

IT managers face a difficult balancing act everyday. Often the IT project list extends beyond your internal resources and capabilities. Micro World Enterprise Solutions can help. Our extensive portfolio of Technical Services bridges the gap by providing relief and resources when and where you need them.

MWES gives you new flexibility and confidence in handling the myriad of IT issues. You can select individual services or have one of our consultants tailor a services solution that fits your exact requirements.

With MWES, you have access to highly skilled and manufacturer-trained technical professionals who can handle the most challenging tasks on the roster. Our technical consultants combine the knowledge and skill of an engineer with the dedication of a technology partner to facilitate pre-sales technical support and proactive solution design.

Data Center Relocation

Moving a data center is one of the most complex of all IT projects. And a failed or problematic relocation can do long-lasting harm to your business.

To help make the move a success, Micro World Enterprise Solutions provides an extensive set of data-center relocation services. These include the coordination of all related service-delivery activities, scheduling transportation, securing adequate insurance, ensuring that equipment is operational before it is moved, checking that items are correctly packed for the move, and running the appropriate diagnostics after the hardware and software has been reinstalled. Also, MWES can help you ensure that software licenses are properly transferred.

Disaster Recovery

Ideally, disaster recovery is part of a complete data-protection methodology which also includes procedures for backing up data, restoring data when files are accidentally lost or deleted, and archiving data to meet both operational and legal requirements. Micro World Enterprise Solutions can assist your company with all aspects of this methodology, but we find that the greatest need is in disaster recovery, if only because existing plans tend to go out of date very, very quickly.

The following issues will be considered during the Disaster Recovery service:

- Backup, restoration, and archiving procedures.
- Contingency planning for various levels of damage to your company's IT infrastructure and other facilities.
- Creating and managing a company-owned alternate processing site which can take over if one data center goes down.
- Exploring the use of third-party, off-site disaster recovery services
- Training your company's personnel so they respond immediately and appropriately in the event of a disaster.

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Help Desk Support

One of the biggest drains on the time and energy of your company's IT staff is the need to answer dozens, or even hundreds, of routine questions each week about how to do particular tasks. Micro World Enterprise Solutions can help you locate and evaluate third-party specialists to provide level 1 and sometimes even level 2 support for your coworkers. This will free your in-house IT staff to concentrate on system planning, operations, and other responsibilities which are more suited to their level of professional expertise.

Installation Services

Micro World Enterprise Solutions' installation services can handle everything from a simple server installation to a complete, enterprise-wide networked solution. Our experienced project managers are familiar with complex installation requirements and can guide the entire process from planning to implementation to customer acceptance.

MWES' installation teams are manufacturer-certified to handle the most complex server, client, network or printer installations, including optional data migration to the new system.

And of course, MWES' quality procedures help ensure the accuracy of your installation, all along the way.

Integration Services

To help you integrate your new hardware and software and move them into production, Micro World Enterprise Solutions draws on two unique resources: the Integration Center and the TECenter.

The Integration Center is an ISO 9001-certified facility that provides high-quality integration of hardware and software solutions, with thorough testing and 100 percent burn-in, if specified. The Integration Center provides both channel assembly and custom-build integration services for just-in-time delivery of your unique solutions.

The TECenter is staffed by manufacturer-certified experts whose specialties include network designs that encompass most major operating systems. They also are adept at integrating proprietary and non-proprietary components with networks, servers, PCs and peripherals from all major manufacturers. The TECenter works closely with the Integration Center as it helps you move your customized configuration into full production.

LAN/WAN Design Services

Micro World Enterprise Solutions offers design services for both local-area networks (LANs) and wide-area networks (WANs). Whether your project is a new network, an upgrade or an expansion, certified network architects will create a plan that includes both logical and physical designs. The logical design represents how the network operates. The physical design represents the actual locations of networking equipment, servers, and clients.

Network design is a detailed, labor-intensive activity. During the design process, all key aspects of the network are examined in terms of how they meet current needs and how they must be adapted or enlarged as network usage grows. This includes the hardware which constitutes the physical network, the software used to give that network its structure and organization, and the firmware which gives your network interface controllers and hubs their functionality.

The goal is to design a network that is cost-effective, easy to manage, and has the flexibility to adapt as your company's business and technical requirements grow and change



Maintenance Services

Establishing the correct level and type of maintenance service for your company's IT hardware and software can be a very challenging task. But A Micro World Enterprise Solutions consultant can help you determine the appropriate level of service for each item in your IT infrastructure, sell you the appropriate coverage, and help manage your contracts to keep them up to date.

When MWES performs a maintenance-service review, the evaluation is based on two primary criteria: the planned use of the item and the cost-effectiveness of extending maintenance vs. replacing the item.

After these have been determined, MWES can review the available alternatives and recommend the one which is best for your company's particular business situation.

Furthermore, MWES can reevaluate these agreements on an annual basis as part of an on-going maintenancecontract management service. This is important because you cannot get the full benefit from your company's maintenance expenditures unless that coverage accurately reflects the adds, moves, and deletes which have been made to your IT infrastructure since the agreements were originally signed.

But what makes an annual review especially valuable is that maintenance costs for a particular item can increase dramatically during the time this item is in service. Each year, many manufacturers will automatically raise the price of maintenance on older items, especially those which are no longer in production. And it is very easy to overlook this drain on your IT budget. An annual maintenance-service review from MWES can indicate when it is time to replace these items, instead of just extending the maintenance contract. This helps ensure that your company gets the maximum benefit from each dollar spent on maintenance agreements.

Performance Analysis

A performance analysis from Micro World Enterprise Solutions is an essential part of many types of IT projects and planning activities. For example:

- If your company is experiencing network problems, a performance analysis can highlight the problem areas, enabling you to focus your upgrades on the places where they will do the most good.
- If you are thinking about upgrading a particular server, a performance analysis which compares your current server to its proposed replacement will help to quantify the benefits you can expect from the change.

In addition to giving you solid, reliable technical information on which to base IT procurement decisions, a performance analysis can help you build the business case required to get funding for the upgrade, because you now know exactly how much bang you will get for your bucks.

Software Implementation Services

Micro World Enterprise Solutions' software implementation services go beyond just loading an operating system or some applications on your company's servers and PCs. Our certified technicians can also configure all your applications for network compliance. This attention to critical detail includes physical connections, addresses, revision levels, and other key variables.



Our software implementation services include:

- Planning
- Site surveys and configuration documentation
- Staging and integration
- Product configuration
- Site configuration
- Installation
- Service-completion report(s)

If you are installing, upgrading, or moving software, MWES' implementation services ensure that these changes are made rapidly, accurately, and with minimal disruption to your business.

Technology Management Maintenance Service (TMMS)

Moore's Law may be a cliche, but more than 25 years after it was first stated, it continues to hold true: the number of transistors on a microprocessor-and therefore its processing power-doubles approximately every 18 months. This applies to servers, to desktop computers, and to laptops. Furthermore, you have probably found that the embedded microprocessors which control your storage devices and networking equipment do not lag far behind.

Obviously, if your company has a computing system which keeps pace with Moore's Law, it has a big advantage over companies that don't. Providing that competitive edge was and continues to be the main justification for buying information technology. But keeping pace with changes in the price/performance curve raises so many administrative and financial problems, the effort to do so can be self-defeating. Your IT staff spends its time on corporate paperwork, instead of working to improve your company's productivity and efficiency.

Those are the problems that Micro World Enterprise Solutions' exclusive Technology Management Maintenance Service (TMMS) is designed to solve. It provides a unique blend of technical and acquisition services to help your company benefit from the rapid pace of technological evolution. This is something that traditional IT acquisition methods, such as three-year leases, cannot provide.

TMMS is aimed at reducing the costs and minimizing the risks which always accompany technology acquisition. This is why TMMS has been adopted by more than 100 companies since it was introduced, including 50 in the Fortune 500.

The heart of the TMMS methodology is an interconnected examination of both the technical and financial considerations affecting your purchase. This helps ensure that:

- Your company's IT infrastructure is updated to newer technology in a regular, planned manner; this process is referred to as a "technology refresh."
- Your company will have the funds needed to implement these updates, without disrupting your normal cash flow or budgeting process.

As MWES' technical and financial consultants prepare your TMMS proposal, they leverage their relationships with the leading manufacturers to get the inside line on current trends and upcoming product introductions. This information is then crafted into your refresh plan.

Your company's TMMS agreement can be tailored to meet the most demanding requirements of dynamic computing environments.

- TMMS enables you to add or remove equipment with a minimum of paperwork.
- TMMS includes customized procedures, jointly developed by MWES and you, to facilitate the purchase, delivery, and removal of equipment.
- TMMS can include not just new equipment, but also the IT equipment your company already has, whether it is owned or leased.
- TMMS allows you to modify the refresh schedule. This means your company is not locked into either a specific upgrade path or specific refresh timing. The refresh schedule can be adapted, based on your actual technical requirements.
- TMMS agreements support different exchange schedules for each technology type (e.g., storage, servers, network).
- Funds for equipment upgrades are built into the TMMS agreement. There is no need to fuss with special budgets or purchase authorizations to obtain your upgrades.
- Technology refresh is preapproved as part of the TMMS agreement; the delays created by slow management approvals for a new project are eliminated.
- With TMMS, you improve your ability to quickly take advantage of technical innovations.
- Technical advisory services, built into the TMMS contract, help your company make the best technology decisions.
- The sourcing of additional consulting services can be included in the project financing.

For complex exchanges, MWES can perform a needs assessment and prepare a formal Migration Impact Report to support the planned technology refresh. This report includes a description of the solutions architecture, a cost of operations analysis, and an updated technology roadmap. With this information in hand, your company's management and IT staff both know what to expect from the exchange and how it will improve your company's operations.

In addition, MWES performs asset tracking for equipment covered by the TMMS agreement and can assist with asset disposition when equipment is returned during a technology refresh.

With TMMS, your company can prepare, in a fiscally responsible manner, for tomorrow's business requirements today, with the flexibility you need to keep pace with the always changing world of IT technology.

Training

One of the best ways to improve the productivity of your company's employees is to provide formal training on the equipment and applications they use. Micro World Enterprise Solutions can help you locate and evaluate third-party specialists to provide this training, which will free your in-house IT staff to concentrate on system planning, operations, and other responsibilities.

Warranty Enhancement Services

Most IT equipment includes a warranty when you buy it, but typically, the coverage you receive is limited in significant ways. A Micro World Enterprise Solutions consultant can help your company review its warranty options and determine whether an extended warranty would be a prudent investment. For example, the factory warranty might include 8x5 service, but if the item in question is a critical database server, 24x7 coverage with a guaranteed 4-hour response time would probably be a prudent investment.

But there is more to this service than just an add-on to the factory warranty. MWES can also monitor your warranty agreements to ensure that ongoing maintenance contracts are in place when the warranty expires. And even if an extended agreement is still available for that item, it may be more advantageous, both operationally and financially, to switch from warranty to maintenance. MWES consultants can help you determine that, too, so your company gets the optimal amount of protection in a cost-effective manner.

Network Services

Emerging technology has altered the demands placed on business enterprise solutions. Networking infrastructure has become an integral part of supporting business needs. Keeping up with this change means delivering the performance, functionality, and scalability that business-critical networks demand. Micro World Enterprise Solutions offers a full range of LAN, MAN & WAN products and services to insure reliability for network managers who are faced with the unprecedented challenges of providing mission-critical applications and quality of service to their customers.

Micro World Enterprise Solutions engineers have a wealth of industry experience and certifications on enterprise connectivity that is not only technology based but cost driven as well. Micro World Enterprise Solutions can offer solutions that meet the increasing demands of users while reducing the increasing cost of ownership. Look to Micro World Enterprise Solutions to assess and implement critical LAN, MAN & WAN features such as:

- Wireless
- System Designs
- Telephony
- Traffic Analysis
- Remote Monitoring
- VPN Design & Implementation
- Network Administration
- Network Optimization
- Moves, Adds and Changes
- 24 X 7 Help Desk Services

The foundation of any customer support program is a centralized user help desk providing comprehensive support services for your organization. Building processes and maintaining a trained, competent staff that can effectively deal with the growing diversity of hardware and software products may be an overwhelming task for many IS managers.

Micro World Enterprise Solutions can provide 24x7 Help Desk service that is customized to your specific requirement, including multi-vendor desktop hardware, peripherals, operation system software, and many software applications.

Micro World Enterprise Solutions engineers and project experts understand and support multi-vendor and multiprotocol systems. As your network needs grow with an expanding enterprise, partner with Micro World Enterprise Solutions to provide LAN, MAN & WAN solutions.

Micro World Enterprise Solutions leverages the technology leadership of our partners' products to build successful applications and services that solve the growing needs of companies competing in the expanding Internet economy.

Micro World Enterprise Solutions has partnered with the leaders in the industry to deliver solutions for your business. We recognize that the new Internet Economy introduces unprecedented challenges to IT organizations which are hard pressed to keep pace with the rapid changes in networking technology in order to maximum their enterprise to take advantage of Business to Business and Business to Consumer opportunities. We have partnered with the companies who have demonstrated expertise and have set the benchmark for networking technologies.

Micro World Enterprise Solutions leverages the technology leadership of our partners' products and builds successful applications and services that solve the growing needs of companies competing in the expanding internet economy.

Our key partners include:

•	Convergence: Voice & Data -	Cisco Systems, Enterasys, Marconi
•	LAN, MAN & WAN -	Cisco Systems, Enterasys, Marconi, ADC, AdTran
•	Wireless -	Cisco Systems, Avaya, Enterasys
٠	Security -	Cisco Systems, Network Associates, Check Point,
		WatchGuard
•	Network & Security Monitoring -	Netsolve "Prowatch"
•	Internet Solutions -	Cisco Systems, Network Associates, Websense
•	Premise Wiring -	Avaya, Panduit, Krone, Molex Premise Networks
•	Cabinets -	Chatsworth Products, Inc., Enclosue Systems
		Worldwide(ESW), Damac
•	Hardware/Innerduct -	Caddy, Carlon
•	Training -	KnowledgeNet
•	Carrier Service -	AT&T, Sprint

Choose Micro World Enterprise Solutions to be your partner, and take full advantage of the benefits that our leadership in both product solution and services brings to your business.