



IT Infrastructure Capabilities Statement



Our Background

MRE Consulting, Ltd. (MRE) was founded in 1994 and is a rapidly growing Houston-based business. In a global market distinguished by remarkable changes, companies face a host of new challenges. MRE Consulting is a dynamic professional services firm that employs highly trained and experienced engineers and management professionals to address the needs of Global 1000 businesses as well as commercial and government institutions. **Our mission is to help our clients refine the way they do business by discovering innovative ways to blend technology and strategy with world-class human resources.**

We know how crucial it is that every organization has clear corporate focus, yet remain both flexible and responsive to change. From business and technical consulting services to outsourcing and staff augmentation, we help our clients maintain this focus while achieving flexibility by integrating and streamlining business processes.

Our multidisciplinary, integrated teams focus on enabling clients to identify, assess and leverage their intellectual assets to drive revenue, improve business performance and achieve success. We work with our clients to define business processes that would benefit from collaborative technology solutions. We then design and build enterprises that enable communication and knowledge-sharing in new, more effective ways.

We're not just full of bright ideas
We're full of bright ideas
that make business sense.



Information Consulting



MRE's Information Technology Consulting practice provides answers that are critical to the selection, design, customization and implementation of our clients' technology requirements. Our technical experts develop and implement innovative solutions that increase productivity, resulting in the realization of significant return on investment. Our Information Technology Consulting solutions include:

- IT Service Desk / Call center
- Hardware and software monitoring
- Project and Program Management
- Enterprise Application Integration design, implementation and support
- Infrastructure design, implementation and support
- Network design, security and administration (LAN/VLAN/WAN/VPN)
- Server configuration, maintenance and support
- Disaster planning and recovery
- Security assessments
- Custom applications development (including client/server & Web-based)
- Software selection
- Database design, administration, and tuning
- Content Management
- Maintenance agreements and software licenses management
- Planning and development of IT strategy
- Email migrations
- Server migrations
- Commercial software implementations and enhancements

IT Service Desk

The MRE IT Service Desk provides the following features:

- **Provides a centralized point of communication with other MRE services**
- **Maintains tracking of all call via a web based ticket tracking system**
- **Can be accessed via phone, email or web**
- **Provides Level 1,2 & 3 support for IT related issues**
- **Customized customer online portal**
- **Performance metrics (tickets, monitoring, etc)**

Some of the services the MRE IT Service Desk provides include:

Level 1 & 2 Support

- Business Desktop & Laptop related hardware and software services
- Email, Outlook client services
- Network access & password services
- Other customer related client support services (Windows, Citrix, Exchange, etc)
- Creation/Deletion of network user accounts
- PDA connectivity issues to customer networks
- Interaction with customer's 3rd party vendors to facilitate communications
- Microsoft desktop security patches
- Desktop/laptop operating system software upgrades
- VPN Client access support
- Printer, scanner, multi-function printer support

Level 3 Support

- Real-time asset management (hardware/software), license management
- Microsoft Exchange server support
- Phone, fax & voice mail related support
- Local area Network support (Including VPN access)
- Tape backup/restore
- Storage related support
- Server related support services (Installation, configuration of software and hardware)
- IT Project management and architecture
- Office relocations
- Business application administration, maintenance ,and support
- Personal systems and home office equipment
- Desktop/software training
- Deadline compressed in scope tasks that result in overtime
- Escalated priority for non-emergency services
- Hardware/software outside of the standards policy
- Disaster recovery planning and preparation, implementation and ongoing Processes, and setup and response documentation
- Database server support

Infrastructure Preventive Maintenance

Desktop Preventive Maintenance

- Implement regular checks for the following:
 - Temp files cleanup
 - Spy ware
 - *Virus protection
 - Disk defrag
 - Disk integrity
 - Cleanup registry
- Check cables, connectors
- Verify backup software
- Verify latest security patches
- Verify latest service packs
- Run HDD Health SMART disk tool and identify failing hard drives
- *Asset inventory
- *Software license compliance

*depending on requirements, additional customer software may need to be purchased.

Data Center Preventive Maintenance

- Manually Verify Backups and Restores
- Check UPS batteries
- Check UPS load
- Manual inspection of cables, cabinets, chassis, other hardware, etc
- Check A/C temperature

Windows Server Preventive Maintenance

- Check power protection
- Check event logs for errors/warning
- Check available disk space
- Check available memory
- Check available CPU
- Check disk, memory and CPU historical charts
- Check HD SMART statistics if using IDE/SATA drives
- Check data backup software logs
- Check disaster recovery images
- Check disk defrag software
- Check operating system patches and service packs
- Clean up temporary files
- Remove old application
- Cleanup registry
- Check cooling fans
- Review inventory and recommend upgrades
- Check for failed Windows services

Infrastructure Preventive Maintenance

Application Preventive Maintenance

Exchange

- Check mailbox sizes, identify fast growing mailboxes
- Archive and create PSTs of large mailboxes
- Check available disk space
- Check last backup
- Check Semi-annual restores to verify backups
- Annually defrag information store
- Check maximum size of Information store and adjust accordingly
- Apply monthly software updates
- Monitor IS disk space to determine if and how quickly the store is growing
- Monitor log drive space
- Check for security lock down for better administration

Active Directory

- Check AD integrity
- Check replication status with windows support tool replmon
- Verify that the fsmo roles do not change, keep an eye on them
- Verify the infrastructure manager is not a global catalog in a multi adc environment
- Verify gpo's are applied only to non built-in containers

- Verify sites and services has servers in proper locations in a multi-site environment
- Verify subnets are defined properly in sites and services in a multi site environment

Share point

- Check available disk space

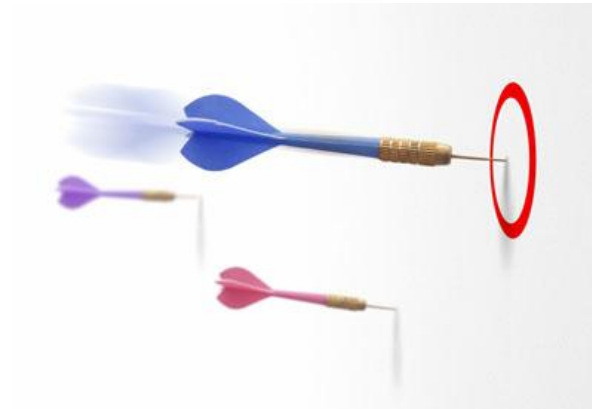
Microsoft SQL Server

- Check available disk space for data and logs
- Check maintenance schedules for all databases
 - Index defrag
 - Database compaction
 - Update statistics
 - Check backup schedules, completions and failures
 - Backup / Log Cutting / Shrink log file / DB REINDEX / Make sure all table have clustered indexes /
 - Monitor Disk Q Length / Memory /CPU / Cache Hit Ratio
 - Backup all systems database master /msdb/
 - Shrinking tempdb
 - rebooting SQL Server every other weeks

Infrastructure Metrics Reporting

MRE IT provides the following types of metrics for reporting purposes:

- Inventory asset reports
- Software compliance reports
- CPU, memory, disk historical trending reports for the last 3 months
- Service Desk ticket/request performance report



Infrastructure Environment Assessments and Recommendations

MRE has the capabilities to perform IT level assessments for customers who are interested in understanding their current IT environment such as configuration, capacity and current and potential growth. Using this information in conjunction with the customer's business growth expectation, MRE can forecast the necessary IT growth needs in order to support the company's business growth scenarios.

Sample IT Assessment Process Includes:

Disaster recovery assessments

- Review existing procedures
- Identify existing gaps
- Augment existing procedures

Network assessments

- Discover and diagram local area network devices
- Make recommendations and implement necessary changes

Email assessments

- Review email servers and configuration
- Review capacity and growth trends
- Make recommendations and implement necessary changes

Server configuration and topology assessments

- Review the configuration and performance of each server
- Create topology diagram of server interactions
- Review server and storage capacity and growth trends
- Make recommendations and implement necessary changes

Application configuration and capacity assessments

- Review the application's configuration and current growth
- Provide forecast and analyze growth trends
- Make recommendations and implement necessary changes

IT Staffing Services

MRE's IT Staffing Services practice offers our clients flexible resource alternatives in response to their changing resource requirements. Working closely with our clients' human resource and administrative departments, we fill our clients' critical staffing needs, resulting in lower costs and higher performance. Our Staffing Service solutions include:

- Candidate search and identification
- Skills and experience assessment
- Permanent and contract-to-hire placements
- Benefits administration

MRE provides a number of capabilities associated with IT staffing that are not available from a standard staffing firm. MRE can utilize experts to screen the candidates and our extensive network allows us to submit quality candidates and not just an unknown resource who we received a resume from via the internet. MRE is also willing to place our top tier consultants into short term engagements at client sites when there is a specific need.

This type of service provides our client with the depth of skills that are required to solve any problem. In addition to our depth of service is our low overhead. We accomplish this by having executive management team members work directly at the clients' sites. Our executives have strong and current technical capabilities. This lower overhead means that the temporary staff working in your facility receives better benefits. Hence, we can staff more qualified candidates for the same rates.

MRE has the capabilities to provide all levels of staffing. We have a wide range of tools available and with own internal ranking systems we can better track the resumes. Therefore, MRE can respond more quickly with the people you will want.

Infrastructure Proactive Monitoring

MRE provides a customized solution to fit each client in order to implement a reliable IT infrastructure monitoring solution. Some of the IT services provided can be found below:

Real-time Event / syslogs monitoring

- Security
- O/S Errors
- Account usage
- Account management
- Policy changes
- Object access
- Application management
- Print server
- Windows event log system
- Events trend

Application/Operating System monitoring

- MS SQL Server
- MS Exchange
- Windows servers

Hardware monitoring

- Windows Servers
- Networking hardware – managed routers, switches

Backup monitoring

- Monitor successful or failed backups
- Proactively address any failures

Monthly status and performance reporting

- Basic status reports
- Server hardware performance reports
 - CPU, memory, network interfaces, disk, uptime, etc.
- Security related reporting
 - Account access/usage
 - Object access

INFRASTRUCTURE CUSTOMERS

MRE's experience in deploying solutions includes several clients. A partial list of current & past IT clients:

