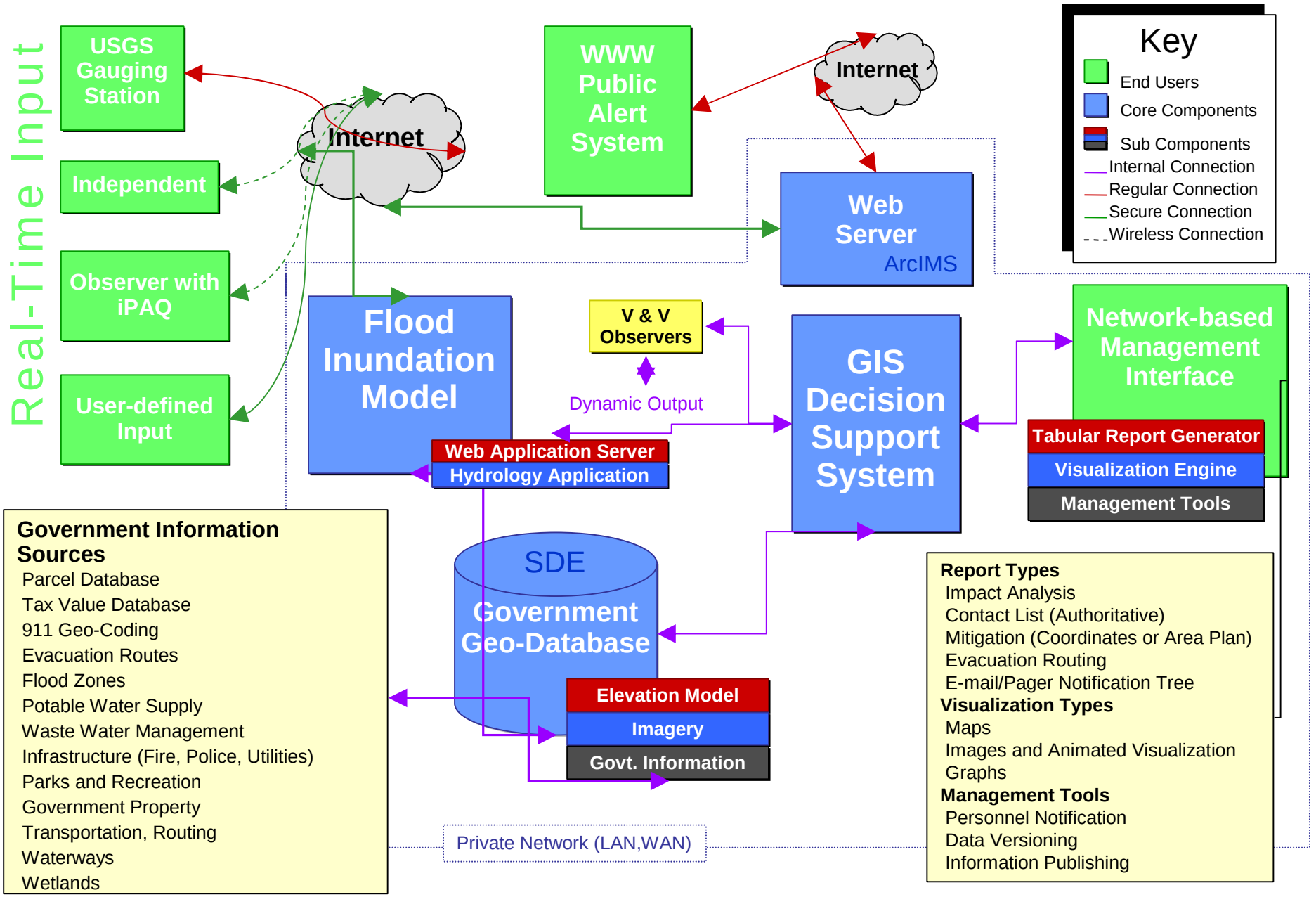
Emergency Management System Overview

NVision developed an Emergency Management Decision Support Architecture for use at all levels of government. This architecture consists of a core enterprise level system built with standards-compliant, commercial-off-the-shelf software supplemented by existing in-house data and software as well as any necessary NVision custom software. Because the system scales from the ready-to-run core system to custom development NVision installs critical disaster mitigation portions of the architecture first to quickly ramp up response operations with secondary requirements being added to the live system as time and funding permit.

Emergency Management System Overview – cont.

NVision deployed this emergency management architecture during the 2003 Hurricane Season for the St. Tammany Parish Emergency Operations Center in Covington, Louisiana. NVision built a parish-wide geodatabase with all parish geospatial data including a complete six-inch resolution aerial photography mosaic for the entire parish. All parish departments can access the data to produce synchronized maps and do versioned GIS analysis. NVision later added a flood inundation model to help emergency officials visualize potential flood inundation in populated areas as well as produce estimated risk reports and trigger the parish “First Call” alert system to automatically notify residents of potential flooding.

Emergency Management Architecture



St. Tammany Parish Decision Support System

St. Tammany Parish, Louisiana, with a grant from NASA, contracted NVision to build a Decision Support System including a dynamic flood inundation model. The flood model coupled with real-time weather sensors will enhance parish officials' ability to make quick decisions in times of crisis to coordinate disaster management efforts, make estimations about damage, and protect parish citizens. Parish disaster management personnel can visualize predicted flood inundation on top of 6-inch color aerial photography of St. Tammany at different inundation levels as well as get vital statistics about the flooded area including population, property values, and contact information for local coordinators.

The following slide shows the Decision Support System in action. It is depicting the water levels when the nearby waterways are at a 5-foot crest. The icons on the map are color-coded according to the Flood Risk Level Scale.

St. Tammany – Decision Support System