



IBM SecureWay® Software: Simplifying e-business with a centralized directory



Underlying every e-business operation or transaction is the ability to:

- **Locate** people, information and applications in the network,
- **Connect** customers, partners and employees to resources across multiple systems and
- **Secure** all interactions and communication.

By integrating directory, connectivity and security, IBM SecureWay Software brings together these fundamental capabilities in a way that reduces the costs, minimizes the complexity and mitigates the risks associated with exploiting Internet technology. Integration is key to establishing a secure network platform for e-business.

SecureWay Directory and the IBM Common Schema, the core of SecureWay Software integration, supply a central repository and a standardized format for all information required by e-business applications. By their very nature networked applications require information on the location of all the distributed resources needed to run them. To satisfy this requirement in the pre-SecureWay Software world, each application has its own directory.

While this works well enough from an application perspective, the duplication of enterprise data requires constant diligence to make sure that all the directories remain updated and synchronized. If a user of multiple network applications suddenly leaves the company, someone needs to ensure that his userid is removed from all directories where it was listed. Similarly if a new network printer comes on-line, all the directories need to be notified of its existence. With one centralized directory, all that redundant maintenance work disappears and the administrative workload of an enterprise can instantly decrease.

Standardizing on LDAP and the IBM Common Schema

Establishing a centralized directory solves only part of the problem. To have a flexible solution that can adapt to the changing needs of an enterprise infrastructure, the central directory must be based on industry standards -- LDAP (Lightweight Directory Access Protocol). This standard defines a common method for storing and retrieving directory information.

In addition to a standard access and retrieval method, there needs to be a common set of definitions for the network objects -- users, groups, access control lists, configurations, etc. -- that will reside in the directory. As part of SecureWay Software, IBM has defined the IBM Common Schema, a collection of definitions for the many types of objects that e-business applications require. IBM is working with the Desktop Management Task Force (DMTF) to standardize on this schema. This schema is stored and maintained in the LDAP Directory.

Today many unique schemas exist for the many different application directories. Therefore the typical schema is narrowly focused, only defining objects appropriate for that application. Despite the differences in scope, each of those schemas do have certain frequently-used objects in common -- but not defined in precisely the same way. So it's easy to see how homogenizing commonly-used network objects can once again simplify work for administrators. They can define an object once and it can then be used by all SecureWay Software-compliant applications.

Companies have the opportunity to lower their network ownership costs when their administrators can view the enterprise network as a single unit rather than as a composite of multiple systems. And that is the what the IBM Common Schema does, it creates a single enterprise view.

Another benefit is that the IBM Common Schema aligns with the intent of the IT infrastructure rather than with its componentry by defining objects that are meaningful in the business world. Consequently, companies can construct policies that can be entered into the system in understandable terms.

The Importance of a Common Directory to SecureWay Software

Interestingly enough, the SecureWay Directory not only benefits e-businesses directly, it complements the other aspects of SecureWay Software thereby enhancing other advantages. For example, because of the breadth of the IBM Common Schema and its definition of businesslike terms, SecureWay Software customers have the opportunity to define policies in terms that make sense to people outside the IS group. Now a company can define a high-level quality of service policy that ensures that high priority customer transactions get the fastest response time on the Web. Overall, this enhances a company's ability to consistently enforce policies throughout the enterprise.

The presence of a common directory in an enterprise can also speed the deployment of new applications. Instead of having to define and populate a new directory designed for a new service, the application can take advantage of the existing directory structure. This can save development, test and deployment time. Similarly, it simplifies the process of accessing host applications from the Web.

IBM is developing a meta directory for SecureWay Software. When IBM's meta directory becomes available it will further enhance the benefits of a centralized directory. This meta directory will integrate the directories of existing network applications into the SecureWay Software infrastructure without the need to redesign their directories. This then broadens the impact and the resulting benefits of establishing and growing an secure network platform.

IBM's meta directory will be especially useful in linking business partners to internal systems with information spread across multiple directories and relational databases throughout an enterprise. Collating this data into a single repository significantly simplifies the task of securing Web access to previously well-insulated data and applications. In addition, with this meta directory as an integration point, companies may eliminate imposing on their customers to reenter data that they have already supplied.

Rely on SecureWay Software

In general e-businesses will find an increasing reliance on directories to create successful innovations that improve the bottom line. By building a centralized, standards-based directory as part of a secure network platform, customers can gain a competitive edge through e-business. SecureWay Software reduces complexity and enhances security offering businesses the potential for lower ownership costs and decreased time to market.