



Network  
Computing

# Table of Contents



Introduction.....	2	• LAN Server Configuration.....	13
Networking Services .....	4	• LAN Server Installation .....	14
• Pre-Network Consulting & Planning .....	4	• O/S Network Upgrade.....	15
• Network Design & Integration .....	5	• Workstation Installation .....	16
• Installation .....	6	• Software Installation.....	17
• Training .....	7	• Bridge/Router Installation.....	18
• Connectivity.....	8	• Remote Customer Support .....	19
• Service & Support .....	9	• On-Site Customer Support .....	20
Service Contracts.....	10	• Host Gateway Installation .....	21
Integration Services .....	11	• Network Administration.....	22
• Network Design .....	11	• Cabling Services .....	23
• Documentation .....	12	• File Server Support Agreements .....	24

Q u a n t a T e c h

## Introduction

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The widespread migration from mainframe to client-server computing has created an environment whereby most businesses today depend on networks and network-based applications in order to be productive.

Moreover, the spread of heterogeneous network environments has placed additional demands on the client-server model, making platform-independence a key factor in selecting network applications, hardware and services. File sharing, databases and even e-mail systems must become part of a seamless network environment in order to ensure maximum performance and user productivity.

The key to understanding all of the issues that involve application interoperability in these environments is expertise and experience. At Quanta Tech we understand the critical and complex relationship between network operating systems and the data applications they support.

As the computer industry continues to change and

company that can design and provide just the right network model to fulfill their business requirements.

Quanta Tech is an innovative network and computer service organization focused exclusively on providing the most cost-effective and productive solutions to integrated network operations and management. We provide networking data communications and support services to businesses of all sizes. Quanta Tech offers a spectrum of services designed to meet your networking needs. We offer a comprehensive program which begins with a pre-sale consultation and installation to on-site training and support. We offer a wide variety of services that benefit both the system administrators, who manage the network, and the users, who rely on it. Our goal is to solve your short-term problems and become your long-term partner in achieving the highest quality, integrated network performance.

To achieve this goal, Quanta Tech has trained technical staff with expertise in all the major networking technologies,

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platforms and products available today. We can solve your networking problems – no matter how simple or complicated they are – quickly and efficiently. Our technical staff will use the best technical resources available to deliver the highest quality service. Our experienced certified staff will work with each individual client to develop a personalized plan for implementing a complete hardware and software network solution.

To date, Quanta Tech has installed numerous computer networks. We have installed networks in insurance companies, law firms, accounting firms, real estate firms and more. The networks have ranged in size from two workstation Local Area Network (LAN) up to a 200+ workstation LAN. Our staff of technicians has integrated Apples, PC's, Laser Printers, Bridges, Routers, Gateways, Fax Servers, Print Servers, plus much, much more. We have installed applications such as E-mail, Word processing, Accounting, Databases, Spreadsheets, Communication Servers, Desktop Publishing, Utilities and Virus Protection software on networks running multiple platforms.

The ability of Quanta Tech to install the newest state-of-the-art equipment, into a network environment, in conjunction with older existing equipment, makes Quanta Tech your single source vendor for all your computer network and hardware needs. In today's business environment, organizations need solutions that let people work effectively in networked computing environments. They need solutions that integrate desktop productivity tools: spreadsheets, word processing, presentation graphics, publishing with communications and server based database programs. They need solutions that make the best use of their existing hardware while facilitating future growth. They need a single source vendor for all their computer and network needs! They need Quanta Tech.

# 4

## Network Computing

# Networking Services

## Pre-Network Consulting

To implement a computer network requires planning. Planning begins with a needs assessment and creation of a project plan for managing all areas of your network integration. The goal of Quanta Tech is to successfully identify your requirements for connecting your PCs to a network. We will lead your organization through the project planning stages. With over twenty years experience in the design, installation and support of networks, Quanta Tech has developed a network integration plan that guarantees success. Our pre-network consulting and planning consists of:

- Recommendation of a network design for your company's needs
- Recommendation of hardware specifications to satisfy your requirements in the most effective and affordable manner
- Recommendation of software applications to satisfy your business requirements
- Training of your staff on the new network
- Analysis of your staff's PC knowledge in order to plan for support services
- Disaster recovery plan

## Network Design &

### Integration

Quanta Tech will analyze your network requirements and design your system with future communication expansion in mind. The integration of your network should flow smoothly if the project plan outlined by Quanta Tech is followed. A successful integration will require the involvement of Quanta Tech in all, or at least part, of the project plan. A team of specialists plan all areas of your network integration. Quanta Tech acts as the project manager to ensure all multi-vendor installation occurs according to the project plan. Our network design and preparation for integration consists of:

- Design of the physical layer of the network
- 72 hour standard industrial hardware testing prior to installation
- Network operating system and software installed at Quanta Tech office prior to hardware installation at your company's location
- New workstations tested in order to assure network connection
- File server hardware tested to ensure excellent performance and reliability
- Testing of the backup system and the Un-interruptible Power Supply (UPS) system

## Networking Services (cont.)

### Installation

The installation of your network is planned around your staff's busy schedule with little or no interruptions. The installation is performed by a team of network installation specialists, on-site, in a quick and organized manner. Majority of the wiring and installation is done on the weekend, thereby ensuring less interruptions to your already busy schedule. Our network installation consists of:

- Complete documentation of your network layout
- Installation of network equipment at company's location
- Workstations are attached to the server(s)
- Intelligent wiring hub is configured and tested
- Tape backup device is installed and tested
- UPS battery backup equipment is installed and tested
- Network cabling is configured and tested prior to installation
- Network operating system loaded prior to installation
- Security rights and software paths are setup upon installation
- Printers are connected and defined within the application software
- Network management is activated

## Training

Our superior service is based on a team approach which makes our entire organization available to meet any of your information technology needs. We want to be your long term support partner by helping you realize profitability gains through the management of information systems and technology. The training of your staff is critical in any network integration plan. Training for the network administration, the staff and for management normally starts when the project plan is approved. The network administrator will then be involved in all aspects of the hardware and software installation unless they specifically request not to. The administrator will be the on-site phone diagnostics provider

for any network problems. Our training consists of:

- Hardware training
- Network operating system training
- Network application training
- System administrator training
- End-user training on network procedure for workstation login
- Individual or group training offered on a variety of platforms (Apple, IBM, etc.)
- Disaster recovery training

## Networking Services (cont.)

### Connectivity

LANs can connect different workstation environments transparently, while maintaining system security and reliability. In addition, they can give the user data processing speed and power that was formerly available only in large central processing environments. Our connectivity consists of the following:

- A remote PC connected to a LAN allows remote users to access the network via modem or the internet
- Inter-network Gateways enable once incompatible LAN operating systems to communicate with each other
- LAN to Host connectivity enables a network user to communicate from a PC through a network to the Internet at considerable cost savings
- Local bridging allows different topologies (Ethernet, Token Ring and Arcnet) to be interconnected on servers running different O/S's
- Remote bridging allows networks across the country to be linked together
- We can help maximize your organization's Client Server usage, and help manage the migration of your existing systems to Client/Server architectures
- Interconnectivity of multivendor platforms

## Service & Support

Once the integration of your network has been completed, additional on-site service and support is critical to the success of any network project plan. Our service and support consists of:

- On-site service for all hardware and software
- One to eight hour response time
- Guaranteed computer operation after diagnostics
- Free telephone support
- Free loaner equipment
- Application support
- Network operating support
- Preventative maintenance support
- Remote modem diagnostics on all network problems provides immediate support for the administrator
- On-site manufacturers warranty repair, at no charge
- Upgrade network operating system as newer versions are released
- Implementation of new applications, as they become available, and on-going training for your staff
- Disaster recovery plan
- Single source vendor for servicing your hardware and software
- Preconfigured and burned in file servers at Quanta Tech allow for a quick swap in case of a file server crash

## Service Contracts

Quanta Tech provides customer-focused contracts in order to refocus service contracts on the customer, rather than on equipment or application being serviced. Quanta Tech's customer-focused service contracts match the service delivery to the unique needs of each customer while eliminating non-value-added focus on serial numbers and targets administrative efforts at meeting real customer needs. Our service contracts include:

- One to eight hour response time
- Replacement parts
- On or off-site labor
- Loaner hardware provided at no charge
- Telephone support
- Service on all new and existing equipment
- On-site service and manufacturers warranty
- Preventative maintenance
- Service on entire network
- Flexible response time to meet client demand
- No travel costs
- Customized service contracts

# Integration Services

## Network Design

Goal: To convert your business requirements into a computer system design

### Implementation:

1. Perform a needs analysis of your current business environment
2. Analyze how your staff is using their existing computers
3. Analyze the computer knowledge of your staff
4. Identify shortcomings of your current system
5. Interview each department to come up with a "wish list" of computer needs
6. Help determine software needs
7. Determine hardware requirements for implementing the desired software
8. Analyze current cable system to determine if it can be used

### Requirements:

1. Availability of staff to be interviewed
2. Availability of current computer system to determine existing applications
3. Inventory of systems and printers
4. Support from top management regarding needs analysis
5. Discussion of future plans for the organization to help determine future computer needs

# Integration Services (cont.)

## Documentation

Goal: Provide documentation for any new and/or existing Local Area Network

### Implementation:

1. Physical and logical network layout for all devices and cabling
2. Interface card switch and address settings
3. All applications separated by version numbers
4. Server and workstation models, serial numbers and configuration information
5. All customized applications

### Requirements:

1. Required when service contract is provided
2. Service contract recommended when Quanta Tech Inc. takes over servicing of an existing LAN

## LAN Server Configuration

Goal: Customize the network operating system to meet the needs of any LAN

### Implementation:

1. Proper configuration of the file server hardware
2. Loading operating system on the file server
3. Login scripts/trustee assignments
4. Security setup/accounting descriptions
5. Network directory structure
6. Server documentation sheets

### Requirements:

1. Defined set of objectives
2. Configuration specifications defined

## Integration Services (cont.)

### LAN Server Installation

Goal: Provide a functional network server.

#### Implementation:

1. Server with the installed network operating system, up to the basic operating system prompt
2. May include on-site installation of additional server hardware
3. Connection of the file server to the physical layer on the network

#### Requirements:

1. Server configuration specifications
2. Server and related hardware and software
3. Tested at Quanta Tech for 72 hours prior to installation

## O/S Network Upgrade

Goal: Install new versions of current operating system or convert to a new O/S.

### Implementation:

1. Upgrade from earlier release
2. Transfer of all data to new operating system
3. Update application programs, if necessary
4. Transfer all trustee rights to new operating system
5. Training on the new operating system
6. Reconfiguration of the network printers, tape backup, battery backup, workstation and physical layer devices

### Requirements:

1. Server to be tested at Quanta Tech for 72 hours
2. Complete backup of current data

# Integration Services (cont.)

## Workstation Installation

Goal: Provide a workstation node on the network.

### Implementation:

1. Workstation with installed network interface card
2. Network operating system driver software installed
3. Documentation on all installed hardware and software
4. Creation of trustee rights on the network
5. Training on network access procedure, location of data and printer access

### Requirements:

1. Functional stand alone PC
2. Network interface card
3. Network operating system installed on the server
4. Network operating system shell driver definitions

## Software Installation

Goal: Provide a loaded and operational software package on a LAN server or workstation node.

### Implementation:

1. Loading the software on the file server
2. Creation of user rights and paths for storing data
3. Testing on access from the workstation
4. Configuration and testing of printer access
5. Documentation on software installed
6. Training on access and installation procedure

### Requirements:

1. Functional network server or workstation
2. Software documentation
3. Certified version of application software

# Integration Services (cont.)

## Bridge/Router Installation

Goal: Provide a bridge or router to link LANs (internal or external), offering local or remote connections.

### Implementation:

1. Installation of the bridge/routing hardware
2. Installation of Local and Wide Area Network interface cards
3. Installation and configuration of the bridging/routing software
4. Documentation on all installed bridging/routing hardware and software
5. User nodes able to access the interconnected LAN
6. Training on the devices and software installed

### Requirements:

1. Bridging/routing hardware, including interface cards
2. Bridging/routing software
3. Access to the local network communication links and connection equipment (modems, etc...)

## Remote Customer Support

Goal: Provide remote telephone support for LANs via voice and electronic access

### Implementation:

1. Technical information
2. Problem solving
3. On-line modem/internet support optional
4. Step by step troubleshooting procedure
5. Support for hardware and software

### Requirements:

1. Customer LAN Administrator
2. Customer network documentation must be present at Quanta Tech's service department
3. If dial-up services are to be provided, remote support software and modem must be installed on the LAN

## Integration Services (cont.)

### On-Site Customer Support

Goal: Provide a wide range of LAN improvement and optimization services to support existing and changing needs.

#### Implementation:

1. Achievement of the agreed upon objectives
2. On-site service agreements on network hardware and software with a guaranteed response time
3. Provides for loaner network hardware
4. Does not cover data or software
5. Training on proper servicing procedure
6. Hourly rates or annual agreements on service will vary based on the tasks at hand and the level of expertise required to provide the service

#### Requirements:

1. Clearly defined objectives and time tables

## Host Gateway Installation

Goal: Provide a functional link between a LAN and host processing resource.

### Implementation:

1. Installation of the gateway hardware, including any local and wide area network interface cards
2. Installation and configuration of the gateway software
3. Documentation on all installed gateway hardware and software
4. Installation of nodes to access the host resource
5. Training on access to gateway server

### Requirements:

1. Gateway hardware, including local and wide area network interface cards and PC devices if necessary
2. Gateway software
3. LAN gateway configuration parameters and definitions
4. Necessary host configuration parameters and support in place
5. Access to local and wide area network communication links and connection equipment (modems, etc...)

# Integration Services (cont.)

## Network Administration

Goal: Manage the LAN and the system hardware and software.

Implementation:

1. Perform the functions of a network administrator

Requirements:

1. Manage all users on the network
2. Answer software and hardware questions
3. Create security rights for users
4. Perform LAN management on-site or remotely
5. Install all new applications on the network
6. Manage and troubleshoot printing problems
7. Manage tape backup procedure
8. Administer Disaster Recovery Plan
9. Training on administration procedure
10. Manage stored files on the network

## Cabling Services

Goal: Provide or test LAN cabling which will support a LAN environment.

### Implementation:

1. Functional LAN cabling plan
2. Testing of new and/or existing cable
3. Cable company consultation

### Requirements:

1. Consultation on cabling specifications as required by network design

# Integration Services (cont.)

## File Server Support Agreements

Goal: Provide guaranteed response time on all network file servers.

### Implementation:

1. Backup file server, prior to start of the file server agreement
2. Restore operating system and applicable data
3. Support for hardware and network operating system
4. Service agreement can be for all or part of the network hardware and/or software
5. Remote phone support
6. Loaner hardware available at no charge
7. Training on proper troubleshooting procedure
8. Complete network documentation

### Requirements:

1. Fully functional LAN
2. Newly installed LAN



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