Infor ERPXA R7.8 Release Enhancements

SH15511

Publication Information

The product Infor ERP XA was previously known as Infor XA, MAPICS ERP for iSeries, and MAPICS XA. These names may still appear in text or graphics within this book.

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Infor ERP XA R7.8 release enhancements

Infor ERP XA R7.8 adds significant new features and enhancements to the product. This document provides a brief description of the new features in this release.

- Customer Service Management (CSM) enhances end-order processing, credit checking, split commissions, price books, reporting, invoicing, and holds. You can now maintain customer items, industry items, contracts, and promotions, as well as customers (when IFM is installed).
- You can maintain kits and kit components in Enterprise Product Data Management (EPDM).
- The scope of Materials Management (MM) has been expanded to include customer order pick lists and shipments. Receiving functions now support transactions for shipment notices, shipment containers, and shipped items. Shipment notices and scheduled receipts not only include purchase order receipts but also items you have transferred but not yet received. In-transit inventory – transferred items not yet received – is now visible. More inventory transactions can be entered.
- Procurement Management (PM) and Materials Management (MM) have been integrated with SRM SupplyWEB to provide electronic communication between you and your vendors. Enhanced vendor security allows for separation of duties for Sarbanes-Oxley compliance. Vendors can be maintained when IFM is installed.
- In International Financial Management (IFM) you can now maintain entities (trading partners, banks, employees and tax authorities) and other objects related to your customers and vendors. New summary levels and analytical functions allow you to see summarized financial data. Credit information is updated in real time, and usability enhancements reorganize client screens so it is easier to find information. IFM client security is now managed in CAS in the same way as the other XA applications. Additional security controls are available. New user fields are available for customization of maintainable objects. Inquiry performance is improved.
- A new Order Based Production Management (OBPM) application setting controls how users are notified when changing manufacturing order quantities with discrete allocations.
- Net-Link has an improved user interface, and supports additional Internet browsers Firefox and Opera.
- Power-Link enhances list, overview, compound, and tabbed cards. User preferences and other administrative functions have been moved out of Integrator into the base product and include the ability to specify public preferences (system defaults) for an XA environment.
- XA integration with Cameleon now de-couples engineering data from line item entry, speeding up the data entry process. Configured item descriptions are saved in both CSM and EPDM. Manufactured orders can be generated automatically from configured customer orders.
- Environment Management now includes the Product Updates feature, allowing you to analyze and apply PTFs, PCMs, and even analyze migrations from R6 to R7.
- Link Manager includes the ability to distribute fix updates via auxiliary machines, and download them to users in the background. It also lets you see which users and workstations are signed onto particular servers and environments, and communicate with them via messaging. Decoupling from the network, as well as improved diagnostics and error reporting, deliver more uptime to your system.
- Integrator includes user exit code with exported/imported objects. Publish and Subscribe supports Notification subsets, including all fields on regular subsets.
- System-Link enhancements include calls to host jobs and reports, the ability to define transaction groups, and support for conditional blocks in System-Link requests.
- Performance enhancements include new features like extra caching of customization data and use of the System i SQL query engine.

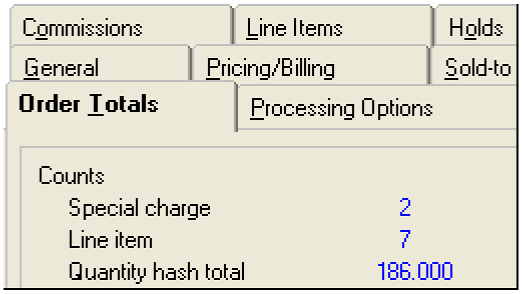
- Translation enhancements add language to the user profile and eliminate the need for multiple MMLIST records and multiple copies of database files. IT staff can install new applications and apply code fixes once without regard to individual languages.

All product branding is updated to *Infor ERP XA.* Release 7.8 is delivered via application of a PCM. The 7.8 PCM has the 7.7 PCM as a prerequisite.

CSM – Customer Service Management

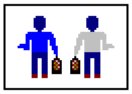
End order processing

End order processing now has the flexibility to run as part of order entry and maintenance. The *Order Totals* card reflects the real-time order information for both open and order quantities at the header and detail levels. Credit checking is based on real-time balance information. The *Processing Options* card lets the user control printing, allocations, and invoice generation for the order.



Default options for printing acknowledgments, pick lists, pro forma packing lists, and pro forma invoices can now be specified as standard Preferences for customer orders.

Split commissions



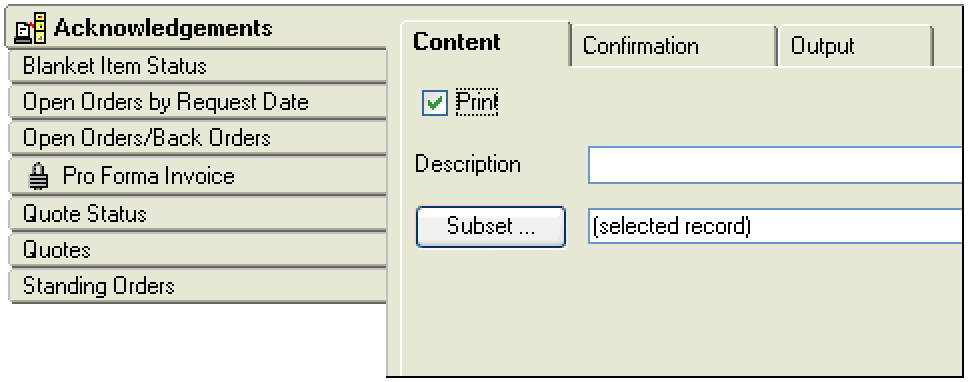
Order processing now allows entry of commissions at the order header and line item level during order entry. At the order header level, the commission can be split among the primary sales representative (salesrep) and additional salesreps. At the line item level, the order commissions can be overridden by adding one or more salesreps to an item. The Commissions card in the order header conveniently shows the commission structure for the entire order.

Comments

CSM Order creation now supports auto-inclusion of comments. Standard customer comments can be automatically included with the order header. Standard item comments can be automatically included with line items or releases.

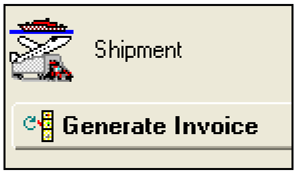
Reporting

A variety of reports including acknowledgements, quotes, and standing orders can be printed or reprinted as needed. As standard host print functions, they can be e-mailed and/or saved in text, HTML, or PDF formats.



Customer order fulfillment

NOTE: Since order fulfillment functions (Picking and Shipping) all take place in the warehouse, they are packaged with Materials Management. When MM is installed, the order fulfillment functions will be accessible by CSM objects. See the MM – section for description of these functions.



Customer invoicing

Once an order has shipped, the invoice can be generated using a new host job available from both orders and shipments. Invoices, including pro forma invoices, can be printed or reprinted at any time. Invoices can even generated without printing, since sometimes they need to be transmitted via fax or EDI.

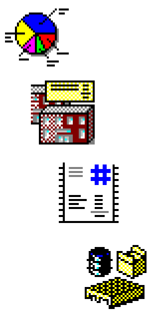
Holds

Visibility for orders, line items, and line item releases on hold has been improved. For example, users can now see how many holds exist for an order, and at what level. Since held orders and items selected for picking will not print on the Pick List, users can now see and address a hold condition prior to running a Pick List. A new *Available to pick* subset automatically excludes held orders.

Order	Status	Order	Lines	Releases
CO 10584	OK	0	0	0
CO 10578	Held	1	0	0
CO 10577	OK	0	0	0
CO 10576	Held	0	1	0
CO 10574	Partial	0	1	0
CO 10573	OK	0	0	0

Additional maintenance objects

R7.8 adds maintenance function for customer items, industry items, contracts, and promotions. Customer maintenance is now available in CSM when IFM is installed.



Hold codes and Special charge codes can now be maintained. Code file maintenance relating to the assignment of invoice form numbers has been added to:

- Tax Categories
- Sales Branches
- Invoice locations
- Invoice Shipping Locations
- Invoice Form Numbers.

Code file maintenance relating to shipping has been added to:

- Packing List Form Numbers
- Container Types.

Integration to Contract Accounting Plus

When Contract Accounting Plus is installed, a card in the customer order header allows the contract to be assigned during order entry and maintenance. It displays static information, such as the prime contract, the award date, and the people assigned to administer and manage the contract. It also displays dynamic information, such as the amount paid to-date and the value of shipments.

Price book unit of measure

CSM now allows for the Price Book to specify the pricing unit of measure. To enable this, the pricing unit of measure was added to the following objects:

- Price Book Base Price
- Price Book Quantity Price Break Amount
- Price Book Quantity Price Break Percent
- Customer Contract Line Item

	Item	Pricing UM	Base selling price	Curren
1	1000	EA	1,095.000	EUR
1	1001	EA	1,295.000	EUR
1	1002	EA	1,495.000	EUR

In each Price Book version, you may still have only one base price effective for an item-price code-currency combination at a time. In other words, you may not have different prices for different units of measure.

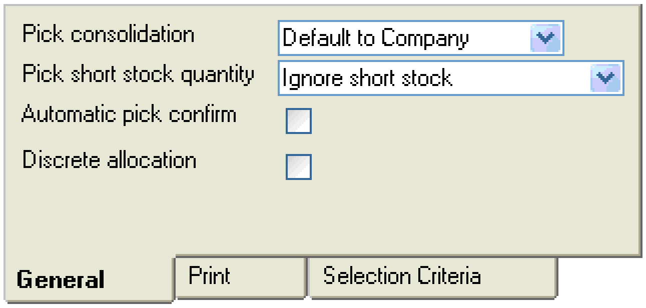
MM – Materials Management

Shipping

Materials Management now owns customer order picking and shipping activity with the addition of Pick Lists, Containers, and Shipments.

Picking

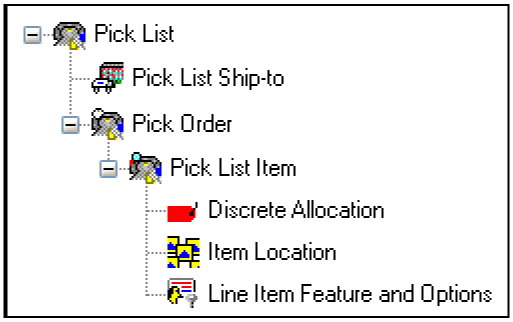
You can now generate, print, and allocate pick lists for a selection of customer orders, line items, or line item releases. Full pick consolidation is supported. Regular and stock pick lists have been combined into one pick list, with an option to consider (or not) short stock. Allocations for a customer order can be done separately from the creation of a Pick List.



A new subset called Available to Pick excludes orders (or lines, or releases) that are prevented from picking due to holds or other reasons. Selecting orders for print using this subset eliminates the problem of printing pick lists only to discover that one or more orders did not qualify. Users are more productive because they can see and resolve issues earlier in the business process.

A host job allows bulk printing groups of orders, lines, or releases on one or more pick lists. A menu option lets the user generate pick lists order-by-order, line-by-line, or release-by-release.

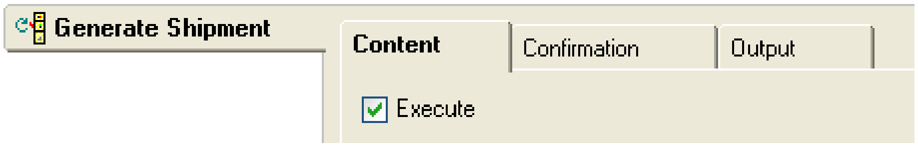
An improved Pick List overview shows all the information that prints on a pick list document. It shows the results of consolidation, and includes the ship-tos, allocations, and warehouse locations. For customers using S-numbers, the features and options selected for a particular item will be shown on the overview as well.



Data that was formerly scattered over several inquiries is now brought together in one place. This overview may also reduce the number of times a document needs to be reprinted.

Shipping

Outbound shipments can be generated from Customer Orders, Pick Lists, and Containers. As a standard host job, the output can be e-mailed or stored as text, HTML, and/or PDF documents. A new subset called *Available to ship* filters out orders, lines, and releases that cannot ship for any of several reasons…cutting out wasted effort from downstream processes. A SA transaction is still produced to update inventory.



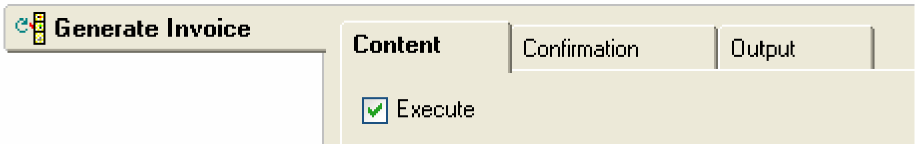
The Generate Shipment host job includes many options to control the shipment process. For example, a *Ready to invoice* flag lets you automatically invoice the shipment.

Shipment documentation can also be printed, including packing lists, bills of lading, and invoices (regular and/or pro forma). Release 7.8 also includes support for Advance Ship Notices (ASNs). Checking the ASN box when generating a shipment causes an ASN to print automatically.

A new field has been added for shipment tracking to store the carrier's tracking number. Using Integrator, a one-click feature can be added to a business object, such as orders or shipments, to look up the status of the shipment from the carrier's web site.

- At this time, only complete shipments are supported. Release 7.8 will support immediate ship.
- New subsets, such as Available to Ship, have been added to aid in generating shipments.
- Bills of Lading and Packing Lists can be printed from the Shipment object.
- Serial Numbers can be generated or entered for shipped items.
- Tracking numbers can be specified on a shipment or by the container in a shipment. Tracking URLs have been added to the Carrier object.
- Carrier enhancements include tracking numbers on the shipment, tracking numbers on the container, tracking URLs on the Carrier object and tracking URLs on each container in the shipment.

Invoicing



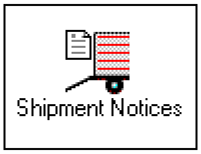
Invoices can now be generated from orders or shipments. As a standard host job, the invoices can be e-mailed or stored as text, HTML, and/or PDF documents. A new subset called *Available to invoice* filters out orders and shipments that cannot ship for any of several reasons…cutting out wasted effort from downstream processes. A new host job, Generate Invoices, is available on both Customer Orders and Order Shipments.

Receiving

Materials Management enhances receiving for purchase orders and transfers.

Scheduled Receipts

The Scheduled Receipts object in Release 7.8 includes purchase- and transfer-scheduled receipts and is becoming the focal point for all types of scheduled receipts to inventory.



Shipment Notices

A Shipment Notice is an Advance Ship Notice (ASN) from your vendor of what you can expect in an upcoming shipment. It may have one or more line items, from one or more purchase orders, and can optionally describe what items are in one or more containers. Since an ASN is what the vendor actually shipped, it makes it much easier to receive a shipment. Instead of looking up POs and doing partial receipts, receiving personnel can simply receive by ASN--the whole thing, one container at a time, or item-by-item. The system knows what PO line items quantities were shipped, so the PO data is updated properly as receipts are processed.

Shipment Notices can also be sent internally, such as with a transfer. Transfers are described later in this document.

While shipment notices can be entered and maintained manually, they are usually received electronically from the vendor. Using System-Link, a company can populate the XA database automatically from electronic transmissions. Infor's SRM SupplyWEB sends ASNs to XA using this capability.

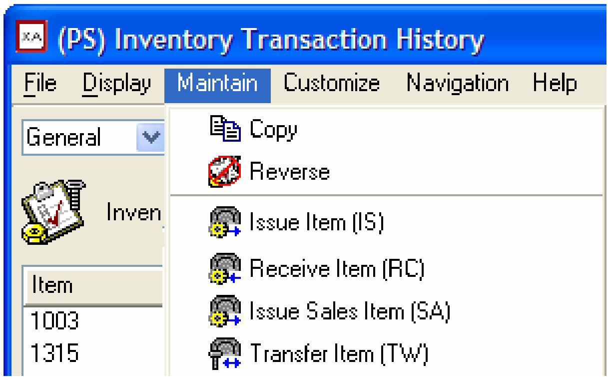
Once the goods have been received, the vendor can be notified of the quantity good and the quantity scrapped via a Receiving Advice. The receiving advice can also be electronically transmitted using System-Link to the external communication system of choice. The System-Link interface is also used to send Receiving Advices to vendors via Infor's SRM SupplyWEB.

Inventory Transactions

A number of inventory transactions have been written in the Infor System i Development Framework (IDF). For example, the receiving and vendor return transactions are already used in Materials Management. Release 7.8 adds additional transactions, along with new function. The transactions have been renamed to fit with the verb-object pattern used throughout the IDF. However, the two-character abbreviations have not changed.

The newly rewritten transactions are available from the Inventory Transaction History object:

- Issue Item (IS) – formerly Miscellaneous issue.
- Receive Item (RC) – formerly Miscellaneous receipt.
- Issue Sales Item (SA) – formerly Sales Shipment.
- Transfer Item (TW) – formerly Interwarehouse Transfer, and the related generated Interwarehouse Issue (IW) and Interwarehouse Receipt (RW).



The Copy and Reverse actions are available, as well as submission by System-Link.

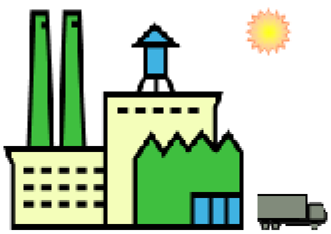
All inventory transactions, regardless of how they were entered, are written to Inventory Transaction History using the IDF. Using IDF's Publish and Subscribe feature, XA Enterprise Integrator users can be notified of inventory transactions instantly.

Release 7.8 provides new Inventory Transaction History subsets and sorts. An Inventory Transaction History host print job allows users to print an Inventory Transaction Register for any of these subsets and sorts, regardless of how the transactions were entered.

A new Inventory Transaction History overview card portrays all transactions related in the IDF to the selected transaction, including any generating, generated by, reversing, or reversed transactions.

Transfers

Prior to Release 7.8, a warehouse transfer (TW) is the pairing of an issue and a receipt from one warehouse location to another. The transfer takes place instantaneously on the system, while in reality it may take days for goods to arrive at the receiving location. To prevent inventory from disappearing from the books when a user enters an Issue Transferred Item (IW), and reappearing when the user later enters a Receive Transferred Item (RW), many companies create an in-transit warehouse. While this technique works, it raises some usability issues.

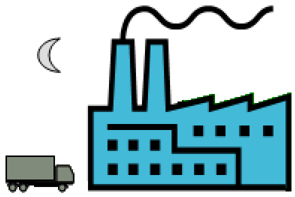


R7.8 includes a *Transfer Item* inventory transaction. It uses the same TW designation as the old Warehouse Transfer (TW) and can be used in exactly the same way. However, it also provides a number of valuable enhancements.

For example, the arrival date and time can be included in the transaction. If the user wants to issue now, and schedule the receipt for later. Release

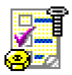
7.8 defines a new in-transit warehouse location type for exclusive use by scheduled transfers. The warehouse location has an inventory status of *In-Transit*, to hold items in that location from all activities except receipt at the destination warehouse. The in-transit items are not included as on-hand, but are included as scheduled receipts in the destination warehouse in the customer order promising functions ATP and CTP, and in MRP, AVP, and Thru-Put planning. Also, the inventory in an in-transit location is still visible to accounting for warehouse valuation purposes, so the asset is not lost while in-transit.

At the destination warehouse, the receiving process for transferred goods is the same as the receiving process for goods from a vendor. For example, a Scheduled Receipt is automatically created in the destination warehouse when a Transfer Item transaction with scheduled receipt is entered. The transfer then appears in the Scheduled Receipts, along with expected PO receipts. When received, the item is moved from the in-transit location to the destination warehouse stocking location.



Transfers as well as PO shipments can be received via Shipment Notices. Transfers for multiple items can be included in a Shipment Notice. This allows the destination warehouse to use either Scheduled Receipts or Shipment Notices to receive a transfer.

Inventory Status and Non-netting Locations



A new object, Inventory Status, is available in Release 7.8, and a new Inventory status field has been added to the Warehouse Location object. The inventory status allows users to identify items to be withheld from certain activities.

Release 7.8 provides two pre-defined inventory statuses: *Plan Hold* and *In-Transit*. Both set the single attribute, *Planning hold*, to Yes. Stock in locations on Planning Hold is ignored by the planning applications MRP, AVP and Thru-Put and the customer order promising functions ATP and CTP.

The In-Transit inventory status is used for in-transit locations. A warehouse location identified as an in-transit location is required for deferred transfers, i.e., transfers not yet received.

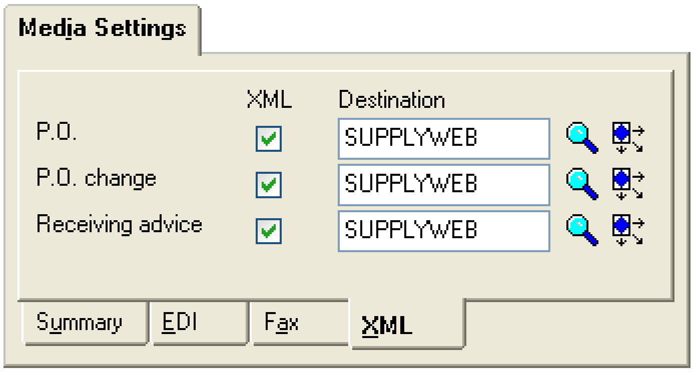
Inventory status	Description	Planning hold
IN-TRANSIT	In-transit	Yes
PLAN HOLD	Planning hold	Yes

The Plan Hold Inventory Status replaces the MRP Non-Netting enhancement (SH61773). Users of that enhancement are automatically migrated to the new function when they upgrade to Release 7.8. The user fields required by SH61773 are freed up for other uses.

PM – Procurement Management

Integration with vendor management applications

Procurement Management provides for electronic communication between your company and your vendors. For example, you can send EDI quotes, planning schedules, purchase orders, shipping schedules, and receiving and remittance advices using Infor ERP XA Electronic Commerce (EC).

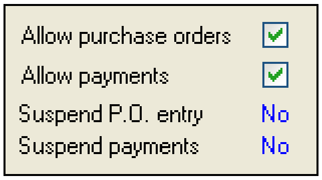


You can now integrate XA processes with vendor management applications to help you negotiate purchase orders electronically. Your vendor must use an application that has been configured to communicate with XA using XML documents and System-Link. Infor SRM SupplyWEB is a vendor management application providing Infor integration between XA and SupplyWEB.

New vendor media preferences allow you to specify the System-Link destinations to transmit Purchase Orders, Purchase Order changes, and Receiving Advices as XML documents. Media preferences can also be used for host print.

Enhanced vendor maintenance

In addition to the changes in vendor maintenance when IFM is installed (explained in the IFM section), other enhancements to vendor maintenance include:



Changes to vendor card files to make the cards easier to read and to increase consistency between the AM and IFM applications. Any associated IFM entities, bank accounts, and purchase order history is now visible.

Separation of duties for Sarbanes-Oxley (SOX) compliance to control which users can set up vendors for purchasing and which users can set up vendors for payments.

You can now determine which vendors in item warehouses have not been defined in the Vendor Master file and which vendors have been suspended from purchase order entry.

IFM – International Financial Management

Entity maintenance

When IFM is installed, users can create and maintain customers in CSM and vendors in PM. Changes to customer and vendor information made in CSM and PM are automatically reflected in the Entity object and vice-versa.

When you create customers and vendors, you now have more flexibility in assigning numbers. In CSM, customer IDs are no longer required to be based on the entity ID and ledger suffix. In PM, assignee vendor IDs need not match the entity ID. In both cases an application-wide option allows you to choose whether to enforce the rule or not.

New database attributes in Customer, Vendor, and Entity records include e-mail addresses, mobile phone numbers, and web addresses.

The entire family of entity-related objects and code files is now maintainable. These include:

- Entities
- Entity Revision
- Personal Accounts
- Personal Account Revision
- Entity Contacts
- Entity Aliases
- Entity Groups
- Entity Tax Identifiers
- Entity Bank Account Revisions.
- Banks
- Tax Cities
- Tax Counties
- Personal Account statuses
- Collection Statuses
- Regions

In the above list, two objects have been renamed. Entity Data has been renamed Entity Revision, and Personal Account Data has been renamed Personal Account Revision. In both cases, the attributes from the current Revision (or Data) records has been merged into the main object to make the application easier, more intuitive, and more productive for the end-user.

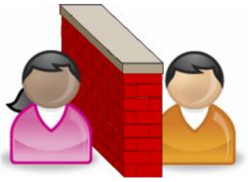
Bank account numbers

Bank account numbers are recorded in a number of places, such as Entity Bank Accounts, Cash Books, Bank Statements, Payment files, and Cash Receipt import files. Prior to Release 7.8, the length of the field was 40 characters, and the flexible editing rules allowed for up to 6 components of 20 characters each. This was inadequate to store the Bank Identification Code (BIC) plus the International Bank Account Number (IBAN).

With Release 7.8, the length of the bank account number has been increased to 60 characters. Additionally, the editing rules have been expanded to 15 components. This is sufficient to handle both BIC and IBAN numbers.

Note that this enhancement includes entity-related objects that are part of this release, as well as legacy (green screen) functions that have not yet been rewritten in the client.

Separation of duties



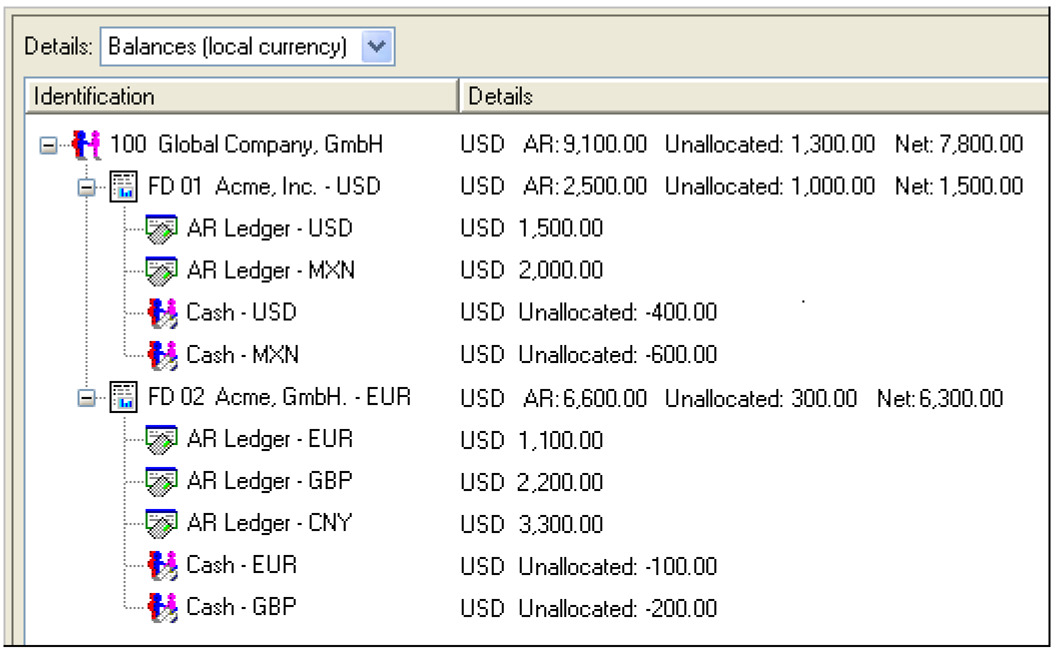
Best practices require a separation of duties so that, for example, the same person who creates a PO cannot also pay the resulting vendor invoice. XA security allows these functions to be locked and users authorized in such a way that the separation of duties can be maintained. Prior to this release there were certain objects which included attributes that needed to be segregated for security purposes, but with no way to do it.

Two new field security categories resolve this need. The VNDPUR category controls which users are authorized to more than forty PO-related fields in the Vendor object. Another category, PAYMENT, controls about two dozen payment-related fields in the PO and related objects. This field security applies only to the client, not the legacy (green screen) functions. Companies desiring this feature will need to set up security so that the only way for users to maintain vendors, vendor items, POs, buyers and items is through the client.

Totals and balances

A financial system contains valuable information to answer management questions, such as: How much money do we owe to vendors? When is it due? How much money do our customers owe to us? By when? From whom? Can we expect them to pay on time?

The answers to questions like these are now readily available. Furthermore, they can be answered at various levels, such as for one internal company or many, for one customer or a group. The combinations multiply quickly but the system keeps them organized, accurate and handy.



For example, a new overview shows the balances for an entity. Ledgers and unallocated cash receipts and payments roll up by division, which then roll up into the entity.

For global accounts a dropdown menu lets the user select the currency – financial division, entity or local, to name just three. From here you can drill down to, say, the transactions that make up the ledger balance. Additional summary levels present totals for a single entity across all financial divisions, or just within one financial division. It's all at your fingertips.

Analytical functions include AR/AP balances, aged balances, and AR credit totals. Each of these is available on cards in the Entity object, so it is very easy to click on one or the other to look at the detail behind the summary totals.

The files are automatically updated as transactions are processed. Recalculations for currency exchange rate fluctuations are performed daily, or on demand if the user prefers.

To analyze data, you can define your own sorts and subsets on lists. For example, you can subset Personal Account Aging Period Balances to show only receivables, and then sort the list to identify customers with the oldest and largest outstanding balances. In Release 7.8 amounts are stored in the database as decimal values, so you can display meaningful column statistics such as total, average, minimum, maximum and count,

Name	Aging period	Aged balance
Foremost Machine Shop	10/31/2008	85,412.46
DeKalb Chemical Co.	10/31/2008	76,503.01
Juan & Juanita's Mfg Ctr	10/31/2008	58,323.00
Brazilian Coffee House	10/31/2008	25,169.21
Versailles Industries	10/31/2008	17,996.51
Japanese Auto Parts	10/31/2008	14,381.74
Jason's Novelties Ltd	11/28/2008	140,250.40
SME Distributors	11/28/2008	128,255.60

This feature allows you to easily export selected data to spreadsheet programs such as Microsoft Excel.

Automatic credit updating

Prior to this release, credit totals were updated periodically through a scheduled process or manually on demand. Many companies set the scheduled process to run automatically every half hour to approximate real time updating. This consumed large amounts of system resources, and even then the delay could be troublesome.

In Release 7.8, the system has been redesigned so that available credit is updated each time an order, invoice or cash receipt is entered. Maintenance changes, such as creating a new Personal Account or even just changing the credit limit, also update available credit immediately. You can now see available credit at any time and know it is right…without consuming additional system resources.

New host jobs

You can now update aged balance totals and customer collection statuses. You can also print aged balance reports and customer statements. You can select these jobs to run as of a specific date, such as the end of the year, or the end of a billing period.

Usability enhancements

- Client screens and menu options have been redesigned so that it is easier to find information.
- Navigation has been improved to reduce the number of screens required to find information. List cards have been added to objects to bring more information together in one place.
- “AR means AR.” Customizable workspaces and security allow each user to see information that is tailored to his particular roles and responsibilities. So, for example, an AR clerk can be authorized to AR tasks and use AR workspaces. Non-AR distractions will disappear, and they will see only AR-related objects and cards.   Similar workspaces are available for AP, Cash and General Ledger functions.
- In the client it is easier to find, create, and maintain information associated with entities and personal accounts, because multiple separate database files have been consolidated and organized into a single object and card file. For example, “data” records have been absorbed into their related objects.
- Balances overviews display financial information in consolidated format, with the ability to drill down to details. For example, from a customer’s receivables account, you can drill down to the individual AR invoices and open orders that make up the totals. An entity’s account balances display the AR, AP, and cash balances that make up the total. From there you can drill down to the customer orders, outstanding receivables, and unallocated cash receipts that contribute to those balances.
- User fields are available on the maintainable objects, so you can add your own custom information.
- Authorized users can customize screens.

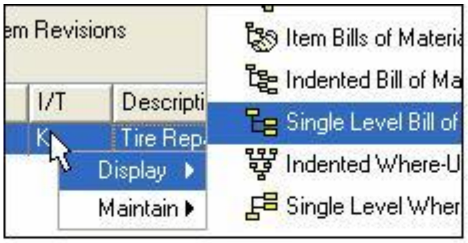
Security changes

For display and maintenance, security is implemented using CAS and client security, not IFM security.

- Auto content security controls access to objects based on administrative division, financial division, entity, ledger, and ledger type (AR, AP, GL, and Cash).
- Field-level security controls access to attributes such as bank account number, tax IDs, and inventory matching controls.
- New audit reports provide a record of each user's permissions, assisting you with SOX compliance audits.

EPDM – Enterprise Product Data Management

Kits



Kits are items with components that are typically collected and packaged together at shipping time. Up to now the items were defined in the engineering system (PDM, PDM*Plus* or EPDM) but the product structure was defined in COM/CSM. With R7.8 the structure definition has been brought into EPDM. Kit maintenance functions in COM and CSM will be disabled. Components for kit items can now be defined as any other parent items.

(Note that non-EPDM environments remain unchanged.)

The installation instructions describe program *CVTCOMKIT* that must be run from the command line. The program will convert the generic (i.e., not site- or revision-specific) kit structure information to EPDM. See the installation instructions for more detail.

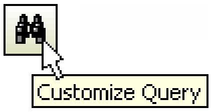
OBPM – Order Based Production Management

Sometimes users are prevented from changing the quantity of a manufacturing order because discrete allocations exist. They must exit the area they are in and eliminate the discrete allocations, then come back to finish the order maintenance.

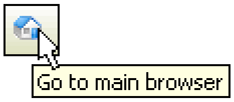
Now, a new application setting allows users to choose whether they receive a warning or an error when changing a manufacturing order (MO) quantity whenever discrete allocations exist for that order. This means that they can accept the error, finish the order maintenance, and *then* go fix the allocations. One more way to improve efficiency.

Net-Link

Net-Link's has been updated to work with multiple Internet browsers. Up to now users had to use Windows Internet Explorer. Now users have the option of using Mozilla (Firefox) and Opera, a popular browser for mobile devices.

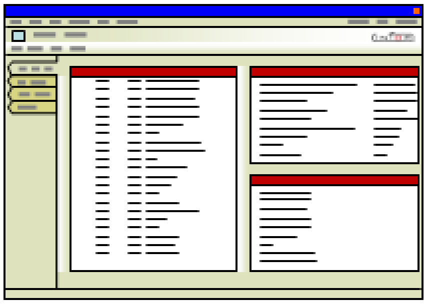


The Net-Link interface has been modernized as well. It better utilizes screen real estate by compacting certain features. For example, view, subset and sort selection is available by clicking the binoculars icon, menus are on the same line as the toolbar, and card tabs are on one line. These changes leave more room for data without sacrificing ease-of-use.



Speaking of ease-of-use, a new Home icon has been added to the toolbar, and on the application cards the icons now have tip text.

Net-Link now supports more features formerly only available in Power-Link:



Compound cards let you arrange the real estate on a card into separate sections, each of which can hold separate information. One section can be for attributes, another for a list, another for a graph, and so on. Since the internet does not allow workbenches, this is the next best thing.

Presentation schemes were limited to foreground colors, such as showing overdue dates in red. Now they can also show different fonts, icons or even blanks, which is nice for suppressing ‘noise’ from your system.

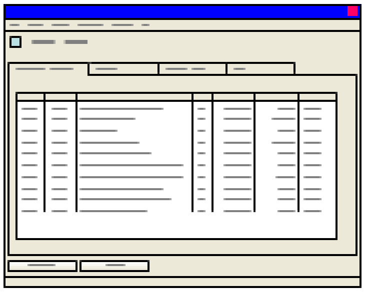
Column functions were limited to totals. Now they can show minimum value, maximum value, average value and number (count) of values in the column.

Note that customization is still done via Power-Link. The results (compound cards, presentation schemes and column functions) can now be seen in Net-Link.

Power-Link

Card enhancements

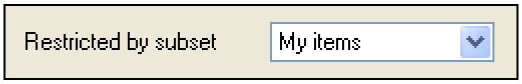
Power-Link list cards, overview cards, compound cards, and tabbed cards have been enhanced.



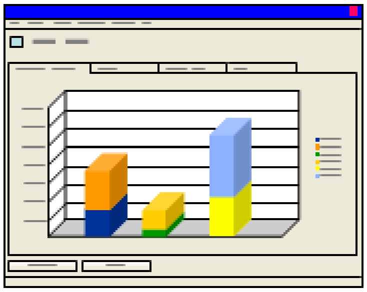
List cards

Lists are one of the key ways to display data. Lists displayed as a result of clicking an icon contain many useful features popular with users. However, lists can also be displayed on cards. Until now the list cards did not contain the all the same useful features as the lists displayed from icons. Naturally, power users would like lists to have similar behavior, regardless of where they appear. This release provides this continuity.

One of the most noticeable features is the ability to restrict the data on a list. The tab of a list card usually specifies the data on the list, but you can change that data using subsets. This can lead to a mismatch between the data and the tab label, causing confusion and inefficiency. To eliminate this problem, you can now apply a restricted subset to a list on a card, where the criteria for the restricted subset match the tab label. This ensures consistency by establishing boundaries within which the user can still subset data.



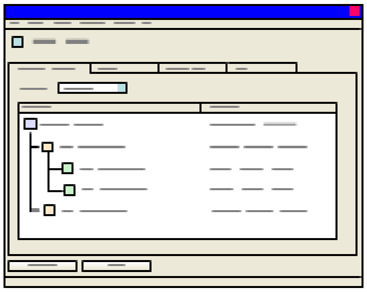
Some other new features appear in the list card customization editor. For example, there is a new Card File card that lets you define the name of the card file and the initial card to display when you select a row and navigate to the object's details. The new Template card lets you identify the names of the templates to use when creating, copying, or changing a row on the list card. And the Options card now has a place to define what happens when you open (double-click) a row. Just as with regular lists, any navigation or maintenance action is available, plus you get Ctl-Open and Alt-Open, as well. Note that the selection is limited to actions on the card toolbar.



Graph cards

Data can now be displayed using stacked bar graphs. Bar graphs are great for comparison, such as showing planned and actual data side-by-side. Stacked bars go one better, by letting the bar itself represent multiple data elements. For example, a bar representing annual quantity might be made up of four quarters stacked one on the other.

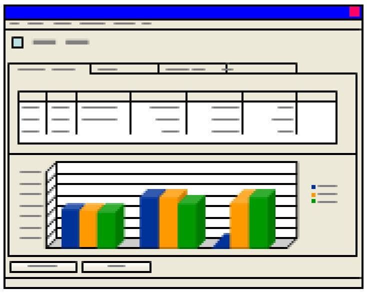
Not only is it easy to switch between graph types, but you can also choose how to have the data grouped. You could stack four quarters up for an annual total, or you could stack all the first quarters into one bar, the three remaining quarters into their bars, and see the results of seasonality over the course of years. This really is a powerful tool.



Overview cards

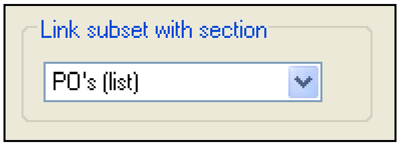
Overview cards present a tree-structure of data, along with details about each object. You can have as many sets of details as you like, such as for costs, dates, and so on. A drop-down menu allows you to select what set of details you would like to see at any one time. All this was available prior to this release.

What is new is that now, for overviews with a lot of details, you can specify a Favorites list to make the drop-down list more manageable.



Compound cards

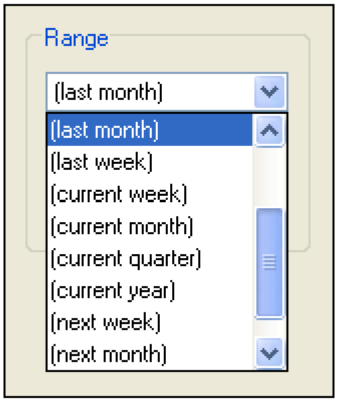
Have you ever had a compound card that included a list and a graph of the same data? For example, you may want to see a list of the POs by vendor and a graph that shows the top ten by value. So far so good. But as soon as you change the subset of the list, the graph no longer shows the same data. How would you like to be able to link the subsets so when you change the list the graph automatically changes, too? Now you can. So if your top ten list is all POs, that's what the graph shows. If you subset the list by POs not invoiced (for example), the graph will show the same thing. Very cool.



Another enhancement to compound cards is that you can include a tabbed card as a section. This gives more flexibility to your use of the real estate on the card. With all this flexibility, you'll soon be able to get all of XA on one card…but you may need a bigger display.

Subset enhancements

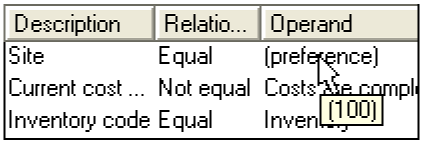
Subset values defined over Date attributes now include additional date range functions for calendar (not fiscal) periods such as last year or next week, as follows:



Last week	Last month	Last quarter	Last year
Current week	Current month	Current quarter	Current year
Next week	Next month	Next quarter	Next year

Wouldn't it be nice if you could use this feature as a crystal ball to see into your future? Sorry, that's not what this does. But if you're tracking quotes and shipments, you *can* see what quotes will expire next week, or what the shipments have been so far this quarter.

Subset values defined over attributes that have default preferences (such as Site or Buyer) can now include those values automatically. This means each user of a public subset will automatically see the data filtered by their preference. It also means that if a user changes their preference, the subsets will adjust automatically. In case the user doesn't know what their preference is (!), the tip text will show them the value in the customization editor.

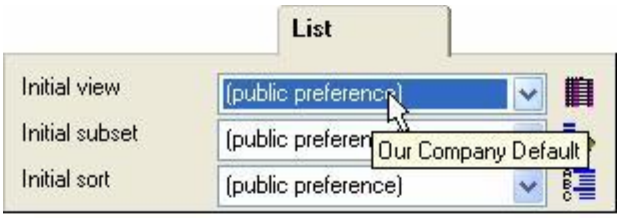


Speaking of subset editors and tip text, now when you have a subset that includes a date offset, such as "-1 year", the editor will show that description instead of the date. The tip text will show the date. This lets the user know that the subset logic is by date offset rather than specific date.

Public Preferences

Preferences were created to let individual users specify the default behavior of their objects, such as the default view or card file. Prior to this release, the default value for many preferences was pre-defined by the system and stored as *system default*. Many administrators wanted to be able to control the system default, because doing so would globally change all users whose preferences were set to use it.

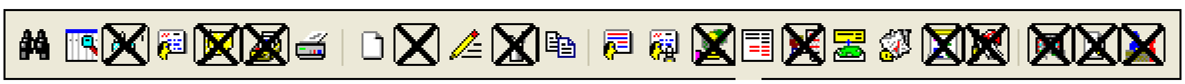
This release satisfies this need in two ways. First, User Preference Administration has been moved from an Integrator function into base code. This means that all companies with an IDF application will have it regardless of whether they license Integrator.



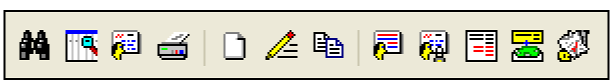
Second, object preferences have all been updated to reference *public preference* rather than *system default*. The ability to specify public preferences has been added to User Preference Administration. Administrators can now make one simple change to the public preference and update all users using the system default. Furthermore, you can place the cursor over the *public preference* designation and the tip text will tell you what it is. (See illustration.)

Customizable menus and toolbars

Some objects have long toolbars…so long that they get cut off when the window is smaller than the whole screen. Not only are they unwieldy, but few users actually need all those tools on the toolbar. In fact, when the toolbar is too long, it's hard to find the tools you really do want. But which tools should we remove? Each user would offer a different answer.



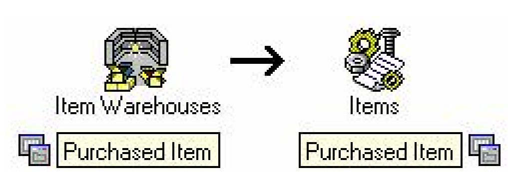
To solve this problem, we added the ability to specify menu favorites in workspaces. Essentially, a new card lets you specify favorites for Display and Maintain menu options. Those that are not favorites disappear from the menus and toolbars. Actually, you can control the menus and toolbars separately, which means you can leave actions on the menus but remove them from the toolbars. Because this feature is part of a workspace, the menus and toolbars can be tailored to the user or task. Now each user can make the toolbars just the way they like them.



As you can see, workspaces are pretty handy. Remember, they're just a named collection of preferences. But they have a lot of uses.

Here's another one…

Navigation workspace



In XA there are many objects which contain two or more kinds of data. For example, consider Item Warehouse. It contains some items that you make, and others that you buy. Wouldn't it be nice to double-click an item in the list and get the "correct" card file? In other words, wouldn't it be nice to click on a purchased item and get a card file tailored for purchased items, or double-click a manufactured item and get the card file tailored for that? It would save having to change card files. For you it saves time. For new or casual users, it also eliminates possible confusion.

There are lots of places in XA where this can apply. In IFM you may want one card file for a customer entity, another for a vendor entity, and a third for a bank entity. In production you may want one card file for a manufacturing order and another for a service order. In customer service you may want one card file for a customer and another for a distributor. This is what workspaces can do…but now there's more.

Let's say you have Item Warehouse set up as described, with a workspace for "make" items and another for "buy" items. When you navigate to the Item Master you can carry the workspace with you! If the object you navigate to has a workspace of the same name as the one you're coming from, the system will automatically use that workspace. The net result is a smoother, more streamlined system.

To help you see what workspace is in play, a new icon appears in the bottom right of the window. When you place your cursor on that icon, the tip text will tell you the name of the workspace that is being used.

Suppress nuisance messages

A new *Do not show again* option has been included in informational ("Just letting you know...") and conformational ("Are you sure?") messages. Checking the box causes the message to be suppressed in the future. You can choose to reactivate suppressed messages using the application preferences from the main browser.

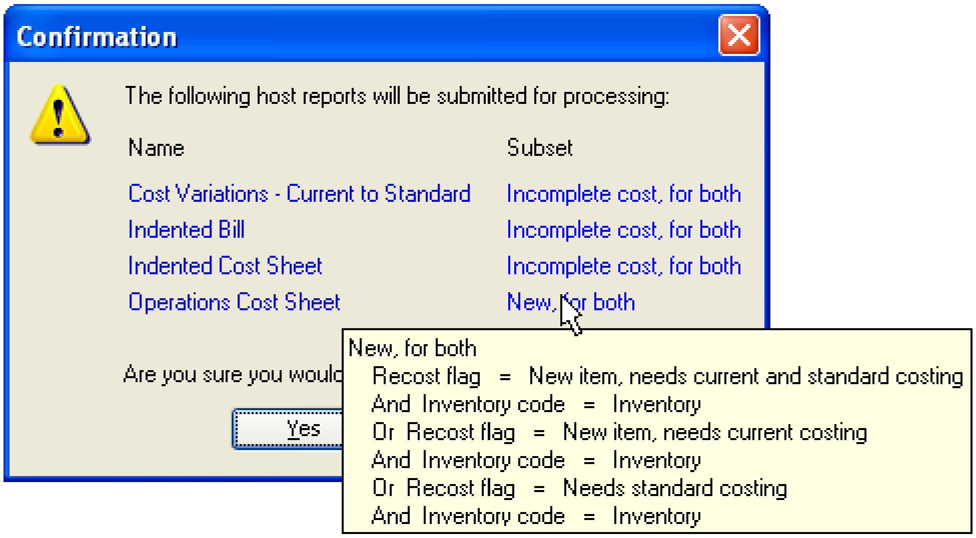
Mass change

When users select mass change they expect it to change all the records in the list as defined by the subset. This now includes constraining criteria, such as when navigating from another object, as well as restricted-by subsets from a workspace.

Host Process Confirmation

Many objects have host processes available from the *Host Jobs…* and *Host Print…* options on the *File* menu. Often users will submit multiple jobs at one time. Up to now there has bee no confirmation ("Are you sure…?") message to let the user see what they are about to submit.

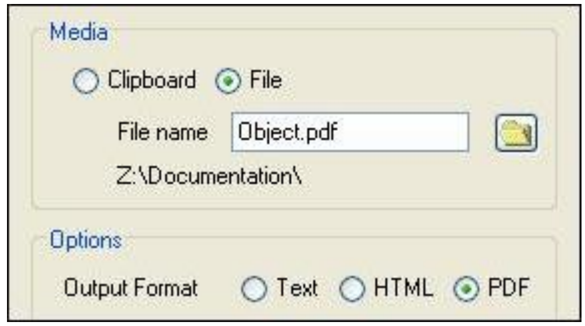
With R7.8 a confirmation message will appear showing all the host processes (jobs or reports) selected by the user. The subset description will appear next to the report name, which can be very helpful when, for example, the subsets are supposed to match.



If the user needs more information about the subset, the tip text will show the criteria.

From the confirmation window the user can continue or return to the selection window to make any changes

Export to PDF



The PDF format is used to present graphics-rich and formatting-heavy documents. As it is one of the most common document file formats and allows a variety of detailed formatting tools and navigation features that HTML and text do not, the PDF format is an excellent container for exporting data.

R7.8 now allows companies to create a document of the information contained in the object card file. This includes the general information, maintenance settings, attribute definitions, relationships, edits, content security, user exit settings, host processes, subscriptions and more. This is very helpful for organizations that need to document work the IT staff does with Integrator.

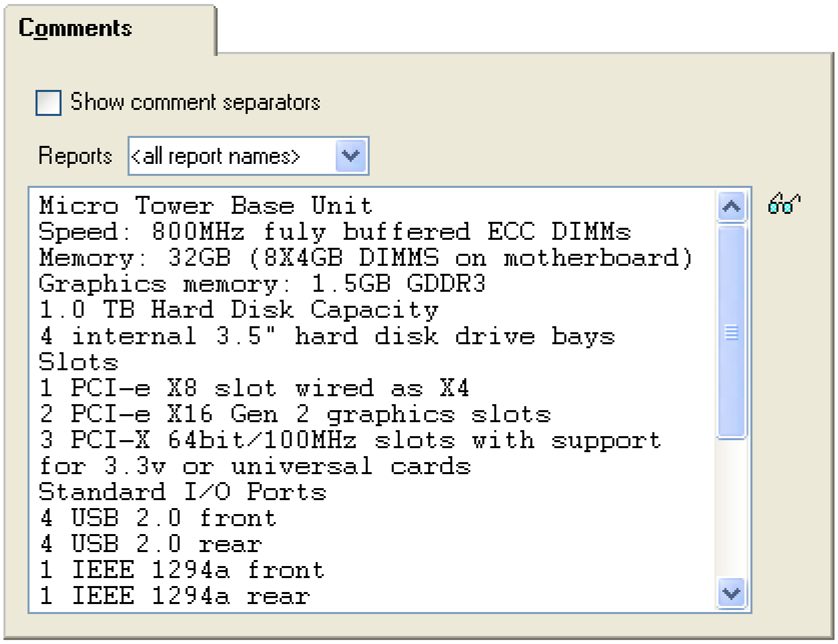
Other Power-Link enhancements

- When exporting reports and other documents to PDF format, you can now specify either Portrait or Landscape orientation.
- User changes to column widths on Overview cards are now remembered the next time the card is opened. This saves the user having to change the column widths every time. There is also an Initial column width can also be set for Net-Link users.
- When creating a new view or card, it is possible to show more information about the attributes. The additional information can include the name and source objects of the attribute. Until now, only the last source object was shown, resulting in apparent duplicates (same name, same object). We now show the entire object path so the uniqueness of each attribute will be clear.
- The User Definition Administration and User Preference Administration functions have been moved from Integrator into the base Power-Link product.
- The Auto-content security function has been moved from Enterprise Integrator into the base Power-Link product. The ability to specify auto-content security for multi-key objects has also been added.
- Users now have the ability to view Transaction Status for other users, instead of only being able to see Transaction Status for themselves.
- Power-Link has been upgraded to now use Sun’s 1.6 JDK instead of the 1.4.2 JDK.

Integration

Cameleon

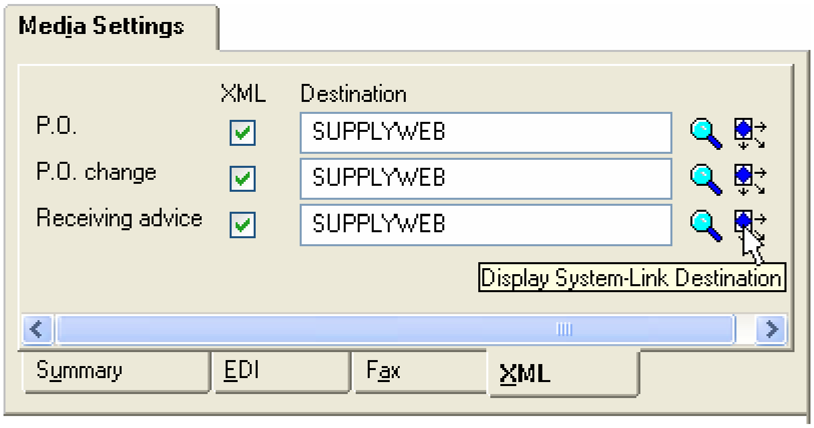
The engineering data update from the configurator has been de-coupled from the line item entry. This means that the CSM user can proceed with the next line item without waiting for the upload of configured engineering data from the previous line item.



- Configured order comments are now saved as a Customer Order comments in CSM.
- Configured item descriptions are now saved in CSM as line item comments and in EPDM as item process descriptions.
- A configuration setting has been added to allow automatic generation of manufacturing orders from configured customer order lines after the engineering data is uploaded.
- The interface now includes milestone operations.

SRM SupplyWEB

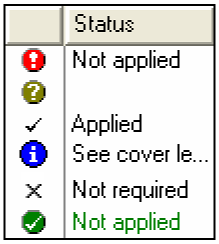
Using System-Link, XA now integrates with Infor SRM SupplyWEB®.



- “Printing” a PO now includes the option to transmit directly to SupplyWEB via the Infor Enterprise Service Bus (ESB).
- After negotiating with buyers the vendors acknowledge the PO’s. Changes, if any, are applied to open PO’s and the Vendor Accept flag is set.
- Advance Ship Notices (ASNs) can be received into XA, providing visibility to what is arriving at the receiving dock. Shipments can then be received via ASN or PO.
- A receiving advice can be sent to SupplyWEB documenting quantities good and scrapped.

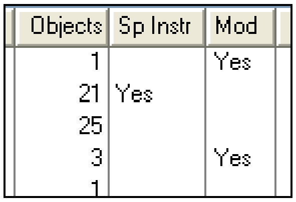
Environment Management

Product Updates



IT professionals responsible for applying regular fixes to Infor ERP XA environments will welcome the new Product Updates feature. When a new fix comes out, the system tells you whether you can apply it safely. If not, it tells which prerequisites you must apply beforehand. It even looks for prerequisites to prerequisites, and shows you the entire flattened list at one time. It tells you which objects in the fix (or a prerequisite) you have modified. It tells you which of your objects reference Infor objects in the fix. You can use this tool to analyze and apply PTFs, PCMs, and even migrations from R6 to R7. See additional documentation in PTF SH82085.

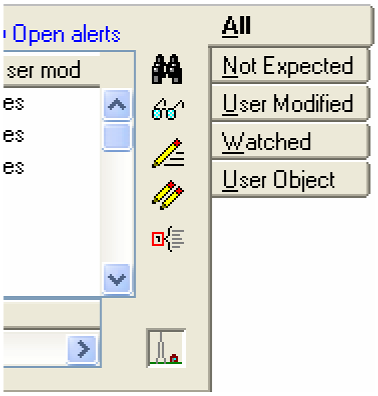
The Product Update feature starts with downloading information about updates (PTFs and PCMs) from Infor Global Support. It's good to do this on a regular basis, but how often is completely up to you. The downloaded information is available to all environments on the system.



Some updates have special apply instructions, such as manual or post-apply steps. These updates are identified so you can download the cover letters. This helps you avoid accidentally missing one or, alternatively, downloading all of them to avoid missing one.

Once the update information is downloaded, it can be analyzed for a particular environment. You can readily see which updates involve a lot of objects and/or objects you have modified. One glance lets you get an idea of which updates will be quick and easy, and which ones will probably take some time.

You can also see which updates have been partially applied. For example, the system may have bypassed a modified object to avoid overwriting it. The system distinguishes between partially applied updates that you said are OK and those that still need to be analyzed.



The analysis scrubs every update in the database and issues alerts for certain conditions. For example, an alert is issued when a PTF or PCM contains an object that is…

- ○ referenced by your program, logical file and/or query
- ○ found in an unexpected library
- ○ modified
- ○ one you want to watch, such as a file that is used by a non-System i process.

After analyzing an update, the execution is the same as it is today, i.e., you apply the PTF and then apply your custom code modifications.

When you re-download update information, your analysis is preserved.
If a particular PTF has been updated, it will be flagged in the next analysis.

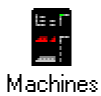
Link Manager

Link Manager allows you to manage the machines, processes, users and environments that constitute the Infor ERP XA host system.

Better stability, more uptime

The server processes are now more insulated from the network, allowing users to continue working despite network glitches that typically occur throughout the day. When issues do occur, advanced diagnostics help IT professionals identify and resolve them quickly. Log files can be collected easily and sent to Support, minimizing turnaround time. Processes can be set to start automatically with the start of an environment.

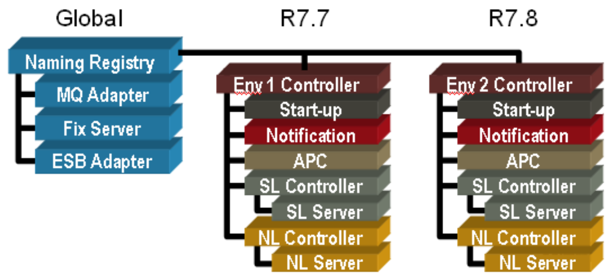
Managing machines



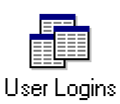
An auxiliary machine can be defined as a Windows Service, so it starts automatically when Windows starts. In R7.7 auxiliary machines were available as a pool of resources used by the host for load balancing. In R7.8 you can exclude an auxiliary machine from the load balancing pool in order to dedicate it to one or more specific processes. You may want to ensure that Net-Link, for example, will always have sufficient resources to provide good performance.

Managing environments

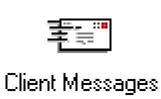
Environmental dependencies have been eliminated, allowing different environments to be at different fix levels. The global environment can be restarted with minimal impact on production environments. Fixes and upgrades can be done by environment, simplifying fix application. Risk to the company is reduced by isolating test and production environments.



Managing users

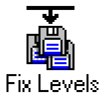


Often you need to know who is using what…and sometimes when they used it. Link Manager now shows you who is signed on: which environment, which servers, using which workstations. The User Logins object keeps a record of who logged to what and when, and even keeps a log of their activity if you want it to. View, subset and sort functions make it easy to manage this potentially large database of activity. You can set the system to automatically purge records after a specified number of days.



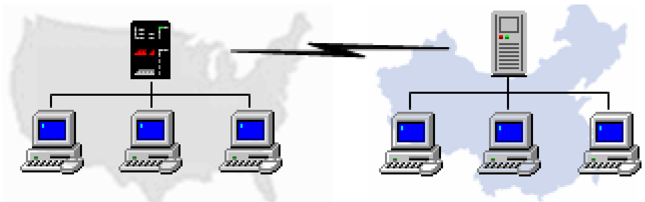
Messages can be sent to users by ID, environment, and/or type of user (Power-Link or Net-Link). Active users will see messages immediately as they are issued. Inactive users will see messages when they sign on. Messages can be set to display once or at every log-in. The system will tell you which users have received a message (although you still can't make them read it).

Applying fixes



The Fix Levels object shows you the fixes available to be installed. You can see the APAR's, enhancements and incidents for each fix level. This helps you determine which ones, if any, need to be applied.

Applying fixes to an environment has been made more efficient with the use of a new Fix Server process running on one or more auxiliary machines. The Fix Server process synchronizes with the XA code on the host machine, and then



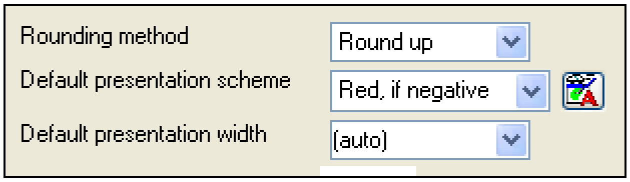
synchronizes with the local user workstations. Fix servers can be used for remote users in the same country or on the other side of the world. Because the download is done once per fix machine, rather than once per remote user, the savings in bandwidth and reduction in sign-on time can be dramatic.

In addition, the download to user workstations can be done in the background. The system will tell you which users have completed the download, so you can choose when to activate it. Activation causes the new code to be used at the next sign-on. The entire process is simple for IT and invisible to the users.

Integrator

New defaults for attributes

You can now control the rounding method to be used for a numeric attribute when the user chooses to suppress decimal values. Up to now the rounding method has always been *Truncate.* However, now you can choose *Half adjust,* which is the traditional rounding method of increasing to the next digit at 5 or higher. A third option is *Round up,* which increases to the next digit at 1 or higher (the opposite of *Truncate*, in a way).



Two new default values have been added to Integrator. One is the default presentation scheme, which lets you define how the attribute is displayed. In the example we are defining a numeric field to show in red if the value is less than zero. Whatever you define in the Integrator will be the default for all applicable UI definitions such as views.

Another new default is presentation width. This is handy for Net-Link, which uses this attribute to control column width. Prior to this enhancement the default was based on the length of the attribute. When the actual data is substantially less, attribute length leads to wasted space. Figuring out the best width and setting the default once will make it easier to have space-efficient Net-Link windows.

Exporting objects

The Business Object import/export function now includes user code within user exit programs. Upon import the system will assign the same object class (EXTnnnn) to the object in the imported environment that it had when it was exported. If the same object class is not available the system will inset the user code into the user exit programs for the new object class. User exits no longer need to be manually moved between environments.

Client-Link program action

Program actions allow the user to invoke other programs on the user's workstation from an XA object. Client-Link allows XA functions to be invoked from other programs on the user's workstation. Now the two can be linked, which means that an option can be added to an XA object to call another XA object.

For example, say you want to create a PO Requisition from an Item Revision. The IT staff could provide this by adding a program action to the Item Revision object which calls the PO Requisition create prompt and fills in the item number. The end user would click the option and then fill in the additional information such as quantity and date to create the Requisition. .

Other Integrator Enhancements

- A Business Object's transactions can now be extended.
- The Edit Buffer user exit has been changed to handle edits for non-standard transactions.
- User programs and URL actions now support "(current system)" and "(current language)" as special values that can be passed as parameters.
- The Publish and Subscribe function now supports Notification subsets that include all fields available on regular subsets instead of just fields on the object itself.
- When new XA applications are added, users can now re-synchronize the Integrator database in a single step, compared to the multiple manual steps required in the past.

System-Link

Enhancements to System-Link include:

- System-Link now supports calls to host jobs and host reports. This opens up those jobs and reports to being scheduled using an external job Scheduler to send these requests. This addition allows users to generate reports and process jobs from System-Link commands.
- System-Link also supports the ability to define transaction groups (StartTransactionGroup), which ensures that either all or none of the transactions in a group are processed. This maintains data integrity for multi-record updates, such as journal entries and bills of material.
- System-Link requests have been enhanced to provide more capabilities:
  - System-Link has added support for conditional blocks (IfCondition and EndIfCondition) inside requests.
  - The QueryList and QueryRelationship functions now have the ability to query related text. This means that comments that have been added using Integrator are now accessible via System-Link.
- Support for Greenwich Mean Time (GMT) has been added. This is helps keep data in proper sequence when passing between systems in different time zones.
- The Publish and Subscribe function now includes an option to add an object key section in the System-Link QueryObject response when a deletion occurs.
- Infor's Adapter to the IBM's WebSphere MQ product now keeps requests on queue until the System-Link Server process is active.
- System-Link now handles requests for deprecated objects. Return messages inform you that these objects will be removed in future releases and direct you to their replacements.

Performance Enhancements

System-wide and application-specific performance enhancements have been added.

- The performance of Power-Link has been improved with extra local caching of customization data. This improvement allows caching across sessions of changes made to Custom Definition Server data, code files, and user data (such as screen sizes and column widths). This improvement is particularly noticeable when accessing Power-Link remotely.
- The framework now takes advantage of the System i SQL query engine (SQE). This new technology has resulted in significantly improved performance system-wide. According to IBM's Redbook a typical OLTP query, which is what most of XA uses, runs 88% faster. A typical OLAP query, which is used by decision support, runs 166% faster. To take advantage of this technology, all XA objects now reference views, rather than logical files.
- Customer Order line item entry has been streamlined.
- The performance of displaying IFM transactions is improved.
- Inventory Transaction History updates have been removed from locked units of work.
- Multiple members have been removed from history files. SQL runs across platforms and does not recognize multiple members, which are unique to the System i. When SQL tries to access a multiple member file, it creates a temporary logical which delays response time. By removing members, this problem is avoided and performance is improved.
- Decimal precision for amount fields has been calculated based on currency and stored in the database, to improve runtime performance.
- The Custom Definition Server has been embedded in Power-Link workstations.
- Objects are cached in Power-Link workstation after sign-off. This makes sign-on much quicker.
- System-Link options for only posting, or only validating, a request have been added. In certain applications this improves performance by eliminating redundant processing.
- Credit totals are updated in real-time instead of through a scheduled batch process.
- SQL Query Engine (SQE) support allows the display of information more quickly.
- Database changes allow transactions and transaction lines to display more quickly in lists.
- The performance of Net-Link has been improved by reducing the amount of data that is passed to the Internet browser.
- Initial file load performance has been improved:
    - The Site for Item Revision and Facility can be selected so that data is only downloaded for the selected site.
    - Item Revision downloads can be limited to APC items and their components.

Translation

Multinational companies require the ability to support several languages in a single XA environment.

The problem

Prior to this enhancement, they did this by installing additional languages in overlay mode, using a multi-step TOT installation process that copied a subset of database files from AMFLIB to the overlay library, applying translation to those files, and then adding the translated objects (DSPF, PRTF, MSGF, PNLGRP). To access the environment in multiple languages, they then had to create multiple Environment Entries (MMLIST records) for a single environment, one per language.

This approach had three drawbacks:

1. Some of the database files in the overlay library were user-maintainable. The database files had to be maintained multiple times, once for the base environment and once for each language overlay. For some companies, the burden of doing this maintenance multiple times made this approach impractical. Examples include security maintenance and menu maintenance.
2. To maintain database integrity, some files could not be copied to the language overlay library, which meant that some functions could not be translated. Examples include user exits and their status, and U-jobs and their status.
3. Environment maintenance was limited. Install/Tailor could not be run on the overlay environments, and if additional applications were installed in the base environment, the overlay libraries had to be rebuilt. Also, the fix apply process did not recognize the copied files. Thus, applying a PCM or PTF might mean starting over and setting up the multiple languages all over again.

The solution

This enhancement adds language to the user profile and removes the requirement for both multiple MMLIST records and copies of database files. As a result, users can sign on the normal way and automatically see the language assigned to them. In addition, host reports will print in the user’s language rather than the base language of the environment. The IT staff can run Install/Tailor on the environment, regardless of the active language, install additional applications, and apply fixes without disruption to the translation overlay libraries. Maintenance need only be done once, and will automatically be reflected in all translations.