Enterprise Extranets – Extension of the Company Intranet

Objective: Extranets provide a joint exchange of information in strategic partner and customer alliances. In a protected environment, Extranets can provide a realistic business-to-business (b2b) e-commerce tool for a mutual increase in prosperity. Extranets are a tool for enterprises to extend their Intranet.

What do Extranets do?

Extranets provide a combined business-to-business information repository, creating the ability to more effectively deal with their customers and discover new markets through management of "new" information. By aligning supply and demand chains, research information, and market diagnosis, enterprises can reduce entry barriers and create additional market share for their products. Extranets offer a more efficient use of combined information resources.

Definition of Extranet: An Extranet is a private business-to-business network that uses Internet technologies to share selected business information with suppliers, vendors, partners, and business alliances that share the same goals.

Benefits of the Extranet: Opening portions of the enterprise internal network (Intranet) to business partners in an effort to share information to benefit business growth and profit.

Extranets provide:

1. Fast communication
2. Formidable, collaborative, and shared information resources (Data Mining)
3. Accelerated B2B commerce
4. Cohesive alliances between external customers, suppliers, and partners
5. Expansion of business
6. Satisfaction of overlapping needs of organizations

Discussion:

Many organizations see a need to share information with business partners to increase company growth and profit. Extranets allow them to harness the power of the Internet for third-party collaboration with partners, suppliers, and consultants. Internet technology is radically altering the shape and broadening the scope of enterprise computing strategies. The Internet already provides a common networking infrastructure that can be used for everything from serving web pages and sharing files to hosting email and client-server applications. Internet standards such as HTML, Java, JavaScript, and XML provide essential elements for Extranets and networked enterprises. Extranets allow organizations to combine information research efforts to reduce the cost of doing

business. Mining this information can offer extended benefits unknown to the independent enterprise.

Extranet Considerations:

1. Security – firewalls – user identification and access rights.
2. Determination of information to share.
3. Standards – protocols, disparate network architectures.
4. Protocols – TCP/IP, IPX, AppleTalk, Java, XML, etc.
5. Hardware requirements to maintain the Extranet network.
6. Network Administration – information processing, security, and maintenance.

Discussion:

Security is paramount to a successful Extranet venture. What information do we share? Security and propriety of information are important decisions for effective sharing. Rapid identification of users, their rights, and permissions are essential for the security of all the Extranet partners. Several security models are available, but the disparate nature of business environments leads to only a few security models. Standards, availability, ease of use, and security assurance must be considered. For this discussion, the Lightweight Directory Access Protocol (LDAP) is considered. LDAP directory services store and deliver contact information, registry data, certificates, configuration data, and server state information. These services provide support for single-user logon applications and reliable authentication capabilities throughout the Extranet. The standard implementation today is LDAP v3, and the x.500 principals.

Benefits of LDAP:

1. Users can search for contact information across enterprises.
2. Business customers can use the same interface and protocols as those used by internal corporate directories.
3. Replication functions of the open LDAP protocol to allow secure distribution of directory data between enterprises.
4. Fast and flexible queries of data structure information for applications and enterprise architectures can be performed.

Disparate network architectures of current and potential business partners present a challenge when determining the rules and methods of collaborative information sharing. Decisions require careful consideration of the available methods. Consideration should be given for selecting common and non-proprietary networks and directories for sharing resources. The nature of existing environments and the future of new environments must be considered carefully to avoid becoming an isolated network. The hardware of the future must be "shareable" through common standards of protocols and devices. The administration of these environments must be streamlined for maximum network efficiency.