Abstract — Shelterware was created to assist the Smithtown Animal Shelter (SAS) update its record-keeping from an antiquated paper-based system to a modern digital system, so that the shelter’s limited staff resources can be better optimized. Presently, the shelter houses 120 to 150 ready-to-adopt animals at any given time. The Shelterware system will allow the SAS staff to manage adoption and volunteer information through a web-based interface, and to find and identify lost animals.

We have developed an iPad application that allows volunteers to process incoming animals at the shelter by taking photographs of the animals, entering data about the animals, and generating QR codes for identification, all of which are uploaded to a database. This database will generate a catalog of pets for adoption, which can be accessed by potential adopters on the web. Potential adopters will now be able to fill out an online application form. Additionally, we have developed a field application that allows staff to use iPhones for the identification of lost animals. Staff will be able to scan QR codes attached to the collars of lost animals, or photograph the animals. This data will then be uploaded to a database with a time and date stamp along with the lost animals’ location data.