Entire Operations

Administration

Version 5.5.3

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ADABAS & NATURAL

This document applies to Entire Operations Version 5.5.3 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Table of Contents

Preface

This documentation describes the administration functions and option settings provided for Entire Operations administrators and users permitted to use selected functions and options as defined in their profile settings.

Accessing Administration Functions	Access administration services.
User Maintenance	List, add, modify and delete user profiles.
Entire Operations Monitor	Display the Monitor status and control the Monitor.
Definition of Nodes	List, add, modify and delete server nodes for different operating system environments.
Entire Operations Defaults	Define defaults for the operating system environment, display settings, logging, networks, jobs, JCL, SYSOUT and others.
Monitor Defaults	Define system files, nodes, activities and tasks for the Entire Operations Monitor.
Monitor Accounting	Enable or disable the Monitor accounting facility.
Global Messages for Events	Define default settings for sending and storing event-specific messages such as job execution errors.
Global User Exits	Define system-wide user exits.
Global Message Code Table	Define message codes to be checked by default after job termination.
Resources	List, add, modify and delete resource definitions.
Mailbox Definition	List, add, modify and delete mailboxes.
Special Monitor Functions and Batch Jobs	Define a monitor start network that is executed after aech monitor start and prior to the activation of another job. Perform system-wide functions such as controlling monitoring activities and jobs in hold, recovering the system and cleaning up the database.
RPC Server Defaults	Define the RPC server used by Entire Operations GUI Client.
Entire Operations Files	View the system files used by Entire Operations.

1 About this Documentation

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *`folder.subfolder.service`*, APIs, Java classes, methods, properties.
`Italic`	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
`Monospace font`	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

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2 Accessing Administration Functions

To access functions available for system administration

- From the Main Menu, select the **System Administrator Services** option and press ENTER.

  A **System Services Menu** like the example below appears:

```
15.10.18                ***** Entire Operations *****                11:55:36
Owner EXAMPLE                System Services Menu              User ID SAG
--------------------------------------------------------------------------------

     System Services Menu

  1  User Maintenance
  2  Entire Operations Monitor
  3  Definition of Nodes
  4  Entire Operations Defaults
  5  Monitor Defaults
  6  Monitor Accounting
  7  Global Messages for Events
  8  Global User Exits
  9  Global Message Code Table
 10  Resources
 11  Mailbox Definition
 12  Special Functions
 13  RPC Server Defaults
 14  Entire Operations Files
Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End                                                  Menu
```

All administration functions available are described in the remainder of this documentation.

3 User Maintenance

In Entire Operations, a user ID can be used to enter the system. Entire Operations user IDs should but need not be defined to the host TP monitor. Several users can log on to Entire Operations with the same user ID and password at the same time. However, for reasons of data security and to trace data modifications, each user usually has a personal user ID and password.

Listing Users

To list all users

- From the **System Services Menu**, select the **User Maintenance** option and press ENTER.

  A **User List** screen with a list of Entire Operations user IDs appears with their associated owner names:

```
19-02-28                ***** Entire Operations *****                11:13:53
                                    User List
--------------------------------------------------------------------------------
                      Cmd     User Name      Owner Name
                              *-------
                       _      SAG            NATQA
                       _      SAGTEST        SAGTEST




****************************** Bottom of Data ******************************
D Delete   B Browse   M Modify

Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   End         Save        Up    Down                   Menu
```

  You can scroll the list using PF7 (Up) and PF8 (Down). For a more selective list, add a start value in the first line of the **User Name** column. For example, enter S and press ENTER to start the list with IDs beginning with the letter S.

  You can add, delete and modify user profiles using the available line commands and PF keys.

  Line Commands: User List

  The following line commands are available on the **User List screen**:

Line Command	Description
D	Delete a user definition and profile.
B	View a user definition in read-only mode: see *Viewing, Adding and Modifying a User*.
M	Modify a user definition and profile: see *Viewing, Adding and Modifying a User*.

Viewing, Adding and Modifying a User

To view or modify a user

1 To view a user definition in read-only mode:

On the **User List screen**, enter B (Browse) in the line command input field next to the required user and press ENTER.

Or:

To modify a user definition:

On the **User List screen**, enter M (Modify) in the line command input field next to the required user and press ENTER.

Or:

Use the direct command MODIFY USER as described in the *Direct Commands* documentation.

The **User Definition and Profile** screen appears with the current user definition. In edit mode, you can modify the definition and profile settings in the same way as when adding a user.

2 Choose PF5 (Save) to save any modifications.

To add a user

- Choose PF2 (Add) on the **User List screen**.

Or:

Use the direct command ADD USER described in the *Direct Commands* documentation.

A **User Definition and Profile** screen like the example below appears:

```
25.01.19               ***** Entire Operations *****               11:51:43
                        User Definition and Profile
--------------------------------------------------------------------------------
                                                                      Mailboxes
      User ID ==> EXAMPLE_    Owner at Logon ==> EXAMPLE___           __________
                                                                      __________
    User Type ==> A                                                   __________
      Profile ==> ________                                            __________
Language Code ==> 1__ English                                         __________
       E-Mail ==> ____________________________________________        __________
                                                                      __________
                                                                      __________
                                                                      __________
                                                                      __________
Profile Settings
 Administration Functions ==> _               Representation ==> _
      Network Maintenance ==> _                  Sort Orders ==> _
                Reporting ==> _            Selection Criteria ==> _
               Monitoring ==> _     Max. Lines in Log Display ==> ________

Command => ____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save              Nodes Owner             Menu
```

This **User Definition and Profile** screen consists of two sections:

- The **User Definition** in the upper half of the screen where you define a user to Entire Operations.

  For explanations of the fields, see *User Definition and Profile Settings*.
- The **Profile Settings** section in the lower half of the screen where you define the user's profile.

  For explanations of the fields, see the following sections:

  Administration Functions
  Network Maintenance Functions
  Reporting Functions
  Monitoring Functions
  Representation - Display Settings
  Sort Orders in Lists
  Selection Criteria Settings
  Max. Lines in Log Display: *User Definition and Profile Settings*

Special PF Keys: User Definition and Profile

PF Key	Name	Function
PF8	Nodes	Define operating system server default user IDs. See *Operating System Server Default User IDs for a User*.
PF9	Owner	Link a user to additional owners. See *Adding and Removing User/Owner Links and Owners*.

User Definition and Profile Settings

You define a user to Entire Operations and set main user defaults by using the fields in the upper section of the **User Definition and Profile screen**.

The fields in the lower section of the **User Definition and Profile screen** are used to define user privileges for distinct maintenance functions and manage individual preferences for default system settings.

User profiles can be modified individually at any time.

Note: We recommend that a user with a modified profile logs off from Entire Operations after the changes are made and logs on again to refresh the session. This guarantees that all profile changes are in effect.

Field	Description
User ID	Entire Operations user ID. This is the user ID with which the user should log on to Entire Operations. See also the sections *Entire Operations User IDs* and *Operating System User IDs* in the *User's Guide*.
Owner at Logon	A job network belongs to an owner. Users linked to that owner are allowed to perform any activity on that network. This includes the granting of some job network functions to other users. The owner at logon must always be defined. See also the section *Owner at Logon* in the *User's Guide*. You can link additional owners to a user as described in *Adding and Removing User/Owner Links and Owners*. **Note:** A user linked to the owner SYSDBA is authorized to access any objects in the whole system.
Profile (optional)	User ID of a predefined template user. If using a wildcard, a user can be selected from a list.

Field	Description	
	The selection of an existing user sets all the attributes to the value of the corresponding attributes in the referenced profile. The predefined templates change permission values. The field **Profile** is reset if an attribute of the user maintenance window is manually modified. Default templates:	
	=GENERAL or =G	Use default general user profile.
	=OPER or =O	Use default operator profile.
	=ADMIN or =A	Use default administrator profile.
	The user's settings can be modified individually later.	
User Type	Determine the tasks the user is allowed to do. The value entered here sets certain authorization defaults in the user profile. Possible values:	
	G	User with general rights. The general user can only view and maintain the Entire Operations objects allowed by the administrator. In addition, the user can view and maintain the objects allowed to the owners and users associated with the user.
	O	User with operator rights. The operator can view and maintain all Entire Operations objects and perform all system maintenance functions allowed by the administrator.
	A	User with administrator rights. The administrator can view and maintain any Entire Operations objects and perform any system maintenance functions.
	With these options, the profile settings of a user are predefined. Individual settings can be modified at any time using the options in the **Profile Settings** section of this screen.	
Language Code	Determine the user language under which Entire Operations is to run. **Note:** The language can be modified anytime during the session using the direct command SET LANGUAGE 1 or SET LANGUAGE 2. Possible values:	
	1	English.
	2	German.

Field	Description
E-Mail	E-mail address used for notifications sent to the user by Entire Operations. The commercial at sign (@) can also be coded as `(a)`.
Mailboxes	Mailbox(es) associated with the user. User is notified of any pending requests linked to these mailboxes. You can specify up to 10 mailboxes per user.
Administration Functions	See the section ***Administration Functions***.
Network Maintenance	See the section ***Network Maintenance Functions***.
Reporting	See the section ***Reporting Functions***.
Monitoring	See the section ***Monitoring Functions***.
Representation	See the section ***Representation - Display Settings***.
Sort Orders	Invoke the **Sort Orders** definition for this user. See ***Sort Orders in Lists***.
Selection Criteria	Invoke the **Selection Criteria Settings** definition for this user.
Max. Lines in Log Display	Determine the maximum number of lines shown in the log display. The maximum number can be overridden on the **Log Display Selection** screen (see *Log Information* in the *User's Guide*). A value of zero (`0`) or an empty field means that there is no line limit.

Profile Settings for User Authorization

Defining a user profile consists of authorizing the user for a certain level of activity in the various system facilities.

User authorizations fall into the following groups:

- **Administration Functions**
- **Network Maintenance**
- **Reporting**
- **Monitoring**

You select a group of functions by entering any character in the appropriate input field and pressing ENTER. A window opens with possible functions, the default authorization value according to the **user type** and, optionally, copied profile.

Authorization Options

The user privileges that can be granted for a function depend on the **user type** defined for the user: general user (type `G`), operator (type `O`) and system administrator (type `A`).

You can enter one of the following authorization options for each function listed in the window (press ENTER to save modifications, and choose PF3 to close the window):

Option Setting	Authorization
Y	Allow function.
N	Disallow function.
blank	No access.
R	Read access only (no definition/modification of item allowed). Read-only restrictions also apply when using a modify or edit function if provided for an item or a list of items.
W	Read/write access (definition/modification allowed, but no delete).
D	Read/write/delete access (all functions allowed).
other option settings	Specific or additional options that can be set for profile settings and functions. They are described in the relevant sections of this chapter.

Deleting a User

To delete a user definition and profile

1 Enter D in the line command field next to the required user listed on the **User List screen** and press ENTER.

A confirmation window opens.

2 Enter the user ID to confirm the deletion and press ENTER to perform the deletion and close the window.

Note: Deleting a user does not necessarily also delete the owner specified as **Owner at Logon** for this user. You can use the OW-MB--P utility (administrator rights required) to make sure that an owner is entirely removed from the environment: see *Mass Change of the Owner and Owner Deletion* in the *User's Guide*.

Adding and Removing User/Owner Links and Owners

In addition to the **Owner at Logon** who must be defined in a user profile, you can link a user to other owners and remove existing links or delete owners.

If other owners are defined, the user can switch to one of them during the session. The user is also authorized to access the objects belonging to the other owners by using the `SET OWNER` direct command (see the *Direct Commands* documentation).

Notes:

1. A user linked to the owner SYSDBA is authorized to access any object in the entire Entire Operations system environment.
2. New owner names must start with a letter and may not contain blanks.

Related Topic:

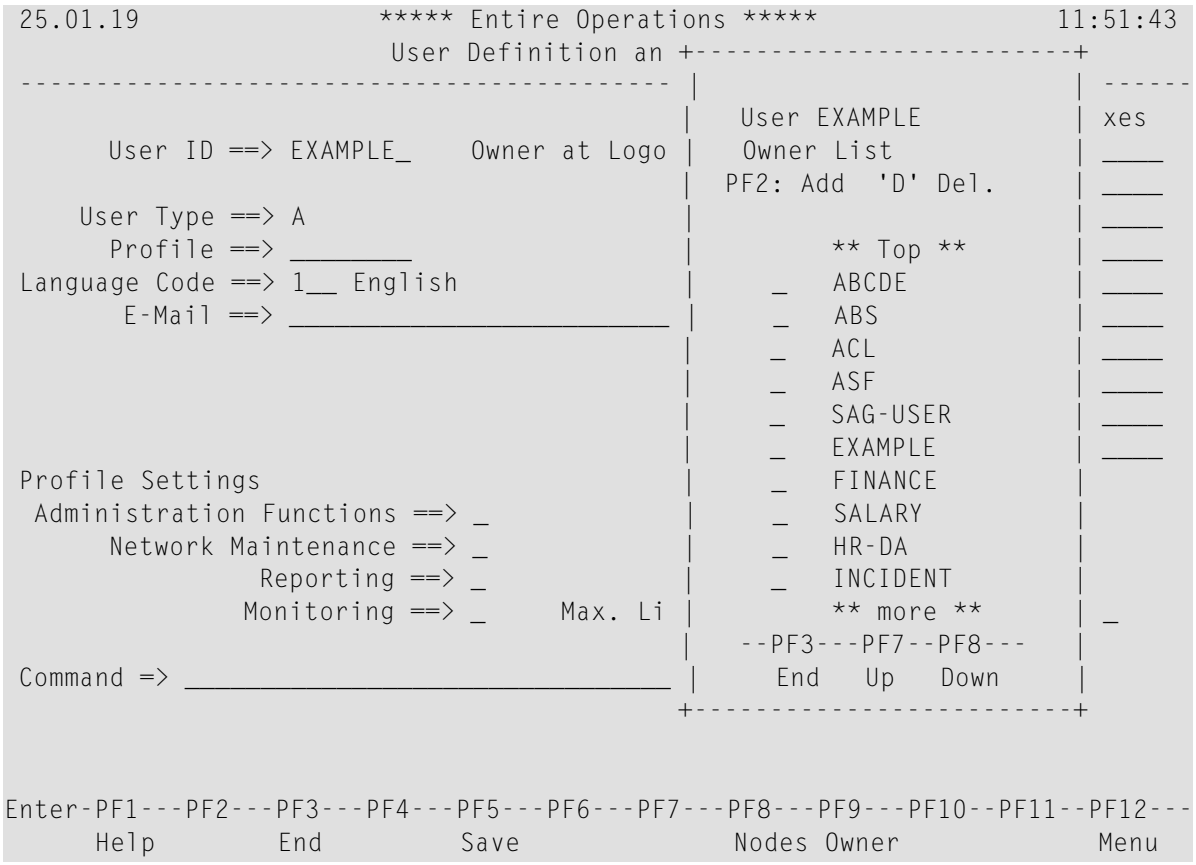
- *Using Owners* in the *User's Guide*.

Linking Users to Owners

To link a user to an additional owner

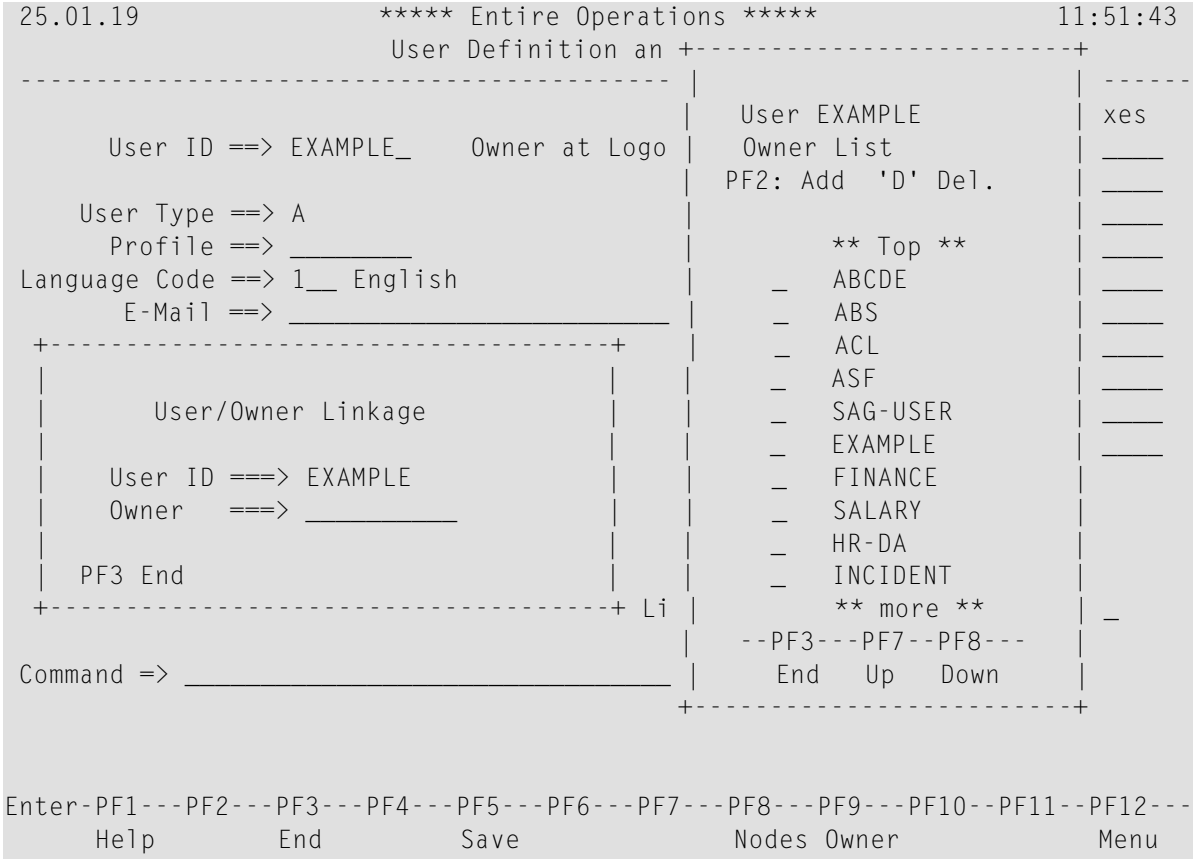
1 Choose `PF9` (Owner) on the **User Definition and Profile screen**.

An **Owner List** window like the example below opens:



2 Choose PF2 (Add) to link a new owner.

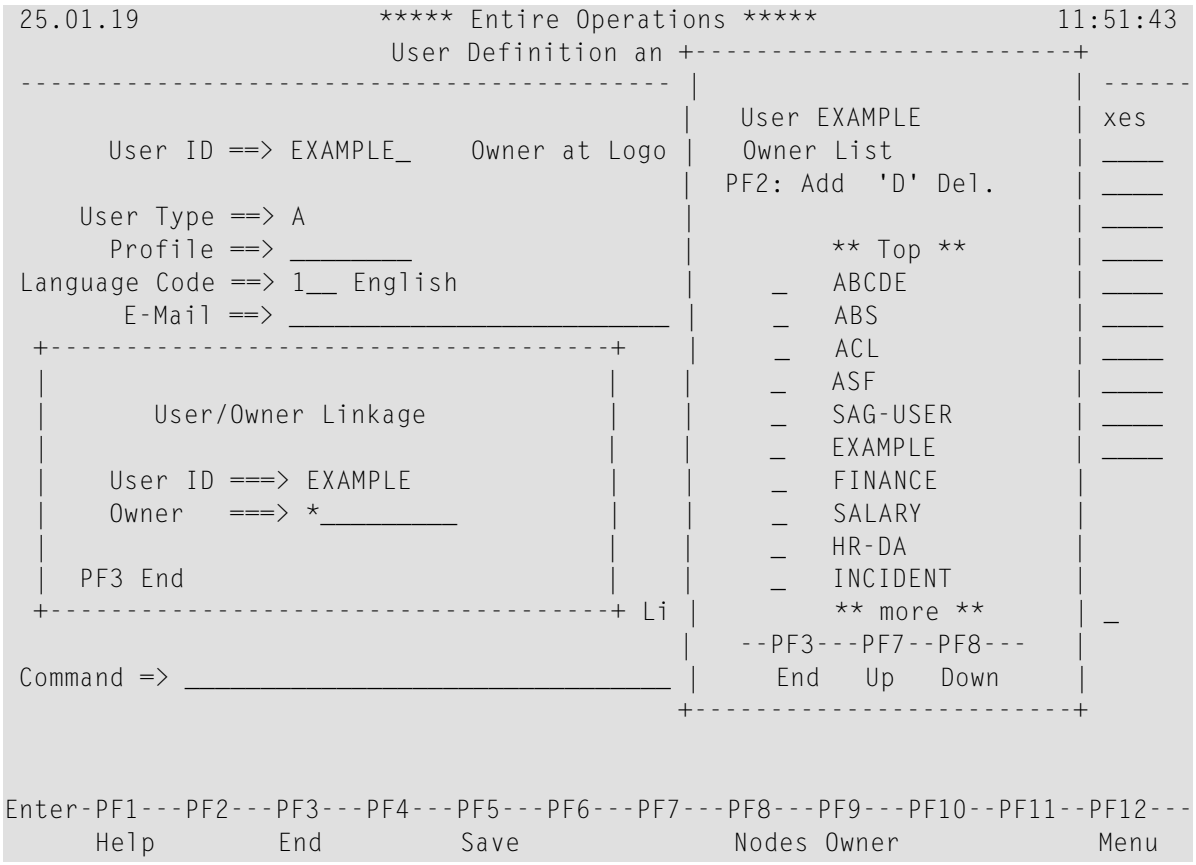
A **User/Owner Linkage** window opens on the left:



3 In the **Owner** field, enter the name of a new owner to whom you want to link the user and press ENTER.

Or:

In the **Owner** field, enter an asterisk (*) to select an owner from a list of available owners:



In the **Owner Selection** window, enter any character in the input field next to the required owner and press ENTER.

The owner is added in the **User/Owner Linkage** window.

4 Choose PF3 (End) to close the selection window.

The selection window closes, and the new owner is added in the **Owner List** window.

5 Choose PF3 (End) to close all windows and return to the **User Definition and Profile screen**.

Deleting Owner Links or Owners

To delete an owner link or an owner

- Replace the name in the **Owner at Logon** field of the **User Definition and Profile screen**.

  Or:

  In the **Owner List window**, enter D in the input field next to the owner link you want to delete, and press ENTER.

  A confirmation window prompts you to confirm the deletion by entering the name of the owner.

The link to the owner is removed for the selected user, or the owner is deleted if not associated with any other users.

The following applies when deleting an owner from a list or maintenance window:

- The owner cannot be deleted if it is still linked to the following Entire Operations objects: calendar, network, symbol table and/or event.
- Furthermore, an owner cannot be deleted if it is specified as the main owner (**Owner at Logon**) for any user. You must replace the name before you can delete the owner.
- If an owner is deleted, all links to the user are removed.
- Deleting an owner from a list or window does not necessarily delete all references associated with this user. The owner can remain unused in your environment. Use the OW-MB--P utility (administrator rights required) to make sure that an owner is entirely removed: see *Mass Change of the Owner and Owner Deletion* in the section *Entire Operations Utilities*.

Administration Functions

If you select **Administration Functions** on the **User Definition and Profile screen**, you can authorize a user (see ***Authorization Options***) to perform the administration functions described in the following table.

The table indicates the default setting that applies to each **user type**: **A** is system administrator, **O** is operator and **G** is general user.

Function	Description	Option	Default for User Type		
			A	O	G
User Definition	Specifies access rights in the user maintenance facility. If R (read) or no access permission is specified here, the list command only returns information for this user. The modify command is allowed only for objects owned by the user.	*blank*, R, W **or** D	D	no rights	no rights
Auto Logon Definition	Specifies default node user IDs for automatic node logon. See also ***Defining Node Default User IDs***.	Y **or** N	N	N	N
Resource Master Maintenance	Specifies access rights in the master **resource definition** facility.	*blank*, R, W **or** D	D	D	no rights
Node Definition	Specifies access rights in the **node maintenance** facility.	*blank*, R, W **or** D	D	D	no rights

Function	Description	Option	Default for User Type		
			A	O	G
Defaults Definition	Specifies access rights in the **Entire Operations defaults** facility.	*blank*, R, W **or** D	D	no rights	no rights
Mailbox Definition	Specifies access rights in the **mailbox definition** facility.	*blank*, R, W **or** D	D	D	no rights
Monitor Start/Shutdown	Authorizes the user to start or shutdown the **Entire Operations Monitor** manually and display Monitor status information, or to use the corresponding STATUS direct command (see the *Direct Commands* documentation).	Y **or** N	Y	Y	N
Special Functions	Authorizes the user to perform special global, control and recovery functions. See the section ***Special Functions***.	Y **or** N	Y	N	N
Other Functions	Authorizes the user to access the **global message code table** and perform special functions.	Y **or** N	Y	N	N
Import/Export	Authorizes the user to perform import/export functions. See also the *Import/Export Functions* documentation.	Y **or** N	Y	N	N

Network Maintenance Functions

If you select **Network Maintenance** on the **User Definition and Profile screen**, you can authorize a user (see ***Authorization Options***) to perform the job and network maintenance function on the master database described in the following table.

The table indicates the default setting that applies to each **user type**: **A** is system administrator, **O** is operator and **G** is general user.

Function	Description	Option	Default for User Type		
			A	O	G
Network Definition	Specifies access rights in the network maintenance facility (see the *User's Guide*). The user for which D is specified here, is also allowed to deactivate networks or jobs.	*blank*, R, W **or** D	D	no rights	no rights
Job Definition	Specifies access rights in the job maintenance facility (see the *User's Guide*).	*blank*, R, W **or** D	D	no rights	no rights
Prerequisite Definitions	Specifies access rights in the condition maintenance and resource specification at job level (see the *User's Guide*).	*blank*, R, W **or** D	D	no rights	no rights

Function	Description		Option	Default for User Type		
				A	O	G
EOJ Checking + Actions	Specifies access rights in the End-of-Job checking and actions facility (see the *User's Guide*).		*blank*, R, W **or** D	D	no rights	no rights
JCL Definition	Specifies access rights to JCL definitions including editing.		*blank*, R, W **or** D	D	no rights	no rights
Description Display	Specifies access rights to the text editor of the object description facility.		*blank*, R, W **or** D	D	no rights	no rights
Symbol Tables	Specifies access rights in the symbol table maintenance facility (see the *User's Guide*).		*blank*, R, W **or** D	D	no rights	no rights
Schedules	Specifies access rights in the schedule maintenance facility (see the *User's Guide*).		*blank*, R, W **or** D	D	no rights	no rights
Calendars	Specifies access rights in the calendar maintenance facility (see the *User's Guide*).		*blank*, R, W **or** D	D	no rights	no rights
Editor Autosave	If Y is defined here, the editor feature AUTOSAVE ON is active at the start of the editing session.		Y **or** N	Y	no rights	Y
Last Run Display	List of active jobs:		S or P	S	S	S
	S	Use the last submitted run as the default for the run number preselection (default).				
	P	Use the last prompted run as the default for the run number preselection.				

Reporting Functions

If you select **Reporting** on the **User Definition and Profile screen**, you can authorize a user (see ***Authorization Options***) to perform the report functions described in the following table.

The table indicates the default setting that applies to each **user type**: **A** is system administrator, **O** is operator and **G** is general user.

For detailed information on the reports mentioned in the table, see the section *Reporting* and *Report Types* in the *User's Guide*.

Function	Description	Option	Default for User Type		
			A	O	G
Wildcards in Online Selections	Authorizes the user to use wildcards in selections for online reports (see *Generating Online Reports* in the *User's Guide*).	Y or N	Y	Y	N
Log of Abended Jobs	Authorizes the user to display the **Log - Abended Jobs** and the **Log - Jobs not started** reports.	Y or N	Y	N	Y
Log of Completed Jobs	Authorizes the user to display the **Log - Terminated Jobs** report.	Y or N	Y	N	Y
Network Activation & Schedule	Authorizes the user to activate job networks, and display the **Network Start Summary** and **Network Schedule Overview** reports.	Y or N	Y	N	Y
Network Description (short)	Authorizes the user to display the **Network Description (short)** report.	Y or N	Y	N	Y
Network Description (detailed)	Authorizes the user to display the **Network Description (detailed)** report.	Y or N	Y	N	Y
Schedule of Jobs	Authorizes the user to display the **Schedule of Jobs** report.	Y or N	Y	N	Y
Job Flow	Authorizes the user to display the **Job Flow of Network** report.	Y or N	Y	N	Y
Accounting Information	Authorizes the user to display **Accounting Information** report.	Y or N	Y	N	Y
Symbol Printing after Prompting	Determines whether all symbols are saved as a file after prompting (see also *Symbol Prompting during Network Activation* in the *User's Guide*).	Y or N	Y	Y	Y
Cross-References	Authorizes use of the **Cross-References** report function (see the *User's Guide*) and the corresponding `XREF` direct command (see the *Direct Commands* documentation).	Y or N	Y	N	Y

Monitoring Functions

If you select **Monitoring** on the **User Definition and Profile screen**, you can authorize a user (see ***Authorization Options***) to perform the operations on jobs in the active database described in the following table.

The table indicates the default setting that applies to each **user type**: **A** is system administrator, **O** is operator and **G** is general user.

Function	Description	Option	Default for User Type		
			A	O	G
Active Jobs	Specifies access rights for modifications to active jobs (see the *User's Guide*). The user for which D is specified here, is also allowed to deactivate networks or jobs.	*blank*, R, W **or** D	D	D	D
Show Mailbox Requests	Authorizes the user to display and react on mailbox messages (see the *User's Guide*), and use the corresponding MAIL or LIST MAILBOX direct command (see the *Direct Commands* documentation).	Y **or** N	Y	Y	Y
Act. Prerequisite Definitions	Specifies access rights for active prerequisite definitions (see the *User's Guide*).	*blank*, R, W **or** D	D	D	D
Act. EOJ Checking + Actions	Specifies access rights for End-of-Job checking and actions (see the *User's Guide*) for an active job.	*blank*, R, W **or** D	D	D	D
Active JCL Editing	Specifies access rights for editing JCL of an active job (see the *User's Guide*).	*blank*, R, W **or** D	D	D	D
Active Conditions	Specifies access right for active job conditions (see the *User's Guide*).	*blank*, R, W **or** D	D	D	D
Active Prerequisite Resources	Specifies access rights for active prerequisite resource definitions (see the *User's Guide*).	*blank*, R, W **or** D	D	D	R
Resource Usage	Specifies access rights to resource usage lists and definitions (see the *User's Guide*).	*blank*, R **or** D	D	D	R
Activate Network	Authorizes the user to activate networks manually (see the *User's Guide*). If the user is allowed to activate networks, the user may also deactivate networks or jobs.	Y **or** N	Y	Y	Y
Resubmit Job	Authorizes the user to use the resubmit function for an active job (see the *User's Guide*).	Y **or** N	Y	Y	Y
Hold/Release Job	Authorizes the user to put an active job on hold or release an active job (see the *User's Guide*).	Y **or** N	Y	Y	Y
Display Job SYSOUT	Authorizes the user to view job SYSOUT of a job run (see the *User's Guide*).	Y **or** N	Y	Y	Y
Cancel Job	Authorizes the user to cancel a running job (see the *User's Guide*).	Y **or** N	Y	Y	Y

Function	Description		Option	Default for User Type		
				A	O	G
Log Display	Authorizes the user to view Entire Operations logs (see the *User's Guide*) for owners associated with this user ID. Possible values are:		Y, N, L or O	Y	Y	Y
	Y	Allow function.				
	N	Disallow function.				
	L	Allow function for all owners associated with this user ID. (Applies to User Type **G** only.)				
	O	Allow function for the Owner at Logon only (see the *User's Guide*). (Applies to User Type **G** only.)				

Representation - Display Settings

If you select the **Representation** option on the **User Definition and Profile** screen, you can specify default display settings. The fields available are described in the following table.

The table indicates the default setting that applies to each **user type**: **A** is system administrator, **O** is operator and **G** is general user.

Field	Description	Option	Default for User Type		
			A	O	G
Node representation	Nodes are displayed in numeric (N) or mnemonic (M) format. **Note:** For master objects, symbol usage is possible in both cases.	N or M	N	N	N
Symbol list: long fields	Symbol names with more than 20 characters are truncated (N) or completely displayed (Y) on the screen.	Y or N	Y	N	N
Log messages with message code	Messages in the log display are prefixed (Y) or not prefixed (N) with their message code if one exists. If set to Y, the message text is prefixed with the message code, for example: `EOR2260 - Network activation performed`.	Y or N	N	N	N

Field	Description	Option	Default for User Type		
			A	O	G
	See also the **Message** column in the example of a system log shown in the *User's Guide*.				

User Attributes for Character Interface and GUI Client

There are three groups of user attributes:

Type	Defined Interface
User attributes relevant for the Entire Operations character interface and Entire Operations GUI Client.	Can be defined in both the Entire Operations character interface and Entire Operations GUI Client.
User attributes relevant for the Entire Operations character interface only.	Can be defined in the Entire Operations character interface only.
User attributes relevant for Entire Operations GUI Client only.	Can be defined in Entire Operations GUI Client only.

Selection Criteria Settings and "Number of Active Runs" Display Mode

If you select **Selection Criteria** on the **User Definition and Profile screen**, you can persistently preset selection criteria for network lists, see *Maintaining Job Network Definitions*.

The selection criteria can be adapted temporarily in the *Network Maintenance screen*.

Selection criteria for network lists can be modified by any user type. General users (type `G`) can invoke the **User Definition and Profile** screen from the **User List** screen using line command `B` (browse) if they are not allowed to modify their **User Definition and Profile** screen.

Field	Meaning	
Network List	`O`	Networks of owner.
	`G`	Owner granted networks.
	`U`	User granted networks.
	`A`	Active networks only.
	`I`	Active runs indicator. An asterisk (*) means that there is at least one active run.
	`R`	Number of active runs.
	Multiple selections are possible.	

Sort Orders in Lists

You can set the default sort order for object lists by using the **Sort Orders** option of the **User Definition and Profile screen**:

```
 25.01.19                ***** Entire Operations *****                12:33:53
                          User Definition and Profile
 ------------------------ +-------------------------------------------------+
                          |                                                 |
       User ID ==> EXAMPLE |                                                 |
                          |                  Sort Orders                    |
     User Type ==> A      |                                                 |
       Profile ==> _______ |      Mailbox List            ==> A              |
 Language Code ==> 1__ Eng |      'All active Jobs' List  ==> A              |
        E-Mail ==> _______ |             sorted by        ==> _              |
                          |                                                 |
                          |                                                 |
                          |                                                 |
                          |                                                 |
 Profile Settings         | Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7--- |
  Administration Functions |       Help        End         Save              |
       Network Maintenance +-------------------------------------------------+
                 Reporting ==> _            Selection Criteria ==> _
                Monitoring ==> _     Max. Lines in Log Display ==> _______

 Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save              Nodes Owner             Menu
```

The fields contained in the window are explained in the following table:

Field	Meaning	
Mailbox List	Sort sequence for the mailbox list.	
	A	Sorted in ascending order.
	D	Sorted in descending order.
All active Jobs List	Sort sequence for listing active jobs (see *Active Job Networks* in the *User's Guide*).	
	A	Sorted in ascending order.
	D	Sorted in descending order.
sorted by	Active jobs list sorted by:	
	' '	Sorted by owner/network/run/job.
	T	Sorted by timestamp.

Operating System Server Default User IDs for a User

For each operating system server node a user is working with, you can define a node default user ID per user. By default, the content of the Natural system variable *USER (described in the Natural *System Variables* documentation) is used for a node logon.

You can define single or multiple node default user IDs for a user. Apart from these node/user definitions, a user can, of course, also use any other node user IDs that are not defined in the user profile.

This section describes for a selected user how to define node default user IDs, auto logon and enabling ***LOGON NODE without Password***. For a mass change to node/user definitions, you can use the NOPUNA-P utility described in *Mass Update for User Access to Nodes* in the *User's Guide*.

Related Topics:

- *Operating System User IDs* in the *User's Guide*
- *Mass Update for User Access to Nodes* in the *User's Guide*

Defining Node Default User IDs

To define a node default user ID for a user

1 Choose PF8 on the **User Definition and Profile screen**.

A **Node Default User IDs** screen like the following appears:

```
05.07.18                ***** Entire Operations *****                17:11:40
User EXAMPLE                 Node Default User IDs
--------------------------------------------------------------------------------
Cmd Node          User ID             Group                LD AJ AS NP      ↩

 _  N0010 (10)    DEMO                                     Y     Y  Y       ↩

 _  N0401 (401)   WIN-UID4             EUR                     Y
 _  N0020 (20)    NPRUSR20                                 Y   Y  Y
 _    333         UNIX-ID             UNIX-GROUP1                Y




******************************* Bottom of Data ********************************
D Delete   M Modify


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   End         Save        Up    Down                    Menu
```

All node default user IDs defined for the selected user are listed on the screen.

(The list is empty if no default user IDs have yet been defined for the selected user.)

The columns on the screen are explained in *Fields and Columns: Node Default User IDs*.

2 If you want to modify a user definition, type `M` in the line command input field next to the node definition you want to change, and press ENTER.

Or:

If you want to add a user definition, choose PF2.

A **Node Default User ID for User** window like the example below opens:

```
+-----------------------------------------------------------------+
|                                                                 |
|           Node Default User ID for User EXAMPLE                 |
|                                                                 |
|  Node               ==> ________________                        |
|  User ID            ==> ____________________                    |
|  Group              ==> ____________________                    |
|  Logon Default      ==> _  no Password ==> Y                    |
|  Auto Logon for JCL ==> _  for SYSOUT ==> _                     |
|                                                                 |
| ---PF1---PF3-------PF5-------------------------------------     |
|    Help  End       Save                                         |
+-----------------------------------------------------------------+
```

3 Add or replace the required values.

The input fields are described in *Fields and Columns: Node Default User IDs*.

4 Choose PF5 to save your entries.

The window closes, and the node default definition is added to or updated on the **Node Default User IDs** screen.

Fields and Columns: Node Default User IDs

The columns on the **Node Default User IDs** screen and the corresponding fields in the **Node Default User ID for User window** are explained in the following table:

Field/Column	Description	
Node	Number defined for a node (see also *Fields: Node Definition*). The **Node** column lists the short node name followed by the node number in parentheses.	
User ID	Operating system user ID to be used for the node.	
Group	Name of a UNIX group or Windows domain to be used for the node logon if defined for the respective UNIX or Windows node (see also *Default Group*). A group name is not evaluated for mainframe nodes. See also *Operating System User ID, Group, Domain* in the *User's Guide*.	
Logon Default (column **LD**)	Only applies if several node default user IDs are defined for a user and node. Select this option for the node user ID to be used by default for a node logon. You can specify only one logon default per user and node. If no logon default is specified, the default user ID (if defined) of the node is used. See also *Other Definitions for a Node (Mainframe)* and *Other Definitions for a Node (UNIX and Windows)*. If only one operating system user ID is defined for a user and node, the **Node Logon** window is preset to this user ID. Possible values:	
	Y	Use as the logon default.
	N or blank	Do not use as the logon default (default).
Auto Logon for JCL (column **AJ**)	(Administrator rights required.) Select this option to allow the specified user to automatically log on to the specified node for JCL editing, browsing or loading. Possible values:	

Field/Column	Description	
	Y	Enable automatic logon.
	N or blank	Do not enable automatic logon (default).
Auto Logon for SYSOUT (column **AS**)	(Administrator rights required.) Select this option to allow the specified user to automatically log on to the specified node for browsing SYSOUT. Possible values:	
	Y	Enable automatic logon.
	N or blank	Do not enable automatic logon (default).
Allow LOGON NODE without password (column **NP**)	(Administrator rights required.) Allow **LOGON NODE** for operating system user IDs without password, see the *Direct Commands* documentation.	
	Y	Enable **LOGON NODE** without password.
	N or blank	Do not enable **LOGON NODE** without password (default).

Auto Logon Feature (for Mainframe Nodes)

Auto logon is allowed for particular combinations of mainframe node and a user ID.

Auto logon can be specified for

- **JCL access**
- **SYSOUT access**

LOGON NODE without Password (for Mainframe Nodes)

LOGON NODE without password is allowed for particular combinations of a mainframe node and a user ID. See also *Direct Commands*.

Note: Enable this option only if the specified operating system user ID really has no password.

Special PF Keys: Node Default User IDs

PF Key	Name	Function
PF2	Add	Add a node default definition.

Line Commands: Node Default User IDs

Line Command	Description
D	Delete a node default definition.
M	Modify a node default definition.

Deleting Node Default User ID Definitions

To delete a node default user ID for a user

- On the **Node Default User IDs** screen, type D in the line command input field next to the node definition you want to delete, and press ENTER.

  The node definition is removed from the screen.

Defining Subadministrators

Defining subadministrators allows you to grant access rights which are not offered by the standard user maintenance facility of Entire Operations.

If the Natural object US-EX--N (delivered with Entire Operations) is not modified, it represents the standard user maintenance facility: Each user is allowed to read, write or delete user definitions, or is excluded from any user maintenance.

To define subadministrators

- Modify the Natural object US-EX--N contained in the Natural system library SYSEOR.

  Using US-EX--N you can define any number of relationships between Entire Operations users.

US-EX--N requires the following parameters:

- USER-1 is the subadministrator, that is, the user who defines other users. His rights over USER-2 are defined in the specification of a return code.
- USER-2 the user who is defined by USER-1.
- RC (return code) defines the rights of USER-1 and the relationships between USER-1 and USER-2.

Data Set Name	Contents
Y	USER-1 can display, change and delete USER-2.
R	USER-1 can display USER-2.
other values	USER-1 cannot display, change and delete USER-2.

The above entries are made in the DISPLAY MODIFY DELETE section of US-EX--N.

In the ADD section of US-EX--N, you specify if a subadministrator is allowed to add other users. In this case, USER-1 must be set to Y. Any entry other than Y signifies that USER-1 is not allowed to create further users. USER-2 is unused.

In the following you will find an example of US-EX--N which you can use to adapt the program to the needs at your site.

The program does not check whether USER-1 and USER-2 belong to the same owner. You can specify subadministrators independently of their owners. If USER-1 and USER-2 are identical, there are no restrictions.

Example

```
* US-EX--N
*
* NOP USER Modification
* This exit is called by US-DEF-P and US-LI--P to give certain
* users limited rights on other users (specify Subadministrator)
* MODIFICATIONS:
* 09.01.97 (160039) User exit for defining subadministrators    GFR212
* ------------------------------------------------------
DEFINE DATA
PARAMETER
1 P-USER-1              (A08)     /* IN
1 P-USER-2              (A08)     /* IN
1 P-US-EX-RC            (A1)      /* OUT
*
*
END-DEFINE
* ------------------------
RESET P-US-EX-RC
*
* Users modifies himself
*
IF P-USER-1 = P-USER-2
  P-US-EX-RC := 'Y'
  ESCAPE ROUTINE
END-IF
*
IF P-USER-1 NE ' '
  IF  P-USER-2 NE ' '
```

```
* ************************************************************
* DISPLAY MODIFY DELETE - Section
* ************************************************************
    P-US-EX-RC := 'Y'   /*     'R'           means DISPLAY only
                        /*     'Y'           means DELETE MODIFY
* For all users we give back 'Y' as return code
*
* Example for subadministrator ABC
*   IF P-USER-1 = 'ABC'
*     IF P-USER-2 = 'XYZ'
*       MOVE 'Y' TO P-US-EX-RC /* can modify or delete user XYZ
*     ELSE
*       MOVE 'R' TO P-US-EX-RC /* can display all others
*     END-IF
*   END-IF
*
  ELSE
* ****************************************************************
* ADD - Section
* ****************************************************************
*                       /* 'Y' means ADD allowed
    P-US-EX-RC := 'Y'   /*  anything else means ADD not allowed
*
* For all users we give back 'Y' as return code
*
* Example for subadministrator ABC
*   IF P-USER-1 = 'ABC'
*     MOVE 'N' TO P-US-EX-RC /* cannot add any user
*   END-IF
  END-IF
END-IF
END
```

4 Entire Operations Monitor

The Entire Operations Monitor is the basic operational component Entire Operations requires to maintain job networks.

For details, see *Entire Operations Monitor* in the *Concepts and Facilities* documentation.

Status of the Entire Operations Monitor

To control the Entire Operations Monitor and display status information

1 From the **System Services Menu**, select the **Entire Operations Monitor** option and press ENTER.

Or:

Use the direct command `STATUS` as described in the *Direct Commands* documentation.

An **Entire Operations Monitor** window like the example below opens:

```
18-05-15                ***** Entire Operations *****                17:50:58
Owner EXAMPLE                System Services Menu              User ID SAG
--------------------------------------------------------------------------------

     Sys +-----------------------------------------------------+
         |                                                     |
  1  Use |  18-05-15      Entire Operations Monitor    17:51:02  |
  2  Ent |                                                     |
  3  Def |          Action ==> _                S Start        |
  4  Ent |                                      C Shutdown     |
  5  Mon |    OpSys Server ==> NOP-Serv1                       |
  6  Glo |       Task Name ==> 55B01                           |
  7  Glo |                                                     |
  8  Glo |          Status ==> active                          |
  9  Res |  Last active at ==> 17:50:58 on 18-05-15            |
 10  Mai |                                                     |
 11  Spe |       Wait Time ==> 10    Seconds                   |
 12  RPC |                                                     |
 13  Ent |  ------PF1---PF3-----------------PF9--------------   |
         |        Help  End                 Tasks              |
 Command  +-----------------------------------------------------+ ___


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End                                             Menu
```

The window contains information on the current status of the Monitor and input fields with which you can start and stop the Monitor. The fields are explained in ***Fields: Entire Operations Monitor***.

2 If tasks have been defined for the Monitor (see *Defining a Monitor Task Profile*), you can display the current task status by pressing PF9 (Tasks).

A **Monitor Tasks** screen like the example below appears:

```
 18-05-15               ***** Entire Operations *****               17:54:27
                                 Monitor Tasks
--------------------------------------------------------------------------------
 Cmd Task     Status                         Started      Active  Wt.Tm.   Usage
 _   55B01    active                         05-15 17:37  17:54:26 ___5    1.8 %
 _   55B02    active                         05-15 17:37  17:54:23 ___5    1.9 %
 _   55B03    active                         05-15 17:37  17:54:26 ___5    0.1 %
 _   55B04    active                         05-15 17:37  17:54:26 ___5    0.3 %
 _   55B05    active                         05-15 17:37  17:54:26 ___5    0.1 %
 _   55B07    active                         05-15 17:37  17:54:22 ___5    0.1 %
 _   55B09    active                         05-15 17:37  17:54:22 ___5    0.2 %
 _   55B10    active                         05-15 17:37  17:54:25 ___5
 _   55B90    active                         05-15 14:23  17:54:22 ___5
 _   55B91    active                         05-15 14:23  17:54:24 ___5
 _
 _
 _
--------------------------------------------------------------------------------
 H Hold   R Release

 Command => _____________________________________________________________

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End                      Up    Down                   Menu
```

For explanations of the columns, see *Columns: Monitor Tasks*.

3 Choose PF3 (End) to close the window.

This section covers the following topics:

- Fields: Entire Operations Monitor
- Line Commands: Entire Operations Monitor
- Special PF Keys: Entire Operations Monitor
- Columns: Monitor Tasks
- Line Commands: Monitor Tasks

- Controlling the Monitor Status from a Mainframe Console

Fields: Entire Operations Monitor

The fields in the **Entire Operations Monitor** window are explained in the following table:

Field	Meaning
Action	Line command input field. For possible line commands, see ***Line Commands: Entire Operations Monitor***.
OpSys Server	Entire System Server internal task name under which the Entire Operations Monitor is running.
Task Name	Name of the Monitor main task. The syntax (explained in *Direct Command Syntax*) is as follows: `{task-prefix}{task-number}` Example: If the task prefix is `E01` and the task number is `1`, the subtask name will be displayed as `E0101`. For further information, see also ***Monitor Task Prefix***.
Status	Protected field showing the current status of the Entire Operations Monitor.
Last active at	Date and time of the last Monitor activity. See also *Date and Time Formats* in the *User's Guide*.
Wait Time	Interval between Entire Operations Monitor working cycles in seconds. When you start the Monitor, the value is taken from the **Global Monitor Wait Time** defined in the **Monitor Defaults**. You can modify the Monitor task wait times of the current Monitor session individually on the **Monitor Tasks screen** (accessible with PF9).

Line Commands: Entire Operations Monitor

The following one-character line commands are available in the **Entire Operations Monitor** window:

Line Command	Description
`S`	Start the Monitor. **Delay before a Monitor restart:** Any Monitor restart which will be performed earlier than Monitor termination time plus three (3) times the Monitor wait time is assumed to be a duplicate Monitor (task) start. Avoid restarting the Monitor within this time interval.

Line Command	Description
C	Shut down the Monitor. No data is lost. If you are working in z/OS, you can also shut down the Monitor from the operator console by entering the command SHUTDOWN SYSEOR.

Special PF Keys: Entire Operations Monitor

The following special PF key is available in the **Entire Operations Monitor** window:

PF Key	Name	Function
PF9	Tasks	Displays the **Monitor Tasks** list.

Columns: Monitor Tasks

The columns on the **Monitor Tasks screen** are explained in the following section.

Column	Meaning
Cmd	Line command input field. Possible commands are described in *Line Commands: Monitor Tasks*.
Task	Name of the Monitor (sub)task. For further information, see also **Task Name**.
Status	Status of the (sub)task. If the Monitor is executed on UNIX or Windows, the status text may be followed by the process ID of the Monitor task. Example: Active (PID 9174)
Started	Time at which the task was started.
Active	Time of the last activity.
Wait Time	Active Monitor task wait time. This value is modifiable. It can be defined individually for each Monitor task. Values changed here are in effect for the current Monitor session only. The value **Global Monitor Wait Time** from the **Monitor Defaults** will be used if no value is specified here. For details, see *Monitor Defaults*. The default wait time modification (for all Monitor sessions) is described in *Fields: Monitor Task Profile*.

Column	Meaning
Usage	Percentage of task activity within real time, calculated from the task start or from the last task reconfiguration.

Line Commands: Monitor Tasks

The one-character line commands available on the **Monitor Tasks** screen are explained in the following section.

Line Command	Description
H	Hold a task.
R	Release a task.

For a description of how to customize Monitor tasks, see the section *Defining a Monitor Task Profile*.

Controlling the Monitor Status from a Mainframe Console

If the Entire Operations Monitor is executing on a mainframe, it is possible to check the Monitor status by an operator command to the Monitor node (Entire System Server).

The command is `STATUS MONITOR`.

The output of this command is a status line for each Monitor task.

5 Definition of Nodes

Nodes are Entire System Server nuclei or Entire System Server/UNIX servers and refer to machines or CPUs on which requests to the operating system are executed. They are distinguished by numerical identifiers in the same way as database IDs distinguish between different Adabas databases.

If you are using Entire Operations in a multi-CPU environment, you must define node numbers for machines. Networks and jobs can thus be defined to run under Entire Operations control on different nodes.

Within Entire Operations, each UNIX and Windows server is assigned a node number. More than one operating system server node can reside in one physical machine. The machines identified by node IDs can run different target operating systems.

Entire Operations recognizes the operating system, thus allowing cross-operating-system job control. Communication paths between otherwise isolated nodes are provided by the Software GmbH products Entire Net-work and EntireX Broker, which allow a transparent connection of nodes, irrespective of how they are physically linked.

For an example scenario, see the section *Entire Operations in Client/Server Environments* in the *Installation and Setup* documentation.

Related Topic:

- *Logging on and off an Operating System Server Node* in the *User's Guide*

Listing all Nodes

To list all nodes defined to Entire Operations

1 From the Main Menu, select the **System Administrator Services** option and press ENTER.

The **System Services Menu** appears.

2 Select the **Definition of Nodes** option and press ENTER.

An **Operating System Server (Node) Table** screen like the example below appears:

```
08.03.16               ***** Entire Operations *****                16:53:59
Owner EXAMPLE        Operating System Server (Node) Table
--------------------------------------------------------------------------------
                                                 Wait a.    VSE    Time
Cmd Node Name       Number  Short  AM Op.Sys.     Error SSU SysId  Diff.  Valid
_   Node 0001            1  N0001  N                  4   U    3   -11.50  yes
_   Node 0002            2  N0002  N  BS2000          5                   yes
_   n4                   4  N4     B                  5             10.00  yes
_   n5                   5  N5     B                  5                    yes
_   Adabas DB 9          9  N0009  N                  5                    yes
_   TEST                12  HUGO   N                  5                    yes
_   hannes              21  21     N                  5                    yes
_   BS2000 SIH2         31  N0031  N  BS2000          1   U                yes
_   Broker 34           34  N0034  N  rted            5                    yes
_   BS2 131             38  N0038  N  BS2000          5                    yes
_   NPR 321             40  N0040  N  MVS/ESA         5                    yes
_   Locl Nd DQA V134    42  N0042  N  MVS/ESA         5                    yes
--------------------------------------------------------------------------------
B Broker  D Delete  I Info  M Modify  O Other

Command => _____________________________________________________________

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   End         Save        Up    Down                   Menu
```

The screen contains a list of nodes defined in Entire Operations (the list is empty if no nodes are defined).

This section covers the following topics:

- Columns: Operating System Server (Node) Table
- Line Commands: Operating System Server (Node) Table

Columns: Operating System Server (Node) Table

The columns on the **Operating System Server (Node) Table screen** are explained in the following table.

Column	Description
Cmd	Line command input field. For possible line commands, see *Line Commands: Operating System Server (Node) Table*.
Number	Entire System Server or UNIX node number.
Short	Short node name.
Node Name	User-defined (long) node name.
AM	Access mode:
	N Use Entire Net-Work for Mainframe nodes.

Column	Description	
	B	Use EntireX Broker for UNIX and Windows nodes.
	L	Local node (invoked directly on the machine where Entire Operations is running; for Entire Operations on UNIX and Windows only).
Op. Sys.	Operating system under which the node is running as received from the last SYSTEM-INFO call to Entire System Server or UNIX/Windows system information.	
Wait a. Error	Wait after error. Time in minutes to wait until the next node access after a temporary error.	
SSU	**Submit Security User Type**: see *Fields: Monitor Defaults*. If empty, the system-wide default is in effect for this node.	
Time Diff.	Time difference between local time and GMT in hours if the node is in a different time zone.	
Valid	Possible values:	
	yes	Node can be used.
	no	Node has been disabled.

Line Commands: Operating System Server (Node) Table

The following one-character line commands are available on the **Operating System Server (Node) Table screen**:

Command	Description
B	Applies to UNIX and Windows nodes only. Open the **Node: Broker Service Definition** window: see *EntireX Broker Service Definitions*.
D	Delete the selected node definition: see *Deleting a Node Definition*.
I	Open the **Node Information** window: see *Viewing Node Information*.
M	Open the **Node Modification** window: see *Displaying, Modifying and Adding a Node Definition*.
O	Open the **Node: Other Definitions** window: see *Other Definitions for a Node (Mainframe)* and *Other Definitions for a Node (UNIX and Windows)*.

Displaying, Modifying and Adding a Node Definition

To display or modify a node definition

1 On the **Operating System Server (Node) Table screen**, enter the line command M next to the required node and press ENTER.

A **Node Modification** window like the example below opens:

```
+------------------------------------------------------------+
!                                                            !
!                   Node Modification                        !
!                                                            !
!       Node Number ==> 1____                                !
!        Short Name ==> N0001                                !
!         Node Name ==> Node 0001_____________________       !
!       Access Mode ==> N                                    !
!   Time Difference ==> ___________                          !
!     Password Mode ==> _                                    !
!       z/VSE SysId ==> 3                                    !
!           Wait after Error ==> 4__ min.                    !
!    Node Security User Type ==> U                           !
!                        Valid ==> Y                         !
!                                                            !
!  PF1 Help   PF3 End   PF5 Save                             !
+------------------------------------------------------------+
```

You can modify the definition by replacing the current values. The input fields are described in *Fields: Node Definition*.

2 Press ENTER to save the modifications.

3 Choose PF3 (End) to close the window and return to the **Operating System Server (Node) Table** screen.

To add a node definition

1 Choose PF2 (Add) on the **Operating System Server (Node) Table screen**.

A **Node Definition** window opens. The input fields correspond to the fields contained in the **Node Modification window**. They are described in *Fields: Node Definition*.

2 Enter the required values.

When finished, press ENTER to save the node definition.

3 Choose PF3 (End) to return to the list of nodes.

The new node is added to the list.

This section covers the following topics:

Fields: Node Definition

The fields in the **Node Definition** or **Node Modification window** are explained in the following table:

Field	Description	
Node Number	Node number. Valid range: 1 to 99900.	
Short Name	Mnemonic short name for the node. The mnemonic short name can be used instead of the node number in various locations. This can be set in the **Representation** options of the user profile.	
Node Name	Unique, user-defined node name. For nodes with access mode `N`: Enter a short description to help the user select an appropriate node for a network or job run. For nodes with access mode `B`: Enter the name of a UNIX or Windows node (server) as it appears in System Automation Tools and EntireX Broker definitions in the SATSRV text object contained in the Natural SYSSATU library (see also the example of a node definition in the *Installation and Setup* documentation). This field is case-sensitive.	
Access Mode	Possible values:	
	`N`	Use Entire Net-Work for mainframe nodes.
	`B`	Use EntireX Broker.
	`L`	Use the local node (invoked directly on the machine where Entire Operations is running; for Entire Operations on UNIX and Windows only).
Time Difference	Difference between local time and GMT in hours if the node is in a different time zone. Input format: *xn*, where: *x* is a plus or minus sign (+ or -), and *n* is any number from 0 to 12.	
Password Mode	This setting is evaluated for nodes on z/OS only. Conversion mode to be used for password entries. Possible values:	
	`U`	Passwords are converted to upper case (default for mainframe nodes).
	`M`	Passwords in lower or mixed case are not converted to upper case (default for UNIX and Windows nodes).

Field	Description	
	The password mode currently set is indicated in the **Node Logon** window (see the section *Logon Function* in the *User's Guide*).	
Wait after Error	Time in minutes to wait until the next node access after a temporary error. Default: 5 minutes.	
Node Security User Type	Node security user type can be set individually for each node. If this field is blank, the global default applies to this node: see the **Node Security User Type** field described in ***Monitor Defaults*** for possible values of this field.	
Valid	Allow or disallow use of the node. Possible values:	
	`Y`	Allow use.
	`N`	Disallow use.

UNIX and Windows Node Definitions

UNIX and Windows nodes (i.e. on Entire System Server) must be defined in the following locations as well:

- SATSRV/SYSSATU (see the section *Definitions for Entire System Server* in the *Installation* documentation of System Automation Tools.)
- EntireX Broker parameters. You can omit these definitions for the Monitor node if this node is accessed in local mode.
- Entire System Server/UNIX or Windows initialization file *npr.ini* (see *Customize the NPR Server* in the section *Completing the Installation* in the *Entire System Server* documentation).

Note: For each combination of UNIX or Windows node and user ID, at least one successful login (by `LOGON NODE`) must have been made, before this combination can be used within the Entire Operations Monitor. These `LOGON NODE` commands must be repeated after a password modification on a UNIX or Windows system.

Viewing Node Information

The **Node Information** window displays general information on the node. In addition to the **Node Modification window**, it also provides product-specific information.

To view additional information on a selected node

1 On the **Operating System Server (Node) Table** screen, enter the line command `I` next to the required node.

2 Press ENTER

A **Node Information** window like the example below opens:

```
+-------------------------------------------------------------------------------+
|                                                                               |
|                              Node Information                                 |
|                                                                               |
|  Node Number ==> N0077 (77)     MVS/ESA                                       |
|    Node Name ==> Test Node 77                                                 |
|                                                                               |
|  NPR Version ==> 3.5.4                                                        |
|   OS Release ==> z/OS 02.01.00                                                |
|                                                                               |
|                                                                               |
|  PF1 Help   PF3 End                                                           |
+-------------------------------------------------------------------------------+ ↩
```

The following fields (read-only) are provided in the window:

Field	Description
Node Number	Short name and number of the node.
Node Name	Long name of the node.
NPR Version	Version of the Entire System Server (NPR) installed at your site.
OS Release	Information (where available) on the operating system that hosts the server node at your site.

Other Definitions for a Node (Mainframe)

To add or modify other definitions for a mainframe node

- On the **Operating System Server (Node) Table screen**, enter the line command `0` next to the required mainframe node and press ENTER.

  A **Node: Other Definitions** window like the example below opens:

```
+-------------------------------------------------------------------------------+
|                                                                               |
|                           Node: Other Definitions                             |
|                                                                               |
|           Node Number ==> N0042 (42)     MVS/ESA                              |
|             Node Name ==> Locl Nd DQA V134                                    |
|                                                                               |
|  Default User ID     ==> SAG_____   Spool Class to be set ==> ________        |
|  E-Mail Code Page    ==> _________                                            |
|  E-Mail SYSOUT Class ==> _                                                    |
|  E-Mail Sender       ==> John.Test@softwareag.com_____________________        |
|  E-Mail Reply-To     ==> Martha.Test@softwareag.com____________________       |
|                                                                               |
|  PF1 Help   PF3 End   PF5 Save                                                |
+-------------------------------------------------------------------------------+
```

  The fields in the window are explained in the following section.

Fields: Node Definition (Mainframe)

Field	Meaning
Default User ID	User ID used by the Monitor for actions for which no specific user ID is available on the job or network level. If the node is the **Monitor node**, this user ID will supersede an eventually defined **Monitor User ID**.
Spool Class to be set	Spool class to be set after job completion. You can enter any valid z/OS spool class to which the job spool class will be set after job completion. Usage precedence: 1. Spool class defined for an Entire Operations job. 2. Spool class defined here in this field (**Spool Class to be set**). 3. Spool class defined in the Entire Operations **defaults for z/OS**.

Field	Meaning
	Note: If you enter a minus sign (-) here, the global default will not be applied.
E-Mail Code Page	E-mail host code page (z/OS and BS2000). The host code page to be used for e-mail sending. Refer to the description of the field HOST-CODE-PAGE of the Entire System Server view SEND-EMAIL.
E-Mail SYSOUT Class	(z/OS and older Entire System Server versions only.) SYSOUT class to be used for e-mail messages, which are sent from z/OS via SMTP.
E-Mail Sender	Default sender name for e-mails which are sent via this node. The commercial at sign (@) can also be coded as (a).
E-Mail Reply-To	Return address for e-mails which are sent via this node. The commercial at sign (@) can also be coded as (a). The name specified in **E-Mail Sender** is used by default.

Other Definitions for a Node (UNIX and Windows)

To add or modify other definitions for a UNIX or Windows node

- On the **Operating System Server (Node) Table screen**, enter the line command S next to the required UNIX or Windows node and press ENTER.

  A **Node: Other Definitions** window like the example below opens:

```
+------------------------------------------------------------------------+
!                                                                        !
!                         Node: Other Definitions                        !
!                                                                        !
!      Node Number ==> N0518 (518)    Linux                              !
!        Node Name ==> npr_pcsn02                                        !
!                                                                        !
!  Default User ID ==> sag_________________                              !
!  Default   Group ==> ____________________                              !
!  Print   Command ==> ____________________________________________      !
!  E-Mail   Sender ==> Any.User(a)softwareag.com___________________      !
!  E-Mail Reply-To ==> ____________________________________________      !
!  Message Command                                                       !
!  ____________________________________________________________________  !
!                                                                        !
!      Cygwin Dir. ==> ____________________________________________      !
!                                                                        !
!  PF1 Help   PF3 End   PF5 Save                                         !
+------------------------------------------------------------------------+
```

The fields contained in the window are explained in the following section.

Fields: Node Definition (UNIX and Windows)

Field	Meaning
Default User ID	UNIX or Windows user ID used by the Monitor for actions which do not depend on a specific network or job.
Default Group	UNIX: If this field is empty, the default group name as defined in `/etc/passwd` is used. Otherwise, this field contains the name displayed when you issue the UNIX command `groups`. Windows: The domain name used to log on to the server. **Note:** You can replace symbols in network and job definitions.
Print Command	Print command (UNIX or Windows) for SYSOUT files on this node. *:f:* will be replaced by the file name. Example: `lp -dxxxx :f:`
Message Command	Message send command (Windows only). This command is used to send a user message out of Entire Operations. `blat` can be specified without parameters.

Field	Meaning

	Replacements:
	■ *:s:* sender name (optional)
	■ *:u:* subject (title of the message, optional)
	■ *:r:* recipient
	■ *:f:* name of the file containing the message
	Entire Operations automatically makes these replacements.
	Examples:
	`blat`
	`blat ":f:" -s ":u:" -i ":s:" -t ":r:"`
	(Parameters must be enclosed in quotes if they contain blanks.)

E-Mail Sender	Default sender name for e-mails which are sent via this node. The commercial at sign (@) can be coded as `(a)`.
E-Mail Reply-To	Return address for e-mails which are sent via this node. The commercial at sign (@) can also be coded as `(a)`. The name specified in **E-Mail Sender** is used by default.
Cygwin Dir.	Applies to Windows only. Base directory of a Cygwin installation. This field is only required if jobs of the type `WCB` (Windows Cygwin Bash) are used on a Windows node. The directory name can contain a slash (`/`) instead of a backslash (`\`). Example: `c:/cygwin64`

EntireX Broker Service Definition (UNIX and Windows)

This function displays the EntireX Broker service definition if specified for the selected node.

To view the EntireX Broker service definition for a selected node

- On the **Operating System Server (Node) Table screen**, enter the line command `B` next to the required UNIX or Windows node and press ENTER.

  A **Node: Broker Service Definition** window like the example below opens:

```
+-------------------------------------------------------------+
|                                                             |
|                  Node: Broker Service Definition            |
|                                                             |
|      Node Number ==> N0401 (401)    Windows7                |
|        Node Name ==> npr_pcsn01                             |
|                                                             |
|  Broker ID                                                  |
|  BKR034                                                     |
|     Server Class ==> NPR                                    |
|      Server Name ==> PCSN01                                 |
|          Service ==> npr_pcsn01                             |
|    Locale String ==>                                        |
|          User ID ==> IBM1                                   |
|        Wait Time ==> 30S                                    |
|                                                             |
|  PF1 Help  PF3 End  PF5 Save  PF6 Refresh  PF9 Del.         |
+-------------------------------------------------------------+
```

The fields (read-only) contain the current attributes of the EntireX Broker service definition specified for the node.

The EntireX Broker service definition for the node can only be modified in the SATSRV text object in the Natural SYSSATU system library on the server. If you change the service definition, use PF6 (see below) for an update.

The window provides the following special PF keys:

PF Key	Name	Function
PF6	Refresh	With this function you can force a re-read of the service definition from SATSRV/SYSSATU into Entire Operations.
PF9	Delete	With this function you can delete all fields of an EntireX Broker service definition in Entire Operations at once. **Note:** This does not delete any entries in SATSRV/SYSSATU.

Deleting a Node Definition

Before you delete a node, consider the impact on master or active objects using this node:

- When a node definition is deleted, this node is no longer available for new objects like network or job definitions.
- A deleted node is not invalidated in existing objects.
- A node status list can still show a deleted node as active.

- Various node access errors can occur if a deleted node is still referenced, for example, during network activation or job submission.

To delete a node definition

1 On the **Operating System Server (Node) Table screen**, enter the line command `D` next to the required node and press ENTER.

A confirmation window opens.

2 Enter the node number and press ENTER to confirm the deletion and close the window.

6 Entire Operations Defaults

You can view and set Entire Operations defaults, for example, for the following:

Entire Operations system and log files;
Defaults for z/OS, **BS2000**, **UNIX and Windows**;
User definitions;
Display options (language, calendar, date);
User application settings and **escape characters**;
Retention periods and start/end dates for networks and jobs;
Logging, activation and APIs;
Scheduling, symbols, JCL and SYSOUT.

Default Setting (1) - Language, Format, User Application, Retention Periods, Escape Characters

To display the second screen of the Default Setting facility

- From the **System Services Menu**, select the **Entire Operations Defaults** option and press ENTER.

  A **Default Setting (1)** screen like the example below appears:

```
 18-07-20               ***** Entire Operations *****               10:16:01
                             Default Setting (1)
------------------------------------------------------------------------------

        Language Code ==> 1__ English            Default Node ==> 12345 BATCH
          Date Format ==> I
     Calendar Display ==> 2

       OpSys Specials ==> _ (mark)                   User ID Definition ==> A
  User Applic. in Menu ==> _ (mark)              File Password Prompting ==> E
                                     Network Default Activation Escape ==> @
                                     Network Default Submission Escape ==> $
  Retention Periods                            Logon Screen obligatory ==> N
       Active Networks ==> ___2 Days           Stack 'RETURN' on Logoff ==> Y
           Active Jobs ==> ___4 Days
    Active Conditions ==> ___7 Days
         Standard Log ==> ___7 Days
        Long-Term Log ==> _180 Days
       Accounting Data ==> _180 Days

 Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save              Down        OSpec       Menu
```

Replace the current values as required and choose PF5 to save your new default settings.

The fields and functions available on the **Default Setting (1)** screen are explained in the following section:

- Fields: Default Setting (1)
- User Application in Main Menu Screen
- Special PF Keys: Default Setting (1)

Fields: Default Setting (1)

Field	Description
Language Code	Determine the Entire Operations default language. Possible values: 1 — English 2 — German
Date Format	Date format in the heading section of Entire Operations screens. See *Date and Time Formats* in the *User's Guide*.
Calendar Display	Determine how your terminal displays calendars. Possible values: 1 — For terminals that support highlighting or colors. 2 — For terminals that neither support highlighting nor colors.
OpSys Specials	Operating system specials. Mark this field with any character and press ENTER to open a selection window for operating system defaults. See the following sections: ■ *Defaults for z/OS* ■ *Defaults for BS2000* ■ *Defaults for UNIX and Windows*
User Applic. in Menu	User application in Entire Operations Main Menu. Mark this field with any character and press ENTER to create a user application definition and open a **User Application in Main Menu** window. (see the relevant section).
Default Node	Default Entire System Server node ID. This node is used for all internal calls to Entire System Server if no other node number is specified explicitly.
User ID Definition	L — First, the user must have logged on successfully to a node. Then, a JCL or submit user ID can be defined.

Field	Description
	A — All JCL or submit user IDs can be defined (default). A logon is always required for: ■ User ID TSOS on BS2000 nodes; ■ User ID root on UNIX nodes.
File Password Prompting	Possible values: E — If a file is password-protected, always prompt for a file password before editing. N — Do not prompt for a password (default). Use the defined password, if necessary.
Network Default Activation Escape	Global escape character used as the prefix for Natural code lines and symbols that are to be replaced at activation time. Default: Dollar sign ($). You can define specific escape characters for each operating system by marking **OpSys Specials**. **Note:** Dynamic JCL might become invalid if this escape character is changed.
Network Default Submission Escape	Global escape character used as the prefix for symbols that are to be replaced at submission time. You can define specific escape characters for each operating system by marking **OpSys Specials**. Default: Dollar sign ($). The character recommended for BS2000 is the semi-colon (;). **Note:** Dynamic JCL might become invalid if this escape character is changed.
Logon Screen obligatory	If Y is specified here, the Entire Operations logon screen is always presented. This setting is recommended if an external security system like RACF is installed, since a password must be entered.
Stack 'RETURN' on Logoff	If Y is specified here, an Entire Operations online session will be finished with the Natural command RETURN. Otherwise, it is not finished. Only with RETURN can control be given back to another Natural application. If T is specified here, the Natural session will be terminated with the Entire Operations session.
Retention Periods:	
Active Networks	Maximum number of days Entire Operations keeps active networks in the active database. If the network is not completed within this time, a warning message is issued to a mailbox linked to the network. Default: 2 days.

Field	Description
	Note: Unfinished active jobs are deactivated after the **Active Jobs** retention period in any case. See also the **Retention Period for Network** option that can be specified for a single network as described in *Retention of Active Network Data* in the *User's Guide*.
Active Jobs	Maximum number of days Entire Operations keeps active jobs in the active database. This retention period also applies to data generated for import/export operations or reports. For active jobs, this period must be longer than the **Active Networks** retention period. Jobs will be deactivated after this this time, even if the active network is not completed. Default: 2 days. **Note:** The retention period for an active job is calculated backwards from the real start time of the job, if available. Otherwise, it is calculated backwards from the activation time of the job.
Active Conditions	Maximum number of days Entire Operations keeps active conditions in the active database. This retention period also applies to resource allocations with deallocation mode `K` (keep until explicit release). Default: 7 days. See also the **Deactivation Mode for active Conditions** option that can be used for a single network to keep active conditions as described in *Retention of Active Network Data* in the *User's Guide*.
Standard Log	Maximum number of days Entire Operations keeps standard log data and mailbox entries (information messages). Default: 7 days.
Long-Term Log	Maximum number of days Entire Operations keeps long-term log data and mailbox entries (waiting for condition, symbol prompting). Long-term log data are network and job activation times with run numbers. Default: 180 days.
Accounting Data	Maximum number of days Entire Operations keeps job and monitor accounting data. Default: 180 days.

User Application in Main Menu Screen

This function allows you to access a user-defined Natural application from the Entire Operations **Main Menu**. This is indicated in the example of a **Main Menu** shown in the *User's Guide*.

If you mark the **User Application in Menu** field on the **Default Setting (1)** screen and press ENTER, a screen like the following appears:

```
 12.06.18                ***** Entire Operations *****                14:17:18
                         User Application in Main Menu
--------------------------------------------------------------------------------


 Application ==> SYSMAIN_

 Menu Text   ==> Natural SYSMAIN Utility_____________________________


 The application must be callable from the Entire Operations environment.
 By default, the program MENU will be invoked.
 The application must return to Entire Operations with the Natural command
 RETURN.
 Example: RELEASE STACK ; STACK TOP COMMAND 'RETURN'


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save
```

Fields: User Application in Main Menu

Field	Meaning
Application	Enter the name of the Natural application. It must be accessible from the Entire Operations environment and a program MENU must exist. The application must be defined in Natural Security and must pass back control with the Natural RETURN command.
Menu Text	The text you enter here will appear on the Entire Operations Main Menu beneath the heading **Applications** on the right-hand side of the screen.

Special PF Keys: Default Setting (1)

PF Key	Name	Function
PF10	OSpec	Open a selection window for operation systems. See also *Accessing Operating System Specific Default Settings*.

Default Setting (2) - Schedule, Start Time, Symbols, JCL

To display the second screen of the Default Setting facility

- Choose PF8 (Down) on the **Default Setting (1)** screen.

  A **Default Setting (2)** screen like the example below appears:

```
10.02.20               ***** Entire Operations *****                14:48:47
                            Default Setting (2)
--------------------------------------------------------------------------------
Extraction of Schedules          ==> 3__ Days before Activation
Activation before Earliest Start ==> 50_ min.
Default Latest Start after Earliest Start       ==>  +60 hours
Default Deadline     after Earliest Start       ==>  +84 hours
End of previous Production Date                 ==> 00:00:01
Subnetwork Activation Mode                      ==> A
Run Number Limit                                ==> 99999
Rewrite prompted Symbols to Symbol Table Master ==> N (Y/N)
Default for 'Use Time from Schedule'            ==> N (Y/N)

Generate Header in submitted JCL                ==> Y (Y/N)
Log Symbol Values in submitted JCL              ==> Y (Y/N)
Log the changes made to an active/pregen. JCL   ==> Y (Y/N)
Symbol Prompting during JCL Regeneration        ==> Y (Y/N)
Automatic cleanup for new day / monitor start   ==> D (Y/N) at ==> 01:00:00
Symbol table obligatory                         ==> N
Keep predefined job time frames                 ==> N (Y/N)
Command => ____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save        Up    Down                    Menu
```

  Replace the current values as required and choose PF5 to save your new default settings.

The fields available on the **Default Setting (2)** screen are explained in the following section.

Fields: Default Setting (2)

Field	Meaning	
Extraction of Schedules	Current network schedules are extracted once a day to prepare scheduled network activation. The extraction can be done several days in advance, for example, to permit earlier symbol prompting. Enter the number of days. Default: 1 day (= current day).	
Activation before Earliest Start	Creates an executable copy of the job network definition. This option allows you to activate the network before the earliest time the network is actually started. Default: 0 minutes.	
Default latest Start after Earliest Start	Applies if no explicit latest start time was specified at the job level. The time (in hours) specified here is added to the (computed) earliest start time. Default: 24 hours.	
Default Deadline after Earliest Start	Applies if no explicit deadline time is specified at the job level. The time (in hours) specified here is added to the (computed) earliest start time. Default: 48 hours.	
End of previous Production Date	Time at which the previous production day ends logically. The input format is HH:II:SS, the default time is 00:00:00 (midnight). This time influences the following: ■ Condition references: The input condition references PDA and PDS refer the production date. ■ Symbol replacement: The predefined symbol `P-DATE` provides the production date in the format YYYYMMDD. See also *Predefined Symbols* and *Date and Time Formats* in the *User's Guide*.	
Subnetwork Activation Mode	Possible values:	
	`A` (or blank)	Activate the subnetwork at activation time of the caller (default).
	`S`	Activate the subnetwork at submission time of the caller.
	For more information, see *Time of Activation of a Subnetwork* in the *User's Guide*.	
Run Number Limit	Maximum run number which can be assigned to a network or job activation. Possible values: 0 to 99999. If 0 is specified, the limit is 99999 (default).	

Field	Meaning	
Rewrite prompted Symbols to Symbol Table Master	Possible values:	
	Y	Update prompted symbols in the symbol table master, in addition to the currently active symbol table. This keeps the last prompted value for the next prompting.
	N	Update prompted symbols only in the currently active symbol table (default).
Default for 'Use Time from Schedule' (for manual activation)	Determines the default setting for the start time to be used when manually activating a network or job. This option corresponds to the **Use Time from Schedule** option on a **Network Activation** or **Job Activation** window (see *Manual Activation* in the *User's Guide*). Possible values:	
	Y	Use the time defined in the schedule used by the network or job.
	N	Use the time entered in the **Network Activation** or **Job Activation** window (default). Possible network or job schedule definitions are ignored.
Generate Header in submitted JCL	Possible values:	
	Y	Generate a header (default).
	N	Do not generate a header.
Log Symbol Values in submitted JCL	Possible values:	
	Y	Log symbol values (default).
	N	Do not log symbol values.
Log the changes made to an active/pregen. JCL	Possible values:	
	Y	Activate logging of active or pregenerated JCL modifications. Any JCL changes to the active or pregenerated JCL are then written to the extended log (described in the *User's Guide*). If this option is set to Y, you may have to increase the editor buffer pool space.
	N	Deactivate logging of JCL modifications (default).

Field	Meaning	
Symbol Prompting during JCL Regeneration	Possible values:	
	N	No symbol prompting is performed during JCL regeneration (default).
	Y	Symbols are prompted again during JCL regeneration.
Automatic cleanup for new day / monitor start	Possible values:	
	N	No automatic **cleanup of the active database** and log data is performed.
	Y	Automatic **cleanup of the active database** and log data is performed. The interval between two subsequent automatic cleanups is at least one hour (default).
	D	Automatic cleanup will only be performed if no cleanup (automatic or manual) was already performed on the same day.
at	Enter the time to perform daily automatic cleanup. **Note:** The cleanup must be triggered at least once a day to avoid an overflow of the active database.	
Symbol table obligatory	Check whether a symbol table definition exists when: ■ Activating a network; ■ Adding a network; ■ Modifying a network. The check is not performed for unchanged network definitions.	
	Possible values:	
	N (or blank)	No symbol table definition required (default).
	A	Symbol table required for all networks.
	S	Symbol table required for subnetworks only.
	If you want to check the existence of symbol table definitions globally, use the batch utility CHNWST-P described in the section *Entire Operations Utilities* in the *User's Guide*.	
Keep predefined job time frames	Possible values:	
	N	Use the calling job's time frame for subnetwork jobs (default).
	Y	Keep predefined job time frames.

Default Setting (3) - Logging, Accounting, APIs, Symbol Table, Encoding

To display the third screen of the Default Setting facility

- Choose PF8 (Down) on the **Default Setting (2)** screen.

  A **Default Setting (3)** screen like the example below appears:

```
 18.03.20               ***** Entire Operations *****               10:28:13
                             Default Setting (3)
--------------------------------------------------------------------------------
 Log and Accounting Settings
   Log Logon/Logoff to nodes                    ==> E (Y/E/N)
   Log API usage                                ==> N (Y/N)
   Collect z/OS step accounting data            ==> Y (Y/N)

 Deactivation Settings
   Confirm activation cancelling                ==> N (Y/N)
   Network deactivation: with active conditions ==> Y (Y/N)
   Jobs to be deactivated at once               ==> 50___

 NOM API Settings
   NOM API retry limit                          ==> 1000
   Pass empty files to NOM                      ==> Y (Y/N)

 Submit symbol/function recalculation at resubmit     ==> Y (Y/N)
 Symbol table activation mode                         ==> X
 Encoding                                             ==> T8______
 Max. number of versions for networks or symbol tables ==> 9999999
 Command => ____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save        Up    Down                    Menu
```

  Replace the current values as required and choose PF5 to save your new default settings.

The fields available on the **Default Setting (3)** screen are explained in the following section.

Fields: Default Setting (3)

Field	Meaning	
Log Logon/Logoff to nodes	Possible values:	
	Y	Log all logon and logoff attempts (including failures) to and from Entire System Server nodes performed by users or Monitor tasks.
	E	Show the extended log (if defined) in case of logon errors. See also *Displaying Extended Log Information* and *Defining Extended Log Information for a Job* in the *User's Guide*.
	N	Show the standard system log (default).
	Be aware of the overhead in the log file.	
Log API usage	Possible values:	
	Y	Log API executions. The API return code is contained. Be aware of the overhead in the log file.
	N	API executions are not logged (default).
Collect z/OS step accounting data	Y	Accounting data for steps is collected additionally for z/OS jobs. Be aware of the overhead in the accounting data file.
	N	Accounting data for steps is not collected (default).
Confirm activation cancelling	Y	A confirmation window is used if future activations are cancelled (default). See also *Cancelling an Active Job* in the section *Active Job Networks* in the *User's Guide*.
	N	No confirmation window is used.
Network deactivation: with active conditions	Y	1. If an active network is deactivated, the belonging active conditions will be deactivated, too. 2. During a **cleanup**, active conditions will be deactivated if their retention period is reached or if their creating network run or job run is not active anymore.
	N	No cleanup of active conditions during a network deactivation. During a **cleanup**, active conditions will be deactivated only if their retention period is reached.
Jobs to be deactivated at once	Maximum number of active jobs to be deactivated in one Monitor cycle. Default: 50.	

Field	Meaning	
NOM API retry limit	Maximum number of attempts for passing a file to Entire Output Management (NOM). Default: 1000.	
Pass empty files to NOM	Possible values:	
	Y	Empty files will be passed to Entire Output Management (default).
	N	Empty files will not be passed to Entire Output Management.
	Note: A log message will be written in any case.	
Submit symbol/function recalculation at resubmit	Determine the handling of submit symbol and function values during job resubmit with submission symbol replacement. Possible values:	
	Y	Active submit symbols and functions will be deleted and activated (calculated) anew (default).
	N	Resubmission will be performed with the same submit symbol and function values.
Symbol table activation mode	Possible values:	
	X	After schedule extraction. Symbol prompting can be used for scheduled networks (default).
	A	During the network activation. No symbol prompting is possible.
Encoding	Possible values (can be combined):	
	T	Applies to JCL on UNIX and Windows only. Use trigraphs in active JCL and in JCL and SYSOUT logging. For information on trigraph encoding, see the relevant section in the *User's Guide*.
	8	Applies to JCL on UNIX only. If the file is UTF-8 encoded, convert UTF-8 characters to HTML format in the active JCL. In this case, you must not use the ampersand (&) as the submission escape character.
	empty field	No encoding (default).
Max. number of versions for networks or symbol tables	Maximum number of versions that might be defined for a network or symbol table. This limit is checked during addition or cloning of versions. Possible values: 0 to 9999999. If 0 is specified, the limit is 99999 (default) for no restriction.	

Default Setting (4) - Run Number for Activation, Symbol Function Results, SYSOUT

To display the fourth screen of the Default Setting facility

- Choose PF8 (Down) on the **Default Setting (3)** screen.

  A **Default Setting (4)** screen like the example below appears:

```
 18.10.18                ***** Entire Operations *****                13:30:53
                              Default Setting (4)
--------------------------------------------------------------------------------
 Activation Settings
   Activation: Allow run number setting              ==> Y (Y/N)

 Symbols
   Search also in other symbol tables of active network  ==> Y (Y/N)
   Write results of MM and MV symbol functions
    to active symbol table                             ==> N (Y/N)


 SYSOUT
   SYSOUT Line Limit                                  ==> 1000_________
   Maximum SYSOUT Size (in MB)                         ==> 1_________
   Line Limit for End-of-Job Checking                 ==> B                  ↩

   Copy SYSOUT File before passing it to NOM          ==> Y (Y/N)
   SYSOUT Store Node                                  ==> 518__
                                                                             ↩

Display
  Show installed ESM Products in CUI Main Menu        ==> Y (Y/N)            ↩


 Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save        Up                           Menu
```

  Replace the current values as required and choose PF5 to save your new default settings.

The fields available on the **Default Setting (4)** screen are explained in the following section.

Fields: Default Setting (4)

Field	Meaning	
Activation: Allow run number setting	Possible values:	
	Y	Allows users to request their preferred run number during network or job activation. See also the field **Preferred Run Number** described in the sections *Fields: Network Activation* (*Network Maintenance*) and *Fields: Job Activation* in the *User's Guide*.
	N	Users are not allowed to request a run number (default).
Search also in other symbol tables of active network	Y	Symbols will be searched also in other active symbol tables of the active network.
	N	Symbols will not be searched in other active symbol tables of the active network.
Write results of MM and MV to active symbol table	Y	Values returned for the symbol functions MM and MV are written to the active symbol table. Subsequent symbol function executions with the same parameters will use these values. See also in the section *Functions for Symbol Replacement* in the *User's Guide*.
	N	Values returned for the symbol functions MM and MV are not written to the active symbol table (default).
SYSOUT Line Limit	0 - 9999999999999	Determine the line limit for SYSOUT. Default: 0 (no limit). If the SYSOUT of a job exceeds the line limit set, the lines are truncated after the line number specified in this field. This affects the following SYSOUT functions: ■ Extended SYSOUT logging is truncated. See also *Displaying Extended Log Information* in the *User's Guide*. ■ SYSOUT browsing of a file or spool data set is truncated and ends with a warning message like the following: `===== EOR4123 - SYSOUT line limit 1000 reached =====` ■ SYSOUT is truncated if copied from UNIX or Windows to the mainframe (for example, BS2000). ■ SYSOUT is truncated if passed from UNIX or Windows to Entire Output Management (NOM), depending on the Entire System Server version installed at your site. ■ Log messages are written for the above cases.

Field	Meaning	
		z/OS, JES2: The value is divided by 1000 and inserted with a `/*LINES` command. If the division result is 0, the value is set to 1.
Maximum SYSOUT Size (in MB)	`Zero, or a maximum SYSOUT Size (Unit: Megabytes)`	■ Applies to UNIX and Windows jobs only. ■ If the SYSOUT of a job exceeds the maximum specified here, the job will be set to 'not ok', and no end-of-job actions will be performed. ■ Default: 0 (no limit)
Line Limit for End-of-Job Checking	`B`	Applies to BS2000 only. Interrupt the job if the SYSOUT line limit is reached. If a SYSOUT file has reached or exceeded the given **SYSOUT Line Limit**, the job will be treated as interrupted during End-of-Job checking and set to `not ok`.
	blank	The job is not treated as interrupted if the SYSOUT line limit is reached (default).
Copy SYSOUT File before passing it to NOM	`Y`	Applies to BS2000 only. Copy the SYSOUT file physically and pass the copy to the Entire Output Management API (default). This doubles the necessary disk storage for SYSOUT files created by Entire Operations.
	`N`	Pass the original SYSOUT file to the Entire Output Management API. **Note:** If the copying of SYSOUT files for Entire Output Management is switched off, SYSOUT files may get lost or overwritten, for example, if the creating job is resubmitted or restarted for recovery.
SYSOUT Store Node	Zero or an existing NPR (Entire System Server) Node	■ If a UNIX or Windows node is defined here, the SYSOUT of all UNIX and Windows jobs will be copied to that node. ■ If the SYSOUT store node was defined or changed, the Entire Operations Monitor must be restarted.
Show installed ESM Products in CUI Main Menu	`Y`	Installed ESM Products will be shown in the **NOP CUI** main menu (default)
	`N`	No other ESM products will be shown in the NOP CUI main menu.

Accessing Operating System Specific Default Settings

To define operating system specific defaults

1 Select **OpSys Specials** on the **Default Setting (1)** screen by marking it with any character and press ENTER.

Or:

Choose PF10 (OSpec) on the **Default Setting (1)** screen.

A selection window like the example below opens:

```
+----------------------------------------+
|                                        |
|  Please select the Operating System    |
|                                        |
|    _  BS2000                           |
|    _  z/OS                             |
|    _  z/VSE                            |
|    _  UNIX                             |
|    _  Windows                          |
|                                        |
+----------------------------------------+
```

2 Select the appropriate operating system and press ENTER.

A screen appears with parameters specific to the operating system selected.

The following sections explain how to continue:

- If you selected z/OS, see *Defaults for z/OS*.
- If you selected BS2000, see *Defaults for BS2000*.
- If you selected UNIX or Windows, see *Defaults for UNIX and Windows*.

Defaults for BS2000

This section provides instructions for setting BS2000 defaults.

You can set the defaults for BS2000 on two screens:

- **Defaults for BS2000 (1)** for general settings and
- **Defaults for BS2000 (2)** for BS2000 message codes that force a `job not OK` by default.

To set defaults for BS2000

1 Select **BS2000** from the **selection window** on the **Default Setting (1) screen**.

A **Defaults for BS2000 (1)** screen like the example below appears:

```
17-06-06                ***** Entire Operations *****                11:31:07
Owner EXAMPLE               Defaults for BS2000 (1)
--------------------------------------------------------------------------------
End-of-Job Checking
  Highest Severity Code accepted as ok         ==> 0000

SYSOUT Handling
  These values will be used as defaults for new job definitions:
  Make the SYSOUT Collection File shareable    ==> N  (Y/N)
  Append the SYSLST File(s) to the SYSOUT File ==> N  (Y/N)


Monitor Job Variables
  Remove internal Monitor Job Variables after End-of-Job Handling ==> Y (Y/N)

Escapes: Activation ==> @ Submission ==> "



Note: Modifications become effective at the next monitor startup.
Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save               Down                    Menu
```

This is the first BS2000-specific screen in a series of two. The fields available on this screen are explained in *Fields: Defaults for BS2000 (1)*.

2 PF8 (Down) to open the second screen **Defaults for BS2000 (2)** containing a table for BS2000-specific message codes:

```
17-06-06                ***** Entire Operations *****                11:36:48
Owner EXAMPLE               Defaults for BS2000 (2)
--------------------------------------------------------------------------------

BS2000 Message Codes, which force 'job not ok' by default:

   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________
   ________   ________   ________   ________   ________

If you want to restore the default settings, please use PF4.


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End   Resto Save        Up                            Menu
```

For more information, see *BS2000 Default Message Codes - Defaults for BS2000 (2)*.

This section covers the following topics:

- Fields: Defaults for BS2000 (1)
- BS2000 Default Message Codes - Defaults for BS2000 (2)

Fields: Defaults for BS2000 (1)

BS2000-specific fields on the **Defaults for BS2000 (1) screen** are explained in the following table.

Note: New default settings become effective after the next Monitor startup and are then used as defaults for new job definitions.

Field	Meaning	
End-of-Job Checking:		
Highest Severity Code accepted as ok	This value is the maximum allowed severity code for messages matching the default message code table. If a message is defined without a severity code, a match always means `job not OK`.	
SYSOUT Handling:		

Field	Meaning	
Make the SYSOUT Collection File shareable	Entire Operations creates its own **SYSOUT Collection File** for each BS2000 job running under control of Entire Operations. Enter `Y` if the Entire Operations Monitor should make these files shareable; enter `N` if not.	
Append the SYSLST File(s) to the SYSOUT File	Enter `Y` if the SYSLST files created by a job should be appended to the Entire Operations **SYSOUT Collection File**; enter `N` if not.	
Monitor Job Variables:		
Remove internal Monitor Job Variables	Enter `Y` to remove internal Monitor job variables immediately after End-of-Job checking. This creates fewer catalog entries. Enter `N` to remove variables during standard job deactivation. **Note:** This setting affects only Monitor job variables which were internally created by the Entire Operations Monitor.	
Escapes:		
Activation	Activation escape character. This escape character is used as the prefix for Natural code lines and symbols to be replaced at activation time. **Note:** Existing dynamic JCL might become invalid after changing this escape character.	
Submission	Submission escape character. This escape character is used as the prefix for symbols to be replaced at submission time. **Note:** Existing dynamic JCL might become invalid after changing this escape character.	

BS2000 Default Message Codes - Defaults for BS2000 (2)

The following BS2000 message codes can be contained in the message code table on the **Defaults for BS2000 (2) screen**:

Message Code	Message Text
BLS0520	Access error on program library. PLAM-AMCB error code '(&00)' and system error code '(&01)'. In system mode /HELP-MSG PLA (&00).
CMD0005	Operation name in input string not recognizable or missing.
CMD0186	CMD0186 OPERATION NAME '(&00)' UNKNOWN.

Message Code	Message Text
CMD0205	Error in preceding command or program and procedure step termination: commands will be ignored until /SET-JOB-STEP or /LOGOFF or /EXIT-JOB is recognized.
DMS05A9	Second file name in command for COPY invalid or does not exist. Correct command.
DMS0936	(Message not defined.)
EXC044F	Warning: PUBSPACE limit exceeded for user ID '(&00)' on PUBSET '(&01)'. Erase files no longer required. (See also **the remark on Global Messages for Events Events** below.)
EXC0733	Unrecoverable termination error: task with TSN '(&00)' pended. Continue system run and take dump after shutdown.
EXC0734	(Message not defined.)
EXC0735	(Message not defined.)
EXC0736	Abnormal task termination. Error code '(&00)': / Help-MSG (&00).
EXC0737	(Message not defined.)
EXC0738	(Message not defined.)
EXC0772	(Message not defined.)
IDA0N45	Dump desired? Reply (Y =user/area dump); Y, System = system dump; N = no).
IDA0N47	Dump prohibited by /MODIFY-TEST-OPTIONS command.
IDA0N48	Task/system settings prohibit dump.
IDA0N51	Program interrupt at location '(&00)'.
IDA0N56	Current system dump suppressed (duplicate).
JVS04A1	Syntax error in JV command. Correct command.
NRTT201	NRTT201 TASK TERMINATION DUE TO /(&00) COMMAND The task termination was caused by a /CANCEL-JOB resp. /CANCEL or a /SHUTDOWN command.
SSM2052	Procedure file '(&00)' cannot be opened. DMS error code '(&01)'. Command terminated. DMS error: /HELP-MSG-INFORMATION DMS(&01).

The following applies when using and checking message codes:

- If one of the BS2000 message codes listed in the table above appears in any BS2000 job SYSOUT, a job is treated as `not ok` without any special definition at the job level.
- If the option **Job not ok, or execution error** is marked with `Y` on the **Global Messages for Events** screen.
  - A global message and/or an event store notification is sent.
  - Note that a global message is also sent if a BS000 file allocation fails, for example due to the BS2000 message code `EXC044F`.

- The BS2000 message codes listed in the table above are in effect after the installation of Entire Operations. You can restore the default set of message codes supplied with Entire Operations at any time by using PF4 (Resto).
- The message code table can be completely empty. None of the mentioned BS2000 message codes would be checked by default in this case.
- Changes to message codes are propagated to a running Monitor immediately.

  Consider that faulty jobs may no longer be set to the status `not ok` when the message code table is modified.

Defaults for z/OS

This section provides instructions for setting z/OS defaults.

To set defaults for z/OS

- Select **z/OS** from the **selection window** on the **Default Setting (1) screen**.

  For z/OS, a **Defaults for z/OS** screen like the example below appears:

```
 23/08/16                ***** Entire Operations *****                15:51:44
 Owner EXAMPLE                Defaults for z/OS
--------------------------------------------------------------------------------
 End-of-Job Checking
   These values apply, if nothing is specified for the End-of-Job Checking:
   Highest   Condition Code accepted as ok ==> C 0009
   = highest Severity  Code (see field help)
   Highest   User      Code accepted as ok ==> U ____
   IEF201I 'Terminated because of condition codes' accepted as ok ==> N

 End-of-Job Actions
   Spool Class to be set after Job Completion ==> ________

 Job Card
   These values will be inserted into the job card, if missing:
   MSGCLASS ==> ________  MSGLEVEL ==> ________

 Escapes: Activation ==> @ Submission ==> $

 Note: Modifications become effective at the next monitor startup.


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save                                      Menu
```

  The fields available on the screens are explained in *Fields: Defaults for*.

Fields: Defaults for z/OS

The fields available for z/OS-specific default settings on the **Defaults for z/OS** screen are explained in the following table.

Note: New default settings become effective after the next Monitor startup and are then used as defaults for new job definitions.

Field	Meaning
End-of-Job Checking:	
The values specified with the following three fields are used for checking completed jobs if no definition has been made at the job level:	
Highest Condition Code (= highest Severity Code)	The value entered here is used for default checks of all step results for which no dedicated check was defined. If such a step result is higher than the value defined here, the job is treated as `not ok`. This value is the maximum allowed severity code for messages matching the **Global Message Code Table**. If a message is defined there without a severity code, a match always means `job not ok`.
Highest User Code accepted as ok	Corresponds to **Highest Condition Code** but checks for user-defined codes only.
IEF201I 'Terminated because of condition codes' accepted as ok	Applies to z/OS only. If `Y` is entered here, the occurrence of the message `EF201I ... - JOB TERMINATED BECAUSE OF CONDITION CODES` does not cause the job to be set to `not ok` automatically. All other implicit or explicit End-of-Job checks are not affected by this setting. This is a system-wide setting. For more information, see the section *Defining and Managing End-of-Job (EOJ) Checking and Actions* in the *User's Guide*. Default: `N`.
End-of-Job Actions:	
Spool Class to be set after Job Completion	You can specify whether the spool class of a job is to be modified after completion. This applies to all jobs. **Note:** 1. **Node-specific definitions** override this default. 2. Job-specific definitions override all others. A valid spool class indicates Entire Output Management where to find all information required to process job SYSOUT passed from Entire Operations. If you leave this field blank, the job output class remains unchanged.

Field	Meaning
Job Card:	
MSGCLASS	Applies to z/OS only. You can complete or modify the job card for any job by adding values for MSGCLASS and MSGLEVEL here. The values specified here are inserted if not already in the job card.
MSGLEVEL	
Escapes:	
Activation	Activation escape character. This escape character is used as the prefix for Natural code lines and symbols to be replaced at activation time. **Note:** Existing dynamic JCL might become invalid after changing this escape character.
Submission	Submission escape character. This escape character is used as the prefix for symbols to be replaced at submission time. **Note:** Existing dynamic JCL might become invalid after changing this escape character.

Defaults for UNIX and Windows

This section provides instructions for setting UNIX and Windows defaults.

Note: Specials for UNIX and Windows nodes can be defined on the **Operating System Server (Node) Table screen**; see also ***Special Definitions for a Node (UNIX and Windows)***.

To set defaults for UNIX or Windows

- Select **UNIX** from the **selection window** on the **Default Setting (1) screen**.

  Or:

  Select **Windows** from the **selection window** on the **Default Setting (1) screen**.

  A **Defaults for UNIX** or **Defaults for Windows** screen (respectively) like the example below appears:

```
20.07.18                ***** Entire Operations *****                15:44:59
Owner EXAMPLE                 Defaults for UNIX
--------------------------------------------------------------------------------
End-of-Job Checking
  Highest Exit Code accepted as ok   ==> 0_________

Escapes: Activation ==> @ Submission ==> ¬




Note: Modifications become effective at the next monitor startup.

Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save                                      Menu
```

The fields available on the screen are explained in *Fields: Defaults for UNIX and Windows*.

Fields: Defaults for UNIX and Windows

The fields on the **Defaults for UNIX** and **Defaults for Windows** screen are explained in the following table.

Note: New default settings become effective after the next Monitor startup and are then used as defaults for new job definitions.

Field	Meaning
End-of-Job Checking:	
Highest Exit Code accepted as ok	The value entered here is the maximum exit code which is accepted as `ok`.
Escapes:	
Activation	Activation escape character. This escape character is used as the prefix for Natural code lines and symbols to be replaced at activation time. **Note:** Existing dynamic JCL might become invalid after changing this escape character.

Field	Meaning
Submission	Submission escape character. This escape character is used as the prefix for symbols to be replaced at submission time. **Note:** Existing dynamic JCL might become invalid after changing this escape character.

7 Monitor Defaults

Setting Defaults for the Monitor

You can define defaults for the Entire Operations Monitor. The defaults must be set before the first start of the Monitor.

To set defaults for the Monitor

- From the **System Services Menu**, select the **Monitor Defaults** option and press ENTER.

  A **Monitor Defaults** screen like the example below appears with a table of all current defaults:

```
 18.09.21                ***** Entire Operations *****                11:49:02
 Owner EXAMPLE                    Monitor Defaults
--------------------------------------------------------------------------------
  NOP Monitor Files      DBID   FNR              Monitor Node ==> 146__ N0146
    NOP System File ==>     9    18
            SAT Log ==>     9    28           Monitor User ID ==> NOPDEV______
         Accounting ==>     9    27       Monitor Task Prefix ==> 55D
    SAT Event Store ==>     9    50
 Entire Output Mgmt ==>     9   251    Global Monitor Wait Time ==> ___10 sec.
                                           Log Monitor Activity ==> N
               FNAT ==>     9   107
              FUSER ==>     9   124
               FSEC ==>     9   125



       Monitor JCL ==> ____________________________________________________________

    OS Spool Class ==> X_______      Node Security User Type ==> U

 Command => _____________________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
     Help        End         Save                    Tasks Susp        Menu  ↩
↩
```

  The fields and special PF keys on the screen are explained in the *Fields: Monitor Defaults* and *Special PF Keys: Monitor Defaults*.

Fields: Monitor Defaults

The following table explains the fields on the **Monitor Defaults screen**.

Field	Description
NOP Monitor Files	Read-only information. Entire Operations files currently used by the Monitor. The files are explained in *Entire Operations Files*.
DBID	Read-only information. Database ID (DBID) of an Entire Operations file currently used by the Monitor.
FNR	Read-only information. File number (FNR) of an Entire Operations file currently used by the Monitor.
Monitor Node	Node under which the Entire Operations Monitor runs. The node can be the same as the default Entire System Server node.
Monitor User ID	User ID used for Monitor actions which are not dependent on any jobs. If not specified, the **Default User ID** of the Monitor node will be used. If both are specified, the **Default User ID** of the Monitor node supersedes the **Monitor User ID**. This field is not used if the Monitor node is a UNIX or Windows node. **Note:** 1. If specified, this user ID must be a valid operating system user ID on the machine of the Monitor node. 2. This field is mandatory for Monitor nodes on UNIX (Linux) or Windows.
Monitor Task Prefix	Prefix used for the internal generation of Monitor subtask names. Entire Operations Monitor subtask names use the following syntax: `EOR{task-prefix}{task-number}` where *task-prefix* is the character string entered in this field and *task-number* the number of a defined task. Example: If the task prefix is `E01` and the task number is `2`, the task name will be `EORE0102`. Default for the task prefix: `EOR`. For further information, see also *Task Names* in the section *Entire Operations Monitor*. **Note:**

<table>
<tr><th>Field</th><th>Description</th></tr>
<tr><td></td><td>1. If you want to run several Entire Operations Monitors under one Entire System Server, you must define a different Monitor task prefix for each Monitor.
2. Monitor tasks of the same Monitor use the same prefix, but different task numbers.
3. For z/OS, the Entire System Server event names also use these subtask names.

z/OS Event Name Syntax:

EORpppnn

where:
ppp is the subtask prefix. The default is EOR.
nn is the task number within the Monitor.

Examples:

Monitor 1 has an empty task prefix. The events are then EOREOR01 through EOREOR99.

Monitor 2 has the task prefix A01. The events are then EORA0101 through EORA0199.</td></tr>
<tr><td>Global Monitor Wait Time</td><td>Wait time (in seconds) between two Monitor cycles. This parameter sets the Monitor frequency.

Valid values: 1 to 99999 seconds.

Default: 30.

(The Monitor waits 30 seconds until it begins the next cycle.)

Note:
This value is the default for all Monitor tasks. An individual wait time can be defined for each task. These individual wait times can also be modified while the Monitor tasks are running, and for the current Monitor session only. For details, see Fields: Monitor Task Profile.</td></tr>
<tr><td>Log Monitor Activity</td><td>Write information about Monitor activities, in particular, about the activities of each Monitor task, to the log periodically.

Note: This option increases the amount of log data.

Possible values:
<table><tr><td>Y</td><td>Log additional information.</td></tr><tr><td>N</td><td>Do not log additional information (default).</td></tr></table></td></tr>
<tr><td>Monitor JCL</td><td>For UNIX only.

Full path name of the shell script to be used for starting the Monitor.

Usually, the script generated during the installation procedure should be used for this purpose.

File selection by wildcard is possible.</td></tr>
<tr><td>OS Spool Class</td><td>For z/OS only.

Spool class to be used by the Monitor for all background printouts.</td></tr>
</table>

Field	Description	
Node Security User Type	The Monitor performs an Entire System Server logon to this user ID. This option allows you to specify which user ID is to be taken. Possible values:	
	M	User ID of the Monitor (default). See also the field **Monitor User ID**.
	O	Network owner.
	U	Submit user ID. User ID of the user who defined the job or who made the last modification (even in the active queue). See also the sections *Operating System User IDs* and *Default User ID Determination*.
	V	Like U (submit user ID), but DUM jobs are assigned the user ID of the Monitor in the Entire Operations log.
	A	Submit user ID must be the same as for the network owner.
	B	Submit user ID must be the same as for the last modifying user.
	Note: With M, no specific security profiles are possible for the submitted jobs. This setting is a global default. You may define the **submit security user type** individually for any node, if necessary.	

Special PF Keys: Monitor Defaults

PF Key	Name	Function
PF9	Tasks	Define a **Monitor task profile**.
PF10	Susp	Define filters to **suspend Entire Operations functions**.

Using Monitor Tasks

A Monitor task defines a function to be performed by the Entire Operations Monitor.

Note: If you want to run the Entire Operations Monitor in several tasks on z/OS and BS2000 systems, you must start the Monitor as a subtask.

You can divide the Monitor into several tasks to:

- Perform some Monitor actions in parallel;
- Execute Natural jobs (NAT-type jobs) asynchronously.

If you want to run the Entire Operations Monitor in several tasks, you must define how the Monitor functions are to be distributed on the different Monitor tasks.

Monitor tasks are defined in the **Monitor Task Profile**.

This section covers the following topics:

Execution of Monitor Tasks using Entire System Server

Monitor tasks must be enabled in the Entire System Server as a subtask in the address space (z/OS) or as a pseudo subtask, that is, standalone task (BS2000).

The execution of Monitor (sub)tasks is internally controlled by the Entire System Server view NATURAL-SUB-TASK.

Before you specify several Monitor tasks or allow several Natural tasks, you should check the value of NATNUMSUB in the Entire System Server startup parameters.

If not enough (sub)tasks are allowed for the Entire System Server, a message will be issued by Entire Operations after an attempted task start, and the task activity is taken over by the main task (Task 1). This can decrease Monitor performance.

In z/OS, subtasks run under the Monitor Entire System Server node.

In BS2000, one batch job is run for each Monitor task.

In UNIX, each Monitor task uses a separate process.

Each task has an internal control record in the database. To display the current status of the tasks, choose PF9 (Tasks) in the Entire Operations Monitor window.

Note: All tasks use the same database files.

For more information, see *Status of the Entire Operations Monitor*.

Dynamic Task Profile Reconfiguration

The tasks defined in the **task profile** can be modified while the Monitor is running. All tasks stop briefly, then the unused tasks are stopped, and the newly-defined tasks are started.

This permits adaptation to different workloads in the running Monitor.

Defining a Monitor Task Profile

To define Monitor tasks

1 Choose PF9 (Tasks) on the **Monitor Defaults screen**.

A **Monitor Task Profile** screen like the example below appears:

```
13.03.23                ***** Entire Operations *****                15:52:51
                              Monitor Task Profile                          ↩

 ------------------------------------------------------------------------------
 Task #                   1   2   3   4   5   6   7   8   9  10              ↩

 Schedule Extraction      X   _   _   _   _   _   _   _   _   _              ↩

 Activation               _   _   _   _   _   _   X   _   _   _              ↩

 JCL Loading              _   _   _   X   _   _   _   _   _   _              ↩

 Prerequisite Check       _   _   _   _   _   X   _   _   _   _              ↩

 Submission               _   X   _   _   _   _   _   _   _   _              ↩

 Job Execution            X   _   _   _   _   _   _   _   _   _              ↩

 EOJ Check                _   _   _   _   X   _   _   _   _   _              ↩

 EOJ Actions              _   _   _   _   X   _   _   _   _   _              ↩

 Message Sending          _   _   _   _   _   _   _   X   _   _              ↩

 Special Actions          _   _   X   _   _   _   _   _   _   _              ↩

 Cleanup                  _   _   X   _   _   _   _   _   _   _              ↩

 Deactivation             _   _   X   _   _   _   _   _   _   _              ↩

                                                                             ↩

 Task wait time (sec.)  ___ ___ ___ ___ ___ ___ ___ ___ ___ ___  global    15
                                                                             ↩

 Max. Number of Natural Tasks     ===> __7                                   ↩

 Max. Idle Time of a Natural Task ===> _30 min.                              ↩

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save                                    Menu
```

A matrix table with a list of all Monitor functions and tasks is displayed.

The fields and columns on the page are explained in *Fields: Monitor Task Profile*.

2 In the **Task #** column, mark each function you want to assign to the Monitor.

As soon as you select a task, the **Task Reconfiguration** option is activated.

3 Choose PF5 to save your changes.

The changes take effect at the next Monitor start.

This section covers the following topics:

- Fields: Monitor Task Profile
- Available Monitor Tasks

Fields: Monitor Task Profile

Field/Column	Meaning
Task #	The **Task #** column lists all functions you can assign to the Monitor and the task number to which they are assigned. The default for all functions is the main task, Task 1. All tasks are performed when you start the Monitor. All tasks are described in *Available Monitor Tasks*.
`suspended`	Normally, each function is assigned to a task. If required, for example, for disaster recovery, you can disable a function by removing the mark in the corresponding **Task #** column as indicated by `suspended` in the **previous example**. The selected function is then disabled until you assign the task again.
Task Wait Time (sec.)	Wait time (in seconds) between two Monitor task cycles. This value can be defined individually for each Monitor task. The value **Global Monitor Wait Time** from the **Monitor Defaults** will be used if no value is specified here. **Note:** With this option, you modify the default settings only. If you want to modify the settings of the current Monitor session, you must do this on the **Monitor Tasks screen**.
Max. Number of Natural Tasks	Maximum number of tasks for the parallel execution of asynchronous Natural programs (`NAT`-type). Increase this number if you want to run longer Natural programs in parallel. Default is `0`: Natural programs are executed synchronously by Task 1.
Max. Idle Time of a Natural Task	A Natural task can remain active for some time after it has performed the last Natural program in its queue. This can be useful if there are many Natural programs with short execution times, and it eliminates some overhead for the starting and stopping of (sub)tasks. Default is `0`: A Natural task terminates immediately if its queue is empty.
global	**Global Monitor Wait Time**.

Available Monitor Tasks

Main Task, Task 1

Task 1 is a general-purpose task and must always exist. It performs all functions for which no other task is defined. It is the only task which can start other tasks.

Other General-Purpose Tasks, 2 - 50

The other tasks in the top row (Numbers 2 to 50) are called general-purpose tasks. This means that each of them can perform all functions. These tasks are all started at Monitor startup time. Each function can and must be performed by exactly one task.

Do not define too many Monitor tasks. If Task 1 is not sufficient for your needs, then the **previous example** shows a possible alternative. You should not exceed 2 to 4 tasks, since resources for administration of the individual tasks must always be considered.

Natural Tasks, 51 - 89

Natural programs (NAT-type jobs; Numbers 51 to 89) can be performed asynchronously in their own dedicated tasks. In the field **Max. Number of Natural Tasks**, you can specify how many of them can be active in parallel. In the field **Max. Idle Time of a Natural Task**, you can specify how long they should remain idle if their input queue is empty. These tasks are started if necessary.

Note: Asynchronous End-of-Job check (EJC) exits and End-of-Job action (EJA) exits will be executed in the Natural tasks too.

OGC RPC Service Task, 90

Task 90 performs background functions for the Entire Operations GUI Client (OGC). It is started automatically during Monitor startup. It cannot be configured by the administrator.

Defining Filters to Suspend Entire Operations Functions

You can reduce the system workload after disaster recovery by defining object filters and determining Entire Operations functions to be suspended for the specified jobs.

For each filter, you can specify whether it is activated (enabled) immediately or only specified for future activation.

To list and define filters and suspended functions

1 On the **Monitor Defaults screen**, choose PF10 (Susp).

A **Suspensions** screen like the example below appears:

```
08.03.18                ***** Entire Operations *****                12:05:57
                              Suspensions

       Filter for                    Suspendible
 Owner      Network     Job          Functions                    Enable

 ******************************   Top of Data    ******************************
 EXAMPLE___ *_________  JOB*______   * _ _ _ _ _ _ _ _ _ _ _ _     Y
 DEMO*_____ TEST>_____  T>________   A _ _ _ _ _ _ _ _ _ _ _ _     N
 SAGTEST___ SAGNET____  T<________   J S _ _ _ _ _ _ _ _ _ _ _     Y
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 __________ __________  __________   _ _ _ _ _ _ _ _ _ _ _ _ _     _
 ******************************* Bottom of Data *******************************


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End   EnAll Save  DisAl Up    Down
```

The screen lists all suspensions defined in your environment (empty if no suspensions exist).

2 Modify, add or remove a definition.

The columns and valid input values are explained in ***Columns: Monitor Defaults - Suspensions***.

The special PF keys available are explained in ***Special PF Keys: Suspensions***.

You can delete a suspension by removing the relevant entries from the table row.

3 Choose PF5 to save your definitions.

All enabled filters are evaluated by the Monitor when you choose PF3 and leave the function.

Special PF Keys: Suspensions

The special PF keys available on the **Suspensions screen** are explained in the following table:

PF Key	Name	Function
PF4	EnAll	Enable (activate) all suspensions listed in the table. All entries in the **Enable** column change to `Y` (Yes).
PF6	DisAl	Disable (deactivate) all suspensions listed in the table. All entries in the **Enable** column change to `N` (No).
PF7	Up	Move up one row in the table.
PF8	Down	Move down one row in the table.

Columns: Monitor Defaults - Suspensions

The columns on the **Suspensions screen** are explained in the following table:

Column	Description	
Owner	Name of an owner or a range of names. For valid range specifications, see *Specifying Filter Criteria* in the *User's Guide*.	
Network	Name of a network or a range of names. For valid range specifications, see *Specifying Filter Criteria* in the *User's Guide*.	
Job	Name of a job or a range of names. For valid range specifications, see *Specifying Filter Criteria* in the *User's Guide*.	
Suspendible Functions	Function to be suspended. Possible values:	
	`A`	**Activation** Activate networks.
	`J`	**JCL loading** Load JCL.
	`P`	**Prerequisite check** Perform prerequisite checks.
	`S`	**Submission** Submit jobs.
	`U`	**Job execution** Execute jobs.
	`E`	**EOJ check** Perform End-of-Job checking.
	`O`	**EOJ actions** Perform End-of-Job actions.

Column	Description	
	M	**Message sending** Send messages.
	D	**Deactivation** Deactivate networks.
	*	**All functions** Perform all functions.
	Enable	Enable (activate) or disable (deactivate) the functions entered in **Suspendible Functions**. Possible values:
		Y Enable function.
		N Disable function.
		PF4 sets all filters to Y, PF6 sets all filters to N.

8 Monitor Accounting

You can use the Monitor accounting facility to collect data from Entire Operations Monitor tasks and functions performed by the Monitor and exits called by the Monitor. This can help you identify potential bottlenecks and improve the performance of the Monitor.

Monitor accounting must be enabled or disabled by setting the appropriate options as described in the following section. The Monitor accounting setting persists between restarts of the Monitor.

We recommend that you enable Monitor accounting only if required to avoid the overhead of performing Monitor tasks.

The data collected by Monitor accounting is written to the Entire Operations accounting file (see also *Entire Operations Files*).

You can generate a report from Monitor accounting data by using the appropriate reporting functions provided by Entire Operations GUI Client.

Enabling Monitor Accounting

To enable and disable Monitor accounting

1 From the **System Services Menu**, select the **Monitor Accounting** option and press ENTER.

A **Monitor Accounting** screen like the example below appears:

```
15.10.18                ***** Entire Operations *****                11:53:31
                              Monitor Accounting
--------------------------------------------------------------------------------

Enable Monitor Accounting ==> Y (Y/N)

Interval                  ==> 10_________  (Minutes)

Start Accounting       on ==> ___________  at ==> _________

Stop  Accounting       on ==> ___________  at ==> _________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save
```

2 In the input fields, enter the required values and choose PF5 to save your entries.

The fields and valid input values are explained in *Fields: Monitor Accounting*.

Fields: Monitor Accounting

The fields on the **Monitor Accounting** screen are explained in the following table:

Field	Description	
Enable Monitor Accounting	Enable or disable Monitor accounting. Possible values:	
	Y	Enable Monitor accounting. Data collection starts immediately or on the date/time defined in **Start Accounting**.
	N	Disable Monitor accounting (default).
Interval	Time interval (in minutes) between two data collection attempts. Monitor accounting data is collected at the end of the given interval for each Monitor task and function performed or Monitor exit called. Valid values: 1 - 9999 Default: 10 minutes.	
Start Accounting	Date and time when Monitor accounting starts. If accounting is enabled and these fields are left empty, data collection starts immediately.	
Stop Accounting	Date and time when Monitor accounting stops. If accounting is enabled and these fields are left empty, data collection remains active until the **Enable Monitor Accounting** option is disabled.	

9 Global Messages for Events

The **Global Messages for Events** screen is used to determine the message recipients for specified events.

Accessing the Global Messages for Events Screen

To define global messages for events

- From the **System Services Menu**, select the **Global Messages for Events** option and press ENTER.

  A **Global Messages for Events** screen like the example below appears:

```
16.10.18               ***** Entire Operations *****               15:03:54
                        Global Messages for Events
--------------------------------------------------------------------------------
Definition of events, for which messages will always be sent or stored in the
SAT Event Store. Please note that the recipient table must be valid for
message sending. You can use PF6 to modify the recipient table.

                                Message  Event
Events                          Sending  Store   Symbols to be used
Monitor Runtime Information        Y       Y     Owner         ==> SYSDBA____
Monitor Runtime Errors             Y       Y     Symbol Table  ==> GMSG-RCV__
Activation and JCL Load Errors     N       Y          Version  ==> (unnamed)_
Latest start time exceeded         N       N     Escape        ==> @
Job executing after deadline       N       N
Job not ok, or execution error     Y       Y
Network or Job not terminated      N       Y
Awaiting Symbol Prompting          N       N
Symbol not found                   N       Y
Calendar undefined for year        Y       Y
Node Errors                        Y       Y
Execution time threshold reached   Y       Y


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save  RcpTa Symb
```

Recipient Table

For all events marked with Y in the input fields of the **Message Sending** column, a predefined message will always be sent to all recipients defined in the recipient table (opens with PF6) for these events.

This function works only if the recipient table contains at least one recipient.

Note: Only one recipient table is available for all defined events.

You can use e-mail addresses as recipients. These must be stored in the symbol table, which can be defined on the **Global Messages for Events** screen.

The recipient table contains the symbol, preceded by the global activation escape character, representing the recipient in this case.

The fields contained in the recipient table are explained in *Fields and Columns: Message and Message Recipients* in the section *Message Sending* in the *User's Guide*.

Event Store

You can limit the number of messages distributed among users by storing part of the messages in the event store of System Automation Tools. The messages can then be checked only if required.

For all events marked with Y in the input fields of the **Event Store** column, a predefined message will always be saved in the event store (if used) of System Automations Tools.

For detailed information on the event store, refer to the appropriate *System Automation Tools* documentation.

Symbols to be Used

In the **Symbols to be Used** section of the **Global Messages for Events** screen, you can specify the symbol table to be used for all symbol replacements within the message **recipient table**.

In the input fields, you can enter a valid name or use the asterisk (*) as a wildcard to select a name from a selection window.

Field	Description
Owner	Owner of the symbol table used for symbol replacements within the **recipient table**.
Symbol Table	Symbol table to be used for symbol replacements within the **recipient table**.
Version (Symbol Table)	Version of the symbol table to be used. If you do not specify a version, the unnamed version is used. Specify `(unnamed)` if you want to use the current version for the current date.
Escape	Read-only field. The escape character to be used is the global activation escape character. The value is derived from the **global activation escape character**. It cannot be modified here.

Events to be Selected

In the **Events** section of the **Global Messages for Events** screen, you can specify the events for which messages are to be sent and/or stored in the **event store**.

Prerequisite: The **recipient table** must be valid.

You specify the events to be selected by entering `Y` (Yes) in the input field next to the required events. Events for which `N` (No) is entered are not selected.

Events Selected	Messages Sent
Monitor Runtime Information	Messages are sent each time the Monitor starts or shuts down a task.
Monitor Runtime Errors	Messages are sent each time the Monitor error routine is activated due to a Monitor runtime error.
Activation and JCL Load Errors	Messages are sent by the Monitor if activation or JCL load errors occur.
Latest start time exceeded	Messages are sent each time a job was not submitted before the defined or calculated start time was reached.
Job executing after deadline	Messages are sent each time the Monitor detects that a job was not terminated before its defined or calculated deadline time.
Job not ok, or execution error	Messages are sent: ■ Each time the Monitor detects that a job ended `not ok`. ■ If the condition `NET-END-NOTOK` is set or reset with an active subnetwork. See also *Link to the Main Network* in the *User's Guide*. ■ BS2000 only. If a file allocation fails, for example with message code `EXC044F`. ■ For other job execution errors.

Events Selected	Messages Sent
Network or Job not terminated	Messages are sent by the network deactivation routine if the active network or job is not terminated. In this case, the active jobs will be deactivated if the retention period for active jobs is reached. The retention period is defined in the *Default Setting (1)* described in the *Administration* documentation.
Awaiting Symbol Prompting	Messages are sent each time the Monitor detects that at least one symbol is to be prompted for network activation.
Symbol not found	Messages are sent each time a symbol cannot be found and cannot be handled successfully by the **global symbol not found exit**.
Calendar undefined for year	Messages are sent each time Entire Operations detects that a calendar is undefined for the current or the next year.
Node Errors	Messages are sent by the Monitor if errors occur during node access.
Execution time threshold reached	Messages are sent if a job runs three times longer than the estimated elapsed time defined for the job in the **Scheduling Parameters** window (see the section *Schedule Maintenance* in the *User's Guide*).

Special PF Keys: Global Messages for Events

PF Key	Name	Function
PF6	RcpTa	**Recipient table**. Use this PF key to open and modify the recipient table.
PF7	Symb	Symbol table. Definition of symbols to be used in message recipient definitions. You can view and modify all symbols defined for the specified symbol table.

10 Global User Exits

This section describes the global user exits that can be used to perform version, JCL, symbol or message validation checks in the whole Entire Operations environment. This is useful, for example, if no specific validation checks are defined for single job networks.

Note: The existence of the defined global user exits is checked during the Entire Operations Monitor startup. If at least one of these exits cannot be found, the Entire Operations Monitor performs an immediate shutdown.

The following applies:

- A global user exit may exist only once within the whole Entire Operations installation.
- All global user exits are optional.
- The user exits must reside as Natural objects in the SYSEORU library.
- The same coding rules and restrictions apply as described in the sections *User Exits* and *Starting an Edit Session* in the *User's Guide* apply.

Related Topic:

- *User Exits* in the *User's Guide*

Accessing Global User Exits

To access and maintain global user exits

1 From the **System Services Menu**, select the **Global User Exits** option and press ENTER.

A **Global User Exits (optional)** screen like the example below appears:

```
17.12.13                ***** Entire Operations *****                15:39:57
 Owner NOPALL            Global User Exits (optional)
--------------------------------------------------------------------------------

                       Exit Name
 Version Names         NVNX0001
 JCL Activation        ________
 Symbol Modification   ________
 Symbol Not Found      ________
 Job Submission        ________  Type   _    A Assembler  N Natural
 Message Sending       ________  Usage  _




 Please note the possible overhead being created by the user exit usage.

 Command => _____________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save                                    Menu
```

2 Enter or change the required values.

The input fields are described in *Fields: Global User Exits*.

3 Choose PF5 (Save) when you are finished.

Fields: Global User Exits

Field	Meaning
Version Names	Name of the user exit to be used as the **global exit for version names**.
JCL Activation	Name of the user exit to be used as the **global JCL activation exit**.
Symbol Modification	Name of the user exit to be used as the **global symbol modification exit**.
Symbol Not Found	Name of the user exit to be used as the **global symbol not found exit**.
Job Submission **Type**	This global exit is obsolete and should no longer be used. It is only maintained for backward compatibility with previous versions of Entire Operations. The exit was used for job submission on mainframe operating systems (z/OS and BS2000) only.
Message Sending	Name of the user exit to be used as the **global message sending exit**.

Field	Meaning	
Usage	Only applies to **Message Sending**. Option to be used for the global message sending exit. **Note:** Extensive use of this exit can cause considerable overhead. Possible values:	
	N	Never use this exit.
	S	Use for explicit sending via exit only (=EXIT).
	D	Additionally, for all defined message send actions.
	A	For all events.

All global exits are described in the following sections.

Global Exit for Version Names

- Function
- Parameter List
- Return Codes

Function

If specified, this exit will check each newly created network version name or symbol table version name.

The exit must be coded as a Natural subprogram.

Parameter List

The parameter list is named NOPXPL-A (see *User Exits* in the *User's Guide*) and is available in the SYSEOR system library.

Include it in the exit with:

```
DEFINE DATA PARAMETER USING NOPXPL-A
```

Parameter	Meaning	
P-CALL-PLACE	NVN	For network version checking.
	SVN	For symbol table version checking.

Return Codes

P-RC	Meaning
0	The version name is OK.
1	The version name is rejected by the exit. If the version name is rejected, the content of P-RT will be shown as error message. If P-RT is empty, a generic error message will be shown.

Global JCL Activation Exit

Function

If specified, Entire Operations will use this exit for each job activation.

The exit must be coded as a Natural subprogram. It is possible to modify almost all fields which describe the JCL location.

Note: You must set P-RC := 1 to make the modifications valid.

The modifications are effective only for the current run, but not for the job's master definition.

Parameter List

The parameter list is named AJCLX1-A and is available in the SYSEOR system library.

Include it in the exit with:

```
DEFINE DATA PARAMETER USING AJCLX1-A
```

Return Codes

P-RC	Meaning
0	OK, no modification of the JCL location.
1	OK, JCL location was modified by exit.
other	Access to JCL file denied or other problem. In this case, the JCL load for the given job will be interrupted.

Global Symbol Modification Exit

Function

User-defined symbols can be modified, and validation checks can be performed during job network activation. If defined, this exit will be invoked during the activation of all job networks for which no specific symbol prompting or modification exit was defined.

In the case of user-defined map(s) and validation checks during the symbol prompting for job network activation, the symbols must be read and updated by the Entire Operations API routine NOPUSY7N (see *API Routines* in the *User's Guide*). This API routine also allows sequential reading in the active symbol table.

See also *Specifying User Exits for Symbol Modification* in the section *Symbol Table and Symbol Maintenance* in the *User's Guide*.

Parameter List

The user exit is to be written as a Natural subprogram and must use the supplied parameter list NOPSYP3A (see *User Exits* in the *User's Guide*). This parameter list contains all environment parameters needed.

A list of symbol tables used for this network activation will be passed.

Return Codes

P-RC	Meaning
0	OK, modifications were done.
1	OK, no symbols prompted or modified.
2	Activation cancelled.
3	On input, rewrite modified symbols to the symbol table master.

Global Symbol Not Found Exit

Function

This exit is invoked during the activation of all job networks for which no specific symbol prompting or modification exit was defined and symbol search failed within the existing hierarchy.

All actions of this exit will be logged.

Note: Extensive use of this exit can cause considerable overhead.

Parameter List

For this exit, the common exit parameter list NOPXPL-A (see *User Exits* in the *User's Guide*) is used. The field `P-CALL-PLACE` contains `SNF`.

Return Codes

P-RC	Meaning
0	Exit returned another symbol value.
1	Accept that the symbol is missing; skip replacement.
2	Use another symbol instead. The returned symbol value will be preceded by the current escape character and followed by a period (.), which will be used as a wildcard. This causes a new symbol replacement with the returned symbol.
3	Exit returns: `symbol not found`. The symbol replacement is not successful.

Global Message Sending Exit

This exit can be used to send messages for job events. The exit must be coded as a Natural subprogram.

For possible option settings, see the **Usage field** described in *Fields: Global User Exits*.

Note: Extensive use of this exit can cause considerable overhead.

This section covers the following topics:

- Parameter List
- Return Codes

Parameter List

The parameter list is named NOPMSG-A and is available in the SYSEOR system library.

Include it in the exit with:

```
DEFINE DATA PARAMETER USING NOPMSG-A
```

Return Codes

P-RC	Meaning
0	Exit execution was OK.
1	Temporary error. The Entire Operations Monitor should try to send the message through the exit later.
2	Permanent error. The Entire Operations Monitor should not try to send the message through the exit later.

11 Global Message Code Table

This function allows you to select message codes to be checked by default after each job termination.

To view and specify message codes for checking

- From the **System Services Menu**, select the **Global Message Code Table** option and press ENTER.

  A **Global Message Code Table** screen like the example below appears with a list of all current codes:

```
17-03-06                ***** Entire Operations *****                12:16:34
                           Global Message Code Table
 ------------------------------------------------------------------------------
       Usage: These message codes will be searched by default during each
              End-of-Job Checking.

                         Message Code   Severity   OpSys

                         NAT9978___     0012       ________
                         NAT0001___     0012       ________
                         __________     ____       ________
                         __________     ____       ________
                         __________     ____       ________
                         __________     ____       ________
                         __________     ____       ________
                         __________     ____       ________
                         __________     ____       ________
                         __________     ____       ________


 Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save                                      Menu
```

Columns: Global Message Code Table

The columns of the **Global Message Code Table window** are described in the following table:

Column	Meaning	
Message Code	Message code, for example, `IEF999I`. This field is case-sensitive.	
Severity	Highest resulting severity code of a job will be compared with the default condition code value to be treated as `not ok`. In other words: The detection of the message causes a simulated condition code setting. The default condition/severity code can be defined in the Entire Operations defaults by selecting the z/OS option from the **OpSys Specials** window. For details, see ***Defaults for z/OS*** in the section ***Entire Operations Defaults***.	
OpSys	Operating system for which the message code is valid. Possible values:	
	empty	The message code is scanned for all mainframe operating systems.
	`UNIX`	The message code is scanned for all UNIX operating systems.
	`WINDOWS`	The message code is scanned for all Windows operating systems.
	`OPENSYS`	The message code is scanned for all UNIX and Windows operating systems.

12 Resources

The maintenance functions provided in **System Services** are used to define resource master definitions to Entire Operations.

A resource master determines the maximum amount of usage available for executing all jobs that reference the resource. This amount is defined as a fixed value (initial quantity) in the resource master. Each resource must be defined as a resource master, before it can be used by a job.

Part of the amount (or the entire amount) specified for a resource can be defined as a prerequisite requirement for a single job or multiple jobs. This can be helpful, for example, to control execution of jobs that run at the same time.

The current amount of a resource master can be determined by an exit, which is periodically invoked by the Entire Operations Monitor. The exit can change the amount currently available for a resource, for example:

- If a requested symbol is not found;
- If a time limit set for job execution is reached;
- If not enough space is available for job execution.

For more information, see ***Using a Resource Master Determination Exit***.

Related Topic:

- Use as a prerequisite condition for jobs: *Handling Prerequisite Resources for a Job* and *Viewing and Modifying Resources Used by Active Jobs* in the *User's Guide*

Listing Resources

To list available resources

- From the **System Services Menu**, select the **Resources** option and press ENTER.

  A **Resources** screen like the example below appears:

```
 12.03.16               ***** Entire Operations *****                12:42:31
 Owner     EXAMPLE                Resources
 Selection A_________

--------------------------------------------------------------------------------
 Cmd Resource            Type  Initial        Used Exit     Exit     E  Call
     *-------------------          Qty         Qty Library  Member      Time
  _  AA-XIT               R      10.00             EOR-T531 AA-XORES Y 13:37
  _  AAAAA                R     123.00             XSETABO1 JCL-2    N
  _  AAAAB                R     456.00                              N
  _  AAAAC                R     789.00
  _  AA1                  R       0.00
  _  ADA-1                N       0.00             EOR531   RMDDBID  Y 15:25
  _  ADA-9                N       1.00             EOR531   RMDDBID  Y 14:22
  _  ADAPROD1             R       0.00
  _  APBAMF-NEXT-JOB      R      10.00                              N
  _  APS-ASSEMBLE         R       1.00
  _  ATEST                U       0.00             AAAA     S        N
********************************** m o r e **********************************
 D Delete   E Edit Exit       M Modify   J Defined in Jobs   W Active Usage
 C Check Usage   X Invoke Determination Exit
 Command => ____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   End         Save        Up    Down                   Menu
```

The screen contains a list of resources defined in Entire Operations (the list is empty if no resources are defined).

The columns are explained in *Columns: Resource Master List*.

Columns: Resource Master List

The columns of the **Resources screen** are described in the following table:

Column	Meaning	
Cmd	Line command input field. For possible commands, see *Line Commands: Resources*.	
Resource	Name of the resource. This can reflect real resources or can describe a fictitious resource. In the line below the column heading, you can enter selection criteria for the range of names to be listed. See *Specifying Filter Criteria* in the *User's Guide*.	
Type	Type of the resource. Possible values:	
	U	Not reusable, quantitative.

Column	Meaning	
	R	Reusable, quantitative.
	N	Not quantitative (absolute).
	For more information, see the **Type** field described in *Fields and Columns: Resource Definition*.	
Initial Qty	Total amount of the resource defined to the system.	
Used Qty	Amount of resource currently used by running jobs.	
Exit Library	Natural library of the resource determination user exit. The fields and commands available for user exit usage are described in ***Fields: Resource Definition*** and ***Special PF Keys: Resource Definition***.	
Exit Member	Natural object of the resource determination user exit. The fields and commands available for user exit usage are described in ***Fields: Resource Definition*** and ***Special PF Keys: Resource Definition***.	
E	User exit enabled. Possible values:	
	Y	The user exit is enabled.
	N	The user exit is not enabled.
Call Time	Date and time of the last invocation of the resource master determination user exit. See also *Date and Time Formats* in the *User's Guide*.	

You can maintain resources using available line commands and PF keys.

Line Commands: Resources

Line Command	Meaning
D	**Delete resource**.
E	**Edit user exit**.
J	Show the definition as prerequisite resource for jobs: see ***Listing Jobs Defined for a Resource***.
M	**Modify selected resource definition**.
W	Show active resource usage: see ***Listing Jobs Currently Using a Resource***. This line command opens a screen which shows the current usage of the resource by active jobs.
C	Check usage. Calculates the total quantity currently used by a resource. The calculated value helps you control consistent usage of the resource and adjust the initial quantity defined for a resource, if required.
X	**Invoke the resource master determination exit**.

Adding and Modifying a Resource Master

Note: The usage of resources can be restricted to read-only access in your user profile as described in *Monitoring Functions* in the section *User Maintenance*.

To add a new resource master

1 On the **Resources screen**, choose PF2 (Add).

A **Resource Definition window** opens.

2 Enter the required definitions.

The fields and special PF keys available are described in the sections *Fields: Resource Definition* and *Special PF Keys: Resource Definition*.

3 When you are finished, choose PF5 (Save) to save the new resource definition.

To modify a resource

1 On the **Resources screen**, enter M in the line input field next to the required resource and press ENTER.

A **Resource Definition** window opens with the current resource definition:

```
+-----------------------------------------------------------+
|                                                           |
|                  Resource Definition                      |
|                                                           |
|          Resource ==> BOA-RES_____________                |
|              Type ==> R                                   |
|  Initial Quantity ==> 20.00_____                          |
|     Used Quantity ==> 0.00                                |
|                                                           |
|  Resource Amount is determined by                         |
|  Exit      ==> ________  in Library ==> ________          |
|  Parameter ==> ________________________________           |
|                        Exit enabled ==> N (Y/N)           |
|                 Exit Check Interval ==> ______ Min.       |
|    Maximum number of jobs that will                       |
|    be awakened from passive waiting ==> ______            |
|     Last Value Determination ==>                          |
|                                                           |
| Enter-PF1---------PF3---------PF5---PF6-------------      |
|       Help         End         Save  Determ.              |
+-----------------------------------------------------------+
```

2 You can modify the resource definition by replacing the current values. Choose PF5 (Save) to save the modified resource. Choose PF3 (End) to return to the list of resources.

For explanations of the input fields and commands available, see *Fields: Resource Definition* and *Special PF Keys: Resource Definition*.

Fields: Resource Definition

The fields in the **Resource Definition** window are described in the following table:

Field	Meaning	
Resource	Name of the resource. You must specify this name when using this resource as a prerequisite for a job.	
Type	Type of the resource. Possible values:	
	U	Not reusable, quantitative. The amount of the resource (e.g., paper) used by a job is not released at job completion.
	R	Reusable, quantitative. The amount of the resource (e.g., address space) used by a job is released at job completion.
	N	Not quantitative. The resource is either entirely available or not available (e.g., a database or printer).
Initial Quantity	Initial quantity defined for resources of the type U and R. The field is read-only if the amount of the resource is determined by a **resource master determination exit**. **Note:** The initial quantity can be modified to a value which is less than the currently used quantity.	
Used Quantity	Read-only field. Shows the amount of the resource currently in use. This value is useful when you wish to modify an existing resource. If you define a new resource, this field shows zero.	
Exit	If a **resource master determination exit** is defined, the initial value of the resource is determined at each invocation of the routine. The user exit is invoked during prerequisite checks for the resource.	

Field	Meaning
	The **check interval** set for the user exit specifies the period (in minutes) between two user exit calls. The exit is used only if it is enabled. If the exit is enabled, the manual setting of the initial value is disabled. It is possible to pass parameters to the exit. See the field help. The exit execution can be forced with a line command.
Library	Natural library in which the user exit resides. This library should be different from the SYSEOR system library.
Parameter	The content of this field is passed to the **resource master determination exit**, in the field `P-RMD-PARAMETER` of the NOPXPL-A parameter data area (see *User Exits* in the *User's Guide*). Symbols may be used. The escape character is the global activation escape character. The symbols must reside in the global symbol table `RMD-PARM` of the owner `SYSDBA`.
Exit enabled	The resource master determination user exit is only used if it is enabled. If enabled, the initial value of the resource cannot be set manually. Possible values: `Y` — Enables the user exit. `N` — Disables the user exit.
Exit Check Interval	Minimum interval between two determinations of the resource. The overhead of resource determinations increases with smaller intervals. A resource determination can be forced at any time by the line command `X` in the resource list.
Maximum number of jobs that will be awakened from passive waiting	Maximum number of jobs to awake from a passive wait state. You can specify a maximum number to limit the storage used by resources. This is useful for large networks where many active jobs require the same resource. When the maximum number is reached, jobs remain in the wait queue until enough resource storage is available to process further jobs. If zero (`0`) is specified (default), no limit applies.
Last Value Determination	Date and time of the last determination of the resource amount by the **resource master determination exit** (if defined). See also *Date and Time Formats* in the *User's Guide*.

Special PF Keys: Resource Definition

The following special PF keys are available as commands in the **Resource Definition** window:

PF Key	Meaning
PF3	Close window; return to resource master list.
PF5	Save definition.
PF6	Force resource determination by exit. Invokes the resource master determination exit to determine the current amount of the resource. See also *Using a Resource Master Determination Exit*.

Using a Resource Master Determination Exit

A resource amount determination exit can be defined for each resource master.

When the exit is invoked, the currently available amount of the resource is returned. The return of the initial amount is optional.

Initial amounts will not be used for normal prerequisite resource checks.

One exit can be used for several (e.g., similar) resource masters, because the name of the resource is passed as an input parameter to the exit.

You can check whatever you need to determine the resource amount. You can invoke Entire System Server views and/or check any database contents.

Note: The user is responsible for the performance of the coded exit.

After the exit is invoked, the new available quantity will be stored in the resource master record. Triggering of passive waiters will only be done if the new quantity is different from the old one.

Resource master determination exits can be **enabled** and **disabled**. If the use of the exit is disabled for a resource, this resource behaves like a resource without exit.

Exit Parameter List

For the common parameter list for user exits, see *Parameters Used for Different Call Places* in the section *Common User Exit Parameter Data Area NOPXPL-A* in the *User's Guide*.

The list contains:

- Return code (out)
- OK, determination successful

- Resource cannot be determined (permanent)
- Resource cannot be determined (temporary)
- Parameter(s) missing
- Return text (out)
- Resource name (in)
- Timestamp for which the evaluation is to be made (in). (Usually, the Natural `*TIMX` system variable will be passed.)
- Current maximum amount as known to Entire Operations (in)
- Currently used amount (in)
- New maximum amount (out)
- New used amount (out)

Listing Jobs Defined for a Resource

To view jobs defined for a resource

- On the **Resources screen**, enter the line command `J` next to the required resource and press ENTER.

  A **Resource defined in Jobs** screen like the example below appears:

```
06.11.08              ***** Entire Operations *****                  09:16:48
                          Resource defined in Jobs

1.20
 ------------------------------------------------------------------------------
 Resource R-20
                             Initial Quantity  Type
 defined in                            777.00  R
 Owner      Network    Job          Quantity  Dealloc.  D.if not ok
 SN         RES-PRQ    J1              20.00
 SN         RES-PRQ    J2               0.01









 ******************************* Bottom of Data ********************************

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End                      Up    Down
```

The screen shows a list of jobs in which the selected resource is defined as a prerequisite resource.

The fields and columns on the screen are described in *Field and Columns: Resource Defined in Jobs*.

Field and Columns: Resource Defined in Jobs

The fields and columns on the **Defined in Jobs screen** are described in the following table:

Field/Column	Meaning
Resource	Name of the resource.
Initial Quantity	**Initial quantity** as defined in the resource master definition (see *Fields: Resource Definition*).
Type	**Type of the resource** as defined in the resource master definition (see *Fields: Resource Definition*).
Owner	Owner, network, network version and job in which the resource is defined as a prerequisite.
Network	
Version	
Job	

Field/Column	Meaning
Quantity	Amount which is requested by this job.
Dealloc.	Deallocation mode. See *Resource Deallocation Modes* in the *User's Guide* for details.
D.if not ok	Deallocation if the job does not end `ok`. See *Resource Deallocation Modes* in the *User's Guide* for details.

Listing Jobs Currently Using a Resource

To view all active jobs using a resource

- On the **Resources screen**, enter the line command `W` next to the required resource and press ENTER.

  An **Active Resource Usage** screen like the example below appears:

```
04.12.19                ***** Entire Operations *****                 11:44:37
                            Active Resource Usage
------------------------------------------------------------------------------
Resource HUGO                 Type R                                  Quantity
                                               A          initial    1900.00
    used by                                    P       total used      10.00
Cmd Owner      Network      Run Job        A D I Begin
 _  SAG        B60-FLOW       5 JOB-01     A K   03.12 17:14            5.00
 _  SAG        B60-FLOW       7 JOB-06     A K   04.12 10:26            5.00















******************************* Bottom of Data ******************************
 F Force Release


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End                       Up     Down
```

  This screen shows a list of active jobs which are currently using a resource.

The fields and columns on the screen are described in ***Fields and Columns: Active Resource Usage***.

This section covers the following topics:

- Fields and Columns: Active Resource Usage
- Line Command: Active Resource Usage

Fields and Columns: Active Resource Usage

The fields and columns on the **Active Resource Usage screen** are described in the following table:

Field/Column	Meaning
Resource	Name of the resource.
Type	**Type of the resource** as defined in the resource master definition (see ***Fields: Resource Definition***).
Initial Quantity	**Initial quantity** as defined in the resource master definition (see ***Fields: Resource Definition***).
Total Used Quantity	Sum of all amounts of single usages of the resource.
Cmd	Line command input field. For possible line commands, see ***Line Command: Active Resource Usage***.
Owner	Owner, network and run number of the active job by which the resource is allocated.
Network	
Run	
Job	
A	Allocation mode. See *Resource Allocation Modes* in the *User's Guide* for details.
D	Deallocation mode. See *Resource Deallocation Modes* in the *User's Guide* for details.
API	Allocated by a resource API. `Y` indicates that this allocation was made by a resource API call: see *NOPURE2N: Handle Resource Allocations* in the *User's Guide*.
Begin	Date and time of the allocation. See also *Date and Time Formats* in the *User's Guide*.
Quantity	Allocated quantity.

Line Command: Active Resource Usage

Line Command	Meaning
F	Force release of the resource. To be used for a manual release of a resource allocation. Be aware that this may cause the submission of jobs, which wait for this resource.

Deleting a resource master

To delete a resource master

1 On the **Resources list screen**, enter D (Delete) in the line command input field next to the resource you want to delete, and press ENTER.

A confirmation window opens.

2 Enter the resource name and press ENTER to perform the deletion and close the window.

Note:

The deletion of a resource master is allowed only if the resource is no longer used

- in any job master definition;
- in any active job.

13 Mailbox Definition

A mailbox is a logical entity within Entire Operations and serves to notify users of pending input conditions.

A mailbox can be specified for an input condition and for a user.

When the input condition is not fulfilled for a job, Entire Operations sends a message to the mailbox. The user associated with the mailbox is notified and can perform the prerequisite task and set the condition manually.

Related Topics:

- *Mailboxes, Message Sending* in the *Concepts and Facilities* documentation
- *Working with Mailboxes* in the *User's Guide*

Listing Mailboxes defined to Entire Operations

To list mailboxes

- From the **System Services Menu**, select the **Mailbox Definition** option and press ENTER.

  A **Mailbox Definitions** screen appears with a list of mailboxes already defined to the system:

```
05.11.08               *** Entire Operations ***               14:34:29
                              Mailbox Definitions
--------------------------------------------------------------------------------
Cmd  Mailbox Name      Description
 _   GHH-BOX
 _   DQA-BOX           for Quality Assurance purposes
 _   DWI-BOX
 _   ESTACION20        Espana por favor
 _   EXPORT-BOX        Test import/export tool
 _   GFR
 _   GFR1
 _   GFR10
 _   GFR11
 _   GFR2
 _   GFR3
 _   GFR4
********************************** m o r e **********************************
D Delete  M Modify


 Command => _____________________________________________________________
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add   End         Save        Up    Down                    Menu
```

The screen contains a list of mailboxes defined to Entire Operations (the list is empty if no mailboxes are defined).

The columns of the **Mailbox Definitions** are described in the following table:

Column	Meaning
Cmd	Line command input field. For possible line commands, see *Line Commands: Mailbox Definitions*.
Mailbox Name	User-defined name of the mailbox.
Description	Short descriptive text.

Line Commands: Mailbox Definitions

Line Command	Description
M	Modify mailbox.
D	Delete mailbox.

Adding and Modifying Mailbox Definitions

To add a mailbox definition

1 On the **Mailbox Definitions screen**, choose PF2 (Add).

A **Mailbox Definition window** like the following example opens.

2 Enter the required values: see *Fields: Mailbox Definition*.

3 Choose PF5 (Save) to save the mailbox definition.

4 Choose PF3 (End) to close the definition window and return to the list of mailboxes.

The new mailbox definition appears in the list.

To modify a mailbox description

1 On the **Mailbox Definitions screen**, enter M in the line command input field next to the mailbox you want to modify, and press ENTER.

A **Mailbox Definition** like the example below opens:

```
+-------------------------------------------------+
|                                                 |
|                Mailbox Definition               |
|                                                 |
|  Mailbox Name ==> MAIL-EXAMP                    |
|  Description  ==> Mailbox of EXAMPLE owner_____ |
|                                                 |
| ---PF1---PF3-------PF5--------------------PF12-- |
|    Help  End       Save                   Menu  |
+-------------------------------------------------+
```

2 Modify the description as required by replacing the current text. See also *Fields: Mailbox Definition*.

(You cannot modify the mailbox name.)

3 Choose PF5 (Save) to save the modification.

4 Choose PF3 (End) to close the window and return to the list of mailboxes.

- Fields: Mailbox Definition

Fields: Mailbox Definition

The fields contained in the **Mailbox Definition window** are explained in the following table:

Field	Meaning
Mailbox Name	User-defined name of the mailbox.
Description	Short descriptive text.

Deleting a Mailbox Definition

To delete a mailbox

1 On the **Mailbox Definitions screen**, enter D in the line command input field next to the mailbox you want to delete, and press ENTER.

A confirmation window opens.

2 Enter the mailbox name and press ENTER to perform the deletion and close the window.

Note: You cannot delete a mailbox that is still linked to a user. In this case, an appropriate error occurs and you have remove the respective user from the **Mailboxes** field in the user's profile (see *Definition and Profile Settings*) before you can delete the mailbox.

14 Special Monitor Functions and Batch Jobs

This section describes special global functions, control and recovery functions provided for system administrators.

Note: Some of these functions should be used only as recovery for uncommon situations.

Außerdem behandelt dieses Kapitel, wie Sie ein Monitor-Start-Netzwerk anlegen und benutzen können.

In addition, this section describes how to define and use a monitor start network.

Defining and Using Monitor Start Networks

(Administrator rights for owner SYSDBA required)

You can define a job network to be executed after each Monitor start and before the activation of any other job.

Monitor Start Network

If a job network with the name `MON-START` is defined under the owner SYSDBA, this network is executed exclusively at each Monitor startup. This is called the Monitor start network.

No other job network is started until the start network is terminated correctly.

The last job of the start network must not set any condition (but can reset conditions). During execution of the start network, the absolute condition `MON-START-RUNNING` (owner SYSDBA) is set.

If any job of the start network ends `not OK`, this condition remains true and blocks any other Monitor action. The condition can be reset manually to free continuation of other processing. While the absolute condition is active, the message `Start Network still running` appears in the log and on the system console during each Monitor pass.

Execution

The start network is intended to run exclusively before any other network. Therefore, the absolute condition `MON-START-RUNNING` (owner SYSDBA) is set at activation time.

The setting of this condition is automatically taken over by the first job of the start network. This job sets no conditions during End-of-Job checking and actions.

Note: The absolute condition `MON-START-RUNNING` is to be reset, only if the whole start network ends normally. Any other activity of the Monitor is blocked during execution of the start network. If any error occurs in the start network, the whole processing of other networks is blocked until there is a manual intervention. To force the normal processing to start, reset the condition `MON-START-RUNNING` manually.

Day Start Network

You can define a job network to be executed at the start of each day (when the date changes) and before the activation of any other job. If the Monitor is not active at this time, it is executed at Monitor start time.

If a network with the name `DAY-START` is defined under the owner SYSDBA, it is executed at Monitor start time.

Day Start Execution

The start network is intended to run exclusively before any other network. Therefore, the absolute condition `DAY-START-RUNNING` (owner SYSDBA) is set at activation time.

The setting of this condition is automatically taken over by the first job of the start network. This job sets no conditions during End-of-Job checking and actions.

Note: The absolute condition `DAY-START-RUNNING` is to be reset only if the whole start network ends normally. Any other activity of the Monitor is blocked during execution of the start network. If any error occurs in the start network, the whole processing of other networks is blocked until there is a manual intervention. To force the normal processing to start, reset the condition `DAY-START-RUNNING` manually.

Common Start Network Considerations

The considerations in this section apply to the Monitor start network and the day start network.

- Exclusive Execution
- Use

Exclusive Execution

While a start network is running, a warning message is repeatedly written to the log.

During the execution of the start network, the following Monitor activities are blocked:

- Schedule extraction
- Activation (except start network)
- Cleanup

Note: The Monitor start network and the day start network can execute in parallel.

Use

Some possibilities for the use of the start network are:

- Preparation of symbol tables for other networks;
- Activation of other networks;
- Condition setting;
- Any Entire System Server functions.

Accessing Special Functions

To access special functions

- From the **System Services Menu**, select the **Special Functions** option and press ENTER.

  A **Special Function Selection** screen appears:

```
16-08-30               ***** Entire Operations *****               14:10:50
                         Special Function Selection
--------------------------------------------------------------------------------
Cmd  Function

_    Global Schedule Extraction
_    Cleanup of the Active Database
_    Control of Activity Monitoring

_    Removal of all Monitor Commands
_    Deactivation in Foreground
_    System File Adaptations for new Version

_    JCL File Password: Global Exchange

_    Force prerequisite check for jobs in Passive Wait
_    Pending Tasks



Command => _____________________________________________________________


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End
```

Columns: Special Function Selection

The columns on the **Special Function Selection** screen are explained in the following table:

Column	Meaning
Cmd	Line command input field. Enter any character next to the function you want to use, and press ENTER.
Function	A short description of the function.

Global Schedule Extraction

The Entire Operations Monitor performs the following steps to activate networks:

- Extracts schedules at the beginning of a new day by default.
- Activates extracted job networks at or shortly before the earliest start time of the network.

Examination of schedules can be forced at any time by using the **Global Schedule Extraction** feature. Several schedule extractions on the same day have no influence on already extracted activations.

Note: Any modification to a schedule automatically implies an activation extraction for the networks linked to this schedule.

This section covers the following topics:

- Setting Dates and Times for Extraction
- Deleting Dates and Times Set for Extraction
- Columns/Fields: Global Schedule Extraction

Setting Dates and Times for Extraction

To add an activation date and time for schedule extraction

1 On the **Special Function Selection screen**, mark **Global Schedule Extraction** with any character and press ENTER.

A **Next Global Extractions** window like the example below opens:

```
+-------------------------------------------------------------------------+
|                                                                         |
|  Owner             Network                                              |
|  Next Global Extractions                                                |
|                                                                         |
|  Cmd  Date     Act.  Start   Type                                       |
|  _    15.10.18 15:22         Global                                     |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|                                                                         |
|  D Deactivate   M Start Time                                            |
|  PF1 Help  PF2 Add  PF3 End  PF7 Up  PF8 Down                           |
+-------------------------------------------------------------------------+
```

The columns and line commands available in the window are explained in ***Columns/Fields: Global Schedule Extraction***.

2 Choose PF2 (Add).

A **Schedule Activation Extraction** window opens. The fields are explained in ***Columns/Fields: Global Schedule Extraction***.

3 Enter the required date and time and choose PF3 (End).

See also *Date and Time Formats* in the *User's Guide*.

The window closes, and the new date and time are listed in the **Next Global Extractions** window.

To modify an activation date and time for schedule extraction

1 In the **Next Global Extractions window**, enter the line command M (Start Time) next to the date and time you want to change, and press ENTER.

A **Start Time Modification** window opens. The fields are explained in ***Columns/Fields: Global Schedule Extraction***.

2 Enter the required new date and time and choose PF3 (End).

Deleting Dates and Times Set for Extraction

To delete an activation date and time for schedule extraction

- In the **Next Global Extractions window**, enter the line command D (Deactivate) next to the date and time you want to delete, and press ENTER.

Columns/Fields: Global Schedule Extraction

The following table describes the columns and fields contained in the **Next Global Extractions** and related subordinate windows.

Column/Fields	Meaning
Next Global Extractions window:	
Cmd	Line command input field. For possible line commands, see *Line Commands: Global Schedule Extraction*.
Date	Date of the activation extraction. See also *Date and Time Formats* in the *User's Guide*.
Act.	Time of the activation extraction. See also *Date and Time Formats* in the *User's Guide*.
Start	Time at which the job network was started in the operating system.
Type	Status of network activation processing. Possible status values: Global schedule, active on demand Activation now Activation in progress Sched. job Demand job Schedule table Aw. symbol prompting Activation error Symbol entry in progress Hold for symbol entry
Schedule Activation Extraction window:	
Date/Time	Date and time to be used for activation extraction. See also *Date and Time Formats* in the *User's Guide*.
Start Time Modification window:	
Start planned/new	The planned (old) start time previously set and the new start time to be used instead. For valid input values, see *Date and Time Formats* in the *User's Guide*.

Column/Fields	Meaning	
Keep predefined Job Time Frames	Adapt the job time frames. Possible values:	
	N	All job time frames are adapted (default).
	Y	Jobs with master time frame definitions are not adapted.

Line Commands: Global Schedule Extraction

Line Command	Description
D	Deactivate. Cancel the planned or scheduled network activation.
M	Start time. Opens the **Start Time Modification** window to change the network start time.

Cleanup of the Active Database

Normally, the active database is cleaned automatically every time the Entire Operations Monitor starts up or at the beginning of a new day.

An immediate cleanup of the active database can be triggered at any time. It is executed by the Entire Operations Monitor (in the background). This cleanup removes expired active job entries, pending tasks, log records, and related material from the Entire Operations database file. The retention periods of the Entire Operations default settings (see *Default Setting (1)*) are used.

Alternatively, the cleanup of the active database can be performed in batch mode. See *Cleanup of the Active Database in Batch Mode* described in the *User's Guide*.

All operations performed during the cleanup are recorded in the Entire Operations log.

To clean up the active database

1 On the **Special Function Selection screen**, mark **Cleanup of the Active Database** with any character and press ENTER.

A window like the following opens:

```
+------------------------------------------------------------+
|                                                            |
|  Please confirm                                            |
|  Active Database Cleanup                                   |
|  by entering CLEANUP                                       |
|          ==> ____________________________                  |
|  PF3 End                                                   |
+------------------------------------------------------------+
```

2 Confirm the cleanup by entering `CLEANUP` and pressing ENTER.

Control of Activity Monitoring

This function allows interaction with non-conversational Entire Operations activity monitoring displays started on other terminals. They can be stopped, or the interval time can be modified.

This section covers the following topics:

- Viewing and Changing Activity Monitoring Settings
- Fields: Entire Operations Activity Monitoring

Viewing and Changing Activity Monitoring Settings

To view and change the activity monitoring settings

1 On the **Special Function Selection screen**, mark **Control of Activity Monitoring** with any character and press ENTER.

An **Entire Operations Activity Monitoring** window like the following opens:

```
+-----------------------------------------+
!                                         !
!  Entire Operations Activity Monitoring  !
!                                         !
!  on Terminal ==> DAEFTCG1               !
!                                         !
!         Stop ==> _ (mark)               !
!                                         !
!     Start at ==> 05.11.08  14:37:08     !
!     Interval ==> 10_____ Seconds        !
!                                         !
!  PF3 End             PF10 Delete Entry  !
+-----------------------------------------+
```

If required, changes the entries. The input fields are explained in *Fields: Entire Operations Activity Monitoring*.

2 Press ENTER to confirm all entries.

Fields: Entire Operations Activity Monitoring

The fields in the **Entire Operations Activity Monitoring window** are explained in the following table:

Field	Meaning
on Terminal	Terminal to be handled. Enter an asterisk (*) and press ENTER to select a terminal from a list of active terminals.
Stop	Mark this field with any character to stop activity monitoring for the selected terminal.
Start at	Modify the date and time to specify when the display of activities will restart. For valid input values, see *Date and Time Formats* in the *User's Guide*.
Interval	Interval, in seconds, between updates of the automatic display for the selected terminal.

See *Monitoring Entire Operation Activities* in the *User's Guide* for details.

Removal of All Monitor Commands

This function removes all internal commands from the internal Entire Operations Monitor command queue.

Caution: Use this function only in case of emergency and with extreme care.

To remove all Monitor commands

1 On the **Special Function Selection screen**, mark **Removal of all Monitor Commands** with any character and press ENTER.

A window like the following opens:

```
+-------------------------------------------------------------+
|                                                             |
|  Please confirm                                             |
|  Monitor Command Cleanup                                    |
|  by entering MONITOR COMMAND                                |
|          ==> _____________________________                  |
|  PF3 End                                                    |
+-------------------------------------------------------------+
```

2 Confirm the removal by entering MONITOR COMMAND and pressing ENTER.

Deactivation in Foreground

Usually, job deactivation is triggered in the foreground and executed by the Entire Operations Monitor in the background.

Caution: Use this function to deactivate active jobs in the foreground only in case of emergency, and if the Entire Operations Monitor is not active.

To deactivate jobs

1 On the **Special Function Selection screen**, mark **Deactivation in Foreground** with any character and press ENTER.

A window like the following opens:

```
+-------------------------------------------------------------+
|                                                             |
|  Please confirm                                             |
|  Job Deactivation                                           |
|  by entering DEACTIVATION                                   |
|          ==> _____________________________                  |
|  PF3 End                                                    |
+-------------------------------------------------------------+
```

2 Confirm deactivation by entering `DEACTIVATION` and pressing ENTER.

System File Adaptations for New Version

The Entire Operations system file is usually automatically modified to the needs of a new version of Entire Operations at the first startup of the Entire Operations Monitor. The modification can be forced online by this function.

To perform data adaptation

1 On the **Special Function Selection screen**, mark **System File Adaptations for new Version** with any character and press ENTER.

A window like the following opens:

```
+-----------------------------------------------+
 !                                               !
 !  Please confirm                               !
 !  Data Adaption                                !
 !  by entering SYSTEM FILE                      !
 !          ==> ____________________________     !
 !  PF3 End                                      !
 +-----------------------------------------------+
```

2 Confirm system file adaptation by entering `SYSTEM FILE` and pressing ENTER.

JCL File Password: Global Exchange

The **JCL File Password: Global Exchange** function allows the system administrator to exchange the file password for all definitions of a given file. This function should be used after the modification of a file password on the operating system level.

To exchange the JCL file password

- On the **Special Function Selection screen**, mark **JCL File Password: Global Exchange** with any character and press ENTER.

  A window like the following opens:

```
+-------------------------------------------------------------------------+
|                                                                         |
|                     Global File Password Exchange                       |
|                                                                         |
|  JCL Node ===> _____                                                    |
|  File     ===> ____________________________________________________     |
|  Password ===>                                                          |
|                                                                         |
|  PF1 Help   PF3 End                                                     |
+-------------------------------------------------------------------------+
```

  Enter the required values. The input fields are explained in *Fields: Global File Password Exchange*.

This section covers the following topics:

- Fields: Global File Password Exchange

Fields: Global File Password Exchange

Field	Meaning
JCL Node	Number of the Entire System Server node on which the file can be accessed.
File	The password for the file specified here will be exchanged in all job definitions.
Password	The new replacement password (invisible when entered). This password must then be used when editing or selecting members, as well as for JCL loading of the Monitor.

Force Prerequisite Check for Jobs in Passive Wait

This function forces an active prerequisite check for all jobs which have been set to the status passive wait.

To force a prerequisite check

1 On the **Special Function Selection screen**, mark **Force prerequisite check for jobs in Passive Wait** with any character and press ENTER.

A window like the following opens:

```
+------------------------------------------------------------+
|                                                            |
|  Please confirm                                            |
|  Force prerequisite check                                  |
|  by entering FORCE                                         |
|          ==> _____________________________                 |
|  PF3 End                                                   |
+------------------------------------------------------------+
```

2 Confirm the prerequisite check forcing by entering `FORCE` and pressing ENTER.

Pending Tasks

This function shows pending file delete requests.

The main reason for pending delete states are `file in use` errors during a delete attempt.

Pending tasks are deleted during the next **database cleanup** (see the relevant section).

To view all pending tasks

- On the **Special Function Selection screen**, mark **Pending Tasks** with any character and press ENTER.

  If any tasks are pending, a **Pending Tasks** screen appears with a list of all pending tasks.

  Otherwise, a message is returned indicating that no tasks are found.

  The screen columns are explained in *Columns: Pending Tasks*.

Columns: Pending Tasks

The columns of the **Pending Tasks** screen are described in the following table:

Column	Meaning	
Owner	Owner of the affected network.	
Network	Network that contains the affected job.	
Run	Run number of the affected job.	
Job	Job that references the affected file.	
Type	Type of delete request. Possible values:	
	`O`	Online or Monitor request.
	`B`	Batch cleanup.
Hours Wait	Hours since the delete request is pending.	
File	File affected by the delete request.	

15 RPC Server Defaults

The Entire Operations GUI Client uses an RPC server. Some definitions for the RPC server can be made here.

Defining RPC Server Defaults for SSL Communication

To define the SSL trust store file

1 From the **System Services Menu**, select the **RPC Server Defaults** option and press ENTER.

An **RPC Server Defaults** screen like the example below appears:

```
18-07-11                ***** Entire Operations *****                09:57:35
                             RPC Server Defaults
--------------------------------------------------------------------------------

SSL TRUST_STORE
/test/ogc-test/keyfile.pemSAGxxx_____________________________________________
(required if RPC communication shall use SSL)




Command =>


Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help        End         Save
```

2 Enter the name of the file that contains the valid SSL key. See also *Usage of SSL TRUST_STORE*.

3 Choose PF5 (Save) to save the entry.

Usage of SSL TRUST_STORE

The **SSL TRUST_STORE** field definition is required if the RPC communication uses SSL.

If the RPC server and EntireX Broker should communicate via SSL, an SSL parameter string must be committed during the startup of EntireX Broker. This string is located within the **SSL TRUST_STORE** and contains a valid SSL key. For this purpose, the Natural program NOPSSL1P in the library SYSEOR is executed during the startup of the RPC server.

The following description assumes that EntireX Broker and the RPC server are installed in a UNIX environment.

- For a general description of the Natural RPC server with SSL, refer to the section *Using Secure Socket Layer* in the *Natural RPC (Remote Procedure Call)* documentation.
- You must define SSL certificates, e.g., with openssl. Refer to the section *SSL or TLS and Certificates with EntireX* in the *webMethods EntireX* documentation.
- Invoke the **RPC Server Defaults** and define the **SSL TRUST_STORE** file.
- The Natural profile parameter `SRVNODE` (on mainframes, the keyword subparameter `SRVNODE` of the profile parameter `RPC`) must contain the string `:SSL`, or it must start with `//SSL:`
- During the startup of the Entire Operations GUI Client RPC server, the Natural program NOPSSL1P must be executed. This module creates and sets the SSL parameter string.

  Example for an Entire Operations GUI Client server startup in a shell script:

```
natural parm=nopparm mainpr=10 \
server=on trace=0 \
srvname=NOP51S11 "srvnode=pcsn2:1958:SSL" \
"stack=(logon syseor;nopsls-p;nopssl1p" \
>/dev/null /null &
```

- In Entire Operations GUI Client, make sure that the EntireX Broker service is invoked correctly. Nothing else special is to be done to use SSL communication.

Further RPC Server Considerations

To make sure that the correct Natural steplibs are being set in the RPC server, it is recommended to execute the Natural program NOPSLS-P during RPC server startup.

Note: For further information, refer to *Natural Steplibs* in the *Installation and Setup* documentation.

If Natural Security is installed on the server and the server library SYSSAT is protected, the Entire Operations GUI Client user must be linked to the library SYSSAT or the user must be a member of a group which possesses a link to SYSSAT.

16 Entire Operations Files

The **Entire Operations Files** screen shows all Natural system files used in your current Entire Operations environment.

The **DBID** (database ID) and **FNR** (file number) fields indicate the file location. The values in these fields are taken from the `LFILE` parameter settings for your current Natural session. They are also used to (re)start the Monitor (see the **Entire Operations Monitor** function).

The following information is provided on the **Entire Operations Files** screen:

Field	System File Description
NOP System File	Contains definitions required by Entire Operations (NOP).
SAT Log File	Contains log files for Systems Automation Tools (SAT).
Accounting	Contains accounting data about network and job executions (see also *Example of Accounting Information* in the *User's Guide*) and the Monitor (see ***Monitor Accounting***).
SAT Event Store	Contains definitions required for the event store of Systems Automation Tools (SAT); optional.
Entire Output Management	Contains definitions required for Entire Output Management (optional).
FNAT	Contains definitions required for base Natural. The DBID and FNR to be used are specified with the Natural `FNAT` profile parameter (see the relevant description in the Natural *Reference* documentation).
FUSER	Contains definitions required for base Natural. The DBID and FNR to be used are specified with the Natural `FUSER` profile parameter (see the relevant description in the Natural *Reference* documentation).
FSEC	Contains definitions required for Natural Security. The DBID and FNR to be used are specified with the Natural `FSEC` profile parameter (see the relevant description in the Natural *Reference* documentation).