



MAKE YOUR FUTURE CLEAR

TECHNICAL SERVICES

CRYSTAL SYSTEM ensures that the underlying infrastructure supports long-term business objectives. We design, implement, and administer the technology and topology for databases, LAN's, WAN's and firewalls.

CRYSTAL SYSTEM possesses in-depth knowledge in systems design, configuration and administration. This includes expertise in performance tuning, network management, telecommunications, help desk support and systems programming.

CRYSTAL SYSTEM optimizes the security, availability, reliability, and responsiveness of the infrastructure. We consider the existing environment, projected demand, and application design of each of our clients. Our professionals understand the importance and urgency of providing an available and responsive production environment at all times.

We recognize that computer problems result in a loss of productivity for the client as well as a decrease in satisfaction for the customer's user community. We will help manage the computer technology on which businesses rely and give relief from the worry of managing a complex computing environment.

1) INFRASTRUCTURE DESIGN

CRYSTAL SYSTEM incorporates industry-leading technologies, processes, and partnerships to make a state-of-the-art infrastructure a reality across the enterprise. We provide proven expertise and knowledge in such technologies as:

- **Disaster Recovery Planning & Testing Storage Area Networks**
- **Enterprise Messaging migration, design, and implementation**
- **Firewall/VPN Design and Implementation**
- **Systems Migration/Upgrades Hardware Integration**
- **LAN/WAN Design**
- **High Availability System Planning**
- **Network Analysis/Audit Broadband Network Design**
- **Server Configuration & Implementation**
- **Security Analysis/Audit**

CRYSTAL SYSTEM professionals can help you build sound practices into your everyday working environment.

2) OPERATING SYSTEMS

Selecting the right operating system to run business applications is critical. Current needs to be assessed with the future plans in mind. Issues such as reliability, usability, productivity enhancement, and technology advantages need to be considered. **CRYSTAL SYSTEM** network desktop and server expertise includes design, implementation, migration, network operations/management centers, optimization, and project management. Our experience doing network rollouts allow us to integrate new networking systems without disrupting our clients' ongoing business operations.

The **CRYSTAL SYSTEM** methodology and approach is based upon successful prior experience developing and implementing many diverse technologies. Our services include reconfiguring and upgrading network elements, systems, and facilities taking into consideration your business processes, the applications you are running and operating systems' interoperability, support requirements and cost of ownership. We can deploy high-speed backbone networks and integrate network management platforms and remote access technology.

Every organization has different needs and different operating systems to manage their network desktops and servers, and **CRYSTAL SYSTEM** can assist you in selecting the right operating system to match your business network needs. Whether that is Microsoft, Novell, Linux, Unix, we have engineers knowledgeable in these leading technologies.



3) NETWORK DESIGN

Some of the biggest headaches faced by management are the design, configuration, and implementation of effective inter-corporate and intra-corporate computer communication systems. Good network design must recognize the requirements for business and technical goals, including **availability, resilience, scalability, affordability, security, and manageability**.

Understanding business goals and constraints is a critical aspect of any network design. Working closely with its clients, **CRYSTAL SYSTEM** develops effective communication networks customized to the client's needs, keeping costs down and productivity high. Network designs are constantly reviewed and updated to ensure that the clients have, at all times, the most appropriate technology working for them.

CRYSTAL SYSTEM is heavily focused on the design, configuration, and implementation of corporate networks for LAN/WAN environments providing multi-tier systems and secured networked solutions, network analysis/audit broadband network design.

4) SERVER CONSOLIDATION

The key to a successful server consolidation is designing an architecture supporting a reduction in complexity and numbers, while ensuring scalability, manageability, and performance do not suffer. It needs to provide a stable, long-term, and highly available environment that can support current and future operational requirements.

A key item many organizations overlook during a consolidation project is the power of NAS and SAN infrastructures in eliminating servers. If a typical organization were to deploy a NAS or SAN-based storage infrastructure, the overall effective utilization rate would increase from 40-50 percent to as high as 80 percent. This increase in efficiency often translates directly to reduce server requirements.

CRYSTAL SYSTEM can design a virtualized, "NAS on SAN" infrastructure that delivers the necessary storage services. This virtualized storage environment has improved storage efficiency and an information management framework that, when integrated with new information management processes, provides significant cost benefits through improved productivity and knowledge management.

For availability and recovery, **CRYSTAL SYSTEM** implements a software-based, server recovery process allowing rebuilding of servers from a failed state in a matter of minutes, as opposed to the multi-hour process historically used.



5) SECURITY

CRYSTAL SYSTEM has a comprehensive top down security methodology. We supply assessment, design, and implement security solutions as a complete package. We provide our clients with complete customized security solutions that fit not only their security needs, but their budgets as well. We not only provide the technical expertise our clients need, but we work with them to help promote independent knowledge and understanding. We also offer customized in-house security awareness and training programs.

- **Antivirus protection**
- **Encryption**
- **Secure Email**
- **Firewalls**
- **Secure network design and implementation**
- **Intrusion detection**
- **Secure documents sharing**
- **Secure remote access**
- **Virtual private networks**
- **Web server security**
- **Wireless security**



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