

In design terms, the Prototype channeled multiple G2G business functions through a secure, single sign-on, role-based system accessible through the Internet. It was used to assess management, policy, technology, and cost implications likely to be associated with the development of a full-scale G2G system. The overarching goal was to understand what would be necessary for state, county, and municipal governments to realize greater efficiency, high quality authentic data, and more consistent and coordinated services.

The Prototype included data about 15 counties (and their associated municipalities) in New York State. This data was provided by the participating state agencies. The Prototype did not include any financial transactions associated with the applications. It operated from a secure Web site hosted on the public Internet and was available only to authorized government officials. The Prototype focused entirely on G2G relationships, it did not offer public services.

In order for the Prototype to generate enough useful results, it had to demonstrate how multiple organizations at different levels of government work together. Therefore three state agencies were selected from three different policy domains and thirteen local governments (including counties, towns, and cities, but not villages) from every region of the state and were asked to take part in the design. Local governments were selected to represent a wide variety of size, wealth, and technical sophistication.

### Figure 1. New York State-Local Internet Gateway Prototype Design

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Figure 1 represents the high-level conceptual design of the Prototype. In this design, a single gateway replaces the myriad of one-to-one relationships among local governments and state agencies. It was designed to offer some features and applications to all users and to limit other applications to specific users based on their functional roles.

## General Access

In the Prototype, three functions were made available to all state and local users.

- Links to Resources on information about laws and regulations, professional associations, data resources, and other helpful information selected to be of value to state and local officials.
- A searchable, unified Contact Directory of state and local government professionals. This electronic repository of contact information allowed users to identify state and local government officials and use the information for mailings and other purposes.
- User Support functions including FAQs and Help.

## Role-Based Access

Under the role-based scheme, each user had access to additional functions that pertained to his or her job. Roles were assigned based on official job title with some additional adjustments made to fit special local conditions. Three role-restricted applications were selected to represent common categories of state-local business functions, so that the learning generated by the Prototype could be generalized beyond these specific cases. For example, in the Prototype, the idea of a single authentic directory of data maintained and shared by state and local governments was used with contact information (as shown by the Contact Repository Application) but other areas of government including child health and well being, education or law enforcement have data that could be maintained and shared in much the same way.

- **Contact Repository Application.** This business process was chosen to represent an authentic shared data resource and was modeled after a similar effort at the NYS Office of the State Comptroller. The electronic repository contained contact information about state and local government officials such as title, organization, address, phone number, and job function. All contact information was updated electronically through a decentralized process that made each locality or state agency its own data owner. Users who had access to this application were designated data owners who managed their own contact information and contact information for other officials in their agency or jurisdiction.
- **Dog Licensing Application.** This application was chosen to represent a high volume G2G transaction process. It supported transactions that take place between the NYS Department of Agriculture and Markets and city, town, and village clerks. The application included searching for registered dogs in multiple

municipalities in NYS, registering a new dog, renewing a dog license, and transferring a license to a new owner. In addition, the application made it possible to create and print reports on new and delinquent or expired licenses.

- **Parcel Transfer Verification Check Application** . This application represented rule-based exception reporting. It performed an automated data quality check to flag possible errors that require further investigation to either adjust or validate the record. The application involved the NYS Office of Real Property Services (ORPS), county real property officials, and town and city assessors. The county forwarded property transfer records to the Prototype for checking. The application applied nine business rules to each record and flagged records that may have had errors, thus alerting assessors to review them.

The role-based access feature was built into the Gateway's sign-on function and limited access to each application based on individually assigned roles. For example, town clerks generally processed dog licenses and contact information, but not property transfer records. Therefore, when a town clerk signed on to the Prototype, she had immediate accesses to both the Contact Repository Application and the Dog Licensing Application, but not to the Parcel Transfer Verification Check Application.