The Best in Networking

Project Background and Purpose

The Virtual Nervous System (VNS) is a technologically challenging, flexible, and dynamic knowledge based system product that provides an organization the ability to organize, process and communicate ideas continuously without operator intervention. VNS also maintains data integrity, security and provides seamless interfaces to internal and external sources of information. The product was originally designed and developed in 1999 by Wi-Lan Inc. under the name E-nerves. In 2000 Wi-Lan and NTG Clarity Networks merged and the product was renamed VNS and was extensively redeveloped and redesigned in 2000 and 2001. VNS is a state of the art Web enabled communications and knowledge management system and addresses a number of key technological needs for organizations requiring this technology. Up to this point in time, with the proliferation of Web browsers many organizations had turned to intranets for their information distributing needs. However, the typically static and isolated methods of creating intranet content could not keep pace with ongoing and dynamic information needs. In order to overcome these technological deficiencies, Wi-Lan and NTG Clarity decided to build a system called VNS (Virtual Nervous System) that would act as an engine that simulates the functions of a proactive nervous system that rapidly gathers, interprets and disseminates information. The main purpose was to provide a set of tools and modules that enhances the ability of an organization to organize, process and communicate its ideas in a flexible and dynamic manner. The main design intent of VNS is to provide functionality that the system dynamically and intelligently organizes information directly from internal and external sources without operator intervention. Using a single VNS interface engine, users do not have to care whether their data is in unstructured form such as documents or in structured form as on a database. This VNS approach provides a dynamic and intelligent alternative to the static internet/intranet systems of the past. The system is also designed to be platform independent so that it can easily run under any operating system. It has a seamless interface capability with standard software products and is accessible by users from any internal or remote location. Enhancements to overcome limitations in standard operating system and RDBMS (NT4.0, Unix, Oracle) security functionality were developed to protect the contents of VNS from unauthorized access in a multi-layered system structure. The system also ensures that user data access integrity for the data repository and RDBMS interfaces is maintained for all functional processes

Main System Features:

The key application modules that were developed to satisfy the integrity and dynamic knowledge based functionality of VNS were:
· Security & Administration tools
· Company Information & online news
· Database and site search
· Email capability
· Customizable portal and homepage
· Discussion forum
· Project management
· To do list
· Document manipulation through business processes
· Contacts & Sales application
· HR application
· Asset Management application
· Expenses, Timesheet and Invoice management applications
· Issue tracking system
· Electronic forms
· Document repository
· Online help
· Interface with Microsoft outlook contacts and ADP product
· Videoconferencing capability
The application is modular in design and has the capability to be implemented in a flexible way to meet individual organization and specific user requirements.

Accomplishments and Results:

In summary, the VNS system has been successfully developed into a technologically challenging, flexible, and dynamic knowledge based system product that provides an organization the ability to organize, process and communicate ideas continuously without operator intervention. VNS also maintains data integrity, security and provides seamless interfaces to internal and external sources of information. The VNS Web enabled software tool is now commercially available for use by organizations as a total integrated entity. It is presently in use in a major Health Services organization.