Infor XA – Getting Started with Infor XA

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To the reader

This book introduces you to the XA family of applications as well as the basics you need to know to become a productive user, such as how to use the library, procedures, tasks, and features. The information in this book applies to all the XA applications.

- Chapter 1, “Introducing XA”, introduces you to the XA library.
- Chapter 2, “Learning the basics”, shows you the basics on the System i, such as how to use the keyboard keys, function keys, menus, displays, and help.
- Chapter 3, “Using your business information”, describes the types of tasks you can do using XA, such as entering data, making inquiries, maintaining files, scheduling jobs, printing reports, and loading the data from offline sources.
- Chapter 4, “Using additional features”, describes the features of XA, such as graphics, electronic data interchange (EDI), group job and secondary jobs, and how to create and maintain signons.
- Chapter 5, “Resolving problems” describes how to resolve problems and the resources available to you.

For a complete list of the books in the XA library, see the bibliography on the XA documentation CD.

Summary of changes

The applications that have been added for XA Release 6 are:

- Accounting Management *Plus* (AM*Plus*)
- Contract Accounting *Plus* (CA*Plus*)
- Materials Management (MM)
- Order-Based Production Management (OBPM)
- New enhancements to Paperless Manufacturing and Communication (PLMC):
  - Quality Reporting Management System (QRMS)
  - Tooling Management Planning System (TMPS)
  - Coil Chain Manager. This module handles the logistics involved in managing Outside Processing, Consignment and Satellite Warehouses.
  - Coil Decisions. This module provides a series of tools, views and reports to help improve decision-making and inventory management in the coil environment. This also includes scheduling, customer claim resolution and supply chain management. Coil Decisions also provides support for defining the building blocks for HFI reports and product specifications. For more detailed information, see the *Coil Management Solutions User's Guide*.
- JacannaForms
- ValetMiner

The applications that have been added for XA Release 7 are:

- Advanced Planning Configurator (APC) is the integration of XA and Access Commerce Cameleon products. APC allows you to model possible configurations of your products contained within XA so that you can create customer and sales orders for those items. Both configured items and standard items can be ordered using this integration.

  This integration allows you to transfer data from the XA database into Cameleon Visual Expert for modeling. To use APC, you must have EPDM, CSM, and OBPM installed. For more detailed information on APC, see the *Guide to Advanced Product Configurator* .
- Coil Management Solutions (CMS) is a client/server application that consists of four modules:
  - Coil Inventory Manager. This module is the core of the CMS system. It is responsible for all logistical issues surrounding the processing of coils and skids, which includes managing coil and skid characteristics, quality holds, product and process specifications, RF transactions, bar code tags, purchasing specifications, and incoming material quality control.
  - Coil Plant Manger. This module is responsible for processing coils or skids and all related activities including production time tracking and quality data collection. It supports any process that changes the physical dimension, chemical composition or aesthetic appearance of the material.
  - Coil Chain Manager. This module handles the logistics involved in managing Outside Processing, Consignment and Satellite Warehouses.
  - Coil Decisions. This module provides a series of tools, views and reports to help improve decision-making and inventory management in the coil environment. This also includes scheduling, customer claim resolution and supply chain management. Coil Decisions also provides support for defining the building blocks for HFI reports and product specifications. For more detailed information, see the *Coil Management Solutions User's Guide*.
- FRx FDM 6.0 Installation Instructions for AM and IFM are a financial analysis and reporting tools that allows financial and accounting professionals to streamline processes and generate the financial knowledge necessary to gain a competitive advantage.

Both use the FDM configuration wizard and FDM load wizard to load your AM and IFM general ledger data from their proprietary format into FRx's FDM 6.0 data format. For more detailed information on these applications, see the *FRx FDM 6.0 Installation Instructions for AM* and *FRx FDM 6.0 Installation Instructions for IFM*.

- Product Development Collaboration Magik! (PDCM) is a fully integrated engineering change control solution that allows all members of the product development process to collaborate remotely on product development via the internet. Magik! allows you to create and track a process document throughout its life cycle. It supports:
  - an engineering change
  - new product request
  - marketing change notification
  - a procedural change
  - a production process change

  For more detailed information on Magik! and installation instructions, see the *PDCM! User's Guide.*
- XA System-Link is a bridge between outside systems and XA. An 'outside system' can be a separate platform, such as another ERP system or a web page. It can also be custom code on the same System i. Programs that can format System-Link XML requests can initiate transactions with XA. System-Link runs its own server and provides the link between a web server and XA EJB server. For more detailed information, see the *Guide to XA System-Link*.
- Changes MAPICS commands to XA commands:
  - **MAPICS** is now **STRXA**
  - **STRMAPICS** is now **STRXAENV**
  - **ENDMAPICS** is now **ENDXAENV**

Contents

Chapter 1. Introducing XA

In this chapter, you will learn about some important topics:

XA is a set of highly integrated applications that help you run your business more efficiently and effectively. To implement these applications in the best possible way at your company, you need to know about a number of topics. This book introduces those topics and tells you where to look for more information, when it is available. Think of this book, *Getting Started with Infor ERP XA*, as your starting guide to XA.

The XA applications

The XA product offers a family of integrated applications. The following list tells you the full name of each application, followed by its abbreviation. We refer to the applications by their abbreviations throughout the XA library and online information.

The following applications are used on the System i:

- Accounting Management Accounts Payable (AP)
- Accounting Management Accounts Receivable (AR)
- Accounting Management General Ledger (GL)
- Capacity Requirements Planning (CRP)
- Contract Accounting (CA)
- Cross Application Support (CAS)
- Customer Order Management (COM)
- Electronic Commerce (EC)
- Enterprise Product Data Management (EPDM)
- Estimating and Quote Management (EQM)
- Executive Information System (EIS)
- Financial Analysis (F/A)
- Forecasting (FCST)
- International Financial Management (IFM)
- InterSite Logistics (ISL)
- Inventory Management (IM)
- Knowledge Based Configurator (KBC)
- Manufacturing Performance Analysis (MPA)
- Market Monitoring and Analysis (MMA)
- Master Production Schedule Planning (MPSP)
- Material Requirements Planning (MRP)
- Multi-environment InterSite Logistics (MISL)
- Payroll (PR)
- Product Data Management (PDM)
- Production Control and Costing (PC&C)
- Production Monitoring and Control (PM&C)
- Purchasing (PUR)
- Repetitive Production Management (REP)
- Sales Analysis (SA).

The following applications are available for use in conjunction with the iSeries applications:

- Accounting Management *Plus* (AM*Plus*)
- Advanced Planning Configurator (APC)
- APS Bridge
- Coil Management System (CMS)
- COM_Net (CNET)
- Contract Accounting *Plus* (CA*Plus*)
- Customer Service Management (CSM)
- eWorkPlace (eWP)
- Fax Interface (FAX) to Telex/Fax/400
- Finite Capacity Planning and Scheduling (FCPS)
- Front Door: Field Sales Client (FSC) and Field Sales Server (FSS)
- FRx FDM 6.0
- Jacana and Valet
    - Jacana Forms
- Maintenance Management System (MMS)
- Materials Management (MM)
- Order-Based Production Management (OBPM)
- Paperless Manufacturing, which includes:
    - Manufacturing Data Collection & Communications (MDCC)
    - Quality Reporting & Management System (QRMS)
    - Tool Management & Planning System (TMPS)
- Product Development Collaboration Magik! (PDCM)
- PDMPlus
- Procurement Management (PM)
- PowerVision (PV)
- ValetMiner (VM)
- WorkFlow (WF)
- XA Browser
- XA Integrator
- XA System-Link.

Following is a brief description of each application. Read the application books for more detailed information about the functions offered by each application.

Cross Application Support (CAS)

The Cross Application Support (CAS) application includes a number of general activities you use to manage and maintain your XA applications. You choose Cross Application Support jobs by using the Cross Application Support Master Menu (AMZM00). The options on this menu are:

- Inquiry
- Reports
- Maintenance/Change
- Back Up/Recover/Reorganize
- Initialize Tapes
- Install/Tailor Applications
- Extended Environment Support
- Load Data From Offline Files
- Multiple Currency Support
- VAT/Sales Tax Support

- Electronic Data Interchange Support.

The system operator and other people in your company who are responsible for managing the XA applications use Cross Application Support to ensure that the XA applications run smoothly.

Accounting Management Accounts Payable (AP)

The Accounts Payable (AP) application tracks and controls a vendor's invoice from the time it is entered into the system until it is paid and the check is reconciled. You enter invoices and credit memos either manually or by selecting documents received by electronic data interchange. These transactions are printed on a purchase journal to provide an audit trail of costs for transactions being transferred to the General Ledger application and entered into the Open Payables file. When invoices are to be paid, you select the appropriate invoices. A cash requirements report is printed so your company knows how much money is needed in the checking account to cover the checks. The Cash Disbursements Journal provides an audit trail for transactions being transferred to General Ledger and acts as the check register. The checks and remittance advices are then printed.

Accounting Management Accounts Receivable (AR)

The Accounts Receivable (AR) application uses summaries of invoices created by Customer Order Management (COM) to apply charges automatically to customer accounts. If you do not have COM installed or do not want to apply charges automatically, invoice summary information can also be entered using a workstation.

You can enter payments and adjustments with immediate updating to reflect the most current accounts receivable balance. At the end of the month, the application prepares customer statements. An aged trial balance and delinquency notices can be printed at any time, on request.

You can inquire into the status of customer transactions and print reports showing receivables in aged and non-aged formats. You can also print reports showing the effect of exchange rates on customer transactions.

Accounting Management General Ledger (GL)

The General Ledger (GL) application combines transactions affecting the financial status of your company during each accounting period. You can enter the transactions directly as general journal entries any time during the course of a period, or you can generate them from the Accounts Payable, Payroll, or Accounts Receivable applications.

After you have made all entries for an accounting period, the Financial Statement Worksheet helps you make certain that the data is in balance before you proceed to closing. This report also helps generate necessary closing entries.

After you have made the closing entries, the actual closing occurs. The General Ledger report lists all journal transactions applied to account balances. The Comparative General Ledger report summarizes the applied transactions and compares the figures to budgeted and previous years. The Income Statement and Balance Sheet shows the current financial position of your company. The Statement

of Changes in Financial Position shows the source and application of all funds applied by the journal transactions.

Accounting Management *Plus* (AM*Plus)*

The XA AM*Plus* application is an extension to the AM modules; Accounts Payable, Accounts Receivable and General Ledger. XA AM*Plus* is designed to enable users to view all, or subsets of, their accounting data in intuitive card and view formats. This is done through the leveraging of XA Client Architecture, which, based on object relationships, allows a user to customize cards to meet specific needs. The AM*Plus* application also allows the user to keep important comment information on hand, via the attachment of notes to customers, invoices, vendors, AP invoices and GL accounts.

Release 6 enhancements for XA AM*Plus* include base application enhancements for the AM modules (Accounts Payable, Accounts Receivable, and General Ledger) as well as a new spreadsheet interface. The spreadsheet interface will allow a user to summarize and pre-process General Ledger data and this information will also respect a segmented (departmental) General Ledger account. The new spreadsheet interface will also allow the downloading to a PC spreadsheet.

The aging in Accounts Receivable has been enhanced to allow for aging by invoice date, by due date, and by age date. The aging results can then be displayed by global or customer specific user defined periods. Aging in Accounts Payable has also been improved upon to allow for aging calculation by invoice date or by due date. Again, the aging results can be displayed by global or vendor specific user defined periods.

Base application enhancements planned for the AM suite are as follows:

Accounts Payable:

- Default the invoice due date based on vendor terms
- Default expense account from vendor master file
- Recurring payables processing

Accounts Receivable

- Aged receivable report enhanced to allow aging by:

  Invoice date
  Due date
  Age date

General Ledger

- Recurring journal entries
- Reversing journal entries
- Remove audit posted journal requirements
- New trial balance report with option to suppress zero balance accounts

Advanced Planning Configurator (APC)

Advanced Planning Configurator (APC) is the integration of XA and Cameleon products. APC allows you to model possible configurations of your products contained in XA so that you can create customer and sales orders for those items. You can order both configured items and standard items using this integration.

The integration allows you to transfer data from the XA database to Cameleon Visual Expert for modeling. To use APC, you must have EPDM, CSM, and OBPM installed. For more detailed information, see the Cameleon Integration Guide.

Capacity Requirements Planning (CRP)

The Capacity Requirements Planning (CRP) application determines the work load by time period for each production facility. This work load is then compared to the production facility capacity and the comparison appears on reports and inquiries. The production planner can then analyze and correct the overloaded and underloaded areas.

Coil Management System (CMS)

Coil Management System (CMS) is a client/server application that consists of four modules:

- Coil Inventory Manager. This module is the core of the CMS system. It is responsible for all logistical issues surrounding the processing of coils and skids, which includes managing coil and skid characteristics, quality holds, product and process specifications, RF transactions, bar code tags, purchasing specifications, and incoming material quality control.
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- Coil Decisions. This module provides a series of tools, views and reports to help improve decision-making and inventory management in the coil environment. This also includes scheduling, customer claim resolution and supply chain management. Coil Decisions also provides support for defining the building blocks for HFI reports and product specifications. For more detailed information, see the *Coil Management Solutions User's Guide*.

Contract Accounting (CA)

The Contract Accounting (CA) application provides additional support for make-to-order manufacturers by grouping multiple manufacturing and purchase orders under a single contract for cost accumulation and progress billing purposes. This application also provides "drill down" auditing capability to any level of cost detail, such as contracts, work breakdown structures, manufacturing orders, operation summaries, and employee transactions.

- User defined estimate periods

  Contract Accounting now allows for user defined periods to be created at the 'element' level for the purposes of specifying estimates and comparing them to actuals. Contract Accounting will calculate actual hours and costs for the user specified period so that they can easily be compared to budgetary numbers.

- Contract Accounting WorkFile Extract

  Contract Accounting now creates a transaction extract for easy downloading into a spreadsheet. The file includes all transactions for a user defined date frame and will optionally allow the user to apply various overhead pools to it. The extract also

allows users to specify what level of detail they want included in the report, from the contract level all the way down to the detailed transaction level.

Contract Accounting *Plus* (CA*Plus)*

CA*Plus* is a new application, which includes full Client Architecture inquiries over Contract Accounting, extensive note taking capabilities, and the ability to update Contract Accounting (from the GUI displays) by adding 'Levels' and 'Orders' to contracts.

XA CA*Plus* is designed to enable users to view all, or subsets of, their Contract Accounting data in intuitive card and view formats. This is done through the leveraging of XA Client Architecture, which, based on object relationships, allows a user to customize cards to meet specific needs.

The CA*Plus* applications also allows the user to keep important comment information on hand, via the attachment of notes to the contract header, lines, level, and orders.

Using CA*Plus*, users can add levels and attach orders to contracts via the XA Browser. To explode orders, the user simply has to select the appropriate MO from a displayed list of all open MO's.

Customer Order Management (COM)

The Customer Order Management (COM) application is a major starting point for activity in a manufacturing organization. For make-to-order products, COM describes the item to be manufactured and when the item is required. For ship-from-inventory products, the application streamlines the order processing so items can be shipped promptly. Depending on which other applications are installed, COM can update item balances maintained by Inventory Management, use charges invoiced to customers to update Accounts Receivable records, and pass records of sales to the Sales Analysis application as the basis for the various Sales Analysis reports. COM operates in an interactive mode and can accommodate multiple workstation operators who are entering data at the same time. Customer orders received by electronic data interchange can also be processed.

You can enter order information, verify it on the display, and make corrections and changes to the order before it is used for further processing. The COM application does the following:

- Retrieves customer names, addresses, and other predefined information
- Selects prices
- Applies discounts, markups, and taxes
- Calculates extensions
- Prints or transmits by electronic data interchange invoices that reflect all customer charges

COM also prints an invoice register that shows summary information for all invoices printed during a given invoice selection.

COM_Net (CNET)

COM_Net is a XA application that enhances XA Customer Order Management (COM) to allow business to business customer service transactions to occur over the internet. It has a subset of COM function with an extremely simple, intuitive Browser user interface. It supports commonly requested customer service functions such as pricing, product, order status inquiry.

A sponsor bar available on most panels allows you to advertise your products or those of your vendors. Vendor advertising revenue can be a significant advantage.

COM_Net allows you to link items to other places at your site or another site. Some examples might include:

- Specifications
- Promotions
- Hazardous information

Installation has two components. The Windows NT server programs that serve a Java client applet to the user and the iSeries gateway component that interfaces the user to XA COM.

COM_Net requires the customer to have a full time web presence on the internet. A simple link from their homepage will access COM_Net.

Electronic Commerce (EC)

The Electronic Commerce (EC) application provides an EDI (electronic data interchange) application interface between traditional XA business applications and EDI translators. EC contains an EDI database that facilitates the movement of EDI transactions in and out of XA. EC supports the processing of EDI data in both ANSI X.12 and EDIFACT standard formats.

Enterprise Product Data Management (EPDM)

EPDM is a client/server application that provides the ability to maintain and cost engineering records by item-revision within site. Engineering records include definitions of items by revision code and their associated bills and routings. Multiple bills and routings can be defined for a single item-revision and paired by means of an Item Process definition. This definition allows a user to specify primary and alternate processes and the dates they are effective.

Using a site's primary item processes, a user can do product costing, master production schedule planning, and material requirements planning. At order entry time, you can override an item's primary process and release a manufacturing order with an alternate process to avoid bottleneck or unplanned situations on the shop floor.

Engineering transactions are entered interactively on the client or can be received on the host from CAD or off-line batch systems. Each transaction can be validated against predefined reason codes and stored in a transaction history file. You can later query the history file by reason code, date, transaction type, user ID, item, and the like to provide an audit trail of engineering changes.

EPDM provides the ability to copy engineering records between sites. A user can copy a single item revision record or all records in one site to another site. Sites are defined as production sites or simulation sites. You can use these sites as either temporary work areas to work with engineering changes, as a cost simulation site, or as production plants interfacing to other XA applications.

You can compare differences between two items, bills, routings, facilities, and processes by field within record, and by record. For example, you can quickly determine why an item has a different cost from another item, the differences in bills or routings between two items, or how one item process differs from another.

Applications and functions that are enabled to EPDM are the MPSP and MRP applications plus IM and PC&C's order entry and release functions. All other applications and functions will continue to interface to PDM until the time they are enabled.

Estimating and Quote Management (EQM)

The Estimating and Quote Management (EQM) application helps to improve cycle time and productivity in preparing and revising quotations, as well as increasing bid accuracy and reducing the risk of bidding too high or too low. This application allows manufacturers to create quotations in three ways: "same-as-except" using Product Data Management data, accessing a previous quote from history and changing it, or starting with a blank page and selecting from the operations table and the Item Master file to build product data.

Executive Information System (EIS)

The Executive Information System (EIS) application allows decision makers to display XA data in a graphical user interface format on a personal computer. It supplies queries showing the trend of key measurement data, with a drill-down capability to the detailed data behind current measurements. EIS collects XA data on a daily, weekly, or monthly basis. Documentation is provided by on-line help in the personal computer portion of the product.

Fax Interface (FAX) to Telex/Fax/400

Telex/Fax/400, by CMA Ettworth, Inc., is a fax solution for the IBM System i, that provides defined programming interfaces for storing fax document types and forms overlays, and trading partner fax phone numbers. It faxes documents with no operator forms handling as they are written to an System i output queue, and merges them with forms overlays, if required. It manages the faxing of the document to the designated phone number.

The Fax Interface allows you to designate which documents you want faxed to customers and vendors, and passes those documents directly to Telex/Fax/400.

Financial Analysis (F/A)

The Financial Analysis (F/A) application supplements the functions provided in General Ledger with five features that extend the scope of XA from an accounting record-keeping system to a financial planning and analysis system. The five features are Automatic Journal Entries, Budget Preparation, Financial Ratios, Fixed Asset Accounting, and Report Writer. These features, combined with the functions of

General Ledger, provide timely information to assist the management staff in monitoring your company's profitability and financial progress.

Finite Capacity Planning and Scheduling (FCPS)

The Finite Capacity Planning and Scheduling (FCPS) application allows users to quickly adjust manufacturing schedules to meet changing conditions. The application schedules production competing for needed resources and establishes schedules within finite capacity. FCPS helps manufacturers resolve production bottlenecks, improves on-time performance, and reduces work-in-process. FCPS also provides improved decision-support capability, including "what if....?" analysis of event-driven situations, such as authorized overtime. The application offers client server architecture with a graphical user interface on a personal computer.

Forecasting (FCST)

The Forecasting (FCST) application monitors customer demand and computes forecasts of future demand. The end-item and service part forecasts can be loaded to the master scheduling and material requirements planning functions to determine production requirements. Statistical forecasting techniques develop individual period forecasts for each end-item or service part using trend and seasonal (item or group) factors one year into the future. In the distribution environment, you can use Forecasting to plan appropriate stocking levels at each selling warehouse.

You can compute forecasts for the second and third years based on life cycle curves defined by your company. You can also compute item safety stock quantity and reorder point quantity.

FRx FDM

FRx FDM 6.0 Installation Instructions for AM and IFM are a financial analysis and reporting tool that allows financial and accounting professionals to streamline processes and generate the financial knowledge necessary to gain a competitive advantage.

Both use the FDM configuration wizard and FDM load wizard to load your AM and IFM general ledger data from their proprietary format into FRx's FDM 6.0 data format. For more detailed information on these applications, see the FRx FDM 6.0 Installation Instructions for AM and FRx FDM 6.0 Installation Instructions for IFM.

International Financial Management (IFM)

International Financial Management (IFM) supports all accounts receivable, accounts payable, and general ledger functions. It handles multiple currencies and international tax requirements. It allows you to analyze your financial data using customized management reports and financial statements.

IFM is fully integrated with XA. It interfaces with COM, the fixed assets portion of F/A, IM, PC&C, PUR, PR, and REP. These applications supply non-financial data that is used for XA financial management. For example, IFM receives customer invoice information from COM and purchase order information from PUR.

IFM is based on several key concepts:

- Accounts can have meaningful names that describe the “who”, “what”, “when”, and “how much” of any transaction
- Financial information is stored in one general ledger, an unlimited number of personal ledgers, and cashbooks
- Transactions are processed for XA using a single processing method
- Entities identify the people or institutions (trading partners) with which you do business
- Reports allow you to tailor the presentation of your financial data.

InterSite Logistics (ISL)

InterSite Logistics allows a company with multiple production and/or distribution sites, to plan and control the production and shipment of items made in one site and used in other sites.

“Intersite” items are identified at the “requesting” site (warehouse), and a “supplying” site is designated. These items are planned in MRP or MPSP at the requesting site, and requirements for the planned intersite orders are passed to the supplying site(s) and used in its (their) MPSP and MRP planning.

Intersite orders can then be:

- Released in the requesting warehouse, using ISL function in MRP order release menu options. ISL opens a COM customer order in the supplying warehouse, to represent the actual demand.
- Shipped from the supplying warehouse, using an ISL menu option, to update the intersite order and the COM order, and transfer the inventory to a “transfer” warehouse which tracks in-transit inventory from the supplying warehouse.
- Received in the requesting warehouse, using an ISL menu option, to update the intersite order, and transfer the inventory out of the “transfer” warehouse. Inventory adjustments are generated, if selected during ISL function tailoring, to account for a difference between the quantity shipped and quantity received.

Intersite Logistics (ISL) performs these functions where the sites are warehouses in a single XA “environment”. See “Multi-environment InterSite Logistic (MISL)” for information about the support of multiple XA environments.

Inventory Management (IM)

The Inventory Management (IM) application is designed to improve inventory control. IM helps establish efficient allocation of inventory funds while maintaining satisfactory customer service levels and maximizing the return on inventory investment by:

- Providing up-to-date information to assist in decision-making and reduction of inventory
- Maintaining tight operating and audit controls
- Furnishing stocking and control reports that aid in warehouse inventory regulation.

IM can be considered as having four major functional areas. The first area allows for perpetual inventory functions that maintain inventory balances by processing related transactions such as receipts, issues, and adjustments. The second area assists in

the financial management and analyses required for sound inventory decisions. The third area provides the ability to effectively release and track manufacturing and purchase orders, allowing inventory managers to identify both on-hand and on-order quantities of inventory items. Finally, the fourth area furnishes information necessary to effectively stock and control items in multiple warehouses and multiple locations within a warehouse. The identification and tracking of batch/lots, control of shelf life for materials and products, quality control tracking and recording, and history reporting are all features that aid in warehouse inventory regulation.

Operating personnel in the purchasing department, in the stock room, or at the receiving dock can enter receipts, issues, adjustments, and other transactions through the workstation on an item-by-item basis. The system edits each transaction for valid item and warehouse numbers and, if the transaction passes all edits, updates the master file. The Inventory Transaction Register lists the transactions that have been processed. Reports of empty locations can be obtained to assist in better management of storage space.

JacanaForms

JacanaForms is a suite of integrated components adding electronic forms presentation capabilities to the existing iSeries database access and retrieval functionality available through Jacana.

The JacanaForms interface enables the details and attributes of System i database fields used in a Jacana report definition, to be made available to the JetForm Design component of JacanaForms. The components that comprise the complete JacanaForms package and their functions are as follows:

Jacana (PC & System i component)

Creating and modify System i reports and database extracts. In Jacana the JacanaForms Wizard will step you through the creation of a JacanaForms report.

JacanaForms PlugIn/Interface

This is a component that links the System i fields with the field dictionary of JetForm Design.

JetForm Design

A Windows based WYSIWYG product that enables the creation of Electronic Forms, for use with the Jacana defined System i report extract.

PrepP for iSeries

This utility allows System i spool file output from any System i application including legacy systems to be passed to JetForm Central for processing and data presentation.

Knowledge Based Configurator (KBC)

The Knowledge Based Configurator (KBC) application allows interactive configuration of a product using customer-specified requirements. It uses expert information in the form of company/product-specific rules to develop information to support

manufacturing of an end product and subassemblies. The on-line dialog process creates precise order information for each uniquely configured product and supports multi-level custom-configured bills of material, configuration-specific routings, costing, and product descriptions. Products configured in KBC can be passed into COM for order processing and manufacturing orders can be released for configured items.

Maintenance Management System (MMS) and Approval (APPR)

The Maintenance Management System (MMS) suite of applications provides support for planning and tracking of the activity and costs of maintaining and repairing plant facilities and equipment. MMS includes Entity Management, Work Order Management, Preventative Maintenance Management, MRO Inventory Control, Foundation, and optionally Approval Imaging and Executive Information System. MMS creates ledger transactions for Accounting Management General Ledger, but it does not interface with International Financial Management. When the interface is activated, MMS appears on the CAS Additional Applications Menu (AM$M50).

Manufacturing Performance Analysis (MPA)

The Manufacturing Performance Analysis (MPA) application collects data so you can review and print performance information for your manufacturing operations. You can specify the intervals for extracting this data from the XA database and updating the MPA files. In addition to collecting data and calculating performance, MPA maintains performance trends. This information is critical to the performance measurement system because it shows you if performance is improving or not.

Each of the 15 performance measurements defined and tracked by MPA has tailorable parameters unique to that measurement. MPA tracks the update activity and reminds you when to close each measurement and when to update performance history records. You can update the records daily, weekly, biweekly, monthly, or quarterly.

Market Monitoring and Analysis (MMA)

The Market Monitoring and Analysis (MMA) application provides detailed sales history reporting and inquiries. It updates and maintains a set of sales history files by vendor codes.

Master Production Schedule Planning (MPSP)

The Master Production Schedule Planning (MPSP) application shows your company how to plan its future production and how much resource the production plan requires.

The application is designed to help you create production plans that support company policies and business goals. Starting with plans for groups of related items (production families), you can do high-level strategic planning and testing to determine the resources needed for your production levels for up to three years. If adequate resources are available, you can set production levels for the end items in each family.

You can generate master production schedules using demand information from item production plans, forecasts, customer backlog, or a blend of forecasts and backlog.

After you create and review the master production schedules, you can do rough-cut capacity planning to find out how much of certain critical resources you need to

complete the scheduled orders. Production planning, master scheduling, and resource planning in MPSP help you stabilize production and use your facilities with maximum efficiency.

Material Requirements Planning (MRP)

The Material Requirements Planning (MRP) application converts product or end-item requirements into a material plan, which shows when and how many subassemblies or component material items are needed. The application helps your company generate and maintain a master production schedule that is correlated to customer sales expressed in terms of forecasts and customer orders. The bills of material are then used to calculate the total requirements (date and quantity) for each subassembly and component item. The total requirements for an item are matched or netted against the available quantity on hand and the scheduled receipts (open purchase/production orders) to determine if any planned orders should be added, rescheduled, or canceled, or if any order release action should be taken. The application allows for revising this material plan to release purchase orders for scheduled receipts in inventory and production orders for starting work.

Materials Management (MM)

Materials Management is a new client/server application, which provides for the maintenance of Warehouses, Warehouse Locations, and Item Locations into a more productive client graphical user interface. The application also contains the ability to do Inventory Counting (MM-IC). MM-IC is a function that allows the user to do total physical inventory as well as cycle counting. It supports a variety of ways to determine which items to count. It supports inventory tags, bar coding, count entry, reconciling to inventory balances and determining variances, and posting adjustments to the actual inventory balances. It incorporates the best capabilities in Inventory Management's (IM) and Manufacturing Performance Analysis (MPA) physical inventory/cycle counting processes and expands that to provide an enhanced client/server implementation.

Rapid P.O. Receiving (MM-RR), is a new design that is aimed at improving the productivity of the warehouse person who receives deliveries of purchased items. It presents an image of the open P.O. items and/or releases and lets the user simply indicate the quantity being received. The application then creates the necessary inventory transaction and passes them to Inventory Management.

The primary objective of MM-RR is to provide a user-friendly, intuitive user interface so the receiving dock person can more easily and quickly report the delivery of purchased items. MM-RR supports transactions for purchase receipts to dock, inspection, stock, and vendor returns, which includes the creation of debit memos as well. It does not include the quality control transactions because QC is performed by a different department; one that is responsible for performing the inspections. MM-RR is intended to be used by the person receiving to dock or stock.

Multi-environment InterSite Logistic (MISL)

InterSite Logistics (ISL/MISL) allows a company with multiple production and/or distribution sites, to plan and control the production and shipment of items made in one site and used in other sites. See the ISL section, for a description of how ISL helps plan, release, ship, receive, and reconcile intersite orders in a single XA environment.

Multi-environment InterSite Logistics (MISL) supports sites across multiple XA environments. The environments may be on the same iSeries, or on multiple iSeries. ISL is required for MISL; MISL provides only the additional functions to support multiple environments.

Order-Based Production Management (OBPM)

The Order-Based Production Management (OBPM) is a client/server application that provides client-based capability for:

- Creation, maintenance, and completion/closeout of manufacturing orders,
- Processing of order creation and maintenance recommendations from MRP planning, for manufacturing, purchase, and intersite orders,
- Processing of order-creation recommendations from inventory reorder point analysis, for manufacturing, purchase, and intersite orders
- Creating manufacturing orders from customer order line item releases
- Checking component availability interactively, as one or more orders are considered for creation
- Printing shop packets for manufacturing orders either as the orders are created or later, by user defined subsets
- Setting parameters by site for Work List Generation, performing the generation for one or a set of sites, and viewing the work list by production facility
- Improved navigation to a variety of client objects by planner ID, similar to what is provided by buyer ID

IM and PC&C are required for OBPM. Other applications such as, COM, EPDM, ISL/MISL, KBC, MRP, PDM, PM, PM&C, and PUR are not required to install OBPM, but are required to execute OBPM functions interfacing to that application.

Paperless Manufacturing and Communications (PLM&C)

Paperless Manufacturing and Communications is made up of three applications:

- MDCC
- QRMS
- TMPS

Manufacturing Data Collection and Communication (MDCC)

MDCC is software for the System i that is both an information delivery application and a data collection system. It is designed, and written to augment and extend the capabilities of XA.

Quality Reporting Management System (QRMS)

QRMS is software for the System i based application developed to manage and analyze quality control information in a manufacturing or process environment. The QRMS database resides on the System i with the ability to download to PCs to perform analytical, graphical, and “what if” capability through user specified software packages.

Tooling Management Planning System (TMPS)

TMPS allows the XA user to track tooling information necessary for proper manufacturing planning and execution. TMPS is dependent on XA software. All inventory tracking, transaction processing, and tool definitions are kept within XA. TMPS gives you the ability to work with the XA database, in retrieving tool information needed in manufacturing process. When interfaced with XA Material Requirements Planning application, tooling demand is created for Manufacturing Orders, Planned Order, and Firm Orders with XA. Scheduling conflicts and tool shortages are also reported through XA.

Payroll (PR)

The Payroll (PR) application is designed to be run weekly, biweekly, semi-monthly, or monthly. You enter the hours an employee has worked. You can type in the pay rates or salaries, or you can select them from the Employee Master file. Based upon the hours, rates, and any necessary adjustments, each employee's gross earnings are calculated and printed on the Gross Earnings Register. Taxes and other deductions are used to calculate net pay. This information is summarized by employee and printed on the Payroll Register. The checks are then printed. Several reports, such as for miscellaneous deductions, state/county/local taxes, and union deductions, are printed to show the detailed information that was summarized on the Payroll Register.

Product Data Management (PDM)

The Product Data Management (PDM) application lets your company build and maintain one set of product data files in the System i. Product data consists of:

- Bills of material (parts lists, formulas, or recipes) that describe the materials and components used in the manufacture of a product or assembly
- Manufacturing routings or process sheets that describe the sequence of operations and processes required to produce the assemblies or fabricated items
- Production facility information that describes machines and manufacturing facilities
- Item master data that contains such information as item number, description, standard costs, drawing number, and item type.

The application can also build up costs for an end item by using that item's bill of material to determine costs of components and using routings to determine manufacturing costs. Costs can be recalculated when changes occur or to simulate projected changes. Using a workstation, each department can display, print, and use the up-to-date information in a wide range of formats. Some information in this database (bills of material, lead times, and so on) is used by the Material Requirements Planning and Master Production Schedule Planning applications. PDM also supplies data to Customer Order Management, Inventory Management, Production Control and Costing, Purchasing, and Repetitive Production Management.

Product Development Collaboration Magik! (PDCM)

Product Development Collaboration Magik! (PDCM) is a fully integrated engineering change control solution that allows all members of the product development process to collaborate remotely on product development via the internet. Magik! allows you to create and track a process document throughout its life cycle. It supports:

- engineering changes
- new product requests
- marketing change notification
- procedural changes
- production process changes

For more detailed information on Magik! and installation instructions, see the *PDCM User's Guide*.

PDM*Plus* (PDMP)

The PDM*Plus* client/server application acts as a front end to Product Data Management, which is a prerequisite application. PDM*Plus* allows you to perform inquiries and maintenance for item production information, including item, bill of material, routing, and production facility data. In addition, PDM*Plus* allows you to inquire and maintain Item Balance information while inquiring or maintaining item information. PDM*Plus* provides enhanced navigation and customization features which allow you to organize data for maximum maintenance productivity.

PowerVision (PV)

A personal computer product, PowerVision, allows decision makers to display XA data in graphical user interface format. It provides a way to drill down and display XA data in real time. It gathers data from different areas and presents it to the user in a more meaningful way. For example, Lot Tracker traces a lot shipped to the customer through receipt of raw materials from the vendor. Power Vision views are grouped into the functional areas of Quality, Finance, Manufacturing, and Sales. Documentation is provided by online help.

Procurement Management (PM)

The Procurement Management (PM) client/server application acts as a front end to Purchasing, which is a prerequisite application. PM provides enhanced navigation and customization features which allow you to organize purchasing data for maximum productivity. These productivity improvements focus on tasks performed by buyers , such as entering quotes, requisition, and purchase orders. In addition, PM provides some functions not available in Purchasing. For example, in PM you can create a purchase order from multiple requisitions, create a contract without first entering a quote, and copy a purchase order from the open database or from history.

Production Control and Costing (PC&C)

The Production Control and Costing (PC&C) application can help your company plan and control its production. When manufacturing orders are released, the shop packet can be printed with component material lists, or routings, or both. Detail records for open orders and the manufacturing operations, component materials, and miscellaneous costs for each open order are stored in the system. When shop activity is reported, it is edited against and posted to these records. These records become the basis for determining the status and actual cost of an order as it is being manufactured. The status shows if a job is falling behind schedule. Actual-versus-standard cost variance reporting indicates potential areas requiring management

attention. The application can measure the value of work in process and can list, by priority, the daily work for each production facility.

Production Monitoring and Control (PM&C)

The Production Monitoring and Control (PM&C) application lets you track the status of jobs, production facilities, and employees, based on up-to-the-minute production activity. As employees clock on and off jobs or move materials, they report this activity through workstations on the shop floor. Information can be entered or read by optically scanning bar-coded documents that PM&C produces. PM&C receives the transactions as they are entered and updates the status of jobs and employees to reflect these changes. As a result, the shop floor can be more easily controlled, because problems can be identified and resolved as they occur.

PM&C provides inquiries to show the status of jobs, production facilities, and employees. The information on the displays reflects all transactions that have been collected from the shop floor. When using the PM&C inquiries, you can find orders, production facilities, and employees by number or by an alphabetic search on description or name.

Purchasing (PUR)

The Purchasing (PUR) application is designed to improve productivity in the purchasing department and your company's dock-to-stock area. In addition, this application helps you control your communications with suppliers by ensuring that:

- What was requisitioned was ordered
- What was ordered was received
- What was scrapped or returned was debited
- What was invoiced was received
- What was invoiced was as agreed.

PUR estimates cash requirements to help control committed funds.

To help find the low-cost vendors for an item, PUR rates each purchase order individually as to performance on price, delivery, quality, and lead-time. Each purchase order rating is summarized into a composite evaluation of all recent purchases of an item from a specific vendor. A composite rating that includes all items supplied by a vendor is also maintained.

Purchase orders, purchase order changes, and requests for quotations can be printed and mailed or can be sent by electronic data interchange. Invoices can be received by electronic data interchange and processed.

Repetitive Production Management (REP)

The Repetitive Production Management (REP) application is designed for manufacturers who build or assemble products on continuously flowing production lines. This application gives you the ability to control these manufacturing processes through production schedules, rather than traditional shop orders. REP helps you develop realistic schedules and control the level of work in process (critical factors in a high-volume, repetitive production environment).

You use the menu options in REP to:

- Create, review, and change production schedules, by item and production line. REP supports a mixture of production schedules: daily schedules, summary schedule groups spanning multiple days, and mixed model production.
- Extract production requirements (demand) from COM, MRP, and an external user-entered source of demand file. After reviewing smoothed demand, you enter production schedules to meet the needs of the demand.
- Commit schedules to the shop floor through the Schedule Release process. Shortage reports highlight components that need to be expedited.
- Prime and replenish production lines with the necessary components.
- Track the performance to schedule in terms of completed units and scrap quantities. Inquiries and reports show you the status of each schedule in terms of quantities and costs.

REP supports Just-in-Time production of components, subassemblies, and finished goods. Using REP, you can create schedules to meet production demands and ensure a timely supply of components to achieve the schedule.

Sales Analysis (SA)

The Sales Analysis (SA) application provides sales, cost, profit amount, and profit percent reporting for management analysis. The application is designed to furnish critical information on demand, including history data or current period data only. SA provides reports and inquiries that show current year data compared to prior year data for sales, cost, and profit. Current and prior year data can also be displayed graphically, for comparison, on a graphics workstation or a personal computer used as a terminal on the System i.

ValetMiner

ValetMiner is a data access tool that lets you view, print, analyze and extract data from existing computer reports. Any report used in your organization can be accessed via ValetMiner.

Whenever a computer produces a report, it creates something called a report file that contains all the characters and control codes that are sent to the printer to produce the actual printout.

ValetMiner reads that same report file, but instead of producing a hardcopy printout with words and numbers frozen on the page, ValetMiner creates a softcopy of the report on screen, with live data you can work with.

WorkFlow

XA WorkFlow is a powerful, object oriented tool that will provide customers with a method to manage and control resources by tracking progress through their internal systems. It consists of three components; Runtime (included with Foundation beginning with Release 5.5), WorkFlow and Application Builder, and WebServer. Its ease of use coupled with its integration with XA Enterprise Resource Planning system, helps speed the development process, enabling an enterprise to rapidly define, create, test, deploy, and enhance boundless enterprise-wide document, data management, and WorkFlow applications.

Runtime, included with Foundation, enables users to:
- Receive notification of tasks to be performed
- Display graphical views of WorkFlows
- Get insight on information for WorkFlow tasks, i.e. person or group responsible for a task, time allotted for completion, time WorkFlow was initiated, etc.
- Receive WorkFlow notifications by e-mail via an attachment

WorkFlow and Application Builder, an additional component, enables users to:
- Create, test, and deploy a variety of WorkFlow applications
- Graphically diagram workflows to be built
- Construct and customize applications to meet data management needs

WebServer provides an enterprise with:
- Capability to convert client server WorkFlow applications to Web-deployed applications in a matter of seconds
- Capability to change and redeploy web WorkFlow applications without web--master resources

  - ECO approvals
  - Customer order holds
  - Manual requisitions
  - Expense approvals
  - Check requests
  - ISO requirements
  - Plus many more...

XA Browser

The XA Browser gives you an efficient, task-oriented way to view application information contained in XA applications. The XA Browser lets you customize how you can view the application information. With the XA Browser you can:

- Arrange application information into multiple groupings and sequences that make sense for your job.
- Hide information that does not apply to a particular job or task.
- Subset records to show only the information that applies to the job or task you are performing.
- Customize the information for an individual user, for a group of users, or for all users.

This guide uses the term “object” to refer to business data. An object can be a collection of data that has something in common, such as information related to a single business entity. Application objects generally correspond to master files in the XA applications. For example, the Customers object shows information about your company’s customers.

XA System-Link

XA System-Link is a bridge between outside systems and XA. An outside system can be a separate platform, such as another ERP system or a web page. It can also be custom code on the same System i. Programs that can format XA System-Link XML requests can initiate transactions with XA. XA System-Link runs its own server and

provides the link between a web server and XA EJB server. For more detailed information, see the *System-Link User's Guide*.

The XA library

The XA applications have a library of books and online information to help you use and manage the applications. This library consists of information that explains how to use each of the XA applications, and cross-application books that explain what you need to know for specific tasks and functions that apply to more than one application.

Note: The names and form numbers of all books in the XA library are listed in the bibliography on the documentation CD.

Application information

For each application, you should have:

- User's guide or Concepts guide
- Online help text.

Cross-application information

The cross-application books include:

- *Getting Started with Infor ERP XA*
- *Planning and Installing Infor ERP XA*
- *CAS Conversion Guide*
- *Working with Infor ERP XA*
- *Working with the XA User Interface*
- *CAS Technical Reference Guide*
- *Getting Started with Visual eWorkPlace*
- *Using Info WorkPlace*
- *User Exits*

Where to find information

The information in the XA library helps you with all the tasks associated with XA. The following table links the books and help text in the library with the tasks you do. Some of the books are listed more than once, because you can use them for more than one activity.

Task	Where to find the information
Learning about XA	*Getting Started with Infor ERP XA*
Planning and installing the applications	*Planning and Installing Infor ERP XA* , User's guides
Learning the applications	Concepts/User's guides
Running daily and periodic tasks	Concepts/User's guides, help text, *Working with Infor ERP XA*
Managing the application tasks	Concepts/User's guides
Managing the XA applications	*CAS User's Guide*
Modifying the user interface	*Working with the XA User Interface*
Modifying the source code	*CAS Technical Reference Guide*

Task	Where to find the information
Analyzing the information supplied by the applications	Concepts/User's guides
Converting MAPICS files to XA files	*CAS Conversion Guide*
Learning about the windows-based graphical user interface for XA	*Getting Started with eWorkPlace*
Learning about flexible report creation and production, electronic forms printing and report writing on the IBM System i	*Using Info WorkPlace*

Ordering books

Infor. sends you a documentation CD with all the books required for your XA applications. If you need other books listed in the bibliography on the CD or if you want additional copies of the books you already have, contact http://support.infor.com.

Using eWorkPlace with XA documentation

eWorkPlace (eWP) is the Microsoft®, Windows'™-based graphical user interface for XA. The eWP windows co-exist with the XA character-based displays, called Host screens. If you are using eWP, you can view the corresponding Host screen for any eWP window, if necessary.

Note: If you have modified a Host screen, the GUI default is used. The default GUI feature can be enabled or disabled.

The user's guides and help text contain instructions that reference the host XA screens (called panels and displays) rather than the eWP windows.

To understand how a Host screen instruction relates to an action on a eWP window, it is helpful to look for text on a window control that corresponds to the instruction. For example, **Cancel** on a button and on a File pull-down corresponds to the user guide instruction "use **F12=Cancel** to return to the previous display".

Note: For the instruction "press **Enter**", the corresponding control on an eWP window is an **OK** button.

The following table shows other examples of instructions from the documentation and the corresponding actions you take on the eWorkPlace window.

Documentation instructions	eWorkPlace actions
To change the details of a vendor, type **2** next to the vendor and press **Enter**.	Select a vendor, then select Change or type C from the List menu or select Change using the right mouse. Click the OK button.
To create a vendor, use **F6**.	Select Create on the Functions menu or click the Create button.
Position to command. If you want to skip to a particular command, type the full or partial command.	Type the full or partial command in the position to entry field and click the Position button.

Documentation instructions	eWorkPlace actions
Type the information requested and press **Enter**.	Type values in or select values for the entry fields and click the OK button.
Type the information requested and use a function key.	Type values in or select values for the entry fields and click a button or select an action on the Functions pull-down.
Use the Item Master maintenance display to.....	Use the Item Master maintenance window to.....

For more information about eWP, see *Getting Started with eWorkPlace*.

The rest of this book

The rest of *Getting Started with Infor ERP XA* introduces you to the main ideas you need to know about using the iSeries system, coordinating XA jobs, running functions that affect more than one application, and resolving problems.

Chapter 2. Learning the basics for System i applications

Before you begin using any of the XA applications on the System i, read the information in this chapter. It covers the following topics and concepts you need to understand:

You should read the documentation for any other applications not run on the System i to learn basic concepts for using that application.

Using the keyboard

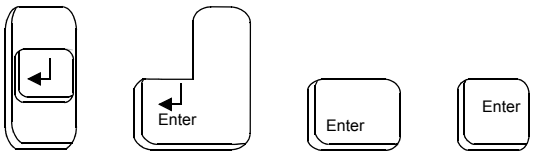
To run an System i application, you need to be familiar with your keyboard. The key names in this book are the names used on most keyboards.

Note: Keyboards differ from one workstation to another. If your keyboard does not match the keys in this book, see your workstation operator's guide to identify which keys you need for XA.

You use keyboard keys to advance the cursor on the display, and to tell the application that you have finished entering data on the display. You also use keyboard keys to page up, page down, request help, request a predefined application function, or reset the display after an error.

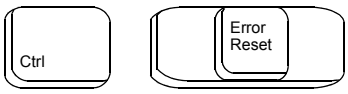
You can use keyboard keys to interrupt your current job.

Enter key



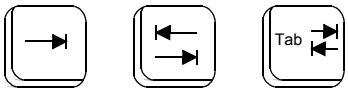
Press **Enter** when you finish typing all data on a display. If the data is correct, the application accepts the data. You can continue with your next step or task. You will use this key often.

Error Reset key



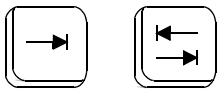
You can press **Error Reset** to reset or correct a keyboard error. The **Ctrl** key is the **Error Reset** key on many personal computer keyboards.

Field Advance key



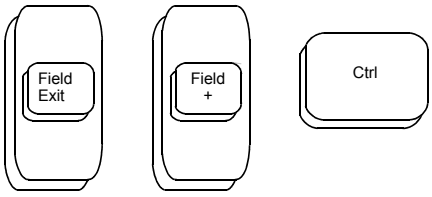
Field Advance (or **Tab**) moves the cursor from one field to the beginning of the next one.

Field Backspace key



Field Backspace (or **Tab and Shift**) moves the cursor back to the beginning of the current field. If the cursor is already at the beginning of a field, it moves back to the beginning of the previous field.

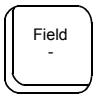
Field Exit, Field Plus keys



Field Exit and **Field Plus** (**Field +**) erase data from the cursor position to the end of the field, and move the cursor to the next field. If you press either key while you are in a numeric field, the data shifts to the right side of the field. Press **Field Minus** (**Field -**) to enter numeric data that is negative. You need to press the **Field Exit** after you enter numeric data in most XA fields.

Be sure to check which one of your keys corresponds to this one. On some personal computer keyboards, the **Field Exit** key is the right **Ctrl** key.

Field Minus key



Field Minus (**Field –**) erases numeric data to the end of the field, moves your data to the right, and moves the cursor to the next field. Use this key only if you are entering negative data into a numeric field. When you press **Field Minus**, an alphabetic character (J through R) or a bracket (}) appears at the end of the field. However, next time you see this display, you see the correct entry with a minus sign (–) in the field.

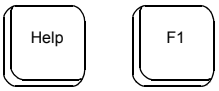
Check your workstation operator's guide or emulator operator's guide to identify which key on your keyboard is the **Field Minus** key.

Function keys

Function keys are labeled **Cmd**, **PF**, or **F** on the keyboard. You need to use numbered function keys in some XA application steps. Function keys and short phrases identifying their use appear on the last lines of XA displays.

You may need to press **Cmd** and then the key designated on your keyboard template. On other keyboards, you need to press **Cmd**, **Shift**, and then the function key in order to use **F13** through **F24**.

Help keys



Help or **F1** shows you additional information about the display you are using or the field where the cursor appears. Press **Help** or **F1** to see help text about the display, fields, function keys, and messages you see on the current display. For more information about using these keys, see “Requesting help” on page 2-21.

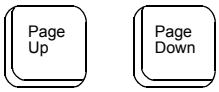
Home key

The MUI Interface function allows you to define a hot key to access a number of menus with useful tasks. Home accesses the hot key menus within XA applications, provided you have defined the **Home** key as the hot key. For more information, refer to the *Working with the XA User Interface* book.

New Line key

New Line moves the cursor to the beginning of the first field on the next line. Be careful: the **Enter** key on some personal computers looks like a **New Line** key. Pressing this key may prematurely submit the information you are entering.

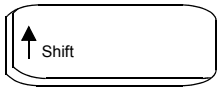
Page Up, Page Down keys (Roll keys)



On some keyboards, **Page Up** and **Page Down** are called the roll keys. You may need to hold down the shift key when you press **Roll Up** or **Roll Down**.

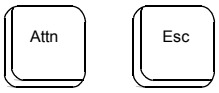
Press **Page Down** or **Roll Up** to move forward through the help text or through the information on a display. Press **Page Up** or **Roll Down** to move backward through the help text or through the information on a display.

Shift key



Press **Shift** just as you would a typewriter shift key, to put the other keys into uppercase (capital letters). Depending on which keyboard you have, you might also use it at the same time as another key to perform a function.

Attention key

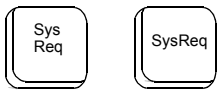


Press **Attn** to suspend an interactive job to run another interactive job from the same workstation. Interactive jobs are jobs that respond immediately to what you type at the workstation. The workstation waits for a response from the application. On some keyboards, the **Attn** key is the **Esc** key.

Sometimes when you are running a primary interactive job in one application, you need to interrupt that job to use programs from other applications. For example, you could be entering information for one application and need to see information in other application files.

When you press **Attn**, a Group Job menu appears. Use the Group Job menu to run programs in other applications without cancelling your current job and without using the other application menus. The Group Job menu can be the standard menu supplied by XA, a menu tailored by your company, or a menu tailored specifically for you. The menu lists the XA and OfficeVision*/400 activities you can do. When you have finished your group jobs, you return to the display where you pressed **Attn**. You cannot use the Group Job menu if you are in a secondary session. For more information on running group job sessions, see Chapter 4 “Using additional features”.

System Request key



Press **Sys Req** to interrupt the primary session interactive job to do another task. A primary session is the session you started when you first signed on. You can interrupt some interactive jobs you are running in the primary session to sign on to a secondary session and run another program.

When you press **Sys Req**, a system request menu appears. On the System Request Menu, choose option 1 to sign on to an alternate job. Sign on when the sign-on display appears. On the Command Entry display, type the information to call the Application Selection menu. Then select the application you want to use in the secondary session. During the secondary session the words “Secondary Job” are highlighted on the top line of the menu shown. When you sign off a secondary job, you return to the display in the primary session where you pressed **Sys Req**.

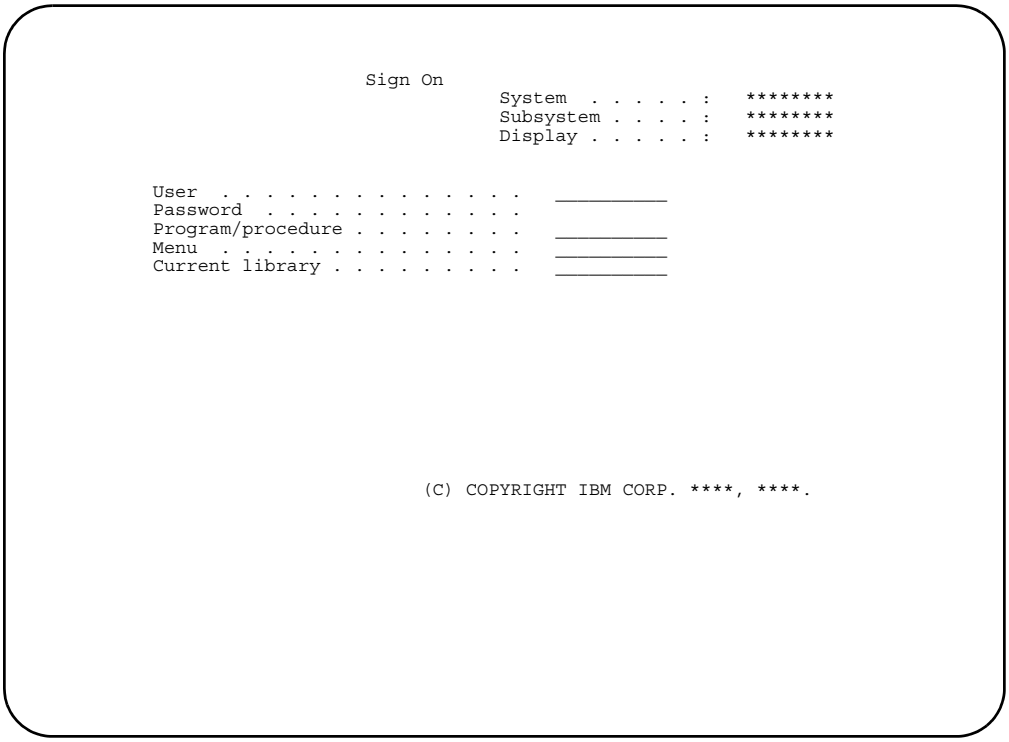
For more information on running secondary sessions, see Chapter 4 “Using additional features”.

Signing on

To tell the computer which application you want to use, sign on from any workstation.

The System i is very flexible in the ways you can sign on. In addition, your company can personalize your menus. Only the simplest sign-on method is shown in this chapter. You may need to ask the person who set up your System i user profile whether there is a specific procedure you should follow for signing on and starting XA.

Turn on the machine. A sign-on display appears:



1. Type your user ID in ***User***. If necessary, press **Field Exit** to move to the next field.
2. If you see ***Password***, type your password. The password you type does not appear on the display. (If you do not see Password on the display, your company does not use password security.)
3. Leave ***Program/procedure***, ***Menu***, and ***Current library*** blank. Press **Enter**.
4. What display you see next is determined by your user profile:
   - If it is a display with a command line, use the STRXA command.
   - If it is a display without a command line, ask the person who set up your user profile how to access XA.
   - If you are set up to go directly to XA, you see an XA menu.

Using the STRXA command

Use the STRXA command to access the XA applications. You can enter the command in several different ways. You can specify:

- The XA Application Selection menu
- An XA application
- An XA application and environment
- An XA application and environment without verifying.

An environment is a set of libraries required to operate your XA application. You can have one or more environments on your system. The standard environment is the MM environment. The designators for the environments are assigned by your company. For more information on creating and maintaining environments, see the *CAS User's Guide*.

If your company is using Personal Menus in XA, your Personal Menu appears when you use the STRXA command. Any information you entered with the STRXA command other than the environment is ignored.

The following discussion describes the menus that appear when you use the STRXA command if you have not changed your startup menu. The startup menu is the first menu you see when you sign on to XA. For information on creating and changing startup menus, see the Menu Maintenance chapter of the *CAS User's Guide*.

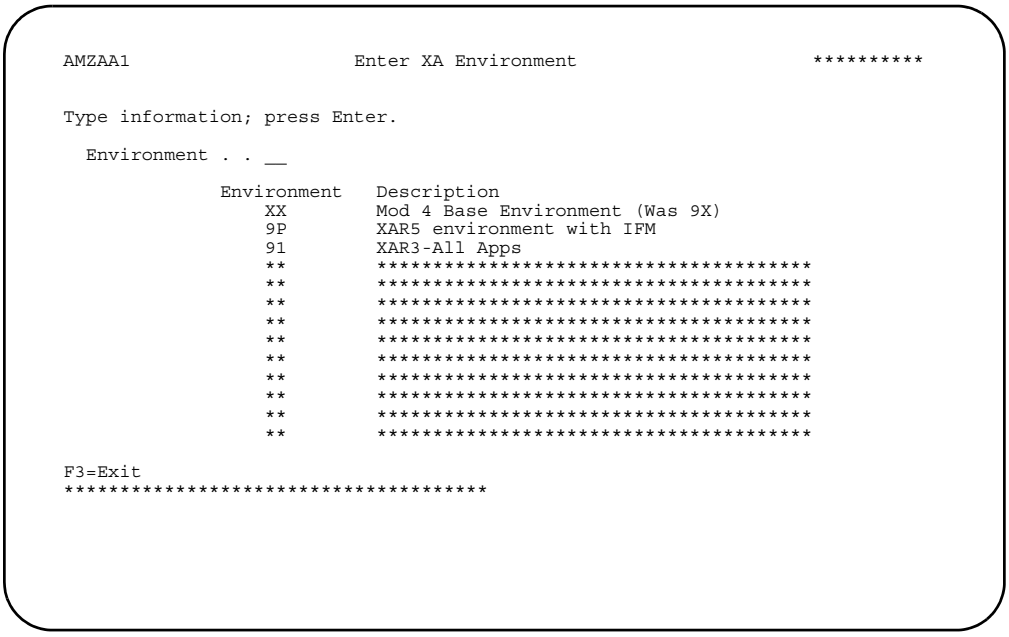
Specifying the XA Application Selection menu

To sign on to the Application Selection menu, type:

STRXA

If you have a single XA environment, the XA Application Selection menu appears. You see the installed XA applications and an option (50) which takes you to the Additional Applications menu. This menu shows other applications, if installed.

If you have multiple XA environments, display AMZAA1 appears.



Select the environment you want and press **Enter**. Display AMZAA4 appears.

```
AMZAA4                    Confirm XA Environment                    **********

Press Enter to continue.
Press F12 to change the environment.



 Environment ..:   9P   XAR5 environment with IFM




F3=Exit     F12=Return
```

Verify your environment selection and press **Enter**. The Initializing XA Environment display appears. When initializing is complete, the Application Selection menu appears (if you have not changed your startup menu).

```
AM$M00                    Cross Application Support                 **********
                            Application Selection

Type option or command; press Enter.

     1. Accounting Management Accounts Payable >>
     2. Accounting Management Accounts Receivable >>
     3. Accounting Management General Ledger >>
     4. Capacity Requirements Planning >>
     6. Cross Application Support >>
     7. Customer Order Management >>
    12. Financial Analysis >>
    14. Forecasting >>
    15. International Financial Management >>
    16. Inventory Management >>
    18. Manufacturing Performance Analysis >>
    20. Master Production Schedule Planning >>
    21. Material Requirements Planning >>
                                                                              +
==> ____________________________________________________________________________

F3=Exit       F4=Prompt        F7=Backward   F8=Forward     F9=Retrieve
F10=Actions   F11=Job status   F12=Return    F22=Messages
```

Type an option number on the command line. Press **Enter**. The Main Menu for the XA application you selected or the Additional Applications menu (if you selected option 50) appears.

Specifying an XA application

To sign on to a specific XA application, type:

STRXA a

where *a* is the application ID and press **Enter**.

If you have a single XA environment, the Main Menu for the application you selected appears.

If you have multiple XA environments, display AMZAA1 appears. Select the environment you want and press **Enter**. Display AMZAA4 appears. Verify your environment selection and press **Enter**. The Initializing XA Environment display appears. When initializing is complete, the Main Menu for the application you selected appears (if you have not changed your startup menu).

The following is a list of the valid XA application IDs.

XA Application	**ID**
Accounting Management Accounts Payable	A
Accounting Management Accounts Receivable	R
Accounting Management General Ledger	G
Accounting Management *Plus*	
APS Bridge	
Capacity Requirements Planning	T
Contract Accounting	9
Cross Application Support	Z
Customer Order Management	B
COM_Net	
Customer Service Management	
Electronic Commerce	4
Enterprise Product Data Management	D
Estimating and Quote Management[a]	1
Executive Information System	N
Financial Analysis	F
Finite Capacity Planning and Scheduling	3
Forecasting	2
International Financial Management	5
InterSite Logistics	i
Inventory Management[b]	I
Knowledge Based Configurator	H
Maintenance Management System	
Manufacturing Performance Analysis	7
Market Monitoring and Analysis[c]	O
Master Production Schedule Planning	L
Materials Management	
Material Requirements Planning	M
Multi-environment InterSite Logistics	m
Order-Based Production Management	
Payroll	P
Procurement Management	U
Product Data Management	E
Production Control and Costing	C
Production Monitoring and Control	J
Purchasing	6

Repetitive Production Management	Q
Sales Analysis	S
XA Browser	b
XA Application Selection menu	$

a. The application ID is the number one.
b. The application ID is the letter l.
c. The application ID is the letter O.

Specifying an XA application and environment

To sign on to a specific XA application in a specific environment, type:

STRXA a xy

where xy is the environment designator and press **Enter**. Display AMZAA4 appears. Verify your environment selection and press **Enter**. The Initializing XA Environment display appears. When initializing is complete, the Main Menu for the application you selected appears (if you have not changed your startup menu).

Specifying an XA application and environment without verifying

To sign on to a specific XA application in a specific environment and skip the display that verifies your environment, type:

STRXA a xy 00

where 00 indicates you want to skip the verify display. Press **Enter**. The Initializing XA Environment display appears. When initializing is complete, the Main Menu for the application you selected appears.

You can also fastpath to a specific menu option by typing:

STRXA a xy nn nn nn

where nn is a menu option number. For example, to go to the option 1 on the CAS Security Maintenance menu (AMZM38) in the MM environment, type:

STRXA Z MM 03 08 01

where 03 is option 3 on the CAS Master Menu (AMZM00), 08 is option 8 on the CAS Maintenance/Change menu (AMZM30), and 01 is option 1 on the CAS Security Maintenance menu (AMZM38). Press **Enter**. The Initializing XA Environment display appears. When initializing is complete, the first display for option 1 appears.

For more information on the fastpath command, type **STRXA** on an System i command line, press **F4** and then **Help** or **F1**.

Accessing XA without the STRXA command

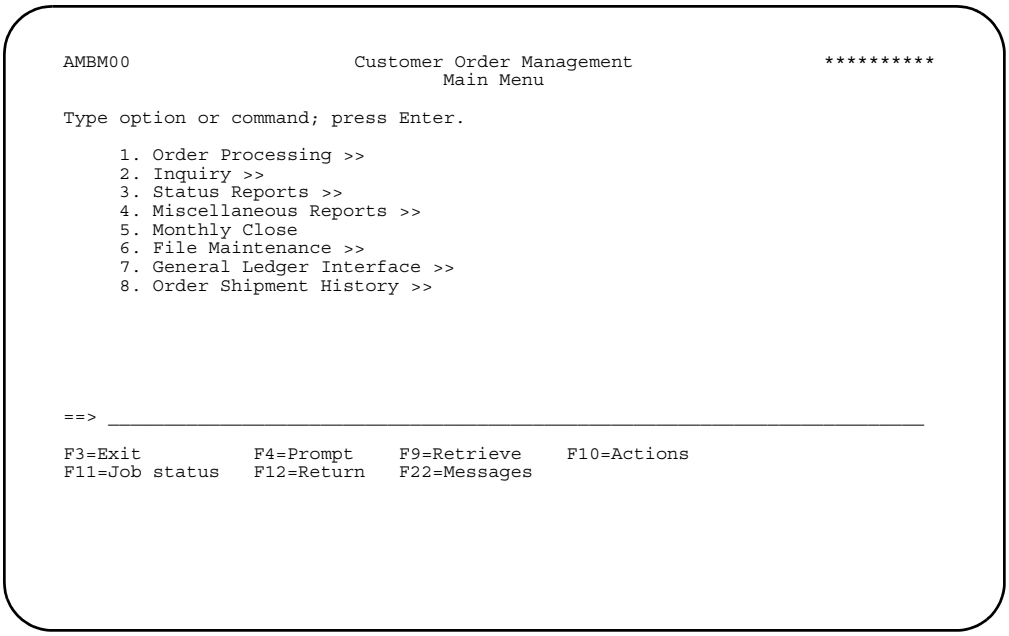
It is possible to include the STRXA command in a program in such a way that the command runs automatically when you sign on or select a certain menu option outside XA. If this is true for your company, you are using a tailored signon. Ask the person who set up your user profile or tailored the signon how to access XA. *Planning and Installing Infor ERP XA* describes how to set up tailored signons.

Using menus

All tasks begin with a menu which is a display listing the tasks you can choose. The purpose of a menu is to give you a convenient way to select the work you want to do.

Note: You can customize menus using option 14 on the CAS Maintenance/Change menu (AMZM30). For information on how to use this option, see the *CAS User's Guide*.

The first menu you see after you choose an application from the Application Selection menu is the Master Menu for CAS or the Main Menu of another installed XA application. The menu lists the major tasks, such as these shown on the Customer Order Management Main Menu.



To choose an option on a menu, type the number of the option you want on the command line and press **Enter**. If >> appears next to a menu option, that option goes to another menu. Otherwise, the option goes to a display or performs an application function, such as printing a report.

The menu called by a Main Menu option is a secondary menu. The menu called by a secondary menu option is a third-level menu.

When you select a menu option, the application makes the necessary security checks and starts the programs.

Using the menu command line

In addition to using a menu command line for entering the options from the menu you are viewing, you can use it to enter the following:

- System i commands. Allow you to do System i tasks.
- Action commands. Allow you to initiate specific application and system tasks.

- Menu fast path commands. Allow you to go directly to another menu or run another menu option in the same or a different application.

XA commands

You can enter any XA command that exists in the library list in a specific environment.

Action commands

Use this option to create and maintain the actions for your installed XA applications. An action is an application or system task that you initiate from an application menu. Actions can be pre-defined or user-defined; you can modify both kinds if necessary.

An action command initiates a specific action from a menu command line. For example, you can display messages by typing ***DM** on a menu command line.

Another way of initiating actions is from a menu action list that you access using **F10**. When defining an action, you have the option to specify that it appear on the action list of the menus for a specific application or on the action lists of all application menus. Using an action list allows you to select an action if you do not remember its command. For example, you can display messages by typing *DM on a menu command line or by selecting *DM from a menu action list. Pre-defined actions appear on an action list with an * before the action.

For more information on creating action commands, see the Menu Maintenance chapter of the *CAS User's Guide*.

Menu fastpath commands

Every XA application menu has a six-character ID:

AMxMnn

where x is the one-character application ID (see the list below); nn identifies the number of the menu in the application.

To go directly to another menu in the same application or in another installed XA application, type a menu ID on the command line and press **Enter**. For example, type AMZM41 to go to the CAS Back Up Files menu. To go to a Main Menu, you can type the application acronym or the menu ID. For example, type **AP** or AMAM00 to go to the Accounts Payable Main Menu.

To run a menu option in the same application or in another installed XA application, type a menu ID and option number (with a space between the ID and the number) on the command line and press **Enter**. For example, type **AMZM41 02** (or **AMZM41 2**) to run option 2 on the CAS Back Up Files menu.

To leave XA, type **EXIT** on the command line and press **Enter**.

The following is a list of XA menu IDs and application acronyms. (The acronym follows the application name.)

AMAMnn Accounting Management Accounts Payable (AP)
AMRMnn Accounting Management Accounts Receivable (AR)
AMGMnn Accounting Management General Ledger (GL)

AMGMnn	Accounting Management Plus
AXAMnn	APS Bridge
AMTMnn	Capacity Requirements Planning (CRP)
AM9Mnn	Contract Accounting (CA)
AMZMnn	Cross Application Support (CAS)
AMBMnn	Customer Order Management (COM)
AM4Mnn	Electronic Commerce
AMDMnn	Enterprise Product Data Management (EPDM)
AM1Mnn	Estimating and Quote Management (EQM)
AMNMnn	Executive Information System (EIS)
AMFMnn	Financial Analysis (FA)
AM2Mnn	Forecasting (FCST)
AM5Mnn	International Financial Management (IFM)
AMIMnn	Inventory Management (IM)
AMHMnn	Knowledge Based Configurator (KBC)
AM7Mnn	Manufacturing Performance Analysis (MPA)
AMOMnn	Market Monitoring and Analysis (MMA)
AMLMnn	Master Production Schedule Planning (MPSP)
AMMMnn	Material Requirements Planning (MRP)
AMPMnn	Payroll (PR)
AMEMnn	Product Data Management (PDM)
AMCMnn	Production Control and Costing (PCC)
AMJMnn	Production Monitoring and Control (PMC)
AM6Mnn	Purchasing (PUR)
AMQMnn	Repetitive Production Management (REP)
AMSMnn	Sales Analysis (SA)
AXIM00	InterSite Logistics (ISL)
AXMM00	Multi-environment InterSite Logistics (MISL)

Command line processing

If you have objects with the same name in more than one of the following categories, they are processed in the sequence shown:

1. Menu option
2. Menu ID
3. Menu ID and menu option
4. Menu action command
5. iSeries command.

For example, if the System i command WRKSPLF (Work With Spool Files) is also an action, the command is processed as a menu action command instead of a System i command.

Using menu function keys

Use the menu function keys as follows:

F1=Help

Not shown. Displays help except when the cursor is on the message line. To get help on a menu message, use the **Help** key.

F3=Exit

Ignores any information you typed and returns you to the Main Menu or asks if you want to exit XA if you are on the Main Menu.

F4=Prompt

Shows a selection list of System i command groups if you have been granted the authority to use all commands from the menu command line.

F5=Refresh

Not shown. Redisplays the current menu and checks the user's security access to command line entries.

F9=Retrieve

Shows the commands and associated parameters you ran on the command line for the current session, beginning with the last command. Each additional time you use **F9**, you see the previous command you entered.

F10=Actions

Shows you a selection list of available actions. Pre-defined actions are identified by an asterisk (*) in front of the action.

F11=Job status

Shows a list of your current system and job information. You can see the status of your current job, including: system ID, time, date, job number, and job name; your ID and your workstation ID; the default output queue and output queue library; and the XA environment.

F12=Return

Ignores any information you typed and returns you to the previous menu or the Application Selection menu if you are on the Main Menu, or asks if you want to exit XA if you are on the Application Selection menu.

F22=Messages

Presents a screen so that you can enter an XA message number to view the first and second level text of the message.

The following function keys appear if a menu has more than one panel.

F7=Backward or Roll Down

Shows the previous panel for the menu. You use **F7** or **Roll Down** after you have used **F8=Forward** or **Roll Up**.

F8=Forward or Roll Up

Shows the next panel for a menu. You can press **F8** or **Roll Up** when you see + in the lower right part of the menu.

Establishing menu security

Using the CAS security maintenance function, your company can establish security for the XA application menu options and the commands and fastpaths you enter on a menu command line. These functions are then available only to certain users.

The ACCMAPCMDS and ACCALLCMDS tasks in the CAS Menu Maintenance security area control user access to the commands and fastpaths. The following table shows that a user's access is determined by both the lock status of the ACCMAPCMDS and ACCALLCMDS tasks and the user authorizations to these tasks:

User has access to:	ACCMAPCMDS = Y ACCALLCMDS = Y	ACCMAPCMDS = Y ACCALLCMDS = N	ACCMAPCMDS = N ACCALLCMDS = Y	ACCMAPCMDS = N ACCALLCMDS = N
XA commands and fastpaths	Yes	Yes	Yes	No
All commands and fastpaths	Yes	No	Yes	No
	Y = User is authorized or the task is unlocked. N = User is not authorized and the task is locked.			

For more information, see the Security Maintenance chapter of the *CAS User's Guide*.

Using displays

After you select the menu option that identifies what you want to do, you then enter information for that task on one or more displays. A display, sometimes called a screen, contains a set of information shown at the workstation.

Note: Some menu options do not have displays. The task is performed as soon as you select the menu option.

Every display has a unique identifier. You can check your data on the display and correct any data you typed before you press **Enter**. The application processes your data when you press **Enter**.

All XA displays have similar information shown at certain places.

The top of the display contains:

- The current date.
- The name (or title) of the display.
- The operating mode or kind of work you selected, such as the following:

  Add To add a record to a master file
  Change To change a record in a master file
  Create To add a record to a master file
  Delete To delete a record from a master file
  Enter To enter transactions from a workstation
  Option(s) To specify report options
  Review To review data you previously entered
  Select To select the work you want to do
  Status To check batch totals or session record count status.

- A unique label that identifies the display.
- The two-character designator for the current environment. The designator for the standard environment is MM. For environments other than the standard, the first character is the program library suffix and the second character is the file library suffix.

```
DATE **/**/**  MANUFACTURING ORDER DETAIL FILE MAINT.    CHANGE  AMI7E2   **
```

Figure 2-1. Parts of the display: top

The middle of the display contains the information fields.

```
ORDER NUMBER *******   COMPONENT ***************   WAREHOUSE ***

 DESCRIPTION            aaaaaaaaaaaaaaaaaaaaaaaaaaaA30
 TOTAL QUANTITY         nnnnnnn.nnn
 QUANTITY PER           nnnnnnnn.nnnnnnn
 UNIT COST              nnnnnnnnnnn.nnnn
 REQUIRED DATE          nnnnnn
 LAST ISSUE DATE        nnnnnn
 CUSTOMER JOB NUMBER    aaaaA6
 OPERATION WHERE USED     aaA4
```

Figure 2-2. Parts of the display: middle

The bottom of the display contains:

- The message area
- The function keys you can use on this display

```
                                                F02 PAGE FORWARD
E AM-XXXX DATE NOT VALID                        F18 REFRESH SCREEN
                                                      F19 RETURN TO SELECT
```

Figure 2-3. Parts of the display: bottom

Paging

Paging at a workstation is like turning pages in a book. When all the information you are looking for does not appear on a single display, you can use function keys to see more information. The term scrolling has the same meaning as the term paging.

On many displays, “**Use Roll Up/Down**” appears on the display to indicate that there is more information. On other displays, “**+**” appears at the bottom of the display to indicate that there is more information. Depending on the display, you need to press one of the following keys to see more information: page forward (roll up or page down on some keyboards), **Enter**, or a function key to see more information.

Entering information

When you first see a display, the cursor appears in the first field in which you can enter information. Type the information you want for that field. To enter information in another field on a display, move the cursor to that entry field, and type the information. Refer to the previous section “Using the keyboard” on page 2-1, to see how to move

your cursor on the display. When you have finished typing information on a display, pressing **Enter** tells the application to process your data.

Each display in a XA application organizes information into fields, for you to read or for you to enter information. If the field contains a default value, the application uses that value if you skip the field and do not type anything in the field.

Defaults

A default is a value the application uses for a field without any input from you. Some entry fields on displays contain the default. Other fields do not show a default, but the application assumes a value if you leave the field blank. Default values can be set for the application by XA, set up when your company installed your application, or entered when you run the application. The display descriptions in the user's guide tell you when you can change a default value and how long the change remains in effect.

To leave the field as is, blank, or with information already in it, press **Field Advance** (or **Tab**), described earlier in this chapter. Using **Field Exit** to skip a field erases any information in that field.

Fields on displays

```
DATE ********   MANUFACTURING ORDER DETAIL FILE MAINT.    CHANGE     AMI7E2  **

ORDER NUMBER *******   COMPONENT ***************   WAREHOUSE ***

  DESCRIPTION            aaaaaaaaaaaaaaaaaaaaaaaaaaaA30
  REVISION               aaaaA6
  TOTAL QUANTITY         nnnnnnn.nnn                    CALCULATE BY
  ADJ QTY PER            nnnnnnnn.nnnnnnn               ORDER QTY <O>
  STD QTY PER            nnnnnnnn.nnnnnnn               OR OPEN QTY <P>  A
  UNIT COST              nnnnnnnnnnn.nnnnnnnn
  REQUIRED DATE          nnnnnn
  LAST ISSUE DATE        nnnnnn
  CUSTOMER JOB NUMBER    aaaaaaaaaA12
  OPERATION WHERE USED   aaA4
  STOCK LOCATION         aaaaaA7
  UNIT OF MEASURE        A2
  FLOOR STOCK CODE <C/U> A
  USER SEQUENCE          aaA4
  DATE LAST MAINTAINED   ********

                                                        F02 PAGE FORWARD
                                                        F18 REFRESH SCREEN
                                                        F19 RETURN TO SELECT
```

The fields on displays shown in the user's guides are coded so that you know what kind of information they contain.

********	The application shows this information. You cannot type anything in these fields.
aaaaaA7	The field is alphanumeric and seven characters long.
nnnnnn	The field is numeric and six positions long.
nnnnnnn.nnn	The field is numeric, ten positions long, and contains three decimal positions.

<Y,N> Requires a **Y** (**Yes**) or **N** (**No**) answer.

<nn,nn> A range of the choices you can make for the field.

Depending on which workstation you use, you can enter information for fields by the vertical column separators or dots shown on the display. On the display, you see one of the following:

REQUIRED DATE | | | | | | |

or

REQUIRED DATE • • • • • • •

or

REQUIRED DATE _ _ _ _ _ _

In the XA books, you see either sample data in the fields or the codes:

REQUIRED DATE nnnnnn

In this example, the field is six numbers long. A numeric field that has a sign, + or -, has an additional space for the sign. If you do not see a sign after a signed field, it is plus (+). Remember, use **Field -** when you type a negative number.

Decimal points

When a numeric field has decimal positions, a decimal point appears on the display. The number of digits you can enter to the right of the decimal appears on the display as zeros (0). For example, a two-digit decimal position field appears as .00. In most cases, you must type the decimal point even though it appears on the display, unless you want to enter a whole amount. The following examples show you how to enter decimal points:

To enter	Type
8.00	8 (The system supplies the decimal point and two zeros.)
8.25	8.25
8.20	8.2 (The system supplies a zero for the remaining decimal position.)

Be sure to press **Field Exit** when you type numeric data; otherwise, you may enter the number incorrectly into the system. If you do not press **Field Exit**, you see a blinking error, “0020,” in the lower left corner of the display.

Press **Reset** and **Field Exit** to continue your entry.

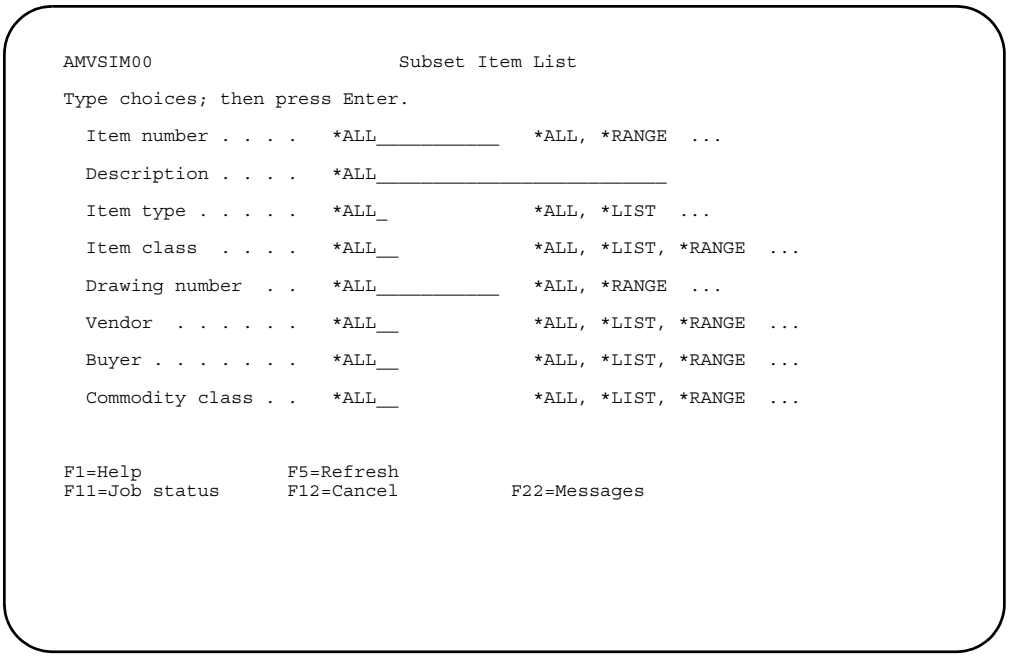
Limits

Some displays let you type in limits or ranges so that you can include a subset of all the information to look at or print. A range is a subset that includes everything between a beginning and ending number. The ending number must be equal to or greater than the beginning number. For example, you can enter a beginning and an ending warehouse number for a report. The printed report includes only the warehouse numbers within the limits you requested.

Subset list display

Certain functions in XA use a subset list to shorten the list of entries on a work with list display. Use the subset list display to specify search arguments, such as a specific value, a range, all, or a string. Only entries that meet all the arguments you enter appear on the list. Typing search arguments into a subset list is functionally similar to running a query.

The subset list display appears when you press **F17** on a display containing the complete list. You cannot create a subset from a subset. The following is an example of a subset list display:



```
AMVSIM00                      Subset Item List

Type choices; then press Enter.

  Item number . . . .   *ALL_____________   *ALL, *RANGE  ...

  Description . . . .   *ALL_____________________________

  Item type . . . . .   *ALL_              *ALL, *LIST  ...

  Item class  . . . .   *ALL__             *ALL, *LIST, *RANGE  ...

  Drawing number  . .   *ALL_____________   *ALL, *RANGE  ...

  Vendor  . . . . . .   *ALL__             *ALL, *LIST, *RANGE  ...

  Buyer . . . . . . .   *ALL__             *ALL, *LIST, *RANGE  ...

  Commodity class . .   *ALL__             *ALL, *LIST, *RANGE  ...


F1=Help             F5=Refresh
F11=Job status      F12=Cancel          F22=Messages
```

Search arguments. You can type one of the reserved words in a field on the subset list display to narrow the list down to a subset. These reserved words, also called search arguments, include:

***ALL** To include all list entries for this field (default).

***BLANK** To include only list entries whose value for this alphanumeric field is blank.

***LIST** To include only list entries matching specific values in this field.

***RANGE** To include only list entries with a value that falls within the beginning and ending values you enter.

***ZERO** To include only list entries whose value for this numeric field is zero.

In addition to the reserved words, you can type a value or character string.

generic To include only list entries that match the partial name, qualified by an asterisk (*); such as, JAM* for entries whose first characters are JAM, *A* for entries with the character A anywhere in the name, or _A* for entries whose second letter is A.

Be sure to include the asterisk (*) if you need to use it.

specific To include only list entries that match the specific value you enter, such as P01 for warehouse ID.

string To include only list entries that match the partial description of an alphanumeric field, such as HEX BOLT for entries that contain the string of characters HEX BOLT in the description.

For more information about work with lists and subset lists, see the *Working with Infor ERP XA* book.

Correcting mistakes

If you notice a mistake before you press **Enter**, just move the cursor back and correct the error.

If a number begins blinking in the lower left of the display, you may not have pressed **Field Exit** after you typed information in a field. Press **Error Reset** to unlock your keyboard. If **Error Reset** does not unlock the keyboard, look up the message number in your appropriate workstation operator's guide.

Error messages

Messages appear in the lower left of your display if the system finds an error when it processes your data. For more information about messages, see Chapter 5 "Resolving problems on the System i".

Requesting help

Nearly all of the fields, screens (menus and displays), and messages in XA already have some type of help text associated (linked) with them.

Most XA applications use XA User Interface (MUI) help text. For more information, see the *Working with the XA User Interface* book.

If you need help for a particular screen (menu or display), field, or message, you can press **Help** or **F1** (if **F1** is not pre-defined for specific use by the application).

Help is cursor-sensitive. That means that the type of help you receive depends on the position of the cursor at the time you request help.

- If the cursor is within a field, you see a window showing information, called help text, for that field.
- If the cursor is on an error or warning message, you see help text for that message.
- (User interface manager help also provides cursor-sensitive help for the message line, command line, and function keys.
- If the cursor is anywhere else, you see a window of help text for that menu or display.

If the information in the help text does not answer all your questions, go to the appropriate part in your application user's guide for more detail.

For fields

To see help text for a particular field, first move the cursor to that field and press **Help** or **F1**. A window of field help text appears.

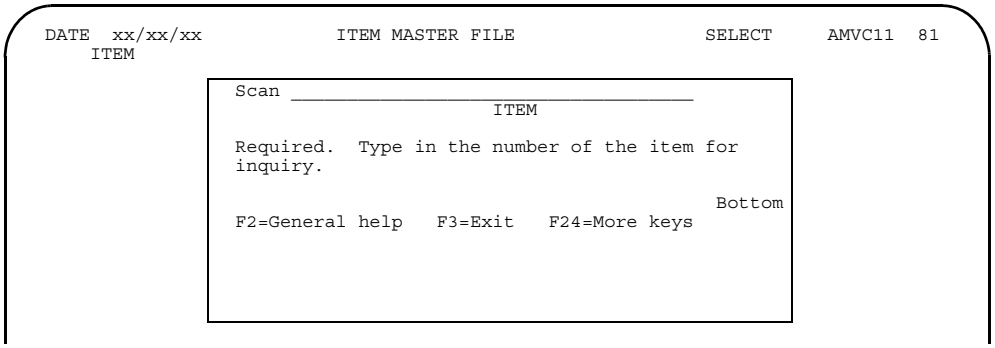


Figure 2-4. Sample help text for a field

Notice that the window appears just below the Item field, so you can see the original display while you are reading help text.

If you need to move the window, you can use **F18 (Move)**.

Move the cursor where you would like the top left-hand corner of the window to be. In this example, the window will move to the left and down one line.

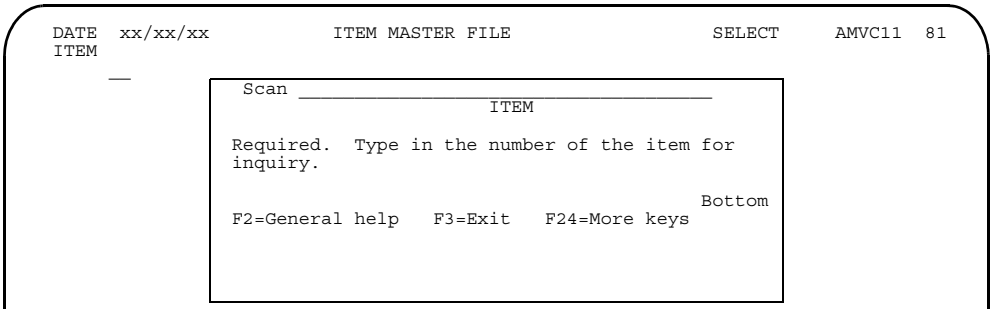


Figure 2-5. Placing the cursor where you want to move the window

Press **F18** to move the window to its new location.

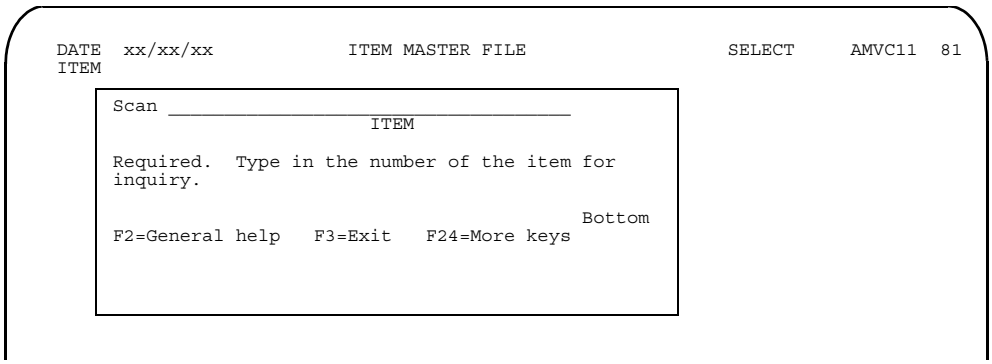


Figure 2-6. Moving the window

If you place the cursor so that part of the window would fall outside the screen boundaries, the system moves the window as close as possible to the requested location. If the window becomes hidden behind another, just press **Enter** to move it to the top.

The field help text window contains:

- Scan. ***Field*** to search for text within this help window. To find a particular word or phrase, type it and press **F16**. To reach the top, type **T**, and press **Enter**. To reach the bottom, type **B** and press Enter.
- Name of the field
- Explanation of the field
- More... or + indicates there is more help text; Bottom indicates there is not.
- Press the **roll** keys or **page** keys to scroll up or down through this window of help text.

F2=General Help
On windows of field help text, press F2 to go to general help for the entire display.

F3=Exit
Returns to the application display or menu from which you requested this function.

F12=Cancel
Returns to the application display or menu from which you requested this function.

F13=Next level
Shows additional levels (windows) of help text, if any have been defined by your company. Press F13 to go to the next lower level. Press F3 or F12 to exit and start over.

F16=Scan
Lets you search for text within the current help window. Type the text in Scan, press F16, and the window skips to the text.

F17=Information
Displays field characteristics (such as name, length, and description).

F18=Move (Move window)
Moves the current window to another part of the display so that you can see the application display underneath it. After pressing F18, move the cursor to the new location and press Enter.

F21=Print
Prints the contents of the window.

F22=Help (or Window)
Toggles between the Help and Lookup windows associated with a field. If you are viewing field help text, you can press F22 to see the Lookup window for that field. If you are viewing a Lookup search list of records, you can press F22 to see field help text.

F24=More keys
Shows additional function keys you can use on this window.

When you have finished reading field help text, press **Enter**, **F3**, or **F12** to return to the application display or menu.

For screens (menus and displays)

To see help text for the entire display or menu, move the cursor anywhere outside of a field and press **Help** or use **F1**. A window of help text for the display or menu appears.

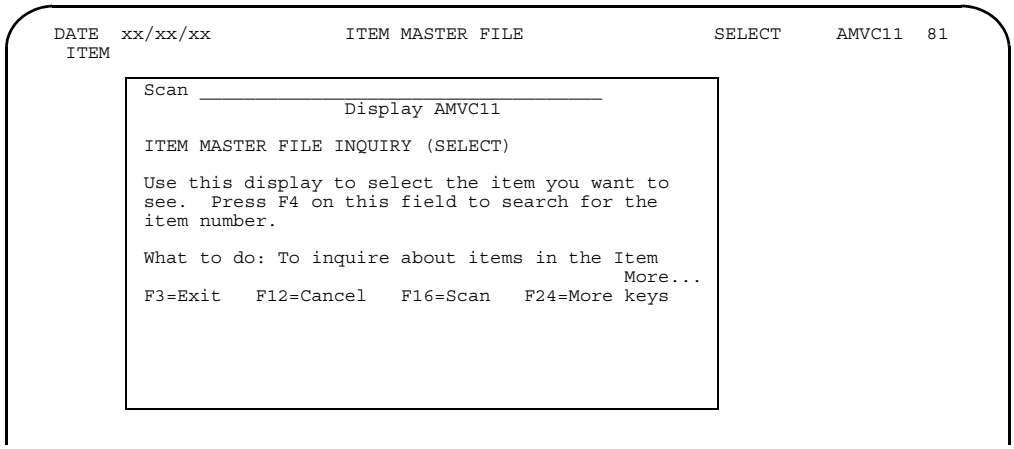


Figure 2-7. Sample help text for a display or menu

The help window for displays or menus contains:

- Scan. ***Field*** to search for text within this help window. To find a particular word or phrase, type it and press **F16**. To reach the top, type **T**, and press **Enter**. To reach the bottom, type **B**, and press **Enter**.
- The identifier for the display or menu you came from
- The name of the display or menu
- Its purpose and how to use it
- An explanation of the function keys on the menu or display
- More... or + indicates there is more help text; Bottom indicates there is not.

- Press the roll keys or page keys to scroll up or down through this window of help text.

F3=Exit
Returns to the application display or menu from which you requested this function.

F12=Cancel
Returns to the application display or menu from which you requested this function.

F13=Next level
Shows additional levels (windows) of help text, if any have been defined by your company. Press F13 to go to the next lower level. Press F3 or F12 to exit and start over.

F16=Scan
Lets you search for text within the current help window. Type the text in Scan, press F16, and the window skips to the text.

F17=Information
Displays field characteristics (such as name, length, and description).

F18=Move (Move window)
Moves the current window to another part of the display so that you can see the application display underneath it. After pressing F18, move the cursor to the new location and press Enter.

F21=Print
Prints the contents of the window.

F24=More keys
Shows additional function keys you can use on this window.

Press **Enter**, **F3**, or **F12** to return to the application display or menu.

For messages

To see help text for a particular error or warning message, first move the cursor to the message line and press **Help** or **F1**. A window of message help text appears.

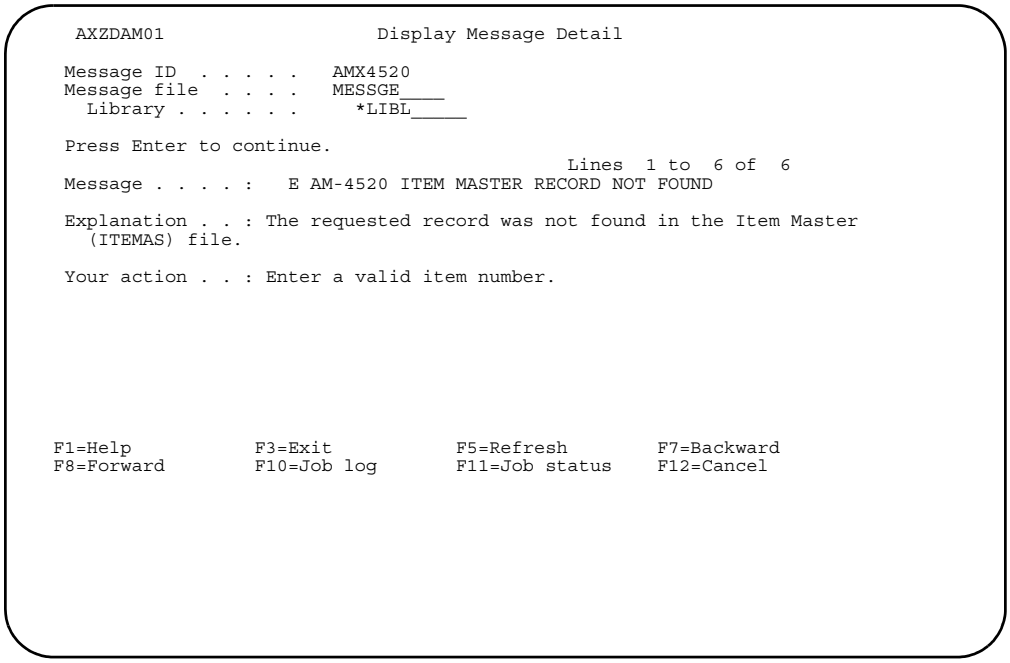


Figure 2-8. Sample help text for a message

The help window for the message contains:

Message ID The number of the current message. To see help for another message, enter its message ID here and press **Enter**.

Message file The file in which this message is stored.

Library The library in which the message file is stored.

Message The text of the message.

Explanation What the message means.

Your action What action, if any, you should take.

F1=Help/Help key
Shows information about the current window or the fields on it. Pressing F1 or pressing the Help key shows you the same information.

F3=Exit
Returns to the application display or menu from which you requested this function.

F5=Refresh
Resets the menu, display, or window with the original defaults.

F7=Backward
Shows the previous panel.

F8=Forward
Shows the next panel.

F10=Job log
Displays a screen with information about the current job.

F11=Job status
Shows a list of your current system and job information.

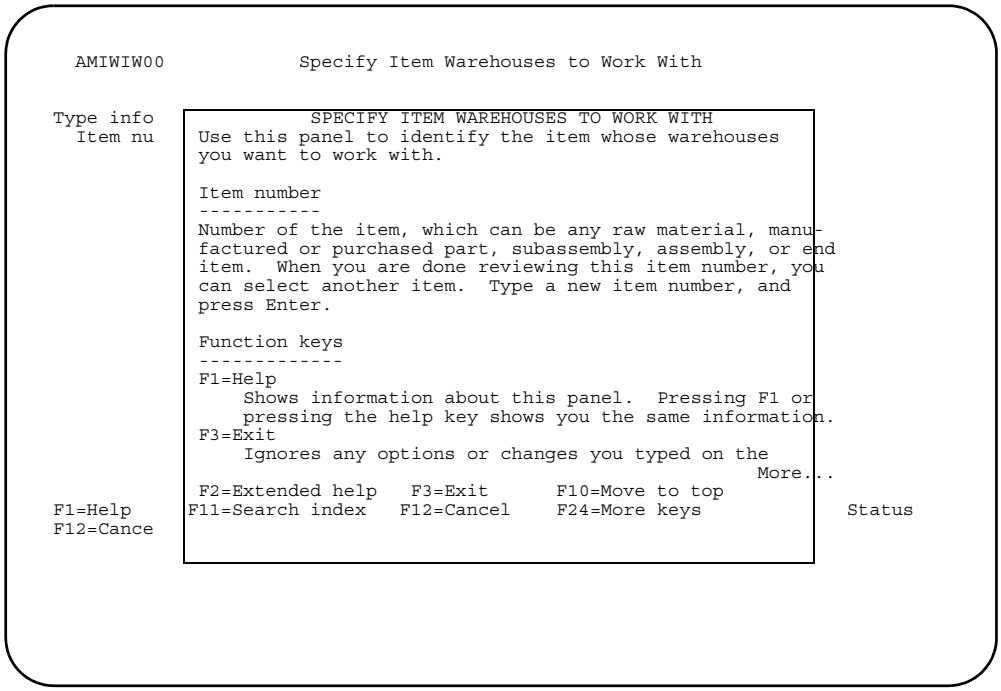
F12=Cancel
Returns to the application display or menu from which you requested this function.

Press **Enter**, **F3**, or **F12** to return to the application display or menu.

For User Interface Manager (UIM) help text

Customer Order Management (COM) and most of the XA Work With functions use the System i user interface manager (UIM) to show help text. UIM help text is similar to other XA help text, with a few differences.

When you press **Help** or **F1**, UIM displays a window containing the help text, like the rest of XA. UIM help text is also cursor-sensitive. To see help text for a particular field, first move the cursor to that field and press **Help** or **F1**. To see help text for the entire display, move the cursor to the top of the display before you press **Help** or **F1**.



With UIM help text, however, you can also request help for other parts of the display, such as the message line, command line, and function keys. Just position the cursor under the message line, command line, or function keys before you press **Help** or **F1**.

More... at the bottom of the window tells you if there is more help text to view. Press the **roll** keys or **page** keys to scroll through the help text.

The bottom of the window lists function keys you can use inside UIM help text. These keys are similar to those in XA help text, with a few exceptions:

1. Press **F2** to go to the beginning of the help text associated with this display. For example, after you request help for a particular field you can press **F2** to review

general help about the entire display. You can ask for extended help on any UIM help text display.

2. You can also search for help text topics by pressing **F11** on any UIM help text display. On the help text display that appears next, you can either enter specific search words or browse the list of all help text topics. Some topics are not available to a specific display because they are general in content.

Remember, UIM help text is only available in certain XA functions.

Signing off

When you finish using a XA application or want to leave it for a period of time, sign off. For security reasons, it is always best to sign off when you are done so that no unauthorized users can continue to use the session you started under your user ID and password.

1. If you are not on the application Main Menu, use function keys to return to it (for example, **F3** or **F24**).
2. When the application Main Menu appears, do one of the following, depending on whether you prefer confirmation of your actions:
   - (With confirmation) Press **F3**.
   - The End XA display appears. Answer **Y** (yes) to confirm and press **Enter**.
   - (Without confirmation) Type:

     exit

     on the menu command line. Press **Enter**.

     If you do not see the System i Sign On display, continue with Step 3.
3. Do one of the following:
   - If the Command Entry display appears, type:

     signoff

     and press **Enter**.

     If the System i Main Menu appears, type 90 and press **Enter**.
4. The Sign On display appears. You can return later and sign on again.

Warning: Remember, when you disconnect by pressing **Sys Req** you have not ended your primary session. Be sure to sign off your primary session.

Chapter 3. Using your business information

To be able to use your business information (data) to make informed business decisions, you need to know some basic procedures for processing the data in XA. The frequency, order, and content of the activities involved in processing your data vary depending on the applications you have installed and how your company works.

This discussion of processing business data uses the term batch. A batch is both a group of transactions applied to a master file and a data processing job requiring little or no user action, such as printing a report. Batch, by itself or in the phrase batch update, means a group of transactions. Batch, in the phrase batch job, means a data processing job.

Using XA master files

You will use the XA master files to store your business date. This section describes how to:

- Organize the data
- Update the data
- Review the data.

You can periodically add, delete, and change data in the master files (maintain the files) by gathering your business information and entering it into the system using several methods.

Organizing the data

Depending on how an application works and how you run your business, you can organize the data you use to update the files by:

- Grouping source documents, such as time cards, by application tasks and entering data directly from the documents on the application displays for those tasks.
- Putting the source information on data entry forms and entering data from the forms on the associated application displays. The data entry forms are set up in a specific sequence, based on the job to be performed and the displays to be filled in.

See your application user’s guide for specific information about data entry forms.

Updating the data

The applications maintain the master files using one or more of the following methods:

- Immediate update
- Batch update
- Offline file load.

Immediate update

Immediate update applies transactions directly to a master file as you enter them during application data entry and file maintenance.

Batch update

Batch update stores related transactions in a batch (group) in a transaction file. (The transaction files accept data entered at a workstation or from offline data entry files.) When you enter all the transactions for a batch and close the batch, the application can apply the information to a master file.

Numerous batches can exist at the same time. The system assigns a number to each batch ranging from 1 to 999, issued sequentially. When number 999 is issued, the application begins again with number 1. If a batch already exists and is still open, you cannot start a new batch until you suspend or close the existing batch.

You can monitor and update batches using the various application data entry control and batch status displays.

Offline file load

You can apply data from files on disk or diskette to the master files by using the file load option. For more information, see the *CAS User's Guide*.

Reviewing the data

Your company can select the option during application tailoring to print a report showing a "before and after" image of each record changed during a file maintenance session. This "before and after" listing is a record of master file changes. The report also contains each added or deleted record. Since file maintenance changes are not saved on disk, you should print a report of all master files the first time you add data to them. If you lose any data and have to rebuild the files, this report of the file maintenance activity can help you enter your changes again.

Regardless of the security (protection) level of the data, all information for each record prints on the report including:

- The 3-character ID associated with the security password of the person who changed the record
- A number, incremented by 1, each time a user runs the file maintenance program
- The date and time of day the report is printed.

When multiple users are maintaining a file, the report of the last person who performed file maintenance has the correct record count of active, deleted, and available items.

How data is organized in XA

XA data is organized in files and libraries, and delivered to your company on tapes or CDs.

Files

Files are collections of information (data) organized in a meaningful way. After the XA applications are installed, all the files you need to run your installed applications are on the system. Some files already contain data; others need to be loaded with information from your business. XA has three types of files which contain your business data:

- System Control (SYSCTL) file
- Master files
- Transaction files.

The System Control file contains the questionnaire answers made when your applications were tailored during installation. If you want more information about the System Control file, see the *CAS User's Guide*.

Master files contain the information you need to run your company on a daily basis and to make business decisions. They contain two types of information:

- Information that rarely changes, called static information, such as customer names and addresses
- Information that changes more frequently, called dynamic information, such as year-to-date totals.

Transaction files store data until it is processed, printed, or moved to a master file. Transaction files are also referred to as data entry files.

Fields and records

Files consist of records which contain fields.

A field is a place to store a specific piece of information, such as a name or a code. For example, the Vendor Name field in the Vendor Master file might contain the following information:

LAMPLIGHTER MFG.

A record is a group of fields containing related data. For example, the Vendor Address record might contain all of the address information for one particular vendor:

LAMPLIGHTER MFG.
2002 Peachtree Street
Atlanta, Georgia 30055-1234
(404) 705-3350

A file contains records of a similar type. For example, the Vendor Master file contains the records of all vendors your company uses, such as:

LAMPLIGHTER MFG.
WIREWORKS, INC.
CONTEMPO BATH CORP.

The following illustration shows the relationships between fields, records, and a file.

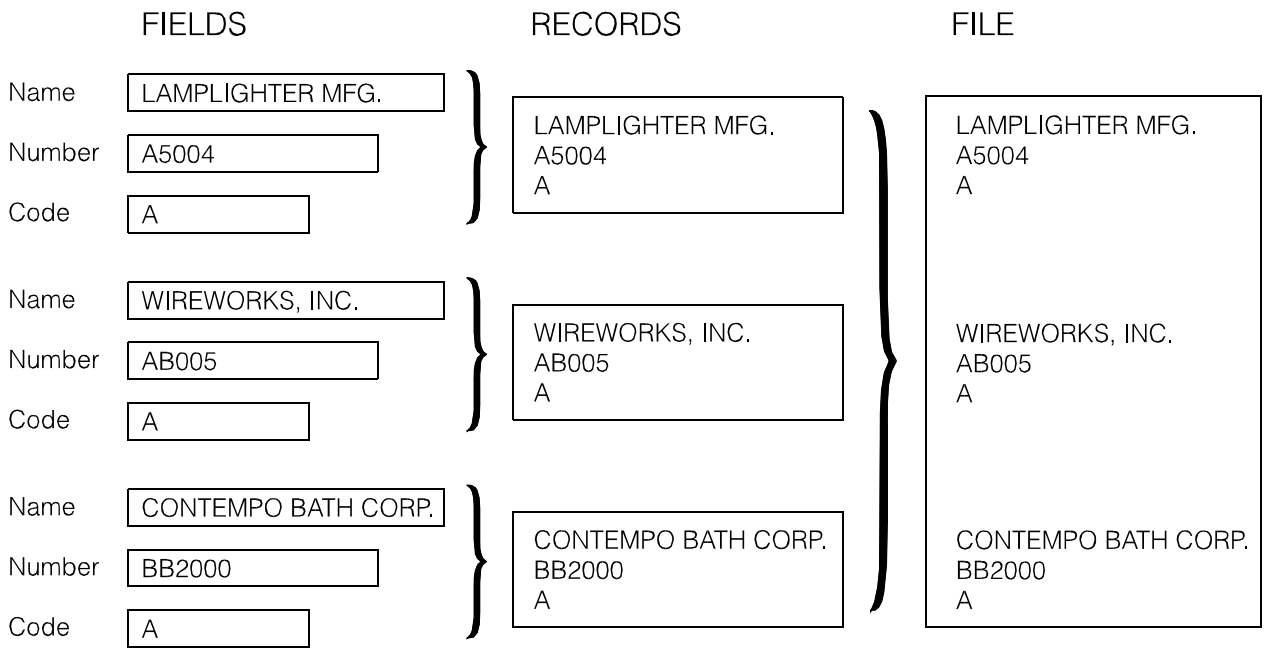


Figure 3-1. Fields, records, and files

Libraries

XA includes groups of programs, files, or other iSeries objects that are organized into the following libraries:

- System i libraries.
- XA libraries (used on a daily basis). These libraries are resident libraries:

  AMALIBx Programs
  AMFLIBy Master files
  AMTLIBy Transaction files
  AMXLIBx Install/Tailor

- Other XA libraries:

  ACSAPPLY Application Correction Set (ACS) Apply bootstrap
  AMATST ACS Apply work
  AMMLIBy Program maintenance
  AMSLIBy Online backup
  CAMnnnnnS ACS Apply CA source
  CAMnnnnnO ACS Apply CA objects
  EQMnnnnnS ACS Apply EQM source
  EQMnnnnnO ACS Apply EQM objects
  FCPnnnnnS ACS Apply FCPS source
  FCPnnnnnO ACS Apply FCPS objects
  INSTALL Install bootstrap

KBCnnnnnS	ACS Apply KBC source
KBCnnnnnO	ACS Apply KBC objects
M7_nnnnnS	ACS Apply application source, where _ is the last character of the application product number (found on the back cover of an application book)
M7_nnnnnO	ACS Apply application objects, where _ is the last character of the application product number (found on the back cover of an application book)
MPAnnnnnS	ACS Apply MPA source
MPAnnnnnO	ACS Apply MPA objects

Notes:

1. The x and y suffixes added to the library names are the designators for XA environments that you set up. For more information on environment designators, see the *CAS User's Guide.*
2. AMALIBx, AMFLIBy, AMTLIBy, and AMXLIBx are resident libraries; that is, they are on the system at all times. The system creates the other libraries as needed.

Chapter 4. Using additional features

Other features of XA and theSystem i may become very useful to you. Read the information in this chapter to find out more about the following features:

Fax Interface

The System i Fax Interface enables an XA ‘document’ to be faxed to your customers and vendors, directly from the XA programs that produce it, without actually printing the document or handling pre-printed forms. The XA Fax Interface:

- Works with either the Telex/Fax/400 or the Fax/400 products from American Presence (sales@american-presence.com or www.american-presence.com), which provide the following:
  - Forms overlays for pre-printed XA forms, that can be customized as required by the user and are merged with the XA ‘printed’ documents for faxing
  - Management of the actual faxing: automatic dialing, re-dialing as required, logging, pre-timed deliveries, etc.
  - Oother fax capabilities, including security/authorization control, viewing on PCs, or printing of incoming faxes, cost analysis, etc.
- Supports faxing the following documents from the XA application shown:

To customers:

Document	Application(s)
Quote	COM/KBC
Order Acknowledgement	COM/KBC
Order Change Acknowledgement	COM/KBC
Packing List/Advance Ship Notice	COM/KBC
Invoice & Pro Forma	COM/KBC
Credit Memo	COM/KBC

To vendors:

Document	Application(s)
Quotation Request	PUR
Planning Schedule	MRP/PUR
Purchase Order	PUR/PM
Purchase Order Change	PUR/PM

To vendors:

Document	Application(s)
Shipping Schedule	PUR
Remittance Advice	AM/AP

- supports the definition of the following by customer and vendor, in customer maintenance for customers, and in vendor/entity maintenance for vendors:
  - what documents are to be faxed
  - what documents are to be printed (a document being faxed can optionally be printed)
  - optional 'override' fax phone numbers by document type, where required, instead of the (one current) fax phone number.

The Fax Interface can be ordered by contacting the XA Response Line.

Electronic data interchange

Some XA applications can accept data electronically through the electronic data interchange (EDI), rather than receiving printed documents through the mail. With EDI, you can exchange business documents over a network. You can transmit business documents electronically with business partners who agree to follow the approved industry standards for translating and exchanging information. See the *CAS User's Guide* for more information about EDI. See the application user's guide to find out whether any business documents used by that application can be sent or received through EDI.

You can also use the Electronic Commerce (EC) application to provide an EDI application interface. See the *Electronic Commerce User's Guide* for specific information.

Extended Environment Support

Extended Environment Support lets you run several XA systems at the same time on one hardware system, each XA environment operating independently of the others. You might find this support useful when you develop applications. For example, you could test new programs against real data files.

You can also use Extended Environment Support to run multiple companies, divisions, or plants independently of one another.

See the *CAS User's Guide* for specific information.

Extended tax processing

XA helps you comply with tax laws worldwide. It handles US sales taxes, value added taxes, and Canadian federal and provincial taxes.

See the *CAS User's Guide* for more information. Refer to the application user's guides to see how these taxes appear on displays and reports.

Group Job support

Group Job support uses the features of the System i to allow you to transfer quickly and easily between jobs. Group Job support lets you start multiple interactive jobs from different applications at a single workstation. If Group Job support is active on your system, you can suspend your XA task and start another one from the Group Job Menu. At any given time, only one job is active; the others are suspended. You can return to a suspended group job to the point at which you left the job. Use the Group Job Menu to start a Group Job activity from any XA display or menu.

1. Process **Attn** to interrupt your XA display or menu. The Group Job Menu appears.
2. Select the option for the activity you want from the Group Job Menu.
3. Press **Attn** again to interrupt that activity to resume your XA activity.

Be sure to end all the jobs you started before you sign off for the day. Those jobs that are still active are highlighted on the Group Job Menu.

For information on how to set up Group Job support, see the *Planning and Installing Infor ERP XA* book and the *CAS User's Guide*.

Group Job Menu

You see the standard menu supplied by XA, a menu tailored by your company, or a menu you specifically tailored. The menu lists the XA, non-XA, and OfficeVision/400 activities you can perform. You cannot use Group Job support if you are using a secondary session, described in "Secondary job" on page 4-23.

AMZGJ1–Group Job Menu

Use this menu to select the options you want to use during your Group Job session. This menu appears when you press **Attn**.

```
AMZGJ                          Group Job Menu                          SELECT

Subset by application . . .
          description . . .

Option  Application  Type  Description
   1       CAS        INQ   Job Status
   2       CAS        INQ   Data Entry File Status
   3       CAS        INQ   Questionnaire Responses - by Application
   4       CAS        INQ   Questionnaire Responses - by Question
   5       CAS        INQ   System Control Data - Field Format
   6       CAS        INQ   System Control Data - Character Format
   7       CAS        INQ   PTF Status
   8       CAS        INQ   Group Job File Inquiry
   9       CAS        MNT   Job Status
  10       CAS        MNT   Assign Work Station ID
  11       CAS        MNT   System Control Data - Field Format
  12       CAS        MNT   System Control Data - Character Format           +
  13       CAS        INQ   PO History Inquiry
Type option; press Enter . . .

F2=Active group jobs   F3=Exit       F5=Spool files   F6=Submitted jobs
F7=Backward            F8=Forward    F11=Job status   F12=Return
```

Figure 4-1. Group Job Menu

Function keys

F2=Active group jobs

Shows the active group jobs for your session.

F2=All group jobs

Shows all group jobs available for your session.

F3=Exit

Returns to the startup group job.

F5=Spool files

Shows all spool files for the current user.

F6=Submitted jobs

Shows all job queue jobs submitted by the current user.

F7=Backward or Roll Down

Shows the previous panel for the menu. You use **F7** or **Roll Down** after you use F8=Forward or Roll Up.

F8=Forward or Roll Up

Shows the next panel for the menu. You can press **F8** or **Roll Up** when you see + in the lower right part of the menu.

F11=Job status

Shows a list of your current system and job information. You can see the status of your current job, including: system ID, date, job number, and job name; your ID and your workstation ID; the default output queue and output queue library; and the XA environment.

F12=Return

Returns to the most recently suspended group job.

Fields

Subset by application. Type an abbreviation to limit the menu to the options for a specific application or function. (See the list under the Application field description that follows.)

Subset by description. Type a string of characters to limit the menu to the options with those characters in the description.

Option. Identifies the menu option in the Group Job file.

Application. Abbreviation for the application or function that provides the menu option:

AP	Accounting Management Accounts Payable
AR	Accounting Management Accounts Receivable
GL	Accounting Management General Ledger
CRP	Capacity Requirements Planning
CA	Contract Accounting
CAS	Cross Application Support
COM	Customer Order Management
EQM	Estimating and Quote Management
IFM	International Financial Management
IM	Inventory Management
ISL	InterSite Logistics
KBC	Knowledge Based Configurator
MPA	Manufacturing Performance Analysis
MPSP	Master Production Schedule Planning
MRP	Material Requirements Planning
MISL	Multi-environment InterSite Logistics
PCC	Production Control and Costing
PDM	Product Data Management
PMC	Production Monitoring and Control
PR	Payroll
PUR	Purchasing
REP	Repetitive Production Management
SA	Sales Analysis
USER	Non-XA options
OFFC	OfficeVision/400 options

Type. Identifies a category of menu option:

INQ	Inquiry
MNT	Maintenance
SEL	Selection

Description. Text of the menu option as it appears on the application menu.

Multiple currency support

You can buy from vendors and sell to customers even when their currency is different from yours.

These applications support multiple currencies:

- Accounts Payable
- Accounts Receivable
- Customer Order Management
- Purchasing

See the user's guides for those applications and the *CAS User's Guide* for how to set up and use multiple currencies.

Euro conversion

On January 1, 1999 a new currency, called the euro, was introduced in Europe. The schedule for introducing the euro will vary by country. On January 1, 1999 eleven countries participated in the EMU (European Economic & Monetary Union). These countries include Germany, France, Belgium, Austria, Luxembourg, Ireland, Netherlands, Spain, Finland, Portugal, and Italy.

Your XA installation is affected by the euro if your company has any business operations in any euro-participating country, and if your company purchases from suppliers or sells to customers whose invoices are denominated in an euro-participating currency. Your company is also affected if it has bank accounts denominated in euro-participating currencies.

Companies not located in participating countries, but who do business with companies in euro-participating countries, may also have to change the currency in which they buy and sell to those companies.

Multiple language support

Multiple language support means you can print descriptions in another language on invoices, credit memos, statements, delinquency notices, quotations, and purchase orders. You can also use this function to print your supplier's item description instead of the one you use internally.

Refer to the application user's guides for instructions on how to enter text in multiple languages.

Notes functions

XA provides two ways to attach notes to various XA application objects, such as customers and vendors, using OfficeVision/400 and the XA User Interface.

OfficeVision/400 Note Tasks

One of the OfficeVision/400 activities, Note Tasks, is built into XA but is not available on the Group Job Menu. Displays in several applications show a function key, **F15**, which you can use to create and maintain notes. You can supplement the information in your files with notes that contain comments about your customers, invoices, customer orders, items, or vendors. For example, you can add a note about a particular back order.

Before you can use **F15 (Note tasks)**, your company must install OfficeVision/400 and enroll all users. Then you must activate Note Tasks for your application. Later, you can reorganize Note Tasks in order to delete notes for customers, invoices, customer orders, items, or vendors that are no longer active.

Be sure to read the help text for additional information about Note Tasks. For information about implementing Note Tasks, see the *Planning and Installing Infor ERP XA*.

XA User Interface Notes

Another way to create and maintain notes is to use the XA User Interface (MUI) Notes function.

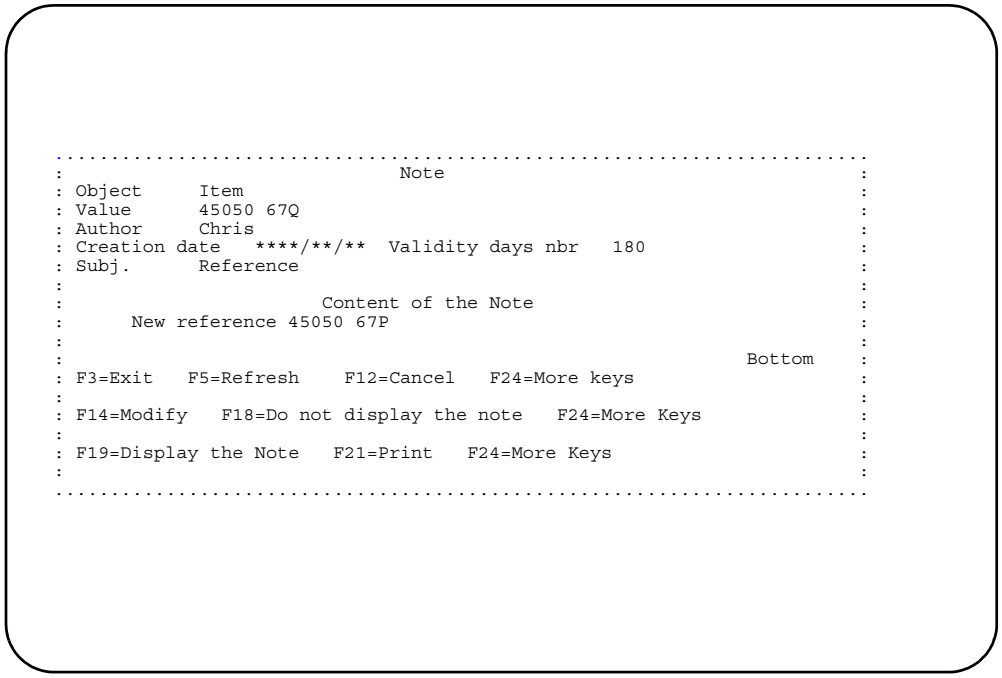


Figure 4-2. MUI note

The MUI Notes function allows you to maintain notes for many kinds of objects, not just customers, invoices, customer orders, items, and vendors. Each user can choose whether to display notes automatically, be warned that notes exist by message and/or audible sound, or display notes only when a function key is pressed.

Before you can use MUI Notes, your XA User Interface system administrator must configure the MUI Notes function for your system and set up a hot key allowing you to access the function.

For information about implementing and using Notes, see *Working with the XA User Interface*.

How to view notes

Once the Note system has been set up and notes have been created, you can view notes from within a XA application. How you view them depends on the parameters set for your system, user ID, or user group. The choices are:

- You see notes automatically.
- The system notifies you.
- The system holds notes, but does not notify you.
- The system uses whatever method is stored in your iSeries user profile.

You can also change parameters temporarily for this session.

Note: Notes are not like System i messages. They must be viewed in the locations where they are linked. They are not saved in a group for later viewing.

For more information, refer to the *Working with the XA User Interface* book.

The example that follows shows the different ways of viewing a note attached to item ABC on the file maintenance screen.

You see notes automatically

If the system automatically displays notes, notes appear without your having to ask for them. Whenever you reach a location linked to a note, the system displays it. View the note and then press **F3** or **F12** to cancel.

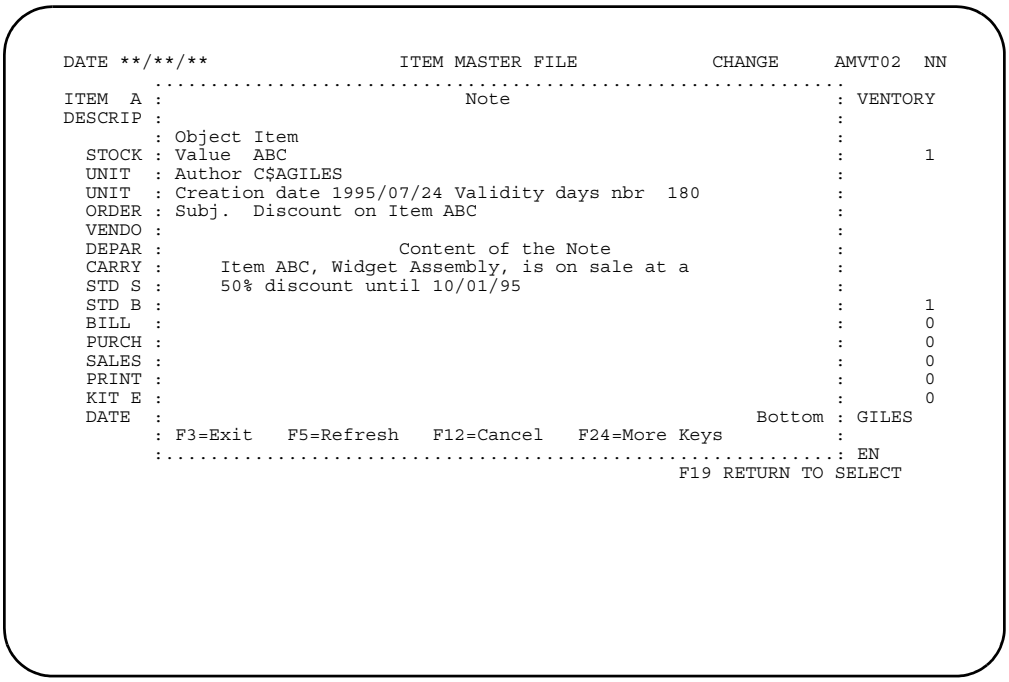


Figure 4-3. Note

F17=Addresses (Addressees)

Displays information about the recipients of the note.

If more than one note is linked to a location, you first see a list of notes, the Notes Management window. Select the note you want by entering 1(select) next to it.

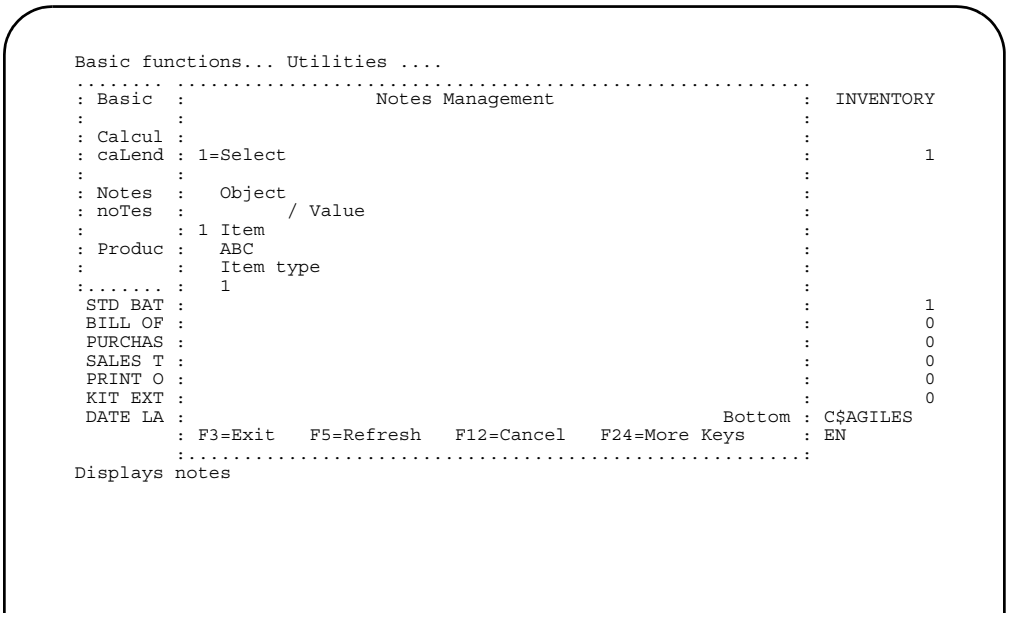


Figure 4-4. Notes Management

The note you selected appears. You then view it and press **F3** or **F12** to cancel.

The system notifies you

If the system only notifies you that a note exists, you see a written message, an audible one, or both, at the location where the note is linked. In this example, the message is the word ***Note*** in the upper right corner of the display for item ABC.

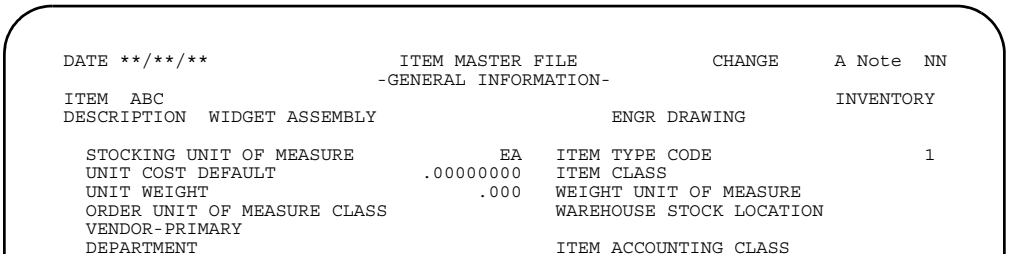


Figure 4-5. Item Master File

To view the note, press **HOME** (or whatever key has been defined as the hot key). A menu bar (called the MUI Main Menu) is displayed at the top of the display. Select Basic function and then the task Notes display.

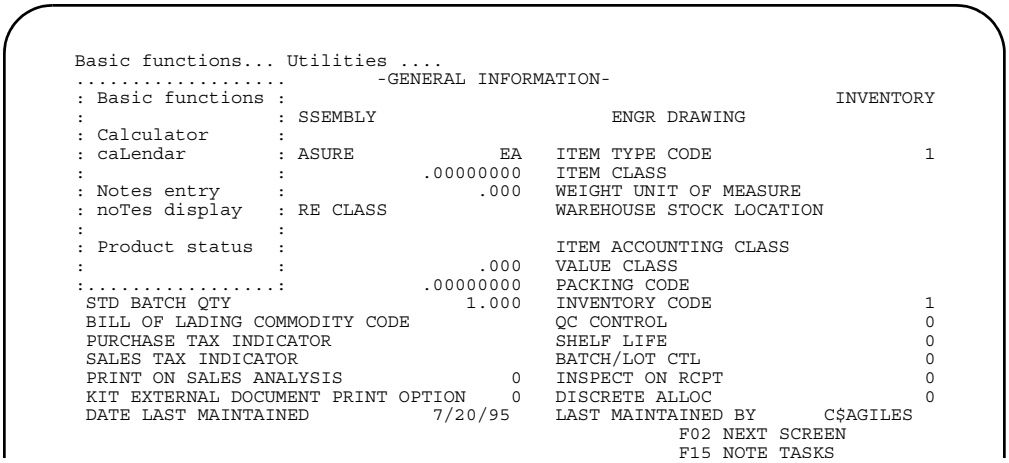


Figure 4-6. General Information

If more than one note exists, you see the Notes Management list for you to select the note you want. If not, the note appears. View it and then press **F3** or **F12** to cancel.

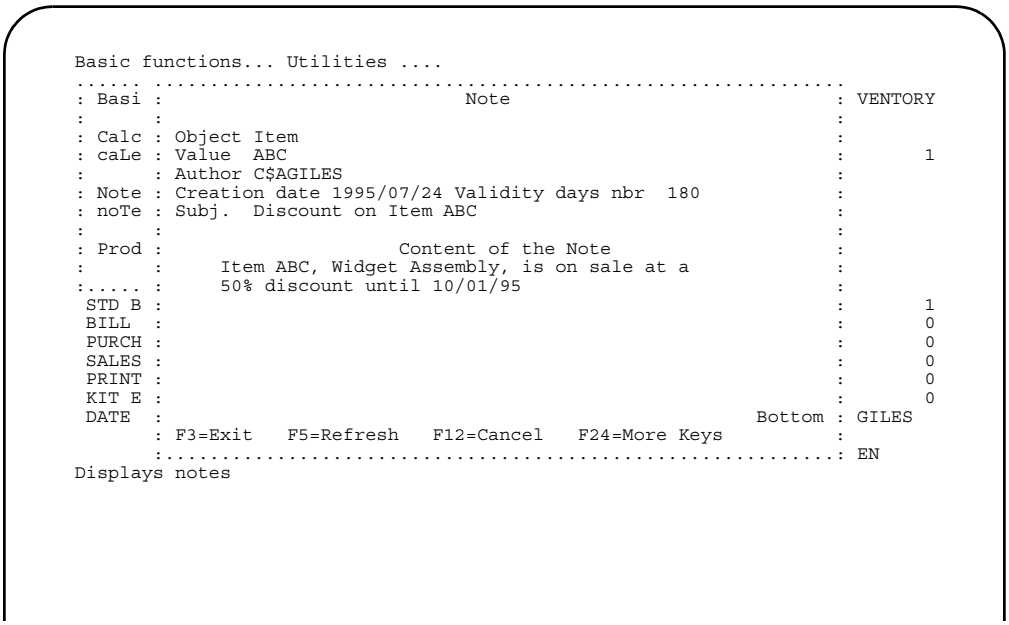


Figure 4-7. Note

The system holds notes

If the system holds notes but does not notify you, you can only guess whether a note exists for a particular location. To check whether a note exists, follow the steps above to press the **HOME** key, display the MUI Main Menu, and then select Basic functions and Notes display. If a note exists, it will be displayed. If not, a message will tell you that none exists.

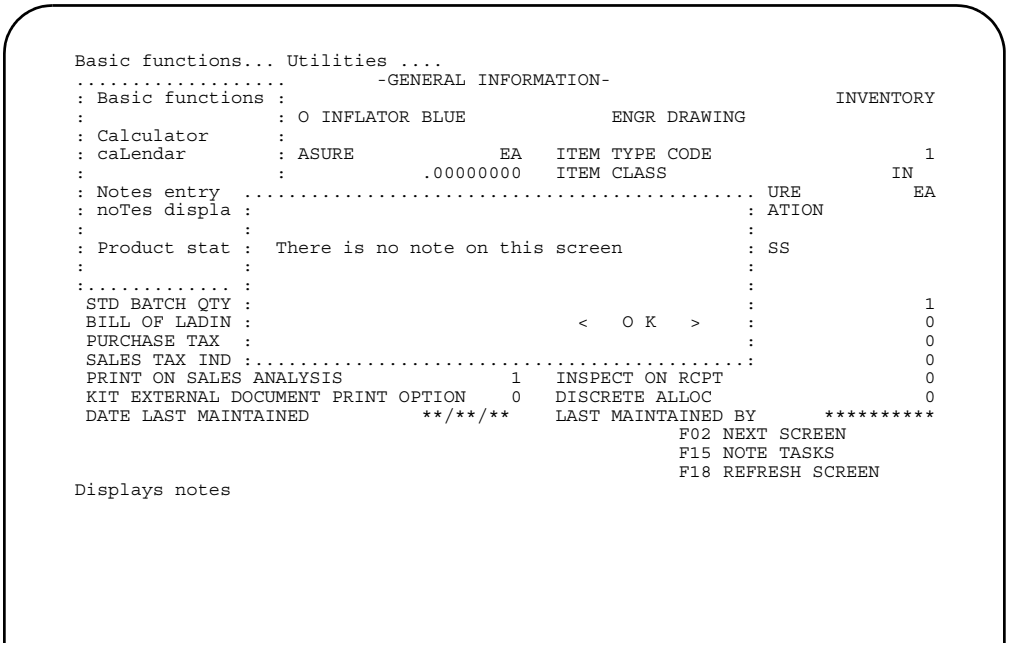


Figure 4-8. General Information

The system uses your user profile

If you see notes based on the setting in your user profile for System i messages, one of the three choices above will occur. Follow whichever of these choices applies to you.

OfficeVision/400

You can start an OfficeVision/400 activity without first leaving XA, if you are authorized to use OfficeVision/400. Use the Group Job Menu to start an OfficeVision/400 activity from any XA display or menu:

1. Press **Attn** to interrupt your XA display or menu. The Group Job Menu appears.
2. Select the option for the OfficeVision/400 activity you want from the Group Job Menu.
3. Press **Attn** again to interrupt the OfficeVision/400 activity to resume your XA activity.

Be sure to end all the jobs you started before you sign off for the day. Those jobs that are still active are highlighted on the Group Job Menu.

Search functions

XA provides two ways to search for information: master file search and lookup search. Lookup search can also locate master file information by using the XA User Interface

function. For additional information, see “Lookup search” on page 4-16, and the Working with the *XA User Interface* book.

Master file search

The XA master file searches use a series of displays to help you locate information quickly. Searching is particularly useful when you inquire into or maintain files, but it can also be helpful during other XA activities.

To begin a search, type a question mark (**?**) in a field that supports the search you want, press **Field Exit**, and then press **Enter**. Fields for which you can do a search contain [?] in the definitions shown in the user’s guides. You see an error message if you type a question mark in a field that does not support a search.

After you type a question mark, press **Field Exit**, and then press **Enter**. A master file search display appears.

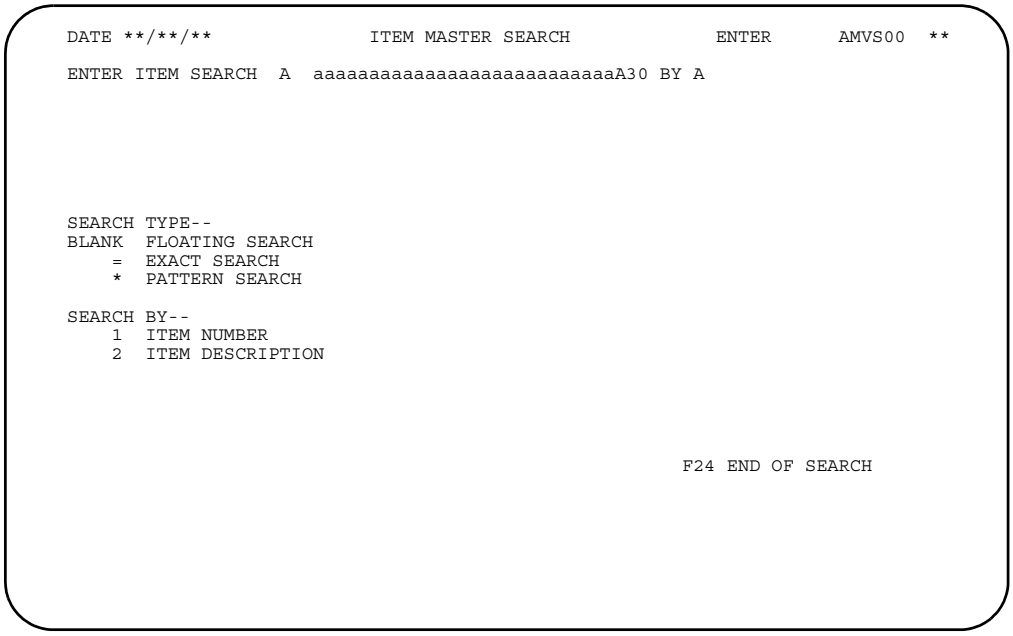


Figure 4-9. Example of master file search

Use the three fields at the top of the display to describe your search.

(Search type) A code for the type of search you want.

(Blank)	Floating search
=	Exact search
*****	Pattern search

See “Types of searches” on page 4-14 for more details.

(Search Description) A sequence of characters describing more specifically what you want to look for

BY A code for the field in the master file you want to search. Your choices are listed on the display.

Types of searches

The three types of searches provide a number of ways to search for master file information. Each type examines all occurrences of a specified field in the master file for the sequence of characters that you identify in Search Description.

Floating. In a floating search, the text in Search Description can occur anywhere in the specified field. For example, a floating search for JOHN in a vendor description might yield the following results:

JOHN FRANKLIN
PETERS, JOHNSON, AND CO.

Exact. In an exact search, the text in Search Description must begin in the first position of the field and must appear exactly as typed. For example, an exact search for JOHNSON INDUSTRIES in a vendor description might yield this result:

JOHNSON INDUSTRIES

Pattern. In a pattern search, you enter text in Search Description using filler characters called “wild cards.”

_	(Underscore) To replace a single character in a sequence
*	(Asterisk) To replace more than one character in a sequence

Use wild cards to define what text must occur within the field and where it must occur. You can also use them to narrow a long list or to avoid typing in a long string of characters.

Examples

Example 1. If you want to search for companies whose names begin with the characters WIND, your Search Description might look like this:

WIND*

The results might be:

WINDHAM INDUSTRIES
WINDING INCORPORATED
WIND AND RAIN DELIVERY INC.

Example 2. If you need to enter a three-digit code but can only remember that the first two digits are 4 and 8, your Search Description might look like this:

48_

The results might be:

486
483
480

Example 3. If you want to search for two words in a vendor description but are not certain what comes before, after, or between the two words, your Search Description might look like this:

*WIND*RAIN*

The results might be:

WIND AND RAIN DELIVERY INC.
J.P. WINDYRAIN TAXI SERVICE
WINDY H. RAINSTORM ROOFING

Example 4. Suppose you are in Item Master File Maintenance, and you want to find the item number for some flooring material. You create a pattern search to find all items whose description contains the word floor.

```
DATE **/**/**              ITEM MASTER SEARCH              ENTER      AMVS00  **
ENTER ITEM SEARCH  *  *FLOOR*                          BY 2


SEARCH TYPE--
BLANK  FLOATING SEARCH
    =  EXACT SEARCH
    *  PATTERN SEARCH
SEARCH BY--
    1  ITEM NUMBER
    2  ITEM DESCRIPTION
```

Figure 4-10. Item Master Search

After you press **Enter**, you see a summary display with a list of possibilities that fit your description.

```
 DATE  xx/xx/xx          ITEM MASTER SEARCH SUMMARY          SELECT     AMVS01  81
 ENTER REF   0   ITEM SEARCH  *  *FLOOR*                        BY 2

REF ITEM NUMBER      DESCRIPTION (TRUNC)              TYPE  CLASS  INV CODE
    1 BRFLFT           BEDROOM FLOORING FEATURE         F     CI        01
    2 BTHFLFT          BATHROOM FLOORING FEATURE        F     CI        01
    3 HTFLPST          HIGH TACK FLOOR PASTE            4     CI        01
    4 IEPV             IVORY AND EBONY VINYL FLOORING   4     CI        01
    5 KTFLFT           KITCHEN FLOORING FEATURE         F     CI        01
    6 LFS24714         2X4X7 LUMBER FLOORING SUPPORT    4     CI        01
    7 LIVFLFT          LIVING ROOM FLOORING FEATURE     F     CI        01
    8 PUF48342         4X8X3/4 PARTICLE UNDERFLOOR      4     CI        01
    9 UCFLS            UNCONTROLLED FLOOR STOCK ITEM    4     UCFS      01
   10 UFS              UNCONTROLLED FLOOR STOCK         1               01
   11 UFS-PARENT       PARENT OF UNCTL FLOOR STOCK      0               01
   12 WBNWVF           WHITE/BLUE VINYL FLOORING        4     CI        01
   13 WGNWVF           WHITE/GREEN VINYL FLOORING       4     CI        01


                                                      USE ROLL UP/DOWN
                                                      F24 END OF SEARCH
```

Figure 4-11. Item Master Search Summary

If the information you want is not on the search summary, you can use the three search fields at the top to create new searches until you find it.

To select what you want from the list, type its reference number, press **Field Exit**, and then press **Enter**. The search retrieves the information you selected and returns either to the display where you started the search or goes to the next display in the sequence.

Lookup search

Another way to look up master file information is to press **F4 (Prompt)** to use the Lookup function provided with the XA User Interface function. See the *Working with XA User Interface* book for additional information. (In Customer Order Management and International Financial Management, **F4** accesses a unique search function. See the applicable user's guide for information.)

Even though you may not always see **F4** listed on an application display, you can use it with every field where you currently use master file search. You can also use it with other fields for which your company has defined new lookup searches.

Lookup is similar to Query/400 on the System i. Here's how it works with the XA User Interface.

Note: Depending on how your system is set up, some of the windows in this section may not appear, or may appear in a different order.

Suppose you still want to find the item number for some flooring material, but this time you know that it has a type code of **F**. You can use Lookup to help you locate it more precisely.

Instead of typing a question mark (?) in Item, leave the cursor there and press **F4**. If more than one lookup exists for the field, the window, Available Windows, appears. Otherwise, you skip this window and see the window Selections next.

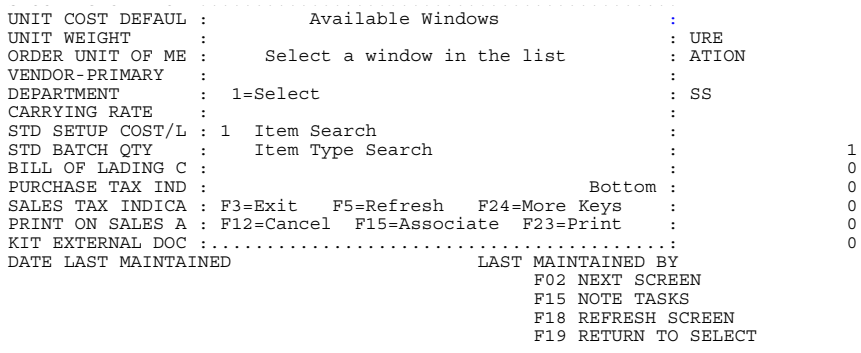


Figure 4-12. Available Window

F15=Associate (Association)

Lets you create an association record to link an existing lookup record with a field, including changing answers to questions about scope.

F23=Print

Prints the contents of the window.

Select the lookup you want, and press **Enter**. The Lookup dynamic selection window appears.

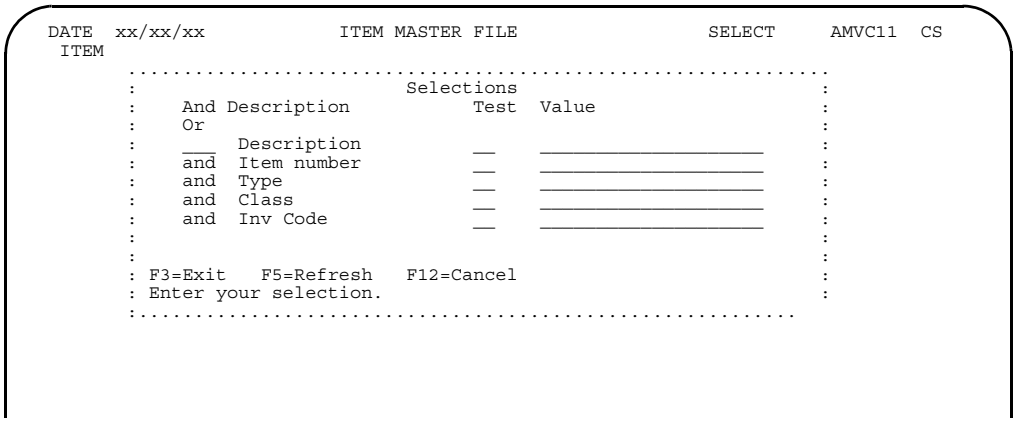


Figure 4-13. Dynamic Selection Window for Lookup

Notice that the Lookup selection window appears just below the Item field, so you can see the original display while you are searching.

Use the fields on this window to create as broad or as narrow a search as you like. The more things you specify, the narrower the resulting list. The more things you leave blank, the broader the list.

And/Or A code (and or) used to combine search arguments. You can either search for instances where all search arguments are met (and) or search for instances where any one of the search arguments are met (or). The default is and.

Description (Display only) The names of the fields you can include in the search.

Test A code used in combination with Value to create a search query.

Enter this	...or this	Description
CT	blank	Contains (a value)
EQ	=	Equal to (a value)
NE	<>	Not equal to (a value)
GT	>	Greater than (a value)
LT	<	Less than (a value)
GE	>=	Greater than or equal to (a value)
LE	<=	Less than or equal to (a value)
RG	(no alternate)	Range of values (such as 1 17)

Enter this	...or this	Description
VL	(no alternate)	List of values (such as red green). If you need to group values as a single unit (such as 'light grey' 'dark green'), use either single (' ') or double quotes (" ") to show groupings.
WC	*	Wild card. What you enter in Value contains one or more wild card characters.

Value Text or values used in combination with Test to create a search query. Value can only be blank if Test is blank.

You can use either wc or both of the wild card characters below in this field:

_ (Underscore) To replace a single character in a sequence
* (Asterisk) To replace more than one character in a sequence

See "Pattern" on page 4-14 for a further explanation of wild cards.

F1=Help

Shows information about the current window or the fields on it. Pressing F1 or pressing the Help key shows you the same information.

F3=Exit

Returns to the application display or menu from which you requested this function.

F5=Refresh

Resets the menu, display, or window with the original defaults.

F12=Cancel

Returns to the application display or menu from which you requested this function, or, if you are viewing multiple levels, to the previous level.

In our example, you want to search for all instances of Item Description containing the text floor and Type containing the value **F**.

```
DATE  9/01/93            ITEM MASTER FILE                SELECT     AMVC11  CS
ITEM
      .....................................................................
      :                          Selections                               :
      :    And Description           Test  Value                        :
      :    Or                                                           :
      :    ___  Description          ct    floor_____________           :
      :    and  Item number          __    __________________           :
      :    and  Type                 ct    f_________________           :
      :    and  Class                __    __________________           :
      :    and  Inv Code             __    __________________           :
      :                                                                 :
      :                                                                 :
      : F3=Exit   F5=Refresh   F12=Cancel                               :
      : Enter your selection.                                           :
      :.................................................................
```

Figure 4-14. Dynamic Selection Window

Because you are able to specify values for more than one field at a time, the resulting list is smaller than the master file search summary shown earlier.

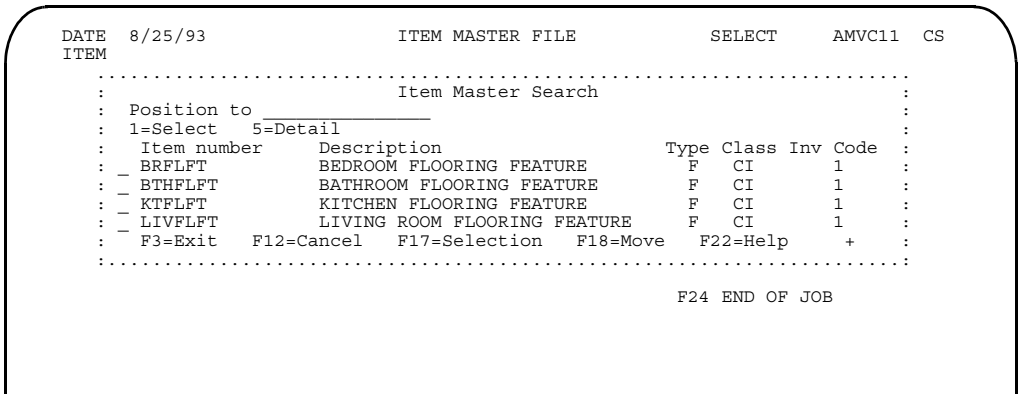


Figure 4-15. Item Master Search

Use this window to select the information you want, or to see the record in greater detail. If the window blocks anything else you want to see on the original display, you can move the window by moving the cursor somewhere else and pressing **F18**.

Position to A field allowing you to skip down the list to a particular entry. You can type the full ID or part of it. The list starts with the first entry beginning with the characters you typed. If no entry matches, the list begins with the entry immediately following the entry you want.

(Option) A code for the action you want to do. Use 1 (Select) to select the record and bring its information back to the field on the original display. Use 5 (Display) to display further details.

(Fields) Names of the fields in this lookup, displayed horizontally.

F1=Help

Shows information about the current window or the fields on it. Pressing F1 or pressing the Help key shows you the same information.

F3=Exit

Returns to the application display or menu from which you requested this function.

F12=Cancel

Returns to the application display or menu from which you requested this function, or, if you are viewing multiple levels, to the previous level.

17=Select (Selection)

Returns to the dynamic selection window for Lookup.

F18=Move (Move window)

Moves the current window to another part of the display so that you can see the application display underneath it.

After pressing **F18**, move the cursor to the new location and press Enter.

F22=Help (or Window)

Toggles between the Help and Lookup windows associated with a field. If you are viewing field help text, you can press **F22** to see the Lookup window for that field. If you are viewing a Lookup window, you can press F22 to see field help text.

If you don't find what you want on the list, press **F17** to return to the selection window and search further.

How to view other types of lookups

Pressing **F4** may lead to other types of lookups for fields, such as calculator and calendar lookups. If these types of lookups have been defined for fields, you can choose the one you want on the window, Available Windows. See "Lookup search" on page 4-16 for a sample display.

Note: The MUI Interface function allows you to define a key, known as a hot key, to access a number of menus with useful tasks. The tasks on these menus are context specific. You always press the hot key within an XA application screen, and most of the tasks are linked to a specific cursor position on that screen. For example, you could access basic functions such as the Calculator, Calendar, and Notes Display with a hot key.

Be aware, however, that the calculator and calendar available through the F4 lookup function return values to fields, but the calculator and calendar tasks available through the hot key menus do not.

For details, refer to the *Working With the XA User Interface* book. Examples of the calculator and calendar lookups follow.

Calculator lookup

The calculator lookup lets you display a calculator with numbers and function symbols.

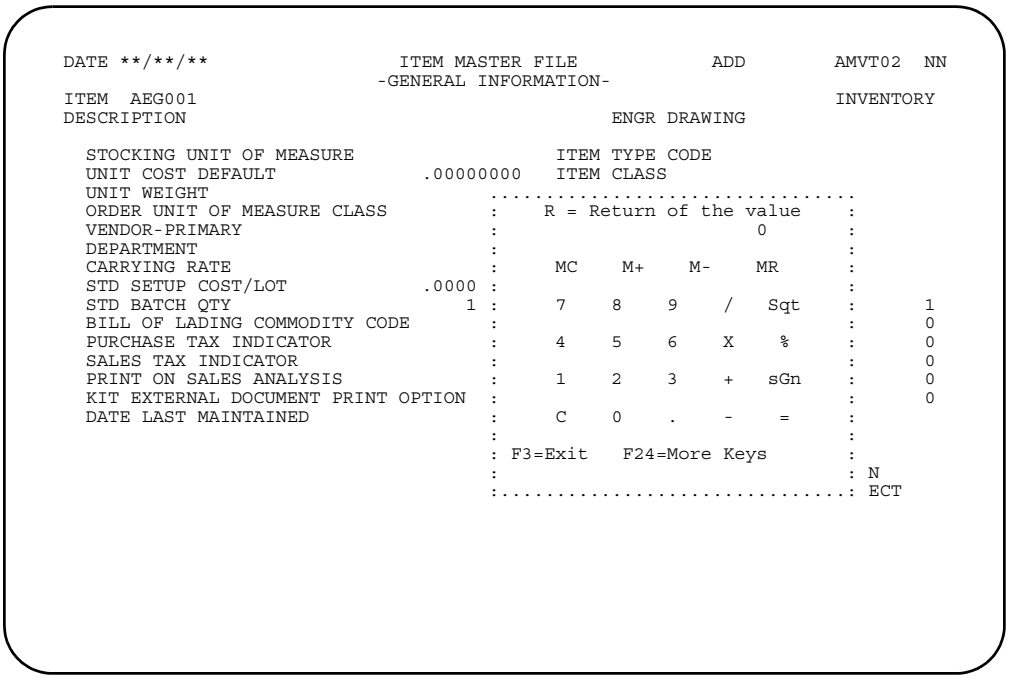


Figure 4-16. Calculator

To enter calculations, leave the cursor in the top left corner of the window and type any of the numbers or functions below. (Do not click on the calculator buttons in the window.) You can press the **Tab** key to return the cursor to the top left corner of the window.

0 through 9	Numbers 0 through 9
. (decimal point)	Decimal point
+ (plus sign)	Addition
- (minus sign)	Subtraction
x or * (asterisk)	Multiplication
/ (front slash) or : (colon)	Division
S	(Sqt) Square root
G	(sGn) Sign change
%	Percentage
M +	Memory plus
M -	Memory minus
MC	Memory clear
MR	Memory recall
= or Enter	To display the result
C	Clear. The first time C erases the previous entry. The second time C erases the current operation.
R	Return. Returns the displayed value to the input field on the display from which you requested the calculator function. Type R and then move the cursor to the displayed value and press Enter.

For example, when you type **10x20=** and press **Enter**, the result of your calculation (200) is displayed in the white area at the top.

The online calculator displays up to 20 digits: 11 integers and 9 decimals. If you enter more than 11 integers, a message warns you that the value is too large. If you calculate a value with more than 9 decimals, the additional decimal positions are truncated. If rounding is defined for this lookup, decimal values are rounded and returned, according to the decimal positions defined for the field.

Calendar lookup

The calendar lookup allows you to display a calendar.

```
DATE **/**/**                  ITEM MASTER FILE            ADD        AMVT03  NN
                            -ADDITIONAL INFORMATION-
ITEM  AEG001                                                          INVENTORY
DESCRIPTION

MASTER SCHEDULE ITEM CODE                    COMMISSION PERCENT          .000
RESOURCE NUMBER                              RESOURCE PROFILE BUILD FLAG    N
PRODUCTION FAMILY PLANNER                    DEMAND TIME FENCE              0
BASE PRICE EFFECTIVE DATE         07/25/95   BASE PRICE                  .000
.....................................................................................
:     JULY            1995     AUGUST          1995     SEPTEMBER       1995 :
:     M  T  W  T  F  S  S      M  T  W  T  F  S  S      M  T  W  T  F  S  S  :
: 26                 01 02 31     01 02 03 04 05 06 35                 01 02 03 :
: 27  03 04 05 06 07 08 09 32  07 08 09 10 11 12 13 36  04 05 06 07 08 09 10 :
: 28  10 11 12 13 14 15 16 33  14 15 16 17 18 19 20 37  11 12 13 14 15 16 17 :
: 29  17 18 19 20 21 22 23 34  21 22 23 24 25 26 27 38  18 19 20 21 22 23 24 :
: 30  24 25 26 27 28 29 30 35  28 29 30 31           39  25 26 27 28 29 30    :
: 31  31                                                                      :
:                                                                             :
: F3=Exit   F12=Cancel   F13=Memo   F14=Modify   F24=More Keys                :
: F15=Associate   F19=Previous   F20=Next   F24=More Keys                     :
:                                                                             :
:                                                                             :
: Place cursor on a date, then press ENTER                                    :
:.............................................................................:
                                                    F15 NOTE TASKS
                                                    F18 REFRESH SCREEN
                                                    F19 RETURN TO SELECT
```

Figure 4-17. Calendar

Your calendar lookup may look different from the one shown here. This is because you can define calendar lookups in many different ways. For example, you can determine:

- The current year
- How many months appear at a time (one month, three months, and so on)
- Which days of the week appear (M-F, M-Sun, and so on)
- Which holidays are defined for your company and how they are highlighted
- Whether week numbers appear (shown here in the left-hand column)
- The increment of time to page backward and forward using **F19** and **F20** (one month, three months, and so on).

To select a date, move the cursor to the date you want and press **Enter**. The date is returned to the input field on the display from which you requested the calendar lookup.

F13=Memo

Allows you to enter a memo associated with a date. Place the cursor on the date and press **F13**. A window appears. Type the memo and press **Enter**. Press **F13** again to see the memo. You can enter memos from both calendar lookups and the hot key menus. However, each group of memos can only be viewed from the function in which it was created.

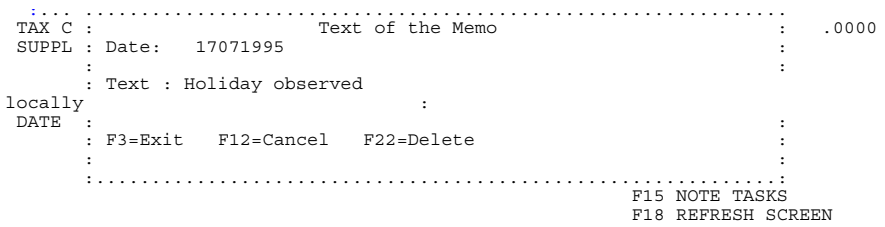


Figure 4-18. Text of the Memo

Secondary job

XA applications run jobs, called interactive jobs, that respond to what you type at the workstation. Your workstation waits for a response from the application during interactive jobs. You may want to interrupt an interactive job so that you can run another one, called a secondary job, in a secondary session. For example, in the middle of entering data in an application you may need to look at information in another application.

To interrupt one job to begin a secondary job, press **Sys Req** and then press **Enter**. When you see the System Request Menu, choose option 1. Sign on when you see the sign-on display. When you see the Command Entry display, type the information to call the Application Selection menu. Select the application you want to use in the secondary session. During the secondary session, you see the words Secondary Job highlighted on the top line of the menu. After you finish, sign off that secondary job to return to the display in the primary session where you pressed **Sys Req**.

Tailored signons

A tailored sign-on program lets you go directly to a XA application in a specific environment without first using the Command Entry display. Check with the person who set up your installation to see if you can use a tailored signon.

For information on how to create tailored signons, see the *Planning and Installing Infor ERP XA* book.

Chapter 5. Resolving problems on the System i

This chapter provides information for solving common system and application problems that can occur while using XA on the System i.

Understanding messages

The system issues a message on a display when there is information you need to know about system resources, jobs, data processing activities, or data input.

XA has three types of messages that appear on displays:

- E (error) means you or the system must take some action such as correcting data in a field or waiting for a conflict job to end before you can continue. For example:

  E AM-0051 Invalid password entered.

  Note: Note: If the data in the fields on a display is in error, the fields are highlighted and the cursor usually moves to the first field in error. After you correct the errors, press **Enter** to continue.

- W (warning) means that there is a problem but you can choose to continue without any action. For example:

  W AM-0222 Procedure has been restarted in JOBQ.

- (Informational) Such messages are shown as reminders of action taken or other status information and require no response from you. For example:

  AM-0130 Operator canceled job.

In some cases, a problem causes more than one error message. On many displays, a plus sign (+) appears to the right of the message. Move the cursor to the message line and use **Roll Down** to see the additional messages.

When you receive a message, you can handle it by noting the status, taking action, or waiting for the system to take action. Any messages that do not have the AM identifier do not come from your XA application. If it is an iSeries system message, put your cursor on the message line and press **Help**. You see the Additional Message Information display.

Diagnosing specific problems

This section gives you information on:

- Recovering from system failures
- Handling some common messages
- Using joblogs for problem solving
- Correcting problems that cause a backup to end abnormally
- Finding out why batch jobs not running in a nonstandard environment
- Other problems.

Application status after a system failure

If your system has experienced a failure, you can use option 1 on the CAS Inquiry menu (AMZM10) to review messages about the status of your applications at the time of failure. The messages help you determine how to restart the applications. The display that appears when you select this option shows you the following information:

- The restartable status of any application procedure that was in the batch job queue at the time of a system failure
- The workstation jobs that were running at the time of a system failure and that cannot be restarted
- The restartable status of any unattached job that was running at the time of a system failure.

For information on using this option, see the *CAS User's Guide*.

Using System i joblogs

You can use an System i joblog to review detailed information about all interactive and batch jobs. Use a joblog when you have a problem with a job or with job output and:

- No message is issued
- A message is issued but does not tell you why the problem occurred

The following are common situations in which you could use a joblog for problem solving:

- Report output is incorrect
- Job terminates but error message does not indicate why
- Job appears to complete normally but no output prints
- Backup ends abnormally.

Creating a joblog for interactive jobs

1. On the System i Command Entry display, type:

   CHGJOB LOG(4 00 *SECLVL) LOGCLPGM(*YES)

2. Run the job.
3. Sign off *LIST when the job finishes.

Creating a joblog for batch jobs

1. On the System i Command Entry display, type:

   CRTDTAARA DTAARA(QGPL/BCHLOG) TYPE(*CHAR) LEN(1)

2. Look in the joblog outq for a spoolfile.
3. Delete the data area when the batchlog finishes.

Backup ends abnormally

Some common reasons for a backup to end abnormally are:

- The owner of an object is not AMAPICS. To see if this is the problem:

1. Look in the joblog for objects not saved.
2. Check the owners for these objects. If the owner is not AMAPICS, use the CHGOBJOWN command to change the owner to AMAPICS.

- Someone is using a XA file; for example, running a System i query while backup is running.

Batch jobs in a newly created environment

You can create environments on your system in addition to the one in which you installed your first application. However, if you do, you must add routing entries for these environments in the QBATCH subsystem (using the CAS Extended Environment Support menu, AMZM70) so that batch jobs can run.

If your batch jobs do not run in the newly created environment, check to see if there is a routing entry in the QBATCH subsystem by doing the following:

1. Type:

   DSPSBSD QBATCH

   and press **Enter**. The Display Subsystems Description display for QBATCH appears.

2. Type:

   7

   and press **Enter**. The Display Routing Entries Display for QBATCH appears. Look for the following entry:

```
  Opt      Seq Nbr   Program    Library    Compare Value
           nnn       AMZPBJ     AMALIBx    'xyMAPICSDB1'
```

   where: nnn is 500 or above and

   x is the first character of your environment designator
   y is the second character of your environment designator.

Other problems

Symptom	How to isolate the problem
Data decimal error in a file, message RPG0907	A numeric field contains nonnumeric data. The message may say that the problem is at program statement number 999999 or 000000. Because these statements do not exist, you need to use System i Query to find the field causing the error. Do the following: Use the joblog to identify which file is in error. Query that file. Make the output type *PRINT and the line wrapping Y. Generate the report to an output queue which is not active. Display the output queue and search for several + signs in the field with the data decimal error.

Symptom	How to isolate the problem
Errors on reports	Check accuracy of input (source documents, data entry forms, and so forth) If the program that printed the report is modified, check to see if the modification is causing the problem To find out more information about the problem, do the following in order: Save a copy of the report. Save a copy of the transaction edit list. Record the options you entered during the run. Type the following if you have security access to the XA files: CPYF FROMFILE(AMFLIBy/ fn) TOFILE(*LIST) PRTFMT(*HEX) and press **Enter**. Call the person in your company responsible for managing the XA applications. Save the file requested by the XA manager.
Need more help	Call the XA product support center.

Glossary

This glossary defines terms that are important for this book. It does not include all XA terms nor all terms established for your system. If you do not find the term you are looking for, refer to the Index in this book, to glossaries in other XA publications, or to the IBM Dictionary of Computing, SC20-1699.

This glossary includes definitions from:

- The American National Dictionary for Information Processing Systems, copyright 1982 by the Computer and Business Equipment Manufacturers Association (CBEMA). Copies may be purchased from the American National Standards Institute, 1430 Broadway, New York, New York 10018. Definitions are identified by symbol (A) after definition.
- The ISO Vocabulary – Information Processing and the ISO Vocabulary – Office Machines, developed by the International Organization for Standardization, Technical Committee 97, Subcommittee 1. Definitions of published sections of the vocabulary are identified by symbol (I) after definition; definitions from draft international standards draft proposals, and working papers in development by the ISO/TC97/SC1 vocabulary subcommittee are identified by symbol (T) after definition, indicating final agreement has not yet been reached among participating members.

abnormal termination. (1) A system failure or operator action that causes a job to end unsuccessfully. (2) System termination by a means other than execution of the PWRDWNSYS (power down system) command.

ACS. Application correction set.

accounting period. A period at the end of which and for which financial statements are prepared.

alphanumeric. Consisting of both letters and numbers and often other symbols, such as punctuation marks and mathematical symbols.

application. The use to which a data processing system is put; for example, keeping a record of a company's inventory.application program.Þ A program that performs a particular data processing task; for example, one that provides an inventory report or payroll checks.

application correction set (ACS). The program temporary fixes (PTFs) as well as the programs necessary to apply the fixes that are contained on a maintenance tape or CD.

application maintenance. The process of updating XA application programs due to changes required by data processing operations or due to changes from Infor.

application program. A program that performs a particular data processing task; for example, one that provides an inventory report or payroll checks.

application tailoring. The process of selecting application options to satisfy the specific needs of a company.

audit. To review and examine the activities of a data processing system mainly to test the adequacy and effectiveness of procedures for data security and data integrity. (T)

audit trail. Information that allows the history of an account, item record, order, etc., to be traced. The more recent information may be stored online for retrieval.

authorization. The process of giving a user either complete or restricted access to an object, resource, or function.

Authorized Program Analysis Report (APAR). A request for correction of a problem caused by a defect in a current release of a program.

back up. To transfer specific objects or libraries from internal storage to magnetic media, such as tapes, or to fixed disk, by duplication.

backup copy. A copy of a file or library that is kept for reference in case the original file or library is destroyed.

batch. An accumulation of data to be processed, as in a batch of transactions.

batch job. A job in which the processing functions are submitted as a predefined series of actions to be performed without continuous operator attention. See batch subsystem. Contrast with interactive job.

batch number. A number printed on a document to delineate a group of transactions.

batch subsystem (QBATCH). A subsystem in which batch jobs are processed. The System i supplies one batch subsystem: QBATCH.

batch update. The process of updating master files using a group of transactions that are being held in a transaction file. Contrast with immediate update.

byte. A binary character operated on as a unit and usually shorter than a computer word. (A)

call. To indicate that a program or XA procedure is to begin execution. The call specifies the program or XA procedure name and required parameters.

cancel. To end the current job before it is completed.

character. A member of a set of elements that is used for the representation, organization, or control of data. Characters may be letters, digits, punctuation marks, or other symbols. (T)

CIM (Computer Integrated Manufacturing). The use of information systems within a manufacturing enterprise to meet the total information requirements of all major functional areas, from Business Management to Physical Distribution. CIM emphasizes capturing data close to its source and making it available online to all departments to increase the flexibility and responsiveness of the enterprise.

CL. See control language.

close. To make a file unavailable for processing.

command. A request for the performance of an operation or the execution of a particular program. A command consists of the command name, which identifies the requested function, and parameters.

concurrent processing. A method of processing in which two or more jobs appear to be processing at the same time. The instructions of each job are processed one at a time, but alternate in such a fashion as to make the most efficient use of the system.

configuration. The group of machines, devices, and programs that make up a data processing system. See system configuration.

control language. A programming language that identifies processing requirements to OS/400.

control tape. Generally, an adding-machine listing of amounts from source documents such as invoices and cash remittances. The total from this tape, once proved, is used to ensure that corresponding entries to a master file or ledger are made correctly.

controlling subsystem (QCTL). An interactive subsystem that is started automatically when the system is started, and through which the system operator controls the system. The System i supplies one controlling subsystem: QCTL.

copy. To read data from a source, leaving the source data unchanged, and to write the same data elsewhere in a physical form that may differ from that of the source; for example, to copy main storage to disk.

currency conversion. Changing foreign currency orders to your currency for accounting and measurement purposes.

cursor. A movable character (underscore) on a display screen that indicates where the next character typed by the operator will appear.

cursor-sensitive. Determined by cursor-position, as in cursor-sensitive help. The result of an action depends on the position of the cursor at the time you request it.

data. A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by human or automatic means. (I) (A)

data area. An object that is used to communicate data, such as CL variable values, between the programs within a job and between jobs. The system-recognized identifier is *DTAARA.

data class. A functional grouping of database objects, or files for use by CIM Series/400 applications. The files in a data class are related to each other by one or more fields that are common to each file.

data description specifications (DDS). A description of the user's database or device files, that is entered using a fixed-form syntax. The description is then used to create files.

data file. A collection of related data records organized in a specific manner. For example, a payroll file (one record for each employee, showing rate of pay, and so

on) or an inventory file (one record for each inventory item showing the cost, selling price, number in stock, and so on.)

database. A collection of stored data.

database file. An organized collection of related records in the database. See physical file, logical file.

DDS. Data description specifications.

deallocate. To release a resource that is assigned to a specific task. Contrast with allocate.

dedicated mode. A mode of operation that requires that no other batch or interactive XA jobs are running. Many of the Cross Application Support functions must be executed in dedicated mode.

default. An alternative attribute, option, or value that is assumed when none has been specified.

delete. To remove a unit of data such as a character, field, file, or record.

device description. An object that contains information describing a particular device that is attached to the system. The system-recognized identifier is *DEVD.

device file. An object that describes the data processed on an external input or output device attached to the system, such as a work station, a printer, or a magnetic tape drive.

disk. A round flat plate coated with a magnetic substance on which data for a computer is stored.

disk file. An organized collection of related records on disk that are treated as a unit.

disk storage. Direct access storage that uses one or more magnetic disks to store data files and programs.

diskette. A small, flexible, magnetic disk permanently enclosed in a protective jacket. Diskettes are a removable medium used to store information until it is required for processing.

diskette file. An organized collection of related records on diskette that are treated as a unit.

display. (1) A visual presentation of data. (I) (A) (2) To present an image on the screen of a display device. (3) The part of a workstation on which data, messages, or other information is displayed.

EDI. Electronic data interchange.

edit. To verify the form or format of data; for example, to test a data field such as customer number.

electronic data interchange (EDI). A technique for exchanging business documents electronically rather than by printed paper copies. A method of transmitting business information over a network, between trading associates who agree to follow approved national or industry standards in translating and exchanging information.

enhanced menus. XA menus that allow you to use function keys to perform various tasks in addition to the usual menu tasks. Enhanced menus may have more than one panel.

enter. To send coding, data, or a message to a computer from a keyboard.

entry. (1) An element of information in a table, list, queue, or other organized structure of data or control information, such as the record of a financial transaction in its appropriate book of account or master file. (2) The act of recording a transaction in the book of account or master file.

error message. An indication that an error has been detected. (A) Contrast with informational message and warning message.

exchange rate. The result of the currency conversion routine calculations for the foreign currency selected for a particular maintenance session.

execute. To cause an instruction, program, procedure, or other machine function to be performed.

extended tax processing. The way an XA application handles U.S. and Canadian sales taxes and European value added tax (VAT). For example, in COM, you can combine taxes on invoices while keeping them separate for your own reports, and print tax reports that cover more than one month.

field. In a form, display, or record, a specified area used for a particular category of data. For example, the area on a display that is regularly used to show an item number.

file. An organized collection of related records treated as a unit.

file maintenance. The online process of updating XA application master files.

file name. An arbitrary symbol created by the programmer or program to identify and refer to a collection of related records.

function. In XA, a type of work with activity. Work with functions create lists of objects. Subset functions narrow lists of objects by selection criteria you enter. Display detail functions show you complete records for individual objects. See also display detail panel, subset list, work with list.

function key. One of the keys of the workstation keyboard to request specific functions from the system or application program.

hash total. A control total, accumulated manually from a batch of input documents, that helps ensure that entry of data into the computer system is correct and documents are not lost. Hash totals can be kept on quantities, part number, invoice number, and so on.

help text. Panels or windows of information, displayed online within an application.

hexadecimal. Pertaining to a numbering system with a base of 16; valid numbers use the digits 0 through 9 and characters A through F, where A represents 10 and F represents 15.

hot key. In the XA User Interface, a key that can be defined to display any one of the several menus or commands.

ID. Identifier.

immediate update. The process of updating master files immediately upon receiving a transaction from a work station. Contrast with batch update.

informational message. A message that is not the result of an error condition. Normally, an informational message gives the status of a job or operation. Contrast with error message and warning message.

initial program load (IPL). A sequence of events that loads the system programs and prepares the system for execution of jobs.

inquiry. A request for information stored in, or calculated from, one or more data files.

interactive data entry. A method of entering data in which the computer carries on a dialog with a work station operator alternately accepting entries and responding to them.

interactive job. A job in which the processing actions are performed in response to input provided by a work station or system operator. During the job, a dialog exists between the operator and the system. Contrast with batch job.

interactive mode. A mode of operation in which information is entered, acted upon by the computer, and then responded to by the computer.

interactive subsystem (QINTER). A subsystem in which interactive jobs are to be processed. The System i supplies three interactive subsystems: QCTL, QINTER, and QPGMP (programmer subsystem).

interface. (1) The hardware and programs that permit exchange of information between computer systems or among devices. (2) The facility to allow information to pass from one application to another.

IPL. Initial program load.

job. (1) A single identifiable sequence of processing actions that represents a single use of the system. A job is the basic unit of work that is identified to the system. (2) The period of time between sign on and sign off at a workstation or the system console is also referred to as a job. See session.

job queue. A list of jobs waiting to be processed by the system.

keyboard. An assemblage of systematically arranged keys by which a machine is operated and from which data is entered.

left-adjust. To place data in a field so the first significant character at the left end of the data is in the leftmost position of the field.

library. An object that is a directory to other objects. A library is used to group related objects and to find objects by name when they are used. Libraries can contain data files, source files, and program objects; the files can also contain members.

library list (*LIBL). An ordered list of library names used to find an object. The library list indicates which libraries are to be searched and the order in which they are to be searched. *LIBL specifies to the system that a job's current library list is to be used to find the object.

load. To enter data or programs into storage; for example, to load a master file.

local currency. The currency you use to record transactions in the General Ledger; normally your own national currency. (The currency you use for accounting purposes.)

lookup. A function to search for database or master file information.

main menu. The first or primary menu in a series of menus. See also secondary menu.

main storage. Storage in the processing unit where all logical, arithmetic, and control operations take place under program control.

maintenance tape. A tape containing application correction sets used for updating XA programs. There are two kinds of maintenance tapes: a program corrective maintenance tape (PCM) and an application modification level tape (AML). Distribution is also made on CDs.

master file. A file that is used as an authority in a given job and that is relatively permanent, even though its contents may change. (I) (A)

master file search. A function to search for database or master file information.

menu. A displayed list of items from which the operator makes a selection.

message. A series of words or symbols, appearing on the display screen or printed output, that convey information. See also error message, informational message, warning message.

message identifier. The leading part of a message that contains information such as its source and an identification number.

message queue. An object on which messages are placed when they are sent to the person or program. The system-recognized identifier is *MSGQ.

methods. An operation used by CIM Series/400 applications to act on a particular class of objects; for example, the Item Read method is used to view information in the Item data class.

MUI. XA user interface. The set of functions providing help text, lookup windows, screen redesign, and notes for XA applications.

multiple language support. Ability to produce invoices with item descriptions and comment text in your customers' languages.

multiprogramming. (1) A mode of operation that provides for the interleaved execution of two or more computer programs by a single processor. (I) (A) (2) Pertaining to current execution of two or more computer programs by a computer. (A)

note. In the XA User Interface, paragraphs of text attached to application objects such as customers, vendors, and items.

numeric. Pertaining to the digits 0 through 9.

object. (1) An entry in a work with list. (2) A named unit that consists of a set of descriptive characteristics (that describe the object) and data. An object is anything that exists and occupies space in storage, and on which operations can be performed. Some examples of objects are programs, files, and libraries.

offline. Pertaining to equipment or devices not under control of the processing unit.

offline data entry. A form of data entry in which data is read into the computing system from offline files.

offline media. Diskettes, disk files, or tapes used for entering data into a computing system.

online. Pertaining to equipment or devices under direct control of the processing unit.

open. To prepare a file for processing.

OS/400. The operating system for the System i.

paging. Displaying the records in a file in sequence on a workstation. Using this facility, an operator can read through an entire file rather than seeing one record, as when using inquiry.

panel. In XA, a work with display. The types of panels are: Specify, which allows you to enter a type of object to work with; Work With, which shows a list of objects; Subset, which allows you to narrow a work with list; Change Defaults, which allows you to sequence panels in a function; Display Detail, which shows you the complete record for a particular object.

parameter. (1) A variable that is assigned a particular value for a specific purpose or process. (2) A value that is specified in a command. (3) Data passed to or received from another program or procedure.

password. An alphanumeric security code that allows access to a set of computer operations or data. See System i password, XA password.

PCM tape. Program corrective maintenance tape.

permanent file. A file retained from one initial program load until the next.

post. To transfer to an account in a ledger or file the data, either detailed or summarized, contained in a book or document of original entry.

primary session. The initial or main activity that takes place in an interactive job.

procedure. (1) Loosely, a function or set of functions to be performed. (2) In XA, procedure refers to one or more CL programs that cause a specific function or set of functions to be performed.

processing unit. The part of a computer system that operates on data.

program. An object that contains a set of instructions that tells a computer where to get input data, how to process it, and where to put the results. A program is created as a result of a compilation.

program corrective maintenance. The process of updating XA programs by loading either a program corrective maintenance tape (PCM) or an application modification level (AML) tape or CD and applying the application correction sets (ACSs) that are on the tape or CD deliverables.

program corrective maintenance (PCM) tape. One of two types of maintenance tapes. The PCM tape is sent to the customer upon request.

program temporary fix (PTF). A temporary solution or bypass of a problem as the result of a defect in a current release of a program. See Authorized Program Analysis report (APAR).

prompt. (1) A symbol or message to an operator requesting information or describing an action that is needed to continue processing. (2) To issue a message to an operator requesting information or describing an action that is needed to continue processing.

PTF. Program temporary fix.

QBATCH. See batch subsystem.

queue. (1) A waiting line or list formed by items in a computer system waiting for service; for example, jobs to be performed. (2) To arrange in or form a queue. (3) In manufacturing planning systems, the backlog of work waiting to be processed at a work center.

questionnaire. A unique set of questions for each XA application first answered when the application is installed and used to tailor the application to meet your company's needs.

record. (1) A collection of related data that is treated as a unit. For example, one line of an invoice could constitute a record. (2) To store data on a reusable input/output medium, such as a disk, diskette, or punched cards.

record key. A field in a record that identifies the record in a file.

register. A record for the consecutive entry of a certain class of events, documents, or transactions, with a proper notation of all the required particulars.

reporting period. Synonym for accounting period.

run-time option. A specification, made when a computer job is run, that tells how the job is to be run.

secondary menu. A menu showing an expanded list of options for an item that appears on a Main Menu. See also main menu.

session. The period of time during which a user of a terminal can communicate with an interactive system, usually, elapsed time between logon and logoff. See job.

session date. The date associated with a session. If a session date is not entered, the session date becomes the same as the system date. See also system date.

sign off. To end a session at a workstation.

sign-off. The procedure by which an operator ends a workstation session.

sign on. To begin a session at a workstation.

sign-on. The procedure by which an operator begins a workstation session.

source document. The original record of a transaction.

SYSCTL file. System control file.

system configuration. A process that specifies the devices and programs that form a particular data processing system.

system control file (SYSCTL). A program-described file containing the answers to the install/tailor questionnaires for all XA applications.

system date. The date assigned by the system operator during initial program load. Generally, the system date is the same as the actual date. See also session date.

System i password. The string of characters known to the System i and to a user, who must specify it to gain access to the System i. Synonymous with System i user password.

system printer. The printer, designated during system configuration, that is used for system and workstation printed output, unless the output is specifically directed to another printer. Contrast with workstation printer.

trading currency. The currency you use in your dealings with your customers.

transaction. An item of business, such as receipt of an order or paying a bill.

update. To modify a file with current information according to a specified procedure.

user ID. A special value assigned to an operator and typed in when the operator signs on. The system uses the value to determine whether the operator is authorized to use the system or requested function.

user password. A string of characters known to a system and a user to allow access to a system. See System i password.

warning message. An indication that an error has been detected. (A) You do not have to correct the error before you continue. Contrast with error message and informational message.

window. An area of the screen with visible boundaries through which panel information is displayed. A window can be smaller than or equal in size to the screen. Windows can overlap on the screen and give the appearance of one window being on top of another.

workstation. An input/output device that contains a display on which data is shown and an attached keyboard through which data is entered.

workstation printer. A serial printer that is designated during installation to print workstation output data. Contrast with system printer.

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