

Infor System21 Generic Function

Product Guide

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About this guide

The purpose of this document is to describe the functions that can be used within the Generic Function Module.

Intended audience

The guide is intended for any users of the L1 Generic Function business module.

Related documents

You can find the documents in the product documentation section of the Infor Xtreme Support portal, as described in the "Contacting Infor" section.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal at www.infor.com/inforxtreme.

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Introduction to Generic Systems File Maintenance

This offers the ability to define an item once and then share its definition with other companies.

Two types of organisational model are supported for the replication of item definitions.

Centralised type organisations

These typically have a unified coding system, where the responsibility for the definition of an item and the control over which other companies within the organisation receive its definition, are both handled centrally.

Once finalised, the definition of an item is pushed into the other companies that require it.

Each company's definition of an item is updated as and when changes are made to the central definition of the item.

Decentralised organisations,

In these, item definitions are passed between companies on a publication and subscription basis.

Once finalised, the definition of an item can be published to a list of other companies within the organisation.

Each company that receives notification of a published item definition has control over the decision as to whether to subscribe to that item's definition or not and whether they wish to review their local definition upon importing the published definition.

- It is possible to replicate all of the following information between companies defined in the same System21 environment:
- Item Master Definition
- Item Group Valuation Criteria
- Lot Header Parameters
- World Trade Item Definition (including country specific tax codes)
- Item Language Descriptions
- Item Text
- Purchase Item Text
- Item Search Keys

- Purchase Item Scan Arguments
- Item Search Characteristics
- Alternative Item Details
- Item Transaction Control Details
- Item Supersession Details
- Item Packaging Details
- Kit List Details
- Item Alias Details
- Item Stockroom Profiles
- Item Supplier Profiles
- Item Container Profiles
- Order Capture Item Definitions
- Item ASN Details

Relationships between companies are established to define the way in which item definitions are to be passed between them. Each relationship defines:

- Whether a company can choose to accept another company's definition of an item or is forced to accept it
- Whether a company can pass on item definitions it has received from other companies
- Whether stockroom balances are automatically generated upon initial import of an item definition into a company
- Which supplier code represents the company that owns an item within each partner company
- Which customer code represents the partner company within the company deemed to owner of an item

Attribute profiles define which of the attributes of an item are to have their values synchronised across all companies. Multiple attribute profiles can be defined to allow different types of item (e.g. finished goods and raw materials) to have a different set of attributes requiring synchronisation.

A catalogue of item definitions is maintained. Each catalogue entry identifies the company responsible for the definition of the global attributes of an item and the attribute profile applicable to that item. Whenever a new item is defined (via either Linked Item Maintenance or Copy Based on Item Creation) the user has the option to become the owner of its definition and thus create an entry on the item catalogue.

Once an owner for an item is established and the owner is happy that the item's definition is complete, he or she chooses to publish the definition to the companies that have a relationship in place with the owner.

The definition of the item in each partner company can then be created or updated from the published definition. The way in which this update occurs is dependant upon the relationship in place between the companies involved.

Where a relationship indicates that a partner company is forced to accept an item's definition from the owner, the owner invokes the Global Item Update function, which processes all of that

company's published definitions and synchronises the definitions of that item in each relevant partner company. An audit list of the changes made in each partner company is produced.

Where a relationship indicates that a partner company decides whether it wishes to subscribe to another company's published item definition, Linked Item Maintenance (within the partner company) is used to process any pending transfer requests into that company. The user can review a list of items published by other companies and decide, on an item-by-item basis, whether they wish to subscribe to each definition. By choosing to subscribe to an item's definition, the definition of that item is synchronised with the owning company.

Introduction to Subsystem Processing

Many of the System21 <u>applications</u> utilise background tasks to process their transactions, those tasks running in a separate subsystem.

The maintenance and control of those subsystems and the control of the application background tasks is managed via these tasks on the Generic Systems Subsystem Processing menu (L1S).

This centralisation makes it easy to manage the status of these subsystems, and also reduces the load placed on <u>Machine Manager</u> Day Start and Day End, as only two tasks are required to start the subsystems and the background tasks that run within them.

There are three sets of tasks:

Data Creation

This is the creation and maintenance of the data required to establish and maintain the subsystem definitions, including the creation of the subsystems themselves.

Note: For information and advice regarding the initial set up of System21 subsystems refer to the System21 Installation and Setup Guide.

Subsystem Control

This is the control of the starting and stopping of the available subsystems for the current environment.

Job Control

This is the control of the starting and stopping of the background jobs that run in the available subsystems for the current environment

Job Multi-Streaming

Multiple instances of background jobs can be active.

This allows a single background task to be active for cross-company support or for one per company as required.

Configuration: Task Maintenance

An identifier to denote that this task runs at the cross-company level or runs at company level is provided; also to indicate whether it runs as a single instance or multiple instances.

Return codes on the background processing <u>application</u> tasks are used to denote whether a task supports these capabilities as follows:

- BJ Batch cross-company single instance
- B0 Batch cross-company single instance
- B1 Batch cross-company multiple instances
- B2 Batch multi-company-- single instance (processor for each company)
- B3 Batch multi-company multiple instances (processor for each company)

For System Manager, tasks within the range 0000-0099 and 9900-9999 are defined as cross-company; tasks in the range 0100-9899 are defined as single company.

For those processors flexible enough to be capable of being switched between single company and multi-company or single instance and multiple instances, two tasks are delivered, so that the user can enable or disable the task without changing the task profile itself.

Configuration: Single Company Task Control

It is possible that within a single environment not all companies will be processed, therefore the ability to configure the background tasks within each company is provided.

To keep the flexibility of the current configuration, the default setting is to have one instance per company.

A maintenance function option that defines which companies are to be supported within the environment is used to configure the Start/Stop Background Jobs task. A separate instance of the <u>application</u> job is then started as appropriate.

All jobs are visible through the System Manager Job Enquiries, with a specific option to view the background subsystem jobs directly from the Subsystem control functions.

Introduction to Audit File Reconciliation

The major files in System21 have an equivalent audit file that represents a trail of changes made, recording **by whom** and **when** the change was made.

The majority of these audit files also record **what** was changed by means of before and after record images.

Whenever the need arises, these audit files are available for interrogation or query either to investigate a particular change or to verify the integrity of the master file data.

FDA Compliance

An example of its use is a situation where the integrity of data needs to be ensured when a business wants to demonstrate compliance to US Food and Drugs Administration regulations, particularly Title 21 Code of Federal Regulations (21 CFR part 11) that deals with electronic records.

For FDA compliance, the System21 user has to validate the accuracy, reliability, and consistency of the software records. That validation could take a number of forms, but it might be to check the physical data records. This reconciliation facility can be used for the validation of these all important audit files.

Note: A separate document, FDA Compliance Guidelines, is available, discussing the relevant aspects of System21 in relation to the FDA requirements, and can be used as a guide when constructing a compliant business process.

Skeleton Audit File Reconciliation

A skeleton Audit File Reconciliation program is available, which verifies the most common of the auditing techniques: those that are labelled as Audit Type 1a in the tables that follow.

It performs three key functions:

- It checks that all the fields on the master file are also on the audit file. This verifies all fields are being audited.
- Following through the sequence of audited changes, it checks that the before image on one audit correctly equates to the after image of the previous change. This ensures no change was made without being audited.
- Finally, it checks that the last audit record image correctly represents the current master record. This shows the audit trail is up to date.

Global Item Attribute [1/L1M]

This maintenance task is used to establish the profile(s) of which attributes of an item are to be considered *global*: that is, those whose value should be the same in all companies in which a definition of an item can be found.

Any number of attribute profiles can be established for an environment. A unique ten-character item attribute profile code identifies each attribute profile.

An item attribute can be flagged as:

- Global (fixed)
- Global
- Local
- Local (with default)

A **global** attribute's value can only be maintained in the company deemed to be the owner of the item. Should the value of a global attribute be maintained in any other company, its value will be automatically reset to the value defined for that attribute in the owning company.

A **global (fixed)** attribute is the same as a global attribute, except that it will not be possible to change such an attribute to local or local (with default).

Examples of such attributes are:

- Item Description
- Purchase Unit of Measure
- Stock Unit of Measure
- Issue Unit of Measure
- Stock to Purchase Conversion Factor
- Issue to Stock Conversion Factor

A **local** attribute's value is available for maintenance in all companies in which a definition of the item resides. Upon initial creation of an item, in a partner company, from its published definition, such an attribute will take a default value as per the normal rules for determining an item attribute's default value.

A **local (with default)** attribute's value is also available for maintenance in all companies in which a definition of the item resides. However, upon initial creation of an item, in a partner company, from its published definition, such an attribute will take its default value from the publishing company.

Note: An attribute of an item might be a single field (such as item type, item class etc.) or a complete set of information associated with an item (such as item text, item supersession details etc.)

Any number of different item attribute profiles can be established.

This allows the definition of the global attributes of items to differ by item attribute profile code. For example, the global definition of a finished goods item might require different attributes of the item to be synchronised across companies from that of a raw material type item.

Global Item Attributes Maintenance Selection Window

To display this window, select the Global Item Attribute task.

Fields

Item Attribute Profile Code

Enter a code of up to ten characters, which can be used to assign different item attribute profiles to different types of item if required, for example Finished Goods and Raw Materials.

Alternatively, use the prompt facility to select from the IAPC Item Attribute Profile Code pop-up.

Valid values are defined on the Inventory Descriptions file (parameter type IAPC).

A value of *BLANKS is permitted.

Functions

Maintain Profiles (F10)

Use this to display the Item Attribute Profile Maintenance pop-up, which allows the definition of permissible attribute profile codes.

Press Enter to display the Global Item Attributes Maintenance Details window.

Item Attribute Profile Maintenance Pop-up

To display this pop-up, select **Maintain Profiles (F10)** on the Global Item Attributes Maintenance window.

Use this pop-up to define a new item attribute profile code or amend or delete an existing one.

Fields

Profile (Untitled)

To add a new item attribute profile code, enter a code of up to ten characters in this field.

Description (Untitled)

Enter a description of up to 30 alphanumeric characters to be associated with the item attribute profile code.

Options

Amend

Use this to amend the description associated with that code

The description is automatically placed at the bottom of the pop-up for amendment.

Delete

Use this to delete the code.

Note: Confirmation of the deletion request is required before the code is removed from the database.

Note: The Item Attribute Profile Deletion pop-up will be displayed and you need to select **Confirm Deletion (F11)**.

Enter a new item attribute profile code and description or amend an existing description and then press Enter to update the window with the new details. Select **Previous (F12)** to return to the Global Item Attributes Maintenance Selection window.

Global Items Attributes Maintenance Details Window

To display this window, enter or select a valid item attribute profile code and then press Enter on the Global Item Attributes Maintenance Selection window.

Fields

Select (Sel)

Select one of the following against the listed attributes:

Global - To denote a global attribute

Only the company deemed to be the owner of an item's definition is permitted to change the value of a global attribute.

Note: Both Item Maintenance and World Trade Item Maintenance permit the user to change the value of a global attribute within a company that is not the owner of the item. Should the value of such an attribute be changed, the attribute value will be automatically reset to the value assigned by the item's owner.

Global (fixed) - To denote a global (fixed) attribute

An attribute is denoted as global (fixed) where it is imperative the certain attributes of an item are synchronised across all companies to ensure the correct operation of the system (for example, item code, units of measure, conversion factors etc.).

The item attributes to which this applies are assigned this state upon shipment and it will not be possible for the user to change their assigned value.

Local (with default) - To denote a local (with default) attribute

Each company is permitted to change the value of such an attribute without affecting its value in any other company.

The default value for a local (with default) attribute is taken from the company deemed to be the owner of an item.

Blank - To denote a local attribute

Each company is permitted to change the value of such an attribute without affecting its value in any other company. The default value for a local attribute is derived from the rules applied within the Item Maintenance task.

Functions

Maintain Attribute Descriptions (F13)

Use this to toggle the Item Attribute Field between being input capable and input inhibited. This enables particular organisations to tailor the descriptions to match the usage within their own organisation.

Select **Update** (F8) to validate the entries and update the Attributes Definitions file with the changes.

Maintain Descriptions [2/L1M]

This option is used to define parameter values for cross application functions. The software uses parameter files for a number of reasons; for example, at data entry time it saves entry of long repetitive data. Once set up and checked, parameter files help to make sure that data input is both accurate and acceptable to the software.

Use this task to enter and use parameters; codes that relate to a single function are grouped together. The identifier for a group of codes is called the major type. The members of any group are the descriptions codes.

Descriptions File Maintenance Selection Window

Use this window to add or maintain definitions of major types.

Fields

Major Type

Enter a major type to add or maintain.

Description Code

You can optionally enter a description code to add or maintain.

Functions

Description Code Details (F15)

If you have entered only a major type, use this to maintain description code details for that type. The Descriptions File Maintenance Detail window is displayed.

If you have entered a major type and description code, use this to maintain description code details for that description code. The Descriptions File Maintenance Code Details window is displayed.

Note: Use Page Up and Page Down to display subsequent windows when appropriate.

To display details about a specific major type, enter the major type and then press **Enter**.

Descriptions File Maintenance Window

To display this window, enter a major type and press **Enter** on the Descriptions File Maintenance Selection window.

Fields

Major Type

This field displays your selected major type.

Description

You can enter or amend the description of the major type.

Description Limit

Enter up to seven numeric characters. This field is for information purposes only within Inventory Management.

P/V

Select one of the following:

Not applicable - If the rate does not apply

P - Where the rate is a percentage basis

V - Where the rate is a value basis

Note: You can define major types to act as search family characteristic codes, which are used in search family codes/certificates of conformance. If you want to use a major type in this way, enter V in the P/V field.

The description codes set up for each major type are the permitted values defined to the characteristic.

For example, you could have a major type (characteristic code) of COLR and descriptions (characteristic values) of Red, Pink and Blue.

Functions

Description Code Details (F15)

Use this to display the Descriptions File Maintenance Detail window.

Press **Enter** to update the major type details.

Descriptions File Maintenance Detail Window

To display this window enter a major type and select **Description Code Details (F15)** on the Descriptions File Maintenance Selection window. Alternatively, select **Description Code Details (F15)** on the Descriptions File Maintenance window.

Use this window to enter the details for the selected major type.

Fields

Description Code

Enter a minor description code to add it to the list.

Options

Select

Use this to view the selected minor type code. This displays the Inventory Descriptions File Maintenance Selected Details window for your selected minor type code.

Press **Enter** to update the minor type.

Descriptions File Maintenance Code Details Window

To display this window, enter a valid major type and description code and then select **Description Code Details (F15)** on the Descriptions File Maintenance Selection window.

Use this window to enter or amend details for the selected description code. Any existing details are displayed.

Note: The window is the same as the Descriptions File Maintenance Selected Details window, except that it does not display the list of codes for the major type.

Fields

Description

Enter up to 30 alphanumeric characters to describe the code.

Note: The value entered in the Description Limit field is the recommended length for the description.

Parameter Limit

Enter up to two numeric characters to specify the length of the description associated with this description code, up to a maximum value of 30.

Rate

Enter a rate using up to five numeric characters, including two decimals. Use the rate for certain description types, such as extra charges, to define a rate associated with the major type. You define the nature of the rate by the percentage/value flag specified for this major type.

P/V

Select one of the following:

Not applicable - If the rate does not apply

P - Where the rate is percentage based

V - Where the rate is value based

Note: If you are defining a minor type for use in something such as a Certificate of Conformance code, enter **V** in this field.

VAT Code

Enter the VAT code, using one character. You can use this to define VAT codes if necessary.

Descriptions File Maintenance Selected Details Window

Use this window to enter or amend details for the selected minor type. Any existing details are displayed.

Note: The window is the same as the Descriptions File Maintenance Detail window, except that it also displays the Description, Parameter Limit, Rate, P/V and VAT code fields that relate to your selected minor type code.

Fields

Description

Enter up to 30 alphanumeric characters to describe the minor type.

Note: The value entered in the Description Limit field is the recommended length for the description.

Parameter Limit

Enter up to two numeric characters to specify the length of the description associated with this minor type up to a maximum value of 30.

Rate

Enter a rate using up to five numeric characters, including two decimals. Use the rate for certain description types, such as extra charges, to define a rate associated with the major type. You define the nature of the rate by the percentage/value flag specified for this major type.

P/V

Select one of the following:

Not applicable - If the rate does not apply

- P Where the rate is percentage based
- V Where the rate is value based

Note: If you are defining a minor type for use in something such as a Certificate of Conformance code, enter **V** in this field.

VAT Code

Enter the VAT code, using one character. You can use this to define VAT codes associated with extra charges.

Functions

Delete (F11)

Use this to delete the description code. No confirmation is required.

Press **Enter** to update the minor type details and re-display the Inventory Descriptions File Maintenance Detail window.

Descriptions File Major Type Codes

EADD - Extended Attribute Data Description Type

This parameter is used to define the types of information that can be held by any additional attribute. This is system-defined and the following types are valid:

1 – Specifications

Notes:

- Use this type for any additional numeric attributes to be defined against an entity.
- This attribute type will allow up to 7 digits and 4 decimal places to be entered
- Up to 10 additional attributes of this type can be defined for each entity
- 2 Parameter Search Keys

Notes:

- Use this for any additional attribute to be set against an entity, where the value can be optionally defined as a code against a specific parameter type within the Descriptions File.
- A validation program can also be optionally defined against any attribute of this type
- This attribute type will allow up 10 characters to be entered.
- Up to 20 additional attributes of this type can be defined for each entity
- 3 Flags

Notes:

- Use this for any additional attribute to be set against an entity, where the value requires a single character flag.
- The flag can be optionally defined as a code against a specific parameter type within the Descriptions File.
- A validation program can be optionally defined against any additional attribute of this type
- Up to 10 additional attributes of this type can be defined for each entity
- 4 Dates

Notes:

- Use this for any additional date type attributes to be defined against an entity.
- A validation program can be optionally defined against any additional attribute of this type
- Up to 5 additional attributes of this type can be defined for each entity
- 5 Text Descriptions

Notes:

- Use this for any additional text/remarks type attributes to be defined against an entity.
- A validation program can be optionally defined against any additional attribute of this type
- This attribute type will allow up 50 characters to be entered.
- Up to 10 additional attributes of this type can be defined for each entity

EADT – Extended Attribute Data Type

This parameter is used to register the System21 and user-defined entities or data types for which extended attributes are to be defined.

The following is a list of System21 Data Types supported:

- 01 Customer
- 02 Item or Style
- 03 Supplier
- 04 SKU

Additional System21 data types may be added to the list in the future and numeric codes for Data Types are therefore reserved for this purpose.

When adding user-defined data types, it is recommended that only alpha characters are used as codes to avoid overlaps with System21 entities.

Enter a 1 in the Limit field if you wish to turn auditing on against an Extended Attributes Data Type.

Note: Audit data can be found in file L1P31A

Usage Maintenance [3/L1M]

Usage Maintenance Selection Window

To display this window, select the Usage Maintenance task.

Use this window to create and maintain usage types

Note: If the GL parameter for <u>Tax Engine</u> OR the GL Parameter for NF's are not in use then a message will be shown.

Fields

Usage Type

Enter a usage type.

Alternatively, use the prompt facility to select from the CFOP Fiscal Code Pop-up.

Usage Type Pop-up

To display this window, prompt on the usage type on the Usage Maintenance selection window.

The usage code types available are as follows:

- 01 Sale OC, AO, OE,
- 02 Purchase Purchase Order Entry
- 03 Purchase Reject
- 04 Return Customer Return Entry
- 05 Return Reject
- 06 Transfer out
- 07 Transfer in
- 08 Job Inbound Workshop (NB. Workshop) entry,
- 09 Job Outbound -
- 10 Service Contract EQ Contract invoices
- 11 Subcontract Issue
- 12 Subcontract Issue Reversal
- 13 Subcontract Receipt
- 14 Subcontract Receipt Reversal
- 50 Sale Triangulation

Usage Maintenance Detail Window

To display this window, enter a usage type on the Usage Maintenance Selection Window or select from the list in the Usage Type Pop-up

Use this window to create or maintain S21 fiscal codes.

Fields

S21 Fiscal

This is the usage code that you choose to make the Fiscal codes you are identifying for the <u>tax</u> <u>engine</u> more understandable to you. They can be any value.

Caution: Multiple S21 fiscal codes can be set up with the same TE Fiscal – this is so the descriptions can be appropriate to each company's users.

Description

Enter a description which further describes the S21 fiscal code.

TE Fiscal

This is the Fiscal Document code that is transmitted to the <u>Tax Engine</u>/ NF Engine for use on the invoice document.

If a sale is being conducted to a delivery address that is not a 000 address this fiscal will be sent to the engine with the despatch details when the invoice is being created.

The tax calculations within order entry use this fiscal document code to show the taxes calculated.

Caution: It is important that you make sure you enter these details correctly. If the wrong information is held here then the taxes created will be wrong.

TE Shipment Fiscal

This is the Fiscal Document code that is transmitted to the <u>Tax Engine</u>/ NF Engine for goods movements only in case of Triangulation.

On a sale if a delivery address other than 000 is used the TE Shipment Fiscal is used for the goods despatch against the non 000 address and the TE Fiscal is used for the invoice against the 000 address.

Caution: It is important that you make sure you enter these details correctly. If the wrong information is held here then the taxes created will be wrong.

Maintain Extended Attribute Data Descriptions [10/L1M]

Maintenance Detail Screen

To display this window enter a valid data type on the Extended Attribute Data Descriptions - Maintenance Prompt Screen

Use this screen to define or amend data description details. Only lines with data against them and the active flag set will be displayed to the user for data entry.

You may add new elements for input at any given point, but only records amended *after* the activation of the new element may have details entered against them.

CAUTION You should be aware of the impact of activating and de-activating an element after the initial activation of the Data Type. A blank value may mean that the element was not been amended after it became active, rather than blank meaning no value. For this reason we would recommend inputting the value *NONE rather than just leaving a blank value against the element.

All or selected descriptions are displayed

Fields

Description

Enter the literal that you wish to appear on the screen for the user to input data against.

Active?

Use this to indicate whether the description is active and should be displayed for the user to input data against.

Search Type?

Optionally, enter the Generic Function Parameter value that will be used to validate the data entered. The Prompt facility can be used to assist in selecting this Parameter.

Note: This function is only available on the following Description types:

2 - Parameter Search Keys

3 - Flags

Validation Program ID

Optionally, enter the Program that should be called to validate the data entered.

This option allows you to write your own program which will be invoked when the extended attribute data is entered or changed.

Select **Update (F8)** to update the Description details

Maintain Extended Attributes Data [11/L1M]

Use this option to input or change the data held against Extended Attribute Data Types for userdefined data. Standard product data types are accessible from within the menu option they pertain tow. For example, Customer extended data is accessed via a function key from Customer Account Maintenance [1/ARM].

Extended Attribute Data Prompt Screen

To select this window select the Extended Attribute Data task.

Use this screen to create or amend data for a Data Type.

Note: This screen is only displayed if the task is invoked from a menu option. If the task is invoked via a function key from another task then this screen is by-passed because the key details are already known.

Fields

Data Type

Enter a data type. Alternately use the Prompt facility to view existing data types

Note: Numeric codes for Data Types are reserved for System21 entities and it is recommended that user-defined ones only use alpha characters.

Data Key

Enter the key details of the Extended Attribute Record that needs creating or amending. Alternately use the prompt facility to select existing data.

For each Data Type, the format used for the Data keys are detailed below:

```
01 - Customer
    Position 1 to 8 – Customer code
    Position 9 to 11 – Delivery Sequence number
02 - Item or Style
    Position 1 to 15 – for Item code
or
    Position 1 to 9 – for Style code
03 – Supplier
    Position 1 to 8 - Supplier code
```

Position 9 to 11 - Delivery sequence number

04 - SKU

Position 1 to 9 – Style

Position 10 to 12 - Colour code

Position 13 to 15 - Size/Fit code

Press Enter to display the next window

Select Extended Attribute Data Pop-up

To display this pop-up, use the prompt facility on the Data Key field on the Extended Attribute Data window

Extended Attribute Data Key Selection

Use this window to find the data that you wish to amend.

Fields

Position To

Use this field to enter the first few characters of the data key to position the first data key that matches the entered criteria.

S (Select)

Select the details you wish to amend.

Press Enter to continue to the Maintenance window

Category Selection Pop-up

To display this window a Category Parameter Type must have been defined against the Data Type. If no category has been defined then this window is by-passed.

Use this window to select a sub-category for the Data Type.

<u>Fields</u>

Data Category

Enter the parameter data as defined in the **Descriptions** (2/L1M) task or leave blank to ignore the defined category where is does not apply. Alternately, use the prompt facility to display all defined parameters for the category.

Press Enter to continue to the Extended Attribute Data Maintenance Window

Extended Attribute Data Maintenance Window

To display this window, either Enter data type details on the Extended Attribute Data Prompt or use the appropriate function key from within another maintenance window from which Extended Attribute details have been enabled.

Use this screen to create or amend extended attribute data.

Note: If another user is currently maintaining the record selected, then a message stating that the record is currently in use will be displayed.

Note: This screen can only be seen in Display only mode when invoked from within other Enquiry tasks.

Each line on this screen has been defined via the Extended Attribute Data Descriptions task (10/L1M). The data entered here is user-defined and may be validated against a parameter or validation program if one has been defined against the data element.

All activated elements with a non-blank description are displayed.

Note: A blank value may mean that the element was not been amended after it became active, rather than blank meaning no value. For this reason we would recommend inputting the value *NONE rather than just leaving a blank value against the element.

Functions

Update (F8)

Use this to update the details entered on the screen

Map Addresses [20/L1M]

Use this option to identify which parts of the System21 free format addresses equates to the fixed format address structure, to be used when sending and receiving data from external systems.

Map Addresses Maintenance Window

To display this window, select the Map Addresses task.

Use this window to create or maintain Address types.

Fields

Address Type

Enter an address type. Alternately, use the Prompt facility to view existing Address Types from the L1 Description ADDF.

Press Enter to continue to the Map Addresses Details Window.

Map Addresses Details Window

To display this window, enter an address type on the Map Addresses Maintenance Window.

This window allows you to select which elements of the address are to be mapped from a list of potential data elements that can be present in the fixed format address.

Fields

Display

Use this checkbox as follows:

Unchecked – the data is not part of the fixed format address

Checked - the data is part of the fixed format address

Select **Update (F8)** to continue to the Mapping Details Window, or **Previous (F12)** to return to the Map Addresses Maintenance Window.

Map Addresses Mapping Details Window

To display this window, select the mapping details on the Map Addresses Detail Window and select **Update (F8).**

This window allows you to define where the elements of the fixed format address are held in the

Fields

Mapped to

Enter the location of the data held in the System21 database.

Separator

Enter a separator to be used after the Mapped to data. Normally this would be a comma or similar. The default value is blank.

For example:

If the Address Line 1 holds both the Building Number and Street Name, you may wish to display this as 3, The High Street rather than 3 The High Street.

Position

Enter the position of the data within the free format entity.

For example:

If Building Number is 1 and Street Name is 2, then the address would be 3, The High Street.

If Building Number is 2 and Street Name is 2, then the address would be The High Street, 3.

Select **Update** (F8) or **Previous** (F12) to return to the Map Addresses Maintenance Window.

Generate Fixed Format Addresses [21/L1M]

Use this option to generate the fixed format addresses from the existing free format address.

Generate Fixed Format Addresses Maintenance Window

To display this window, select the Generate Fixed Format Addresses task.

Use this window to generate the fixed format addresses from the existing free format address for all customers and suppliers who do not already have them.

Fields

Address Type

Enter the address type for addresses you wish to generate.

Alternately, use the prompt facility to select address types from the L1 Description ADDF.

Customers or Suppliers

Select one of the following:

Customers (1) – To generate address for customers

Suppliers (2) – To generate address for suppliers

Run Type

Select one of the following:

Generate/Report (0) – To generate the report of fixed format addresses to be created

Generate/Update (1) – To generate the report and then fixed format address lines.

Account From/To

Enter the range of customer or supplier accounts for which addresses are to be reported and/or generated on.

Alternately, use the prompt facility to select accounts from the Customer or Supplier Selection pop-up

Country From/To

Enter the range of countries for which addresses are to be reported and/or generated on.

Alternately, use the prompt facility to select countries from the Inventory Description CCOD.

Select **Update (F8)** to report on and optionally create new address records.

Maintain Subsystem Data [1/L1S]

This task can be used to:

- Alter the parameters, such as run priority, time slice, etc., associated with an existing subsystem
- Add new applications to the list of applications requiring subsystem definitions

Note: For information and advice regarding the initial set up of System21 subsystems, refer to the System21 Installation and Setup Guide.

Generic Subsystem Data Window

To display this window, select the Maintain Subsystem Data task.

Options

Amend

Use this to display the Subsystem Data pop-up, which permits the amendment of subsystem control parameters, such as run priority, time slice, etc.

The pop-up displayed is identical to that displayed on selecting **Add Entry (F10)** except for the fact that the existing data is displayed on it.

Note: The <u>amendment</u> of an <u>application's</u> subsystem parameters is only permitted when the subsystem is inactive.

Note: The changes made to the subsystem parameters become effective the next time the subsystem is started.

Delete

Use this to delete an <u>application</u> from the displayed list, thus preventing the creation of a subsystem for that application.

This is needed if an application has been added in error.

Note: Deletion of an <u>application</u> is only permitted prior to the generation of the subsystem definition.

Functions

Inquire on All Subsystems (F9)

If the subsystems are active, they will not be displayed for maintenance. Use this to display all subsystems for inquiry.

Add Entry (F10)

Use this to display the Subsystem Data pop-up, which allows the definition of a subsystem.

When additional System21 <u>applications</u> are installed, each application requiring the definition of a subsystem must be added individually using this function.

Select a function or select **Exit (F3)** to leave the task.

Subsystem Data Pop-up

To display this pop-up, select **Add Entry (F10)** on the Generic Subsystem Data window. The same pop-up is displayed when you select Amend on the Generic Subsystem Data window, but in this case it will show the existing data for amendment.

For each added application you can choose either to submit that application's jobs to a subsystem attached to another application (by entering a value in the Submit Application field) or specify the subsystem description parameters that will be used to construct the subsystem description for the application.

Fields

Application

Use this field to specify the name of the application.

Submit Application

Use this field to specify the application to which you wish to attach the application's jobs.

Max Jobs in the Subsystem

Use this field to specify the maximum number of jobs which can run in the subsystem.

Note: If you are going to use a single subsystem to run all application jobs then you should override the default setting 20 to ensure that all submitted jobs activate simultaneously.

Max Jobs from the Job Queue

Use this field to specify the maximum number of jobs which can be accepted at one time from the <u>application's</u> job queue.

Run Priority

Use this field to specify the run priority to be associated with the subsystem.

Timeslice

Use this field to specify the time slice to be used by jobs running in the subsystem.

Caution: The alteration of any of the subsystem parameters has a performance implication on the iSeries and should only be attempted if you are familiar with the implications of the various values.

Select **Update** (F8) to update an existing entry or to add the new application to the application list.

Create Subsystems [2/L1S]

This task should only be used when additional System21 <u>applications</u>, requiring the use of a subsystem, have been installed.

On entry to this task, a list of applications which have been defined as requiring subsystem descriptions (that is, those which do not submit their jobs to another application) is displayed.

Note: For a detailed description of how to assign names and generate subsystems, refer to the System21 Installation and Setup Guide.

Create Subsystems Window

To display this window select the Create Subsystems task.

Note: This window will not show any data if there are no applications which are eligible for subsystem creation.

Options

Amend

Use this to amend the subsystem details.

Delete

Use this to delete the subsystem details.

Functions

Create Subsystems (F8)

Use this to generate the required subsystem description, class and job queue definition for each <u>application</u> in the specified library. A routing entry will be created for each job queue to attach it to the subsystem definition.

Note: This function will not be available if there are no <u>applications</u> which are eligible for subsystem creation.

Inquire on All Subsystems (F9)

Use this to display all subsystems for inquiry.

Generate Names (F10)

Use this to construct default names for each subsystem and job queue. The Generate Data popup will be displayed. Accept the default values for the Subsystem Name, Maximum Jobs and Subsystem Description and enter a Default Library in which the subsystem and its associated job queue or queues will be generated.

Select **Generate (F8)** on the Generate Data pop-up to re-display the Create Subsystems window with the subsystem names and job queue names assigned to each application.

Note: This function will not be available if there are no <u>applications</u> which are eligible for subsystem creation.

Select the required function or select Exit (F3) to leave the task.

Configure Background Jobs [3/L1S]

Multiple instances of background tasks can be active.

This allows a single background task to be active for cross-company support or for one per company as required.

An identifier to denote whether a task runs at the cross-company level or runs at company level is provided; also to indicate whether it runs as a single instance or multiple instances.

Return codes on the background processing <u>application</u> tasks are used to denote whether a task supports these capabilities as follows:

- BJ Batch cross-company single instance
- B0 Batch cross-company single instance
- B1 Batch cross-company multiple instances
- B2 Batch multi-company-- single instance (processor for each company)
- B3 Batch multi-company multiple instances (processor for each company)

For System Manager, tasks within the range 0000-0099 and 9900-9999 are defined as cross-company; tasks in the range 0100-9899 are defined as single company.

For those processors flexible enough to be capable of being switched between single company and multi-company or single instance and multiple instances, two tasks are delivered, so that the user can enable or disable the task without changing the task profile itself.

Configuration: Single Company Task Control

It is possible that within a single environment not all companies will be processed, therefore the ability to configure the background tasks within each company is provided.

The default configuration is to have one instance per environment.

This task allows you to define which companies are to be supported within the environment in order to configure the Start/Stop Background Jobs task. A separate instance of the application job is then started as appropriate.

All jobs are visible through the System Manager Job Enquiries, with a specific option to view the background subsystem jobs directly from the Subsystem control functions.

This task also enables you to override the default wait time for any of the background jobs to be submitted for the current environment.

Note: The default wait time specified for a task determines how long that task will lie in a dormant state before being forced to check for a request to end in a controlled manner.

Note: A background task that lies dormant awaiting requests to be placed on a data queue will awaken as soon as a request is placed upon the appropriate data queue.

Note: For information and advice regarding the initial set up of System21 subsystems, refer to the System21 Installation and Setup Guide.

Maintain Subsystem Task/Company Rules Window

To display this window, select the Configure Background Jobs task.

This window displays a list of all background subsystem tasks.

Fields

Select (S)

Enter 1 to maintain the list of companies allowed and the processing rules for a background task.

Ε

*= Enabled background tasks

Note: If a task exists within the same application with the same job name, you are only allowed to activate one of them. This ensures that no conflict will arise by trying to run a mix of single company and cross-company jobs. The select option is disabled for the inactive duplicates.

Enter 1 against a background task and then press Enter to display the Enable/Disable Companies window.

Enable/Disable Companies Window

To display this window, enter 1 against a background task and then press Enter on the Maintain Subsystem Task/Company Rules window.

Use this window to enable or disable individual companies, specific to the application, for the selected task.

Fields

Default Settings

These apply for all companies unless a company level override is specified.

Delay Job

This field displays the time in seconds that the job will wait before checking to see if there is a new transaction to process.

Initial Jobs

In batch mode, this field displays the initial number of instances of this background processor to be started.

Maximum Jobs

This field displays the maximum number instances of a background processor that can be active at any time.

Select (S)

Enter **1** to enable or **2** to disable the company. Only enabled companies can be used in the start/stop function.

For each company it is possible to have specific settings:

Note: Company details are only shown for background processors which are capable of running by company. All others processors are shown only with company = &&, which indicates the background processor processes all companies transactions. Background processor tasks with a return code of B2 or B3 indicate that the task is capable of being run by company, i.e. a processor per company.

Delay Job

This field displays the time in seconds that the job will wait before checking to see if there is a new transaction to process. You can override this.

Jobs Initial

In batch mode, this field displays the initial number of instances of this background processor to be started.

Jobs Maximum

This field displays the maximum number instances of a background processor that can be active at any time.

Note: Initial and maximum jobs can only be maintained on a background processor task with a return code of B1 or B3, which indicates that the task is capable of being run as multi-instance.

Functions

Enable All (F15)

Use this to enable all companies.

Disable All (F16)

Use this to disable all companies.

By Status/By Company (F20)

This toggle allows the view to be sequenced by status or company as appropriate. Enabled companies are re-sequenced at the top when the display is sequenced by status.

Note: If you want to enable all companies except for a few, use Enable All (F15) and then disable individual entries.

Select **Update** (F8) to complete the update.

Start/Stop Subsystems [10/L1S]

This task allows you to stop and start established subsystems for the current environment.

Start/Stop Subsystems Window

To display this window, select the Start/Stop Subsystems task.

This window displays a list of the subsystems defined to the environment in order of application code. For each subsystem the following information is displayed:

- The current status of each subsystem
- The maximum number of jobs that can be active within that subsystem
- The current number of jobs running in that subsystem

Caution: The window displays an entry per application specified in the Maintain Subsystem Data task. Where a single subsystem has been established for an environment, the same subsystem details are repeated against each application. In this circumstance, it is only necessary to request the start or end of the subsystem specified on one of the lines. This effectively starts or stops the subsystem for all applications.

Fields

Select (Sel)

Select one of the following:

Start subsystem - To perform a start subsystem command for the selected line or lines when you select Update (F8)

If this is successful, the status recorded against the line will change to active.

Stop subsystem - To perform a controlled shutdown of an active subsystem, including all the jobs running within it, for the selected line or lines when you select **Update (F8)**

Caution: If any of the jobs active within a subsystem at the time you request this option fails to end successfully, the subsystem will remain active until the offending job has been cancelled.

Stop subsystem immed - To stop the subsystem immediately

This performs an immediate shutdown of the subsystem associated with the selected line or lines.

Caution: This option should only be used as a last resort, as it does not stop all the jobs in a controlled manner and may therefore leave the data in an undetermined state.

In addition, record locks may be left on file L1P99, and although attempts are made to rectify this on the re-start of the jobs, this may not always be successful. In this case, it might not be possible to re-start the job until the record lock has been removed manually.

Display jobs - To use the IBM command Work with Subsystem Jobs (WRKSBSJOB) for the subsystems associated with the selected line or lines.

The standard Work with Subsystem Jobs window is displayed, which permits you to interrogate the status of jobs running in a subsystem.

Select **Process Selections (F8)** to perform the appropriate actions based upon the selections you have made against each line.

Note: You must use this function to perform the selected actions.

Start Subsystems - Batch [11/L1S]

This task allows you to start established subsystems for the current environment through a batch job.

This has the same effect as the selection of **Start Subsystem** against every application in the displayed list in the Start/Stop Subsystems task.

Note: All subsystems for an environment can be started within <u>Machine Manager</u> by adding this task as an Auto Day Start job. This can be done either from Machine Manager or with the MNGADSJOB command.

Select Confirm Submit (F8) to start the batch job.

Stop Subsystems - Batch [12/L1S]

This task allows you to perform a controlled shutdown of all subsystems for the current environment through a batch job.

This has the same effect as the selection of **Stop Subsystem** against every application in the displayed list in the Start/Stop Subsystems task.

Note: All subsystems for an environment can be stopped within <u>Machine Manager</u> by adding this task as an Auto Day End job. This can be done either from Machine Manager or with the MNGADEJOB command.

Select Confirm Submit (F8) to start the batch job.

Start/Stop Background Jobs [20/L1S]

This task allows you to control the submission and termination of all background tasks for an environment.

The list of jobs available for submission from this function is built from the list of enabled background jobs maintained via "Configure Background Tasks".

Note: The task definitions for each background task are still defined in the <u>application</u> for which they are to be submitted. This allows the library list and other details to be retained when the task is submitted.

Start/Stop Application Background Jobs Window

To display this window, select the Start/Stop Background Jobs task.

Fields

Position To

Use this to position the list to the appropriate <u>application</u> job or company according to the current view.

Select (S)

Note: Where the current user is not authorised to a particular task, selection of that task is prohibited.

Enter one of the following:

1 - To start a single instance of the background subsystem job

Caution: To ensure that AS Despatch Notes are printed successfully, the user profile that is used to submit the AS Confirm Despatch Updates task must have *USE authority over the user profiles of the users performing Confirm Despatch.

2 - To stop the background subsystem job

The program closes and the appropriate lock, which signifies that the task is currently active, is removed from the Record Locking file.

5 - To enquire on the job if the job is active

Note: Start will submit one instance of the background processor and the start can be requested until the maximum number of instances has been reached.

Status

This field displays the current status of each task according to the entry for that task in the Record Locking file (L1P99) and the actual job status.

The possible values are:

Active - The task is currently running.

Inactive - The task is not currently running.

Submitted - The task has been submitted but has not yet registered as active in the Record Locking file.

If a task remains in this state for a significant period of time, the likelihood is that the subsystem in which the task is expected to run has not been started.

Active- Closedown Requested - A request to end the task is pending.

Once an end request is submitted for a task it will take differing amounts of time for each of the tasks to complete. This is a result of the inbuilt delays in each of the jobs.

Ins/Max

These fields display the current start instance number and the maximum allowed for this job.

Note: This is only valid when more than instance is allowed.

Functions

By Application/By Company (F20)

This toggle allows the view to be sequenced by <u>application</u>/job or company as appropriate. In company mode, the cross-company jobs are sequenced after the single company jobs.

Show/Hide (F22)

In show mode, the full application/task details are visible.

Note: If the user is not authorised to the application/task, it will not appear on the list and therefore cannot be started or stopped.

Press Enter if you have entered 5 against a job to display the Job Enquiry window.

Select **Update (F8)** to process your selections for starting and ending jobs.

Job Enquiry Window

To display this window, select 5 against a background job on the Start/Stop Application Background Jobs window.

Select **Previous (F12)** to return to the Start/Stop Application Background Jobs window.

Start Background Jobs - Batch [21/L1S]

This task allows you to start all background tasks defined within the current environment through a batch job.

This has the same effect as the selection of **Start** against every task in the displayed list in the Start/Stop Background Jobs task.

The batch start of subsystem jobs loops round all enabled background jobs and companies, starting all jobs as appropriate. Multiple jobs are started for the initial number of jobs specified at task/company level.

Note: All background tasks for an environment can be started within <u>Machine Manager</u> by adding this task as an Auto Day Start job. This can either be done from Machine Manager or with the MNGADSJOB command.

Select **Confirm Submit (F8)** to start the batch job.

Stop Background Jobs - Batch [22/L1S]

This task allows you to perform a controlled end of all background tasks defined within the current environment through a batch job.

This has the same effect as the selection of **Stop** against every task in the displayed list in the Start/Stop Background Jobs task.

All active background jobs are stopped - all instances for all companies.

Note: All background tasks for an environment can be stopped within <u>Machine Manager</u> by adding this task as an Auto Day End job. This can either be done from Machine Manager or with the MNGADEJOB command.

Select Confirm Submit (F8) to start the batch job.

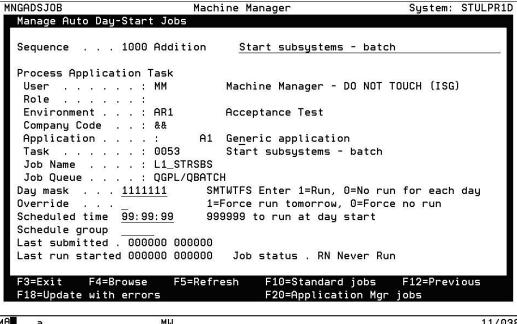
Automation of Starting and Stopping Subsystems and Background Tasks

The starting and stopping of System21 subsystems and background tasks can be automated within <u>Machine Manager</u>. This is done by adding the appropriate entries to the Auto Day Start and Auto Day End routines.

The following windows show examples of the sort of entries required.

Note: The examples shown are for an environment code of AR1.

To start System21 subsystems in an environment would require the following Auto Day Start Job



MA a 11/038 MW

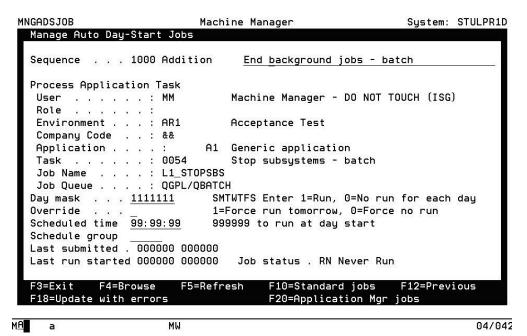
entry:

To start all of the System21 background tasks in an environment would require the following Auto Day Start Job entry:

```
MNGADSJOB
                            Machine Manager
                                                             System: STULPR1D
 Manage Auto Day-Start Jobs
 Sequence . . . 1000 Addition
                                   Start background jobs - batch
 Process Application Task
  User . . . . . : MM
                                 Machine Manager - DO NOT TOUCH (ISG)
  Role . . . . . :
  Environment . . . : AR1
                                 Acceptance Test
  Company Code . . : &&
  Application . . . :
                             A1 Generic application
  Task . . . . . : 0057
                                 Start background jobs - batch
  Job Name . . . : L1_STRJOBS
  Job Queue . . . : QGPL/QBATCH
 Day mask . . . <u>1111111</u>
                              SMTWTFS Enter 1=Run, 0=No run for each day
 Override . . .
                              1=Force run tomorrow, 0=Force no run
 Scheduled time 99:99:99
                              999999 to run at day start
 Schedule group
 Last submitted . 000000 000000
 Last run started 000000 000000
                                  Job status . RN Never Run
            F4=Browse
                         F5=Refresh
                                       F10=Standard jobs
                                                            F12=Previous
 F18=Update with errors
                                       F20=Application Mgr jobs
                                                                        04/067
```

Caution: To ensure that AS Despatch Notes are printed successfully, the user profile that is used to submit the AS Confirm Despatch Updates task must have *USE authority over the user profiles of the users performing Confirm Despatch.

To end all System21 subsystems in an environment would require the following Auto Day End Job entry:



To end all of the System21 background tasks in an environment would require the following Auto Day End Job entry:

MNGADSJOB	Machine Manager	System: STULPR1D
Manage Auto Day-Start Jo	bs	_
Sequence 1000 Add	ition <u>End subsystem jobs -</u>	batch
Process Application Task User MM Role	Machine Manager - DO N	OT TOUCH (ISG)
Environment : AR1 Company Code : &&	Acceptance Test	
Application : Task : 005	A1 Generic application 8 Stop background jobs -	batch
Job Name : L1_ Job Queue : QGP		nun fon oagh dau
Override	1=Force run tomorrow, 0=F 999999 to run at day star	orce no run
Schedule group Last submitted . 000000		
	000000 Job status . RN Never	Run
F3=Exit F4=Browse F18=Update with errors	F5=Refresh F10=Standard job F20=Application	s F12=Previous Mgr jobs
MA T a MW		14/055

Document Definitions [1/L1N]

Document Details Window

To display this window, select the Document Definitions task.

This window shows a list of documents.

<u>Fields</u>

Invoice Document

If the L1 invoice numbering process is to be used, the document must be flagged as an invoice document type by checking this checkbox.

Conventional invoices and DRP invoices are separated here in order to support their individuality, and hence enable different rules to be applied if so desired.

Select **Update** (F8) to update the values and leave the task.

Site Document Control [2/L1N]

Use this task to specify numbering policy and Invoice number format by site

Stockroom Site Additional Details Maintenance Selection Window

To display this window, select the Site Document Control task.

Fields

Stockroom Site

Enter a site for which to maintain details.

Alternatively, use the prompt facility to select from the Stockroom Site Selection pop-up.

The site must be defined in Inventory Company Parameters Maintenance (/INUM) and stockrooms associated with the site should be specified in World Trade for DRP invoice functionality to work correctly.

Enter or select a valid stockroom site and then press Enter to display the Stockroom Site Additional Details Maintenance window.

Stockroom Site Additional Details Maintenance Window

To display this window, enter or select a valid stockroom site and then press Enter on the Stockroom Site Additional Details Maintenance Selection window.

Fields

Invoice Number Policy

This is as per the SOP company profile rule.

Enter one of the following:

Confirm despatch - To assign numbers at confirm despatch

Invoice print - To use internal invoice numbers until invoice print and then assign external numbers

Note: For invoice numbering formats Tax Register or Tax Register and Year, policy Invoice print should be used.

DRP Invoices

Use this checkbox as follows:

Unchecked - If DRP invoices are not to be active

Checked - If DRP invoices are to be active

Invoice Number Formats

There are three different values allowed here, **Normal**, **Tax Register** and **tax register and year**, signifying which structure is to be used for the site invoice number format.

This will apply to DRP and conventional invoices, but with **Document Level Overrides (F16)** it is possible to specify an override for individual documents.

All Customer Service and Logistics invoice numbers are restricted by database constraints to 7 characters. The formats supported reflect this.

Normal - PNNNNNN

This is the same as existing formats, where P is a 1-character prefix, which can be incremented, and NNNNNN is a 6-digit number, where a range can be specified in the Inventory Reference Numbers task (3/INUM).

Tax Register - RVVVVVV

R is the tax register prefix character and VVVVVV is a 6-digit number actually obtained from the tax register (also known as the protocol number).

Tax register and year - RYVVVVV

R is the tax register prefix as above. Y is the year suffix code (see the Register Year field below) and VVVVV is a number obtained from the tax register (protocol number).

Note: For Invoice Number Formats Tax Register and tax register and year a tax register reference is required below.

GL Company

This is a General Ledger code and is part of the key to the tax register.

You can use the prompt facility to select from the General Ledger Company Selection pop-up.

Register Code

The GL tax register identity code is actually a 2-character code.

You can use the prompt facility to select from the Select Tax Register pop-up.

Caution: Only the first character can be used in the construction of structured invoice number.

It is assumed that tax registers will be unique, not only in terms of the 2-character code but also, where they are being used in invoice number structures, in terms of the first character. This must be monitored manually by the user.

Different types of tax registers exist in the General Ledger for Sales (disposals) and Purchases (acquisitions). Care should be taken here in selecting the correct one.

Register Year

Enter a 4-digit year here, for example 2006.

The suffix character (6 in this example) is required for and used in structured invoice number format tax register and year only.

Functions

Document Level Overrides (F16)

Use this to display the Document Level Overrides Selection window.

Select Update (F8) to update the values and leave the task.

Document Level Overrides Selection Window

To display this window, select **Document Level Overrides (F16)** on the Stockroom Site Additional Details Maintenance window.

Options

Select

Use this to select a document to specify overrides.

Select a document to display the Document Level Overrides window.

Document Level Overrides Window

To display this window, select a document on the Document Level Overrides Selection window.

Fields

You can specifically override any document policy at site level so that different document types can have different invoice number formats if necessary.

Select **Update** (F8) to update the values and leave the task.

Site Document Queue Controls [3/L1N]

Stockroom Site Maintenance Selection Window

To display this window, select the Site Document Queue Controls task.

Fields

Stockroom Site

Enter a site for which to maintain details.

Alternatively, use the prompt facility to select from the Stockroom Site Selection pop-up.

The site must be defined in Inventory Company Parameters Maintenance (/INUM) and stockrooms associated with the site should be specified in World Trade for DRP invoice functionality to work correctly.

Enter or select a valid stockroom site and then press Enter to display the Stockroom Site Maintenance window.

Stockroom Site Maintenance Window

To display this window, enter or select a valid stockroom site and then press Enter on the Stockroom Site Maintenance Selection window.

You can now specify a different output queue for Delivery Notes, Combined Delivery Notes/Invoices and DRP invoices by site, using the Output Queues and Library fields in the appropriate sections of this window.

The idea is that these documents are required as part of the despatch process and are routed to the despatching site in order that they can, if required, accompany the physical delivery of the goods (as is the case in Italy).

Functions

Reference Numbers (F15)

Use this to display the Reference Number Entry pop up.

Select **Update** (F8) to update the values and leave the task.

Reference Number Entry Pop Up

To display this pop-up, select **Reference Numbers (F15)** on the Stockroom Site Maintenance window.

<u>Fields</u>

Reference Code

This field displays the current reference code used for the displayed reference type.

Last Number Used

This field displays the last number used against this reference code. This code may be changed if necessary.

You can use the prompt facility to select from the RFCD Reference Code pop-up.

Select **Update** (F8) to update the values and return to the previous window.

Introduction to Historical Data Removal

The following business documents can be removed from the live database and moved to history files kept in a separate archive library.

- Sales/DRP Orders
- Purchase Orders
- Customer Returns
- Consolidated and Sundry Invoices / Credit Notes
- Load Sheets
- Inventory Movements

Once control data is set up, the business documents each have a separate removal program that can be scheduled in Machine Manager. Each business document program consists of the validation of each business document, and, if available for removal, the copying and deletion of the business document from the live database. This can include bespoke non-System21 files, if applicable.

History files are created with the same name as the source file, plus a suffix of H.

Note: The current System21 database already contains some history files. It is important that the history files in the archive library are used, and not the files in the current System21 database.

An audit is written for both the documents transferred and the exceptions.

Once the documents are moved, the history libraries can be copied ready to be saved to media and cleared at specified time intervals.

Business Document Types

The following naming conversions are used for the Business Document Types.

- SALORD
- PURORD
- INVMOV
- LOADSH
- CUSRET

SINVCR

Business Documents - Removal Criteria

Sales / DRP Orders (SALORD)

- The business document details are accessed from the business document file for the current company number and the business document type equal to SALORD. Orders with an order source equal to Q, J or S are not removed but are audited so that accidental wrap-around issues are avoided.
- The removal date option is used to determine which date is to be used in the removal validation, for orders where the status is not equal to **X**.
- The order header file is processed for the current company number. For each record that is found, where the order is a SOP sales order, the following additional validation is performed.
- If the order is cancelled, status is equal to **X**, the system order date is compared to today's date, and the number of days between the two calculated. This result can then be compared to the number of day's field. If it is greater than this number of days, then the business document is transferred to history, and the additional validation below is skipped.
- If the sales / DRP order is available to be transferred, from an age point of view, the following additional validation is performed.

Validation

For all orders:

• The Active Flag of the sales order is checked and if it is set to **A**, a record is created on the exceptions audit file, with the message – 'Business object is locked by another job'.

For sales orders:

- If the order status is not equal to **C**, the order has not been fully processed and will not be transferred to the history files. A record is created on the exceptions audit file, with a message 'Order status not equal to Complete'.
- If a pick note requires POD, and does not have the processed indicator equal to **9** and has not been processed by POD, the order has not been fully POD'd and will not be transferred to the history files. A record is created on the exceptions audit file, with a message 'POD outstanding for pick note(s)'.
- If the use accounts receivable field is equal to **0** (No), all of the invoices for the order number must be at a status of **Posted**. If they are not, the order is not transferred to the history files. A record is created on the exceptions audit file, with a message 'Invoice(s) not at posted status'.
- If the use accounts receivable field is equal to 1 (Yes), all of the invoices for the order number must have been paid in the accounts receivable system. If they are not, the order is not transferred to the history files. A record is created on the exceptions audit file, with a message 'Invoice(s) have not been paid'.

For DRP orders:-

- If the order status is not equal to C, the order has not been fully processed and will not be transferred to the history files. A record is created on the exceptions audit file, with a message -'DRP Order status not equal to Complete'.
- The transferred stock must have been received into the 'to' depot. If it is not fully received a record is created on the exceptions audit file, with a message - 'DRP order still requires confirm shipment receipt'.
- If the order has been validated as being available to be transferred to history, the order details are copied to the history files in the history library from the following files, and are deleted from the source file. If the history file does not exist, it is created.

Audit

An audit record is written for those business documents that have been transferred to the history files / library and an exception is written for those which failed the validation.

Files archived

File	Name
OEP40	Order header
OEP40A	Order header audit
OEP40E	Order header extension
OEP41	Order credit card details
OEP41A	Order credit card details audit
OEP45	Order address overrides
OEP45A	Order address overrides audit
OEP45E	Order address overrides extension
OEP45EA	Order address overrides extension audit
OEP49	Order charge detail
OEP50	Order charge detail
OEP50A	Order charge detail audit
OEP50E	Order charge detail extension
OEP55	Order lines
OEP55A	Oder lines audit
OEP55F	Order lines extension
OEP56	Pricing override file

OEP57	Pricing result file
OEP59	SOP document line overrides
OEP59A	SOP document line overrides audit
OEP65	Invoice header
OEP70	Invoice lines
OEP70E	Invoice lines extension
OEP72	Pricing override – invoices
OEP73	Pricing result – invoices
OEP93	POD confirmation details
OEP97	Delivery adjustments
OEP27	Multiple lot work file
OMP09	Order sourcing supply by item
OMP24	JIT Link Header
OMP29	Container lines
OMP89	Sales demand
OMPF0	Provisional to sales order cross reference
OMPF4	Order sourcing / supply
OMPF9	Order suspend work file
INP05	Stock in transit
INP56	Picking/despatch header
INP56E	Picking/despatch header extension
INP57	Picking/despatch detail line
INP57E	Picking/despatch detail line extension
INP57F	Picking/despatch detail line extension
INP61	Despatch note pack details
INP71	Demand/supply allocations/reservations
INP40	Text file
DYP10	Delivery document header
DYP11	Delivery document charges
DYP12	Delivery document VAT summary
DYP15	Delivery document details

DYP20	Delivery document lots
TPP80	TP Drop/Order File
TPP80A	TP Drop/Order File Audit
TPP81	TP Order Line/Container Type file
TPP81A	TP Order Line/Container Type Audit
BWP25	Bond Despatch Workfile
BWP93	CoD Background Processor

Caution: The only Transport Planning records that are removed are those for Orders that have NOT been assigned to a Load.

In addition to the standard files above being processed, the bespoke files will be accessed from the business document bespoke files file, for the **SALORD** business document type.

Each of the files accessed from this file is processed using the company number and order number currently being transferred to the history library. The records with a matching company number and order number will be copied then deleted from the source file.

Purchase Orders (PURORD)

If the purchase order is available to be transferred, from an age point of view, the following additional validation is performed.

Validation

For all orders:

• The Active Flag of the purchase order is checked and if it is set to **A**, a record is created on the exceptions audit file, with the message – 'Business object is locked by another job'.

For Purchase orders:

- If the purchase order is a blanket purchase order schedule type = B, determine if the blanket schedule has been created for all the order lines. This is done by accessing the purchase order lines file, and for each order line with a blanket sequence number = 99999. If a record is found, the whole order quantity has not been 'scheduled' and the removal cannot proceed for this order. The purchase order will not be transferred to the history files. A record is created on an exceptions audit file, with a message 'Blanket PO not fully scheduled'.
- If the order has any records on PMP71 then it relates to an Unmatched Log invoice or a Held invoice and is not removed. A record is created on the exceptions audit file, with a message – 'Order is on a Log/Held Invoice'.
- If the order relates to a VS contract (with PO generation at contract or Item level) which has not
 expired at Contract level (or item level, if PO is at item level) then it is not removed if the expiry
 date is not older than the selected number of days. A record is created on the exceptions audit
 file, with a message 'Order is on unexpired VS Contract'.

- If the use PO invoice matching is set to 1 yes, or the purchase order is a service purchase order, all of the purchase transactions must have been invoice matched. The invoice date must not be equal to 0 for all lines except container lines with order price equal to zero. If not all of the purchase transactions have a non-zero invoice date, the order is not processed by the removal routine. A record is created on the exceptions audit file, with a message 'Order not invoice matched'.
- If the use PO invoice matching is set to 0 no, and the purchase order is not a 'service' purchase order, all of the purchase transactions must have a receipt required field equal to 0 and have been received into 'stores' receipts type = S, or if they have a receipt type of G or I, have an available quantity = 0. If not all of the purchase transactions for the order number have been received into stock, or have not been returned, the order is not processed by the removal routine. A record is created on the exceptions audit file, with a message 'Order not fully received into stock'.
- If the order has been validated as being available to be transferred to history, the order details are copied to the history files in the history library from the following files, and are deleted from the source file. If the history file does not exist, it is created.

Audit

An audit record is written for those business documents that have been transferred to the history files / library and an exception is written for those which failed the validation.

Files archived

File	Name
PMP02	Purchase Order Header
PMP02F	Purchase Order Header Extension
PMP02A	Purchase Order Header Audit
PMP03	Purchase Order Lines
PMP03A	Purchase Order Lines Audit
PMP04	Purchase Order Landed Costs
PMP04A	Purchase Order Landed Costs Audit
PMP09	Purchase Transactions
PMP14	GRN Line Landed Costs
PMP14A	GRN Line Landed Costs Audit
PMP11	Purchase Text
PMP18	Invoice Dissections
PMP20	Order Extension code
PMP45	Override Addresses

PMP68 Cancelled GRN's Audit

In addition to the standard files above being processed, the bespoke files will be accessed from the business document bespoke files file, for the **PURORD** business document type.

Each of the files accessed from this file is processed using the company number and order number currently being transferred to the history library. The records with a matching company number and order number will be copied then deleted from the source file.

Inventory Movements (INVMOV)

Validation

- The stock movements detail file will be processed for the current company number. For each
 record that is found, the reference date will be compared to today's date, and the number of
 days between the two calculated. This result will then be compared to the number of day's field.
 If it is greater than this number of days, then the business document can be validated further as
 below.
- If the stock movement has been validated as being available to be transferred to history, the stock movement details are copied to the history files in the history library from the following files, and is deleted from the source file. If the history file does not exist, it is created.

Audit

A record is created in the audit file to record the date of the last movement archived for that company.

Files archived

File	Name
INP95	Stock movement detail
INP96	Stock daily movements detail

Stock Count (INVMOV)

Validation

- The count header file will be processed for the current company number. For each record that is
 found, the date the count was initiated will be compared to today's date, and the number of days
 between the two calculated. This result will then be compared to the number of day's field. If it is
 greater than this number of days, then the business document can be validated further as below.
- If the stock count has been validated as being available, the status of the count will be determined. If the stock count status is not equal to 3 or 9, the stock count cannot be removed. A

record will be created on an exceptions audit file, with a message – 'Stock count %CTNO54% not completed'

- If the stock count has been validated as being available to be transferred to history, the stock count details are copied to the history files in the history library from the following files, and are deleted from the source file. If the history file does not exist, it is created.
- The audit files are dealt with via a separate route through the process. These files are not traditional audit files in that they do not hold an audit trail of the changes made to the corresponding data file. They are populated by the **Purge Stock Counts** [24/INUD] which physically deletes any records copied to these files from the live database files the process also deletes data on some files

Caution: Do not use the Purge Stock Counts process or you may lose data on INP73, INP75 and INP77 for removed counts.

Audit

An audit record is written for those business documents that have been transferred to the history files / library and an exception is written for those which failed the validation.

Files archived

File	Name
INP54	Count recommendations
INP54A	Count audit details
INP58	Count header
INP58A	Count header audit
INP73	Action list header
INP75	Event header
INP77	Event details

In addition to the standard files above being processed, the bespoke files are accessed from the business document bespoke files file, for the **INVMOV** business document type.

Each of the files accessed from this file is processed using the company number and reference number or count number currently being transferred to the history library. The records with a matching company number and reference number or count number will be copied then deleted from the source file.

Load Sheet (LOADSH)

If the load is available to be transferred, from an age point of view, the following additional validation is performed.

Validation

For all loads:

The Inventory record locking file is checked to determine if a load is locked. If it is locked a
record is created on the exceptions audit file, with the message – 'Business object is locked by
another job'.

For loads:

- The load header file is processed for the current company number. For each record that is found, the ship date is compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document is validated further as below.
- If the load number is an empty load it will be included in the transfer to history.
- If an order level requirement exists for a load (i.e. Unpicked) then the load will not be removed.
- If there are some order / drop records found for the load number, is the load at the correct status to be removed.
- If the transfer awaiting COD field is set to 1, if the status is less than '70', the load cannot be removed to history. A record is created on the exceptions audit file, with a message 'Load header not at required status'.
 - Note: This only applies if the load does not require rating.
- If the transfer awaiting COD field is set to **0** or the transfer awaiting COD flag is set to **1** and the load requires rating, if the status is less than **95** the load cannot be removed to history. A record is created on the exceptions audit file, with a message 'Load header not at required status'.
- If the load is at the required status to be included in the transfer, the orders / returns on the load must be at the required status for the load to be processed further. Access the order / drop file. For each record found check the status of the order / return as follows:-
- For a pick note, check that the pick note status is equal to 3. If there are any pick notes where the status is not equal to 3, the load cannot be removed. A record is created on the exceptions audit file, with a message 'Pick note %ORDN56/DESN56% status incorrect for load'. If the pick note is not found, it will be assumed that it has been transferred to history as part of the Sales Order / DRP Order transfer to history process and that the load can be removed.
- If the pick note is at status 3, and the customer requires a POD, check if the pick note has been POD'd. If there are any pick notes that have not been POD'd, the load cannot be removed. A record is created on the exceptions audit file, with a message 'Pick note %ORDN56/DESN56% not POD'd for load'.
- For a customer return, the return must have been received into stores. Check that all the return transactions for the customer return have a receipt required equal to '0', and that the receipt type is equal to 'S'. If not the load cannot be removed. A record is created on the exceptions audit file, with a message 'Customer return %RTNN09% not received to stores'.
 If the return is not found, it will be assumed that it has been transferred to history as part of the Customer return transfer to history process, and that the load can be removed.
- For any loads that have sub loads all the above checks are performed for the master load and all
 of its sub loads before the entire group of loads can be removed.

- For any load that is a consolidation load all checks need to be performed for the consolidated load and all of its consolidation loads before the entire group of loads can be removed.
- Skeleton loads are processed in the same manner, so as they are empty these too are removed once they pass the date check.
- If the load has been validated as being available to be transferred to history, the load details are copied to the history files in the history library from the following files, and are deleted from the source file. If the history file does not exist, it is created.

Audit

An audit record is written for those business documents that have been transferred to the history files / library and an exception is written for those which failed the validation.

Files archived

File	Name
TPP65	Load profile
TPP65A	Load profile audit
TPP65E	Load profile extension
TPP66	Load pack type
TPP67	Load transport container
TPP68	Load commodity code details
TPP75	Load / drop
TPP75A	Load / drop audit
TPP80	Load / order
TPP80A	Load / order audit
TPP81	Order line / container type
TPP81A	Order line / container type audit
TPP82	Transport charges
TPP82A	Transport charges audit

In addition to the standard files above being processed, the bespoke files will be accessed from the business document bespoke files file, for the **LOADSH** business document type.

Each of the files accessed from this file is processed using the company number and load number currently being transferred to the history library. The records with a matching company number and load number will be copied then deleted from the source file.

Customer Returns (CUSRET)

If the customer return is available to be transferred, from an age point of view, the following additional validation is performed.

Validation

For all orders:

• The Active Flag of the return is checked and if it is set to **A**, a record is created on the exceptions audit file, with the message – 'Business object is locked by another job'.

For Customer Returns:

- If the return status is equal to **C**, the removal date option will be ignored, and the return date will always be used, and will be compared to today's date and the number of days between the two calculated. The result will be compared to the number of days field. If it is greater than this number of days, then the business document can be processed skipping the additional validation below. If it is not the return will be ignored.
- All of the return transactions for normal items must have a credit note number, which is not equal
 to zero meaning a credit note has been raised.
- If there are any lines for container items, where the container item is defined as being chargeable for inbound transactions on the item master file, the line must have a credit note number as above. If the container item is non-chargeable for inbound transactions, the line will be assumed to have been 'credited' for the purposes of this validation.
- If the return has not been fully credited, the return will not be processed by the removal routine. A record is created on the exceptions audit file, with a message 'Return not fully credited'.
- If the return has been validated as being available to be transferred to history, the details are copied to the history files in the history library from the following files, and are deleted from the source file. If the history file does not exist, it is created.

Audit

An audit record is written for those business documents that have been transferred to the history files / library and an exception is written for those which failed the validation.

Files archived

Name
Returns header
Returns header extension
Returns header extension audit
Returns lines
Customer return details extension
Customer return details extension audit

CRP04	Return lines extension
CRP09	Return transactions
CRP11	Returns text
CRP20	CR extended GL code
CRP45	Override addresses
CRP60	Returns transactions
OEP65	Invoice header
OEP65A	Invoice header audit
OEP70	Invoice lines
OEP70A	Invoice lines audit
OEP70E	Invoice lines extension
OEP72	Pricing overrides – invoices
OEP73	Pricing results – invoices
OEP45	Order address overrides
OEP45A	Order address overrides audit
OEP45E	Order address overrides extension
OEP45EA	Order address overrides extension audit
OEP50	Order charges
OEP50A	Order charges audit
OEP50E	Charges extension
INP40	Text
TPP80	TP Drop/Order File
TPP80A	TP Drop/Order File Audit
TPP81	TP Order Line/Container Type File
TPP81A	TP Order Line/Container Type Audit

Caution: The only Transport Planning records that are removed are those for Returns that have *not* been assigned to a Load.

In addition to the standard files above being processed, the bespoke files will be accessed from the business document bespoke files file, for the **CUSRET** business document type.

Each of the files accessed from this file is processed using the company number and return number currently being transferred to the history library. The records with a matching company number and return number will be copied then deleted from the source file.

Consolidated and Miscellaneous Invoices (SINVCR)

- The invoice header file will be processed for the current company number. Invoices with an order source equal to **Q**, **J** or **S** will be ignored.
- For each record that is found, where the reason code is not equal to **0**, and the return number is equal to blank, or the reason code is equal to **0** and the invoice is a consolidated invoice (record exists on invoice consolidation file), additional validation will be performed.

Validation

 If the invoice / credit note has not been printed and posted, the invoice document cannot be removed to history. A record is created on the exceptions audit file, with a message – 'Invoice not yet printed / posted'.

If the invoice has been validated as being available to be transferred to history, the invoice details are copied to the history files in the history library from the following files, and are deleted from the source file. If the history file does not exist, it is created.

Audit

An audit record is written for those business documents that have been transferred to the history files / library and an exception is written for those which failed the validation.

Files archived

File	Name
OEP65	Invoice header
OEP65A	Invoice header audit
OEP60	Invoice consolidation details
OEP70	Invoice line / order analysis
OEP70A	Invoice lines audit
OEP70E	Invoice lines extension
OEP72	Pricing overrides – invoices
OEP73	Pricing results – invoices
OEP45	Order address overrides
OEP45A	Order address overrides audit
OEP45E	Order address overrides extension
OEP45EA	Order address overrides extension audit
OEP50	Order charges
OEP50A	Order charges audit

OEP50E	Charges extension
INP40	Text file

In addition to the standard files above being processed, the bespoke files will be accessed from the business document bespoke files file, for the **SINVCR** business document type.

Each of the files accessed from this file is processed using the company number and invoice number currently being transferred to the history library. The records with a matching company number and invoice number will be copied then deleted from the source file.

Business Document Maintenance [1/L1H]

This option allows users to set the control data necessary to run the archive routines to remove historical transaction data.

The control data can be set up for all companies via the **Maintain Defaults (F14)** function or different defaults can be set up for each Company. It is advisable to set up the defaults first so that these can be modified for each company, once copied.

Business Document Company-Specific Selection Window

To display this window, select the Business Document Maintenance task.

This data is shown for the System21 Company that the user is signed onto. If the window does not show any business objects then data has not been copied for that company.

Default information is shipped and users may maintain the data by initially selecting **Maintain Defaults (F14).**

Options

Details (1)

Select a business document for maintenance.

Bespoke Files (2)

Select to add bespoke files to the business document processing.

<u>Fields</u>

History Library

Enter the name of the library to hold the historical business documents. Only 8 characters are available, to allow for the suffix processing on the copy libraries.

This library must already be in existence and should only be used for the history files associated with these business documents.

Bespoke History Library

Enter the name of the library to hold the historical business documents bespoke files. Only 8 characters are available, to allow for the suffix processing on the copy libraries.

This library must already be in existence and should only be used for the bespoke history files associated with these business documents.

If no separate bespoke history library is required, this should be set to be the same as the History Library.

History Library Copy Days

Enter the number of days before the history library can be copied to a copy library.

Caution: Do not select **Copy Defaults (F16)** until the correct information is held against the defaults. Use **Maintain Default (F14)** and verify its setup first.

Functions

Add (F6)

Use this to add a new business document.

Update (F8)

Use this to updates the files as necessary.

Maintain Defaults (F14)

Use this to maintain the default All Company data.

Copy Defaults (F16)

Use this to copy the default data for the current company.

Note: If a different setup is not required for each company there is no need to use this option. The processing options look for specific company data and if it is not found they look for the default data for controlling the removal.

Select the required function or select **Exit (F3)** to leave the task.

Business Document All Company Defaults Window

To display this window, select **Maintain Defaults (F14)** from the Business Document Company-Specific Selection window

The data initially shown in this window are the shipped defaults. These but can be overridden.

All Business Documents shipped are listed on this window.

Options

Details (1)

Select a business document for maintenance.

Bespoke Files (2)

Select to add bespoke files to the business document processing.

View Core Files (5)

View a list of the core files that are removed by this business document.

Fields

History Library

Enter the name of the library to hold the historical business documents. Only 8 characters are available, to allow for the suffix processing on the copy libraries.

This library must already be in existence and should only be used for the history files associated with these business documents.

Bespoke History Library

Enter the name of the library to hold the historical business documents bespoke files. Only 8 characters are available, to allow for the suffix processing on the copy libraries.

This library must already be in existence and should only be used for the bespoke history files associated with these business documents.

If no separate bespoke history library is required, this should be set to be the same as the History Library.

History Library Copy Days

Enter the number of days before the history library can be copied to a copy library.

Commitment Control

Use this checkbox as follows:

Unchecked - If commitment control is not active

Checked - Commitment control is active. The journal library and details are displayed.

Functions

Add (F6)

Use this to add a new business document.

Update (F8)

Use this to update the data files.

Maintain Company Overrides (F14)

Use this to return to the Maintain Company level overrides window.

Select the required function or select Exit (F3) to leave the task.

Business Document Additions Window

Select Add (F6) from the Business Document All Company Defaults Window

Fields

Business Document Type

Enter the new business document type that requires data removal.

Business Document Name

Enter the name of the business document

Number of days

Enter the number of days for which the data is retained on the live database, before it is available for transfer to the history library.

This value must be greater than 7, assuming most companies will want to keep data for at least a week.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Processing program

Enter the name of the processing program to be called to remove data.

This touch point program must exist.

Functions

Update (F8)

Use this to update the changes

Select **Update** (F8) to update the changes and return to the Business Document Selection window

Business Document Maintenance – SALORD

Select **Details (1)** from the Business Document Selection window to view the SALORD business document data

This data is shown for the company you are signed onto. If the window does not show company details then the data entered will apply to *all* companies when the removal is run.

Fields

Number of days

Enter the number of days for which the data is retained on the live database, before it is available for transfer to the history library.

It must be greater than 7, assuming most companies will want to keep data for at least a week.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Removal Date

The removal date is used for comparison purposes

Select a removal date.

Alternately, use the prompt facility to select from the Inventory Description TSAL Removal Date Sales/DRP.

The options are as follows: -

System Order Date (1) - the system order date is compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as below. If it is not, the order is ignored.

Despatch Date (2) - Prior to complex despatch date testing a simple test will take place to ensure that the system order date is outside the number of days to ensure that records are not read/processed unnecessarily. The latest despatch date is determined by accessing all of the pick note header records for the company number and order number, where the processed indicator is not equal to **9** to find the latest despatch date.

The latest despatch date of a pick note is taken to be the latest Despatch date (or if not despatched) the date created.

Caution: Old orders 'picked' within the removal time fence will not be reported. Old order that have not been picked will be reported as 'Order Not Picked'

This latest despatch date is then compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as below. If it is not the order is ignored.

Delivery date (3) - Prior to complex despatch date testing a simple test will take place to ensure that the system order date is outside the number of days to ensure that records are not read/processed unnecessarily. The latest delivery date is determined by accessing all of the pick note header records for the company number and order number, where the processed indicator is not equal to **9** to find the latest delivery date.

The latest delivery date of a pick note is taken to be the latest of Actual delivery date (or if not used), Despatch date (or if not despatched) the date created.

Caution: Old orders 'picked' within the removal time fence will not be reported. Old order that have not been picked will be reported as 'Order Not Picked'

This latest delivery date is then compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as below. If it is not the order is ignored.

Invoice Date (4) - Prior to complex despatch date testing a simple test will take place to ensure that the system order date is outside the number of days to ensure that records are not read or processed unnecessarily. The latest date of invoice is determined by accessing the invoice lines for the various invoices for the order to access the invoice date from the invoice header.

The latest of the invoice dates is then compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as below. If it is not the order is ignored.

Caution: This option is not recommended as a way of reporting outstanding data in a satisfactory manner.

Caution: Removal date types 2-4 may result in unreported orders remaining on the files so care should be taken if the removal process is to be trusted in terms of wrap-around use of order numbers.

Use Accounts Receivable

Use this checkbox as follows:

Unchecked - In order to cater for those companies that do not use Accounts Receivable (SL), a sales order will be considered complete if the invoice is flagged as posted.

Checked - The Invoice must have been paid before the Sales Order can be considered for removal.

Note: This setting does not apply to DRP orders as they do not often produce invoices.

Select Update (F8) to update the changes and return to the Business Document Selection window

Business Document Maintenance - PURORD

Select **Details (1)** from the Business Document Selection window to view the PURORD business document data

This data is shown for the company you are signed onto. If the window does not show company details then the data entered will apply to *all* companies when the removal is run.

Fields

Number of days

Enter the number of days for which the data is retained on the files, before it is available for transfer to the history library.

It must be greater than 7, assuming most companies will want to keep data for at least a week.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Removal Date

The removal date is used for comparison purposes.

Select a removal date.

Alternately, use the prompt facility to select from the Inventory Description TPUR - Removal Date Purchase Order.

The options are as follows: -

Order Date (1) - the order date is compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as below. If it is not, the order is ignored.

Caution: For Blanket/Schedule orders, the order date may be old but the latest call-offs may be current, so the order date check may not be suitable for customers using blanket / schedule orders.

Receipt Date (Latest) (2) - Prior to complex date testing a simple test will take place to ensure that the order date is outside the number of days to ensure that records are not read/processed unnecessarily.

Then the latest receipt date will be determined by reading the purchase transactions file for the order number. If the order classification is equal to **6**, the order is a service order. This type of order is not 'received', the invoice matching process implies receipt of the service. However, the receipt date is defaulted to the due date, and is set as received, so this can still be used for service orders.

This latest receipt date is then compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not the order is ignored.

Invoice Date (Latest) (3) - Prior to complex despatch date testing a simple test will take place to ensure that the system order date is outside the number of days to ensure that records are not read/processed unnecessarily. The latest invoice date will be determined by reading the purchase transactions file for the order number. If none are found, then the latest transaction receipt date should be used (this may be an expected date if not actually received).

This latest invoice date is then compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not the order is ignored.

Use Invoice Matching

Use this checkbox as follows:

Unchecked - In order to cater for those companies that do not use the Accounts Payable (PL, a purchase order will be considered complete if the order is fully received into Stores.

Checked - The order must have been invoice matched before it can be considered for removal.

Note: If this is unchecked, the removal date selection Invoice Date (3) is not allowed.

Select **Update** (F8) to update the changes and return to the Business Document Selection window

Business Document Maintenance – INVMOV

Select Details (1) from the Business Document Selection window to view the INVMOV business document data

This data is shown for the company you are signed onto. If the window does not show company details then the data entered will apply to all companies when the removal is run.

Fields

Number of days

Enter the number of days for which the data is retained on the live database, before it is available for transfer to the history library.

It must be greater than 7, assuming most companies will want to keep data for at least a week.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Select Update (F8) to update the changes and return to the Business Document Selection window

Business Document Maintenance – LOADSH

Select Details (1) from the Business Document Selection window to view the LOADSH business document data

This data is shown for the company you are signed onto. If the window does not show company details then the data entered will apply to all companies when the removal is run.

Fields

Number of days

Enter the number of days for which the data is retained on the live database, before it is available for transfer to the history library.

It must be greater than 7, assuming most companies will want to keep data for at least a week.

Removal Date

The removal date is used for comparison purposes.

Select a removal date.

Alternately, use the prompt facility to select from the Inventory Description TLOD - Removal Date Load Sheet.

The options are as follows: -

Ship Date (1) - the ship date is compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not, the load is ignored.

Transfer Awaiting Despatch Loads

Use this checkbox as follows:

Checked - if the status is less than '70', the load cannot be removed to history. Unchecked - if the status is less than '95', the load cannot be removed to history.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Select **Update** (F8) to update the changes and return to the Business Document Selection window

Business Document Maintenance – CUSRET

Select **Details (1)** from the Business Document Selection window to view the CUSRET business document data

This data is shown for the company you are signed onto. If the window does not show company details then the data entered will apply to *all* companies when the removal is run.

Fields

Number of days

Enter the number of days for which the data is retained on the live database, before it is available for transfer to the history library.

It must be greater than 7, assuming most companies will want to keep data for at least a week.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Removal Date

The removal date is used for comparison purposes.

Select a removal date.

Alternately, use the prompt facility to select from the Inventory Description TRET - Removal Date Customer Return.

The options are as follows: -

Order Date (1) - the return date is compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not, the return is ignored.

Receipt Date (Last) (2) - The latest receipt date will be determined by reading the return transactions file for the return number. The latest receipt date will be compared to today's date and the number of days between the two calculated.

This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not the return is ignored.

Credit Date (Last) (3) - The latest credit date is determined by reading the return transactions file for the return number. The latest credit date is compared to today's date and the number of days between the two calculated.

The result is compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not, the return will be ignored.

Use Accounts Receivable

Use this checkbox as follows:

Unchecked - In order to cater for those companies that do not use the Aurora accounts receivable application, a return will be considered complete if a credit has been raised.

Checked - The credit must have been 'paid' before it can be considered for removal.

Select Update (F8) to update the changes and return to the Business Document Selection window

Business Document Maintenance – SINVCR

Select **Details (1)** from the Business Document Selection window to view the SINVCR business document data

This data is shown for the company you are signed onto. If the window does not show company details then the data entered will apply to *all* companies when the removal is run.

Fields

Number of days

Enter the number of days for which the data is retained on the live database, before it is available for transfer to the history library.

It must be greater than 7, assuming most companies will want to keep data for at least a week.

Caution: When these routines are implemented, if there is a significant amount of data awaiting transfer to the history file, the routine may take a considerable length of time to run.

We recommend that the number of days is initially set to a high value so that there is a smaller amount of data to be archived. The number of days should then be gradually reduced over a period of time until it reaches the desired level.

Removal Date

The removal date is used for comparison purposes.

Select a removal date.

Alternately, use the prompt facility to select from the Inventory Description TINV - Removal Date Consol/Sundry Inv/Crd.

The options are as follows: -

Order Date (1) - the invoice date is compared to today's date, and the number of days between the two calculated. This result is then compared to the number of day's field. If it is greater than this number of days, then the business document can be validated further as above. If it is not, the order is ignored.

Use Accounts Receivable

Use this checkbox as follows:

Unchecked - In order to cater for those companies that do not use the Aurora accounts receivable application, a sales order will be considered complete if the invoice is flagged as posted.

Checked - The Invoice must have been paid before the Sales Order can be considered for removal.

Select **Update (F8)** to update the changes and return to the Business Document Selection window

Business Document Maintenance Bespoke File Selection Window

Select **Bespoke (2)** from the Business Document Selection window to view the Business Document Bespoke File Selection window

Options

Amend (1)

Use this to select a bespoke file for maintenance.

Delete (4)

Use this to removes a bespoke file from the business document.

Functions

Add (F6)

Use this to add bespoke file details.

Update (F8)

Use this to update the changes to be poke file details.

Select the required function or select **Exit (F3)** to leave the task.

Business Document Bespoke File Maintenance Window

Select Add (F6) or Amend (1) from the Business Document Bespoke File Selection window.

Fields

File Name

In add mode, enter the bespoke file to be included in the data removal.

File Sequence

Enter the sequence number to position the bespoke files in the order in which it should be processed.

Company Field Name

Enter the field within the file that denotes the company.

Alternately, use the prompt facility to select the field

Document Key Field Name

Enter the field within the file that denotes the key data within the bespoke file.

Alternately, use the prompt facility to select the field.

Document Key Field Name 2

Enter a supplementary field within the file that denotes the secondary key data within the bespoke file.

Processing program

Enter any processing program that is to be called to remove data.

You do not need to have a processing program if data can be removed via SQL using:

- Company and the Document Key Field Name,
- Company, Document Key Field Name and Document Key Field Name 2

Caution: It is recommended that processing programs are used for performance reasons.

Press Enter to return to the Business Document Bespoke File Selection window.

Business Document View Core Files Window

Select View Core Files (5) from the Business Document Selection window

Use this window to display details of the standard product files being used in the data removal process. Details displayed are the same as those that are entered through the bespoke window.

Press Enter to return to the Business Document Selection window.

Business Document Copy History Libraries [2/L1H]

This task archives the copy of the history libraries created by the **Copy History Library Data process** to media, and then deletes them.

Note: These libraries have a numbered suffix and are created by running the Copy History library data process, usually via Machine Manager.

Business Document Copy History Libraries Selection Window

To display this window, select the Business Document Copy History Libraries task

Fields

History Library

Enter the name of the history library, including the suffix, of the library to be saved.

Caution: Once the History library is copied it is deleted

Bespoke History Library

Enter the name of the bespoke history library to be saved.

Caution: Once the History library is copied it is deleted

Storage Device

Enter the name of the storage device to be used

Copies

Enter the number of copies to be made

Caution: If multiple copies are to be made the user is prompted to change the contents of the storage device between copies.

Batch or Interactive

Select one of the following:

Batch - To run in batch.

Interactive. – To run interactively

Note: If running in Interactive mode, the user is directed as to when to load and change the storage media.

Caution: Users are prompted to load and change the storage media as appropriate via MSGW against the batch job.

Functions

Copy Libraries (F8)

Use this to copy libraries and remove the selected data libraries.

Delete Libraries (F11)

Use this to remove the selected data libraries without making a copy.

Historical Data Removal

In order to remove historical data from the system21 database, control data must be set up first via the **Business Document Control [1/L1H]** task. Then the following commands may be run manually or from Machine Manager to regularly remove transaction data.

Journaling

The function can operate with journaling and commitment control providing it is possible to journal all the files to the same journal.

To journal all the files associated with a business document type use the following command

CALL PGM(AULL1P2/L1401CL13) PARM('SALORD' 'AUL')

Where AUL is the associated application manager environment.

This will journal all files used by the selected business object type to the journal specified on the control file. You can use **Business Document Maintenance** [1/L1H] task in default settings to specify the current journal.

Note: If the order capture files are already journalled, then this journal will appear here and will not be maintainable.

If journaling and commitment control are active and a program fails in some manner then only the fully processed document references will be processed in the files, any part processed transactions will be returned to their original state.

Business Document - Historical Data removal

This removes the Business Document data which meets the control criteria.

Add entries to Machine Manager as required, an example follows:-

CALL PGM(AULL1P/L1401CLP) PARM('*A' 'SALORD' 'AUL')

Where AUL is the associated application manager environment.

The company can be a single company or *ALL (*A in the call program) for all companies.

Business documents which meet the criteria are transferred to the libraries specified in the control data. An audit is written to L1P42 of all documents transferred and exceptions are written to L1P44. When repeatedly run, new documents will be added the end of existing history files.

Copy History library/s to numbered version after specified number of days.

This copies the contents of the history library to another library and clears the history library ready for the next set of archived Business documents. When repeatedly run, it increments the library name suffix e.g. 01, 02 etc. The assumption is that these will be archived to media via option 2/L1H at some point and deleted.

Add entries to Machine Manager as required, an example follows:-

CALL PGM(AULL1P2/L1401CL10) PARM('*A' 'AUL')

Where AUL is the associated application manager environment.

The company can be a single company or *ALL (*A in the call program) for all companies.

Note: Each time the program runs, it accesses the business document control file (L1P43), and compares today's date with the date the copy routine last ran. If the difference between these two dates is greater than the copy library number of days, the library is renamed, and a new blank history library created.

The name used for the renamed history library (and the bespoke library) has the 2 digit copy library sequence number applied, from the business document control file. This sequence number is incremented by 1. The assumption is that these will be archived to media via option 2/L1H at some point and deleted.

Caution: When the sequence number reaches 99, it reverts to 00

This library name is then used for the rename process. This means that there could be multiple copies of the history library (and bespoke history library) on the system at any point in time.

The date of last copy is updated with today's date.

This approach means that the when the job runs to transfer the data to the history files, the program has to use a CRTDUPOBJ to create the copy file. This is important because if a database change needs to be applied, then all the history libraries will be detached, so that the new files can be created to prevent level checks.

Re-organisation of files

This re-organises the files following the removal business document removal. It only reorganizes the files specified in the control data.

If the option to journal all the files has been used and commitment control is activated then the option to re-organise the files relating to the business object can be used whilst the files are in active use.

If commitment control is not in use then the re-organize of physical files will attempt to re-organise the files but if it encounters a file that can not be allocated for exclusive use then the file will be skipped and the next file processed.

Add entries to Machine Manager as required, an example follows:-

CALL PGM(AULL1P2/L1401CL11) PARM('SALORD' 'AUL')

Where AUL is the associated application manager environment.

Manual Testing

You may wish to test using a test data library rather than the default data library.

Each of the programs detailed below that take an environment as part of the call can have the environment set to ***. This tells the program to not change the current library list.

So for testing purposes you would take an L1 option to set the initial library list, change the library list to include your data library (e.g. use CHGCURLIB to your test data library) and then call programs as detailed below using the following commands + F4 to enter the required parameters

L1 BDR PRC process business document

L1 BDR CPH copy history files

L1_BDR_RGZ reorganise business document files

In each case specify *** for the environment parameter.

Audit File Reconciliation - Overview

Overview

The major files in System21 have an equivalent audit file that represents a trail of changes made, recording **by whom** and **when** the change was made.

The majority of these audit files also record **what** was changed by means of before and after record images.

Whenever the need arises, these audit files are available for interrogation or query, either to investigate a particular change or to verify the integrity of the master file data.

FDA Compliance

An example of its use is a situation where the integrity of data needs to be ensured when a business wants to demonstrate compliance to US Food and Drugs Administration regulations, particularly Title 21 Code of Federal Regulations (21 CFR part 11) that deals with electronic records.

For FDA compliance, the System21 user has to validate the accuracy, reliability, and consistency of the software records. That validation could take a number of forms, but it might be to check the physical data records. This reconciliation facility can be used for the validation of these all important audit files.

Note: A separate document, FDA Compliance Guidelines, is available, discussing the relevant aspects of System21 in relation to the FDA requirements, and can be used as a guide when constructing a compliant business process.

Skeleton Audit File Reconciliation

A skeleton Audit File Reconciliation program is available, which verifies the most common of the auditing techniques: those that are labeled as Audit Type 1a in the tables that follow.

It performs three key functions:

- It checks that all the fields on the master file are also on the audit file. This verifies all fields are being audited.
- Following through the sequence of audited changes, it checks that the before image on one
 audit correctly equates to the after image of the previous change. This ensures no change was
 made without being audited.

• Finally, it checks that the last audit record image correctly represents the current master record. This shows the audit trail is up to date.

The instructions that follow describe how this skeleton can be used to verify the contents of any of the audit files of Audit Type 1a.

Note: For other audit file types, the source of the skeleton program could be used as a basis for developing other kinds of reconciliation, or the source of a generated program used as a base.

Audit Files

The final table below lists all the System21 files that have an equivalent audit file.

There are slight variations in the data held on the audit records, so the following explains the contents of the audit records and the differences between the various types.

Audit Type with Record Images

Audit Type	Date	Time	User	Device	Record Type	Record Image	Program	Audit No.
1a	Υ	Υ	Υ	Υ	1, 2, 3	1, 2	Υ	-
1b	Υ	Υ	Y	Υ	1, 2, 3	1, 2	-	-
1c	Υ	Υ	Υ	Υ	A, U, D	B, A	-	-

Audit Type without Record Images

Audit					Record	Record		
Туре	Date	Time	User	Device	Туре	Image	Program	Audit No.
2a	Υ	Υ	Υ	Υ	1, 2, 3	-	-	-
2b	Υ	Υ	Y	Υ	A, C, D	-	-	-
2c	Υ	Υ	Y	Υ	A, C, D	-	-	Υ
2d	Υ	Υ	Y	Υ	-	-	-	-
2e	Υ	Υ	-	-	-	-	-	-

Self-auditing

Audit Type	Date	Time	User	Device	Record Type	Record Image	Program	Audit No.
3	Υ	-	-	-	-	-	-	-

Fields

The following describes each of these audit fields.

Audit Type

Type 1 files have before and after record images:

• 1a uses numeric codes and also records the task that updated the file.

- 1b uses numeric codes but does not record the task that updated the file.
- 1c uses alphabetic codes.

Type 2 files record when changes are made without before and after record images:

- 2a uses numeric codes.
- 2b uses alphabetic codes.
- 2c uses alphabetic codes and also records an audit sequence number.
- 2d does not record the type of file update.
- 2e records only the date and time changed.

With Type 3 files, when changes are made, a new record is added to the master file, and the old record is marked with the date changed.

Date

This is the date on which the master record was changed and the audit record written.

On a self-auditing file the date last changed is only set on the superseded record, with the current record having a value of all zeros or all nines.

It is known by field names prefixed DTLC, DATC, ADAT, UDTE, and LCHD.

Time

This is the time at which the record was changed.

It is known by field names prefixed TLC, TIMC, ATIM, UTME, LCHT, and TMOC.

User

This is the user profile name of the user who ran the task that made the change.

It is known by field names prefixed USER, USRA, AUSR, LCHU, and USID.

Device

This is the iSeries Display Name or Workstation ID for the attached user.

It is known by field names prefixed TERM, TRML, AWRK, LCHW, and WSID.

Record Type

This identifies the database action performed on the master file record. Values are:

1 or A - A new record was added.

2 or C or U - An existing record was changed or updated.

3 or **D** - An existing record was deleted.

Numeric types are known by field names prefixed ATYP, AMTY, AMDT, and AACT.

Alphabetic types are known by field names prefixed MODE, FUNC, AFAC, TYPE, and UTYP.

Record Image

This identifies the type of record image. Values are:

1 or B - Before image

2 or A - After image

It is known by field names prefixed ARCT.

Program

This is the program name of the task that performed this database update.

It is known by field names prefixed APRG.

Audit Number

This is an incrementing sequence number that identifies each of the audited changes, recorded on the master file record and stamped on the audit record.

It is known by field names prefixed NLUP.

Generating an Audit File Reconciliation Program Source Member

Run the Audit File Reconciliation task on the Generic Functions Utility menu (1/L1U).

Compiling an Audit File Reconciliation Program

Once the source has been successfully created, it should be carefully checked. It should then be compiled by a user with sufficient authority to allow the program to be run in the required environment.

- Program object owner AULOWNER
- Primary group AULUSER
- Public authority *EXCLUDE

Running an Audit File Reconciliation

Once compiled, the reconciliation program can be run when required. It does not have any parameters.

The program must be run at a time when the master file is not in being modified, otherwise unpredictable results may occur.

The program can be called from a command line; however, it is recommended that the program be run from a batch job at a time when it will have minimum impact on other tasks. If the files are large, the program could take a long time to run.

Note: The reconciliation is not for a specific company; the whole file is reconciled.

A printer file, L1620PT, is produced, which reports any errors detected and a count of the number of records processed. When an error is reported, the record key fields and audit control fields are shown, together with an appropriate error message.

The errors reported are:

Key Field Missing from Master File

One of the fields specified for the unique key does not exist on the master file.

Field Missing from Audit File

There is field on the master file that does not have a corresponding field on the audit file. All master file fields must have a corresponding audit file field for this reconciliation to work.

Field has Different Definitions on Master File and Audit File

The fields have different sizes or types so cannot be compared. All master file fields must have a corresponding audit file field with the same definition for this reconciliation to work.

ATYP Field Missing or has Incorrect Definition on Audit File

The skeleton program is dependent on the Audit Type (ATYP) to perform the reconciliation. For this error to occur, this may be wrong or missing on the nominated audit file.

No Audit Records Found for Master File Key

A master file record should have as a minimum the first after image that equates to the addition of that record.

Unrecognised Audit Type Record

The skeleton program expects valid values in the field Audit Type (ATYP).

Error Found in Sequence of Audit Records

The before and after images are, for some reason, out of sequence.

Current Master File Record Does Not Match Final AFTER Image

The final after image ought to be the same as the current master file record.

AFTER/BEFORE Image Mismatch

The before image written before a new master file update ought to be the same as the after image written after the previous update. If they are not the same, it might imply the master file has been updated without an audit image being written. It might also be because the images have got out of sequence.

System21 Files with an Equivalent Audit File

Audit Type 1a

This type:

- Records before and after images
- Uses numeric codes and also records the activity that updated the file

Generic and Style

File	Title	Audit File
AIP50	Order Header Details - received via EDI	AIP50A
AIP52	Order Line Details - received via EDI	AIP52A
ASP51	Pallet Header	ASP51A
ASP52	Pallet Details	ASP52A
ASP72	ASN Header	ASP72A
ASP74	Item Summary	ASP74A
ASP75	ASN Address Overrides	ASP75A
DRP24	DRP Stockroom/Customer	DRP24A
INP1B	Article Numbering	INP1BA
INP21	Calendar Years Header	INP21A
INP35	Item Maintenance	INP35A
INP35E	Inventory Item Master Extension	INP35EA
INP47	Multi-sourcing Rule Header	INP47A
INP48	Multi-sourcing Rule Details	INP48A
INP4B	Sourcing Rule Header	INP4BA
INP4C	Sourcing Rule Detail	INP4CA
INP50	Search Family Attributes	INP50A
INP51	Count Profile	INP51A
INP52	ABC Class Profile	INP52A
INP54	Count Details	INP54A
INP58	Count Header	INP58A
INP60	Item/Stockroom Balance	INP60A
INP84	Batch Header	INP84A
INPCB	Country Level Average Packaging	INPCBA
INPCD	Packaging Code Fees	INPCDA
INPCF	Customer/Item Responsibility Overrides	INPCFA
INPCH	Packaging Countries - Responsibilities	INPCHA
INPCJ	Country/Item Packaging Code Details	INPCJA
INPCK	Item Responsibility Overrides	INPCKA
INPCL	Sales Channel Responsibility Overrides	INPCLA

File	Title	Audit File
INPE1	Packaging Reporting Countries	INPE1A
OEP20	Customer Detail	OEP20A
OEP85	Discount List	OEP85A
PMP04	Purchase Order Line Landed Costs	PMP04A
PMP07	Item/Supplier Landed Cost Details	PMP07A
PMP14	GRN Line Landed Costs	PMP14A
WTP00F	Company Profile Extension	WTP00FA
WTP05E	Customer Extension	WTP05EA
WTP10E	Supplier Extension	WTP10EA
WTP25E	Item Detail Extension	WTP25EA
WTP40F	Country Extension	WTP40FA
WTP90E	World Trade Movement Extension	WTP90EA

Generic Only

File	Title	Audit File
AIP91	Order Line Detail	AIP91A
AIPS1	Product Activity Header	AIPS1A
AIPS2	Customer PO Authorisation	AIPS2A
AIPS3	Product Activity Detail	AIPS3A
AIPS4	Product Activity SDQ Detail	AIPS4A
EQJ28	Timesheet Header	EQJ28A
EQJ29	Timesheet Details	EQJ29A
EQJ31	Employee Expense Header	EQJ31A
EQJ32	Employee Expenses	EQJ32A
EQJ34	Direct Transactions	EQJ34A
EQJ47	Pricing Transactions	EQJ47A
EQJ65	Direct Postings Interface	EQJ65A
EQJC2	Equipment/Warranty Parts	EQJC2A
EQP22	Installation/Machine Header	EQP22A

File	Title	Audit File
EQP44	Invoice Pending File	EQP44A
EQP55	Service Equipment	EQP55A
INP01	Product Transaction Control	INP01A
INP1A	IN Division	INP1AA
INP36	Item Attributes	INP36A
INP38	Alternative Item Reference	INP38A
INP63	Standard Landed Cost	INP63A
INP70	Certificate of Conformance Details	INP70A
INP87	Batch Header Control Parameters	INP87A
INP92	Item Statistics	INP92A
INPLA	Location Control Stockroom Profile	INPLAA
INPLB	Location Control Item Stockroom Master	INPLBA
INPLC	Location Map Master	INPLCA
INPLH	Rotation Date Balances	INPLHA
OEP16	Pricing	OEP16A
OEP18	Pricing Group	OEP18A
OEP19	Pricing Group Details	OEP19A
OEP20E	Customer Detail Extension	OEP20EA
OEP40	Order Header	OEP40A
OEP45	Address Overrides	OEP45A
OEP45E	Order Address Overrides Extension	OEP45EA
OEP50	Order Charges	OEP50A
OEP55	Order Lines	OEP55A
OEP65	Invoice Headers	OEP65A
OEP70	Sales Invoice Line	OEP70A
OEP75	Discount/Price List Profile	OEP75A
OEP80	Price List	OEP80A
OEP90	Depot Profile	OEP90A
PMP02	Purchase Order Header	PMP02A
PMP03	Purchase Order Lines	PMP03A

File	Title	Audit File
PMP31	Contract Header	PMP31A
PMP32	Contract Details	PMP32A
PMP70	Invoice Matching Delimiter	PMP70A
SSP22	Installation Details	SSP22A
SSP44	Invoice Pending	SSP44A
SSP55	Service Equipment	SSP55A
SSPA8	Multi Account Cross Reference	SSPA8A
SSPC2	Equipment/Warranty Parts	SSPC2A
TPP01	Transport Centre	TPP01A
TPP12	Vehicle Types	TPP12A
TPP15	Carrier Rates	TPP15A
TPP16	Carrier Rate Level Breaks	TPP16A
TPP20	Carrier Details	TPP20A
TPP23	Route Details	TPP23A
TPP25	Delivery Time Slot Details	TPP25A
TPP26	Rating Area Details	TPP26A
TPP42	Carrier/Route Details	TPP42A
TPP48	Item/Pack Type Details	TPP48A
TPP65	Load Profile	TPP65A
TPP75	Load/Drop	TPP75A
TPP80	Drop/Order	TPP80A
TPP81	Order Line/Container Type	TPP81A
TPP82	Transport Charges	TPP82A

Style Only

File	Title	Audit File
APP05	Style PO Additional Details	APP05A
APP06	Style PO Line Additional Details	APP06A
APP07	Style Shipment and Container Details	APP07A

File	Title	Audit File
APP25	Style/Colour Matrix	APP25A
APP26	Style Attributes	APP26A
APP36	Style Mark for Details	APP36A
APP37	Style Order Mark for Details	APP37A
APP38	Style Despatch Mark for Details	APP38A
APP41	Style Blanket Order Batch Match Parm	APP41A
APP56	Style Letters of Credit	APP56A
OEP96	Style Sales Order Types	OEP96A

Audit Type 1b

This type:

- Records before and after images
- Uses numeric codes but does not record the activity that updated the file

File	Title	Audit File	Generic	Style
WHP05	Warehouse Profile	WHP05A	G	S
WHP06	Warehouse/List Profile	WHP06A	G	S
WHP10	Area Profile	WHP10A	G	S
WHP12	Resource Code	WHP12A	G	S
WHP13	Check Digits	WHP13A	G	S
WHP15	Area Dimensions	WHP15A	G	S
WHP20	Location Type/Packaging Type	WHP20A	G	S
WHP25	Location Type Characteristics	WHP25A	G	S
WHP30	Warehouse Map	WHP30A	G	S
WHP40	Packaging Code Specification	WHP40A	G	S
WHP45	Item/Warehouse Profile	WHP45A	G	S
WHP50	Item/Pack Profile	WHP50A	G	S
WHP55	Item Fixed Locations	WHP55A	G	S
WHP60	Location Rules by Item	WHP60A	G	S
WHP62	Location Rules Header	WHP62A	G	S

File	Title	Audit File	Generic	Style
WHP65	Location Rules by Area	WHP65A	G	S

Audit Type 1c

This type:

- Records before and after images
- Uses alphanumeric codes

File	Title	Audit File	Generic	Style
CRP02E	Customer Return Headers Extension	CRP02EA	G	S
CRP03E	Customer Return Headers Extension	CRP03EA	G	S
CRP06	Returns Officers	CRP06A	G	S
CRP08	Collection Instructions	CRP08A	G	S
CRP10	Company Profile	CRP10A	G	S
CRP10E	Customer Returns Company Profile	CRP10EA	G	S
DRP00	Company Profile	DRP00A	G	S
DRP01	DRP Network	DRP01A	G	S
DRP02	DRP DC (Branch)	DRP02A	G	S
DRP03	Deployment Profile	DRP03A	G	S
DRP04	DRP Item Master	DRP04A	G	S
DRP06	DRP Purchase Officers	DRP06A	G	S
DRP31	Calendar Years Header	DRP31A	G	S
DRP33	Holidays	DRP33A	G	S
DRP34	Week Template	DRP34A	G	S
DRP70	DRP Control File	DRP70A	G	S
DRP74	DRP Item Group Forecast	DRP74A	G	S
DRP75	DRP Item Forecast	DRP75A	G	S
DRP76	DRP Item Group Profile	DRP76A	G	S
DRP78	DRP Stockroom	DRP78A	G	S
FCP00	Company Profile	FCP00A	G	S
FCP01	Group/Item Profiles	FCP01A	G	S

istory	FCP02A	G	
A 1 . 1 .			S
1odels	FCP07A	G	S
lethod Codes	FCP09A	G	S
structions	PMP08A	G	-
Profile	PMP10A	G	S
pany Profile Additions	PMP15A	-	S
	PMP25A	G	-
Structure	PMP40A	G	-
ns Authorisations	PMP50A	G	S
	Profile pany Profile Additions Structure as Authorisations	pany Profile Additions PMP15A PMP25A Structure PMP40A	pany Profile Additions PMP15A - PMP25A G Structure PMP40A G

Audit Type 2a

Files record when changes are made without before and after images.

This type uses numeric codes.

File	Title	Audit File	Generic	Style
FAP02	Financial Calendar Year	FAP02A	G	S
FAP03	Financial Period Calendar	FAP03A	G	S
FAP10	Depreciation Profile	FAP10A	G	S
FAP11	Valuation Index	FAP11A	G	S
FAP12	Structured General Ledger Accounts	FAP12A	G	S
FAP20	Base Asset Details	FAP20A	G	S
FAP23	Asset Analysis Codes	FAP23A	G	S
FAP26	Asset Financial Details	FAP26A	G	S
FAP27	Asset External Funding	FAP27A	G	S
FAP28	Leased Assets	FAP28A	G	S
FAP30	Asset Book Details	FAP30A	G	S
FAP35	Asset Disposal Details	FAP35A	G	S
FLP018	Analysis Transaction	FLP018A	G	S

File	Title	Audit File	Generic	Style
USP20	Customer Tax Bodies	USP20A	G	-
USP35	Tax Bodies	USP35A	G	-
USP36	Tax Rates	USP36A	G	-
USP37	Remit to Details	USP37A	G	-
USP39	Taxable Items	USP39A	G	-

Audit Type 2b

Files record when changes are made without before and after images.

This type uses alphanumeric codes.

File	Title	Audit File	Generic	Style
CNP40	Rules Header	CNP40A	G	-
CNP42	Rules Detail	CNP42A	G	-
CNP44	Bill Rules	CNP44A	G	-
CNP46	Rules Messages	CNP46A	G	-
CSP00	Company Profile	CSP00A	G	S
CSP10	Bank Details	CSP10A	G	S
CSP11	Bank Extension	CSP11A	G	S
CSP40	Bills of Exchange Master	CSP40A	G	S
INP65	Kit List	INP65A	G	S
SLP05F	Customer Name and Address Extension	SLP05FA	G	S
SLP61	Letter Text File	SLP61A	G	S

Audit Type 2c

Files record when changes are made without before and after images.

This type uses alphanumeric codes and also records an audit sequence number.

File	Title	Audit File	Generic	Style
FLP001	Company Profiles	FLP037	G	S

File	Title	Audit File	Generic	Style
FLP002	Ledger Descriptions	FLP039	G	S
FLP003	Chart of Accounts	FLP041	G	S
FLP026	Level Codes	FLP040	G	S
PLP05	Supplier Names and Addresses	PLP05A	G	S
SLP05	Customer Names and Addresses	SLP05A	G	S

Audit Type 2d

Files record when changes are made without before and after images.

This type does not record the type of file update.

File	Title	Audit File	Generic	Style
APP35	Style Item Master	APP35A	-	S
FLP045	User-defined Budget	FLP045A	G	S
FLP055	Period Budgets	FLP055A	G	S
OEP20E	Style Customer Detail Extension	OEP20AE	-	S
PLP00	Company Profiles	PLP00A	G	S
PLP35	Period Calendar	PLP35A	G	S
PLP40	Reason Code	PLP40A	G	S
PLP41	Location Codes	PLP41A	G	S
SLP00	Company Profiles	SLP00A	G	S
SLP35	Period End Dates - Calendar File	SLP35A	G	S
SLP40	Reason Codes	SLP40A	G	S

Audit Type 2e

Files record when changes are made without before and after images.

This type records only the date and time changed.

File	Title	Audit File	Generic	Style
EQP20	Mobile Equipment Servicing Pick List	EQP20A	G	-

File	Title	Audit File	Generic	Style
EQP26	PM Device Task Lists	EQP26A	G	-
SSP20	Mobile Service Management Pick List	SSP20A	G	-
SSP26	PM Device Task Lists	SSP26A	G	-

Audit Type 3

Files record when changes are made without before and after images.

This type uses numeric codes.

File	Title	Audit File	Generic	Style
PMP02	Style Purchase Order Header	PMP02	-	S
PMP03	Style Purchase Order Lines	PMP03	-	S
PMP53	Style Purchase Order Detail Lines	PMP53	-	S

Other Types of Auditing

These Application Interface files have their own form of auditing:

File	Title	Audit File	Generic	Style
AIP4D	Catalogue Header Interface	AIP4DA	G	
AIP4E	Al Catalogue Item Detail Interface	AIP4EA	G	
AIP76	Invoice Customer Tax Summary - trans	AIP76A	G	S
AIP78	Invoice customer trailer - trans	AIP78A	G	S

Audit File Reconciliation [1/L1U]

This task allows for the generation of an audit file reconciliation, performing the first step to generate the source code for a reconciliation program.

To complete the reconciliation, the manual compile and run steps must be followed. Refer to the Audit File Reconciliation Overview section for more information.

Audit File Reconciliation Instructions Window

To display this window, select the Audit File Reconciliation task.

The displayed window initially presents a message with reference to the instructions that have to be followed to build an audit file reconciliation program. It then prompts for the parameters for the first step - to generate the source code for a reconciliation program.

Fields

Message (Untitled)

The message refers to the Product Guide, where the instructions can be followed.

Functions

Exit (F3)

Use this to return to the menu without building a reconciliation program.

Continue (F8)

Use this to proceed to first step in order to generate the source for a reconciliation program.

Select **Continue (F8)** to continue with the first step required to generate the source for a reconciliation program.

Audit File Reconciliation Program Source Generation Window

To display this window, select Continue (F8) on the Audit File Reconciliation Instruction window.

Use this window to nominate the audit file to be reconciled. Program source for a new audit file reconciliation will be generated.

Fields

Master File/Master File Library

Enter the name of the master file being reconciled and the files library in which it resides, for example, Inventory Item Master INP35 in AULT2F2.

Audit File/Audit File Library

Enter the name of the corresponding audit file being reconciled and the files library in which it resides, for example, INP35A in AULT2F2.

Source Member to be Generated

Member Name

Enter a name for the new program source.

It is recommended that you avoid names that may conflict with the System21 object naming convention.

Source File/Library

Enter a name for the source file and the library in which this new program source will be saved. These must exist.

It is recommended that a bespoke library should be used and that the files should not be saved into the standard System21 libraries.

Replace Member if Member Already Exists

This controls whether the new generated source should replace an existing source member.

Use this checkbox as follows:

Checked - To replace the existing member if it already exists

Unchecked - Not to replace the existing member if it already exists

Member Name

Enter the name of the skeleton program source member. The product is shipped with a single skeleton source called L1620. This is the default.

Note: This skeleton works for any audit file which uses the most common audit technique, described as type 1a in this product guide.

Note: If you wanted to reconcile a number of files of a different audit type, you could manually create a new source skeleton source and quote that skeleton member here.

Source File/Library

Enter the name of the source file and library in which the skeleton source member can be found. This defaults to L1RUNTIME in the T1 program objects library, for example AULT1P2.

Error Count Limit for Printed Report

This will limit the number of reported errors when the reconciliation program is run. The default is 80, which equates to about five pages of errors.

There are two reasons why this may be important.

- Firstly, during the development of a reconciliation program, the key fields may be defined incorrectly, thus resulting in a lot of reported errors.
- Secondly, where an audit file has, for some reason, gone adrift from the master file and there
 are high volumes of records involved, the same error might be reported many times. This
 error count prevents high volumes of unnecessary output.

Note: The program will continue to run through the master file and accumulate the total number of errors found and records processed, and print these totals at the end of the report.

Unique Key

Enter up to twenty field names from the master file, in the required sequence, to define a unique key. This is used to match the audit records to the master file.

Select **Generate (F8)** to verify the selected parameters and generate the source member. The Audit File Reconciliation Generation Pop-up is displayed.

Audit File Reconciliation Source Generation Pop-up

To display this pop-up, select **Generate (F8)** on the Audit File Reconciliation Program Source Generation window.

This window confirms whether the source generation has been successful or not.

Source Generation Failed

If the source generation was not successful, the printed error report will detail the errors found.

Select **Previous (F12)** to return to the input window for another attempt, or select **Exit (F3)** to leave the task without generating a source member.

Source Generated

If the source generation was successful, the printed error report will show no errors and confirm the name and placement of the generated source. You may wish to review the generated source.

Select **Exit (F3)** to complete the task and return to the menu. The manual steps for compiling and running the reconciliation program must now be followed, as described in the Audit File Reconciliation - Overview section.

Appendix A Glossary



AM

Acronym for Application Manager

Application

In System21 this refers to a group of related modules. For example the Financials application includes modules for General Ledger, Accounts Receivable and Cash Management. Non-System21 applications can refer to any software package.

Application Manager

This is designed for the easy management of System21 <u>applications</u>. It sits between the iSeries 400 system and the applications it manages, providing a route into them for the user. It can also be used to control non-System21 functional areas and to design bespoke menus.

Machine Manager

This is designed to provide automatic management of daytime and night-time operating environments, where daytime processing is mainly interactive and night-time processing is mainly batch. The interface between the two operating environments is controlled through scheduled day-start and day-end jobs.

MM

Acronym for Machine Manager