

CA-MLINK™

End-To-End Managed Data Transport

Spanning the industry's widest range of platforms, CA-MLINK and CA-MLINK™ Server support high-speed, automated, and unattended data transport. It is the ideal solution for IT managers who require a high-performance, cost-effective data transport solution adaptable to today's expanding network environments.

The Challenges Of Managing The Transport Of Time-Sensitive Information

Today's business enterprises are growing at an enormous rate. Organizations are expanding globally to meet their competitive needs. As they grow in the distributed environment, they are creating, processing, and dispersing large volumes of strategic information. The timely, accurate, and secure movement or transfer of this information is critical to the value of the data.

The Data Transport Management Solution

CA-MLINK is the ideal data transport solution for automated data transport and communications scheduling that uses industry-standard TCP/IP and asynchronous communications protocols. It has the capability and flexibility to manage complex networks consisting of thousands of remote computers, supporting various hardware and operating systems. The CA-MLINK Server operates as a central communications manager to give you complete control over the process of sending and receiving data. The server is supported on a variety of UNIX systems, as well as OS/2 and NT.

CA-MLINK Delivers Unprecedented Benefits

CA-MLINK provides the answer for companies with a large number of remote locations. It is ideal for use with applications such as point-of-sale data distribution and collection, sales force automation, and mobile computing. With CA-MLINK, sessions may be centrally defined and scheduled to control sending and receiving files, as well as local and remote command execution. Its benefits include:

- High performance data transport across multiple industry platforms.
- Enhanced system productivity through data compression and checkpoint restart.
- Verified delivery of time-sensitive information.

CA-MLINK Boasts Distinctive Features

CA-MLINK provides value-added file transfer functionality for high performance, control, reliability, and applications integration above and beyond basic file transfer. CA-MLINK Server manages the collection and distribution of information across the enterprise using:

- **A Centralized Database.** CA-MLINK Server allows you to store all the information needed to communicate with remote sites in one central location—the CA-MLINK Server. Users can perform group-oriented operations such as task list updating, post processing, and reporting on a group basis. These features help reduce administrative costs for large-scale operations managing hundreds or thousands of remote systems.
- **Powerful, Flexible Session Options.** CA-MLINK Server offers each site multiple defined sessions. A session defines scheduled communication windows and a list of tasks to be executed, along with site priorities. One or more lists of tasks may be assigned to occur in any given session. The schedule may specify days of the week, specific dates, time of day, and intervals. This gives you complete control over the scheduling of communications tasks on a per day basis, for the times and sites of your choice.

CA-MLINK provides the following value-added management features:

Communications. CA-MLINK is designed to work within your existing network. With a wide range of platforms and protocols supported, CA-MLINK maximizes your investment for future network growth. Its powerful communications capabilities are well-suited for automating distribution activities to and from remote sites. CA-MLINK:

- Supports TCP/IP and asynchronous protocols.
- Supports a wide range of UNIX and workstation platforms.
- Supports a variety of connection types.

CA-MLINK communicates with a large number of sites through its ability to operate multiple concurrent ports. It can simultaneously operate all ports allowable by the capacity of your central communications server's hardware and operating system. CA-MLINK dynamically assigns tasks to all available ports, and gives the operator full control over port configuration at all times.



Basic File Transfer. CA-MLINK provides robust capabilities for reliable,unattended transfer of files between systems. It allows any system to initiate data transfer and perform bi-directional, unattended transfers.The four primary functions of CA-MLINK include:

- **Send File.** Allows you to send a data file to be written on a remote system.
- **Receive File.** Allows you to retrieve a remote data file to be written on a local system.
- **Local Command.** Allows you to execute a command locally.
- **Remote Command.** Allows you to send a command to be executed on a remote system.

CA-MLINK also gives you the flexibility to pre-schedule transfer requests,or have them executed on demand.

Speed/Performance. With CA-MLINK,you're working smarter, not harder. CA-MLINK's file transfer technology is rich in features to provide error-free transmissions.It offers you all the advantages and conveniences you expect from a leading data transport solution in meeting your most demanding file transfer needs. For example,CA-MLINK:

- Provides automatic checkpoint/restart and error recovery in case of transmission failure.
- Offers the benefits of an adjustable frame size of up to 32K, to significantly reduce line turnaround time in the event of a transmission error.
- Offers CRC-16 checksum algorithm to ensure high levels of error detection and correction.Blocks are automatically retransmitted until they are received correctly, or until the user-defined retry limit is exceeded.
- Provides session time-out indicators to detect broken connections.
- Provides advanced data compression to maximize network productivity.

Unattended Operations. Reliability is vital for companies that depend on data transport for business-critical information. CA-MLINK performs unattended transfers reliably, thereby improving productivity. CA-MLINK also provides you with:

- **Automatic Error Recovery.** Since CA-MLINK is designed to run in unattended mode, it has built-in error detection, intelligent error recovery, and detailed session reporting. CA-MLINK detects all errors that occur during a session and takes the intelligent steps to recover whenever possible. For example, CA-MLINK interprets and reports error codes returned by most auto-dial modems.

- **Automatic Retries.** When a connection to a remote system is unavailable, or when communication problems interrupt a session, CA-MLINK automatically attempts to reconnect by continuing to retry for a user-defined number of times. Delays may be used to allow the remote system to reset or give priority to sites not contacted. Unnecessary retransmissions are avoided by skipping files already transferred.
- **Statistics, Reports, And Audit Trails.** CA-MLINK provides comprehensive statistics, status reports, and audit trails to assist you in monitoring distribution activity and troubleshooting. Reports may be generated automatically to show the number of sites completed, sites requiring retries, and failed sites. Status reports may be displayed or printed for selected sites, groups of sites, or all sites. Exception reports may be selected for failed sites.
- **Realtime Display Of Activity.** A port monitor screen provides realtime display of activity on each communications port,and comprehensive session tracing can be enabled for troubleshooting sites.All status,audit trail,and tracing information is automatically archived for future analysis.A configurable archive cycle controls the volume of information stored online.
- **Security.** The CA-MLINK Server site database allows you to define user names and passwords for each site.This information is verified by the remote system at the beginning of each session.This verification interfaces with local UNIX security for UNIX systems, and to a local file within CA-MLINK for PCs.

Application Integration. CA-MLINK can be used as a turnkey data transport system or can be integrated directly into in-house or third-party applications. Its application integration features,along with its speed,performance,and reliable operations, provide additional value to make CA-MLINK the choice for enterprise-wide data transport.Some of these features include:

- **Menu And Command Line Interfaces.** An easy-to-use menu interface with context-sensitive help accesses the functions required for database setup,data entry, updates,statistics,and reporting.External programs can also issue operational commands to CA-MLINK through its command line interface.
- **Graphical User Interface.** The CA-MLINK server offers a graphical user interface,the Administrative Workstation (AWS). This easy-to-use interface runs on a workstation running Windows 3.1+,Windows 95, and Windows NT, connected to the CA-MLINK Server. The CA-MLINK Server database is manipulated using the AWS.Using the AWS,you can:

- Create and maintain the CA-MLINK Server databases.
- Start and stop the CA-MLINK Server databases.
- Initiate demand calls for ad hoc requests.
- Check the current status of your sites.
- Generate reports.
- Add, delete, and edit sites, sessions, task lists, tasks, alternate paths, and ports.
- **Script Language.** The CA-MLINK script language provides an easy-to-use programming language designed for quick implementation of communications applications across multiple operating systems. The language can also be used to develop specialized applications such as sales-force automation projects. CA-MLINK scripts compile into fast, secure modules that can be ported to and executed by any CA-MLINK system.
- **Powerful Update Facilities.** CA-MLINK provides a variety of approaches for easy database maintenance. By using default records, including group defaults, you can modify site definitions quickly and easily.
 - Batch update facilities make it easy to change task lists even for a network of thousands of sites. Batch updating can be initiated by external programs for automatic “event-driven” operation.
 - Macros allow you to automatically embed site numbers and dates in file names to be transferred.
 - Distribution lists provide powerful grouping capabilities for downloads, and can be automatically deleted from the sending system upon completion.
- **Easy Customization.** CA-MLINK is designed for companies with demanding communications requirements. Because exact communications requirements vary from business to business, script source code is provided for dialing, session, remote operation, and post-processing functions. Script source code modules are written in the CA-MLINK script programming language, and can be easily tailored to your organization’s needs. CA-MLINK comes with:
 - Dialing scripts for the most popular modems. CA-MLINK allows you to easily modify scripts to support other modems, special devices, value-added networks, and satellite links.

- Session scripts to define the events following connection to a remote site. Standard session scripts are supplied with CA-MLINK to contact both single- and multi-user sites. Since your network may contain any mixture of remote operating systems and applications, CA-MLINK allows session scripts to be configured on a site-by-site basis. Session scripts can execute commands in the task lists in a complex interactive session with the remote site.
- Remote scripts for customizing remote operations. CA-MLINK allows you to modify scripts to incorporate custom log in sequences and any other activity to be executed before, during, and after each session.
- Postprocessing scripts, which are initiated after session activity is complete. CA-MLINK allows you to link up local activity with the application, thereby providing application integration.

Cosession remote control software is an option available to PC-DOS CA-MLINK users. It provides remote access to CA-MLINK PC-DOS target systems while allowing users to take advantage of its many capabilities, such as dual screen/keyboard operations. With CA-MLINK and Cosession together, users can now:

- Completely monitor and control any remote PC-DOS system.
- Perform a variety of file operations.
- Work simultaneously on the same program.
- Load one program without exiting another program.
- Remotely view and control a second PC.
- Optimize help desk remote site support and user training.

The Choice For Data Transport

CA-MLINK provides features that go beyond the simple transfer of information from one system to another. This robust functionality is what differentiates CA-MLINK from basic file transfer software products. These features help ensure the delivery of data when and where needed, and can help you meet your goals of providing greater return on investment to your organization through increased productivity and reduced network usage costs.



Supported Environments

CA-MLINK Servers:

- Windows NT
- IBM RS/6000 AIX
- ATT/NCR 3000 S5R4
- DG AViiON DG/UX
- HP9000 HP/UX 9.0
- IBM OS/2
- SCO UNIX
- Sun Solaris
- SunOS

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- IBM RS/6000 AIX
- ATT/NCR 3000 S5R4
- DG AViiON DG/UX
- HP9000 HP/UX 9.0
- IBM OS/2
- SCO UNIX
- Sun Solaris
- SunOS
- IBM 4860
- DEC Alpha OSF/1
- PC-DOS
- MAC OS
- Novell NLM/NetWare
- Windows and Windows For Workgroups
- Windows NT

**For additional information, call 1-800-225-5224,
visit our website at www.cai.com, or contact
your local Computer Associates office.**