Administration

Version 5.5.2

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This document applies to Version 5.5.2 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 and Exits	Define global messages for events and system-wide user exits.
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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- Add product feature requests.

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2 Accessing Administration Functions

To access functions available for system administration

- In the object workspace, select the **Administration** metanode and open the context menu.

  Or:

  For user, node, resource and mailbox maintenance functions, select the required node or node instance and choose a function from the relevant context menu.

  The following menu functions are available for the **Administration** metanode:

Function	Description
Entire Operations Defaults	Define defaults for the operating system, nodes, date, language, retention periods and other system defaults. For details, see the section *Entire Operations Defaults*.
Monitor Defaults	Define node, user ID, module and other defaults for the Entire Operations Monitor. For details, see the section *Monitor Defaults*.
Messages and Exits	Define the sending of global messages, message codes to be checked after job termination and system-wide user exits. For details, see the section *Global Messages and Exits*.
Special Functions	Special global control and recovery options. For details, see the section *Special Functions*.
RPC Defaults	Define default values for an RPC server. For details, see the section *RPC Server Defaults*.
Set Drag And Drop Function	See *Drag & Drop* in the *User's Guide*.

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. 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.

Functions: User Maintenance

To list all functions available for the User metanode

- In the object workspace, select the **User** metanode and open the context menu.

  The following functions are available:

Function	Shortcut	Description
List	F8	See *Listing Users*.
New	CTRL+N	See *Viewing, Adding and Modifying a User*.
Refresh	F5	Refresh users: see *Refreshing Object Lists* in the *User's Guide*.
Filter	F3	Selection criteria to list users: see *Filtering Objects* in the *User's Guide*.
Export	---	Open the **Export Objects** window to export users: see *Exporting Objects* in the *Import/Export Functions* documentation.
Set Drag And Drop Function	---	See *Drag & Drop* in the *User's Guide*.

To list all functions available for a User instance

- Select a **User** instance and open the context menu.

  The following functions are available:

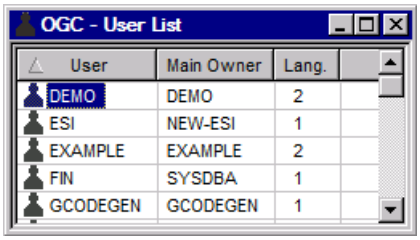
Function	Shortcut	Description
Open	CTRL+O	See *Viewing, Adding and Modifying a User*.
Display	CTRL+D	Display user information: see *Viewing, Adding and Modifying a User*.
Delete	DEL	See *Deleting a User*.
Browse Log	---	See *Displaying Logged Information* in the *User's Guide*.
Export	---	Open the **Export Objects** window to export a user: see *Exporting Objects* in the *Import/Export Functions* documentation.
Add to Workplan	---	See *Add to Workplan* in the *User's Guide*.
Set Drag And Drop Function	---	See *Drag & Drop* in the *User's Guide*.

Listing Users

To list all users

- In the object workspace, select the **User** metanode and choose **List** from the context menu, or press F8.

  A **User List** window like the example below opens:



  The window lists all user IDs available in your Entire Operations environment and their associated owners. It also indicates the language under which Entire Operations runs (2 for German, 1 for English).

Viewing, Adding and Modifying a User

To view a user definition

- In the object workspace, select a **User** instance and choose **Display** from the context menu, or press CTRL+D.

  A **Display User** window like the **Maintenance User window** opens where you can view all definitions and profile settings of the user.

  The tabbed pages available on the window are explained in the sections referenced below:

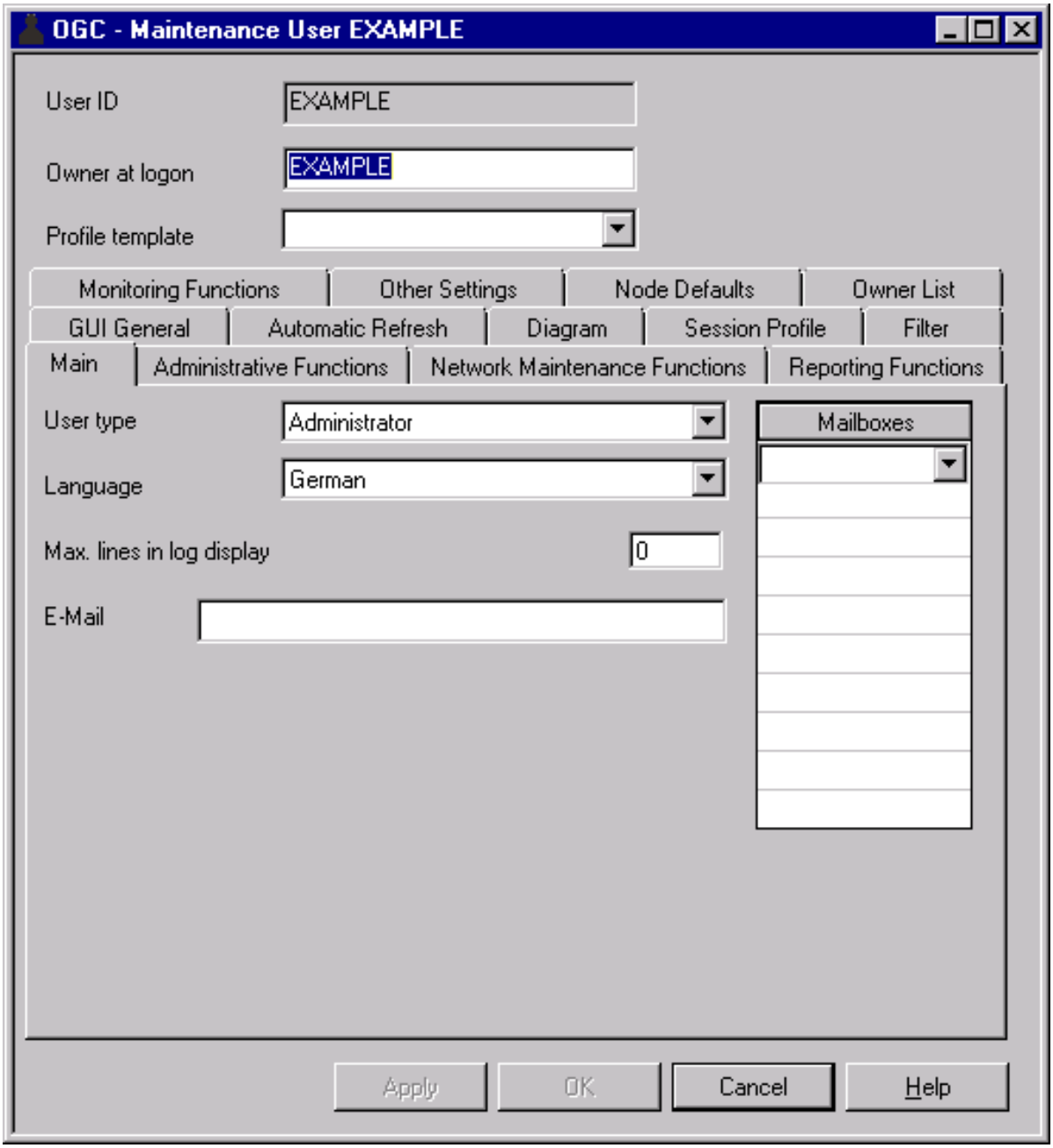
Page	Explanation
Main	See *User Definition and Profile Settings*.
Administrative Functions	See *Administration Functions*.
Network Maintenance Functions	See *Network Maintenance Functions*.
Reporting Functions	See *Reporting Functions*.
Monitoring Functions	See *Monitoring Functions*.
Other Settings	See *Other Settings - Display Options for Lists*.

Page	Explanation
Node Defaults	See *Operating System Server Default User IDs for a User*.
Owner List	See *Adding and Removing User/Owner Links and Owners*.
GUI General	See *GUI-Specific Attributes*.
Automatic Refresh	
Diagram	
Session Profile	
Filter	

To modify a user

1 In the object workspace, select a **User** instance and choose **Open** from the context menu, or press CTRL+O.

A **Maintenance User** window like the example below opens:



The definition of the selected user is shown.

Each tab represents an area of Entire Operations components that are defined for a user.

The tabbed pages available on the window are explained in the sections referenced below:

Page	Explanation
Main	See *User Definition and Profile Settings*.
Administrative Functions	See *Administration Functions*.
Network Maintenance Functions	See *Network Maintenance Functions*.
Reporting Functions	See *Reporting Functions*.
Monitoring Functions	See *Monitoring Functions*.
Other Settings	See *Other Settings - Display Options for Lists*.
Node Defaults	See *Operating System Server Default User IDs for a User*.
Owner List	See *Adding and Removing User/Owner Links and Owners*.
GUI General	See *GUI-Specific Attributes*.
Automatic Refresh	
Diagram	
Session Profile	
Filter	

2 Change the user definition as required.

When you are finished, choose **OK** to save the changes.

To add a user

1 In the object workspace, select the **User** metanode and choose **New** from the context menu, or press CTRL+N.

A **Create new User** window like the **Maintenance User window** opens.

The tabbed pages available on the window are explained in the sections referenced below:

Page	Explanation
Main	See *User Definition and Profile Settings*.
Administrative Functions	See *Administration Functions*.
Network Maintenance Functions	See *Network Maintenance Functions*.
Reporting Functions	See *Reporting Functions*.
Monitoring Functions	See *Monitoring Functions*.
Other Settings	See *Other Settings - Display Options for Lists*.
Node Defaults	See *Operating System Server Default User IDs for a User*.
Owner List	See *Adding and Removing User/Owner Links and Owners*.
GUI General	See *GUI-Specific Attributes*.
Automatic Refresh	
Diagram	

Page	Explanation
Session Profile	
Filter	

2 Add the required information and profile settings in the same way as when modifying a user.

When you are finished, choose **OK** to save the user definition and profile settings.

User Definition and Profile Settings

You define a user profile to Entire Operations and set main user defaults by using the fields in the upper half of the **Maintenance/Create new User window** and on the **Main** page.

All other pages of the **Maintenance/Create new User window** 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.

Field	Description	
Profile Template (optional)	User ID of a predefined template user. 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 template** is reset if an attribute of the user maintenance window is manually modified. Default templates:	
	General User	Use default general user profile.
	Operator	Use default operator profile.
	Administrator	Use default administrator profile.
	If you enter a value in the selection box, you can use the following abbreviations: `G` (**General User**), `O` (**Operator**) or `A` (**Administrator**). 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 selection options:	
	General User	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.
	Operator	User with operator rights. The operator can view and maintain all Entire Operations objects and perform all system maintenance functions allowed by the administrator.
	Administrator	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.	
Language	Determine the user language under which Entire Operations is to run. Possible selection options:	
	English	English.
	German	German.

Field	Description
Max. Lines in Log Display	Determine the maximum number of lines shown in the log display. The maximum number can be overridden in the **Log Display Selection** window (see *Log Information* in the *User's Guide*). A value of zero (0) or an empty field means that there is no line limit.
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.

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**

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 select one of the following authorization options for each function listed in the window (choose **OK** to save modifications):

Option/Check Box Setting	Authorization
enable checked	Allow function.
enable unchecked	Disallow function.
read checked	Read access only (no definition/modification of item allowed).
write checked	Read/write access (definition/modification allowed, but no delete).
delete checked	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 In the object workspace, select the user you want to delete from the **User** metanode.

2 Open the context menu and choose **Delete** or press DELETE.

A confirmation window opens.

3 Choose **Yes** to confirm the deletion or **No** to cancel the action.

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.

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.

- Linking Users to Owners
- Deleting Owner Links or Owners

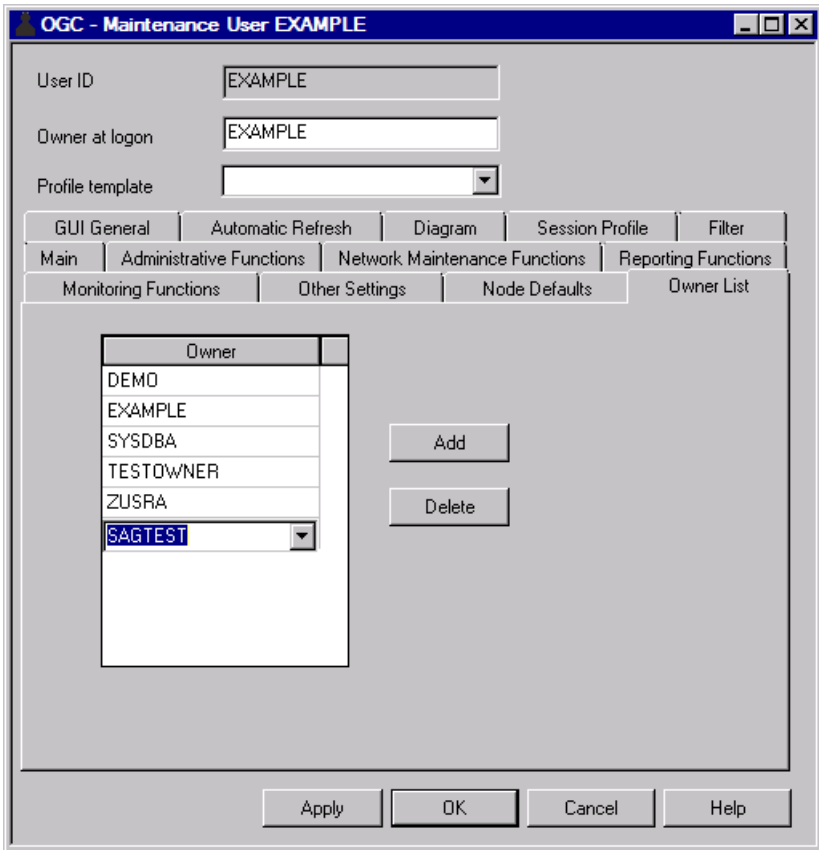
Related Topic:

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

Linking Users to Owners

To link a user to an additional owner

1 Open the **Owner List** page of the **Maintenance/Create new User** window shown in the following example:



The list box shows all owners (if already specified) linked to the user.

2 Choose **Add** and enter the name of an additional owner (here: `SAGTEST`) or select an owner from the drop-down list box.

3 Choose **OK** to confirm your action.

Deleting Owner Links or Owners

To delete an owner link or an owner

- Replace the name in the **Owner at logon** field of the **Maintenance/Create new User window**.

  Or:

  Open the **Owner List page** of the **Maintenance/Create new User** window.

  The list box shows all owners linked to the user.

  Select the owner you want to delete and choose **Delete** and then **OK** to confirm the deletion.

  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 open the **Administrative Functions** page of the **Maintenance/Create new User** window, you can authorize a user (see ***Authorization Options***) to perform the administration 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 **read** or no access permission is selected here, the **List** function and the expand tree functions only return information for this user. The **Open** function is enabled only for the objects owned by the user. A user with read or no access permission can only view **non-security settings** of his profile. See also the option **Modify non-security settings**.	**read, write or delete**	delete	no rights	no rights
Auto Logon Definition	Specifies default node user IDs for automatic node logon. See also *Defining Node Default User IDs*.	**enable**	not enabled	not enabled	not enabled
Resource Master Maintenance	Specifies access rights in the master **resource definition** facility.	**read, write or delete**	delete	delete	no rights
Node Definition	Specifies access rights in the **node maintenance** facility.	**read, write or delete**	delete	delete	no rights
Defaults Definition	Specifies access rights in the **Entire Operations defaults** facility.	**read, write or delete**	delete	no rights	no rights
Mailbox Definition	Specifies access rights in the **mailbox definition** facility.	**read, write or delete**	delete	delete	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).	**enable**	enabled	enabled	not enabled
Special Functions	Authorizes the user to perform special global, control and recovery functions. See the section *Special Functions*.	**enable**	enabled	not enabled	not enabled
Other Functions	Authorizes the user to access the **global message code table** and perform special functions.	**enable**	enabled	not enabled	not enabled
Import/Export	Authorizes the user to perform import/export functions. See also the *Import/Export Functions* documentation.	**enable**	enabled	not enabled	not enabled
Modify non-security settings	Authorizes the user to modify non-security settings for the user's own user profile. This option setting only applies to a **General User** or an **Operator** with **read** or	**enable**	not enabled	enabled	enabled

Function	Description	Option	Default for User Type		
			A	O	G
	no access permission selected for **User definition**. Non-security settings are: ■ All settings for: **GUI General**, **Automatic Refresh**, **Diagram**, **Session Profile**, **Filter** and **Other Settings**. ■ The following settings for **Network Maintenance Functions:** **Editor autosave** and **Last run display**.				

Network Maintenance Functions

If you open the **Network Maintenance Functions** page of the **Maintenance/Create new User** window, you can authorize a user (see *Authorization Options*) to perform the job and network maintenance functions 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 **delete** is checked here, is also allowed to deactivate networks or jobs.	**read, write or delete**	delete	no rights	no rights
Job Definition	Specifies access rights in the job maintenance facility (see the *User's Guide*).	**read, write or delete**	delete	no rights	no rights
Prerequisite Definition	Specifies access rights in the condition maintenance and resource specification at job level (see the *User's Guide*).	**read, write or delete**	delete	no rights	no rights

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

Reporting Functions

If you open the **Reporting Functions** page of the **Maintenance/Create new User** window, 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 or Regenerating Online Reports* in the *User's Guide*).	**enable**	enabled	enabled	not enabled
Log of Abended Jobs	Authorizes the user to display the **Log - Abended Jobs** and the **Log - Jobs not started** reports.	**enable**	enabled	not enabled	enabled
Log of Completed Jobs	Authorizes the user to display the **Log - Terminated Jobs** report.	**enable**	enabled	not enabled	enabled
Network Activation & Schedule	Authorizes the user to activate job networks, and display the **Network Start Summary** and **Network Schedule Overview** reports.	**enable**	enabled	not enabled	enabled
Network Description (short)	Authorizes the user to display the **Network Description (short)** report.	**enable**	enabled	not enabled	enabled
Network Description (detailed)	Authorizes the user to display the **Network Description (detailed)** report.	**enable**	enabled	not enabled	enabled
Schedule of Jobs	Authorizes the user to display the **Schedule of Jobs** report.	**enable**	enabled	not enabled	enabled
Job Flow	Authorizes the user to display the **Job Flow of Network** report.	**enable**	enabled	not enabled	enabled
Accounting Information	Authorizes the user to display **Accounting Information** report.	**enable**	enabled	not enabled	enabled
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*).	**enable**	enabled	enabled	enabled
Second Symbol List Format	Symbol names with more than 20 characters are truncated (enable checked) or completely displayed (enable not checked) on the screen.	**enable**	not enabled	not enabled	not enabled
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).	**enable**	enabled	not enabled	enabled
Bar Charts	Authorizes the user to generate bar charts as **Network Start Overview**, **Network and Job Start Overview** and **Network Schedule Overview**.	**enable**	enabled	enabled	not enabled

Function	Description	Option	Default for User Type		
			A	O	G
Monitor Accounting	Authorizes the user to generate **Monitor Tasks and Functions Overview** and **Monitor Tasks and Exits Overview** reports.	**enable**	not enabled	not enabled	not enabled

Monitoring Functions

If you open the **Monitoring Functions** page of the **Maintenance/Create new User** window, 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 **delete** is checked here, is also allowed to deactivate networks or jobs.	**read, write or delete**	delete	delete	delete
Show Mailbox Requests	Authorizes the user to display and react on mailbox messages (see the *User's Guide*), and use the corresponding `MAIL` direct command (see the *Direct Commands* documentation).	**enable**	enabled	enabled	enabled
Active Prerequisite Definitions	Specifies access rights for active prerequisite definitions (see the *User's Guide*).	**read, write or delete**	delete	delete	delete
Active EOJ Checking + Actions	Specifies access rights for End-of-Job checking and actions (see the *User's Guide*) for an active job.	**read, write or delete**	delete	delete	delete
Active JCL Editing	Specifies access rights for editing JCL of an active job (see the *User's Guide*).	**read, write or delete**	delete	delete	delete
Active Conditions	Specifies access right for active job conditions (see the *User's Guide*).	**read, write or delete**	delete	delete	delete
Active Prerequisite Resources	Specifies access rights for active prerequisite resource definitions (see the *User's Guide*).	**read, write or delete**	delete	delete	read

Function	Description		Option	Default for User Type		
				A	O	G
Resource Usage	Specifies access rights to resource usage lists and definitions (see the *User's Guide*).		**read or delete**	delete	delete	read
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.		**enable**	enabled	enabled	enabled
Resubmit Job	Authorizes the user to use the resubmit function for an active job (see the *User's Guide*).		**enable**	enabled	enabled	enabled
Hold/Release Job	Authorizes the user to put an active job on hold or release an active job (see the *User's Guide*).		**enable**	enabled	enabled	enabled
Display Job SYSOUT	Authorizes the user to view job SYSOUT of a job run (see the *User's Guide*).		**enable**	enabled	enabled	enabled
Cancel Job	Authorizes the user to cancel a running job (see the *User's Guide*).		**enable**	enabled	enabled	enabled
Log Display	Authorizes the user to view Entire Operations logs (see the *User's Guide*) for owners associated with this user ID. Possible settings are:		**enable** owner list or owner	enabled for owner list	enabled for owner list	enabled for owner list
	enable	If enable is checked, the function is allowed.				
	Owner list	Allow function for all owners associated with this user ID. (Applies to User Type **G** only.)				
	Owner	Allow function for the Owner at Logon only (see the *User's Guide*). (Applies to User Type **G** only.)				

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.

GUI-Specific Attributes

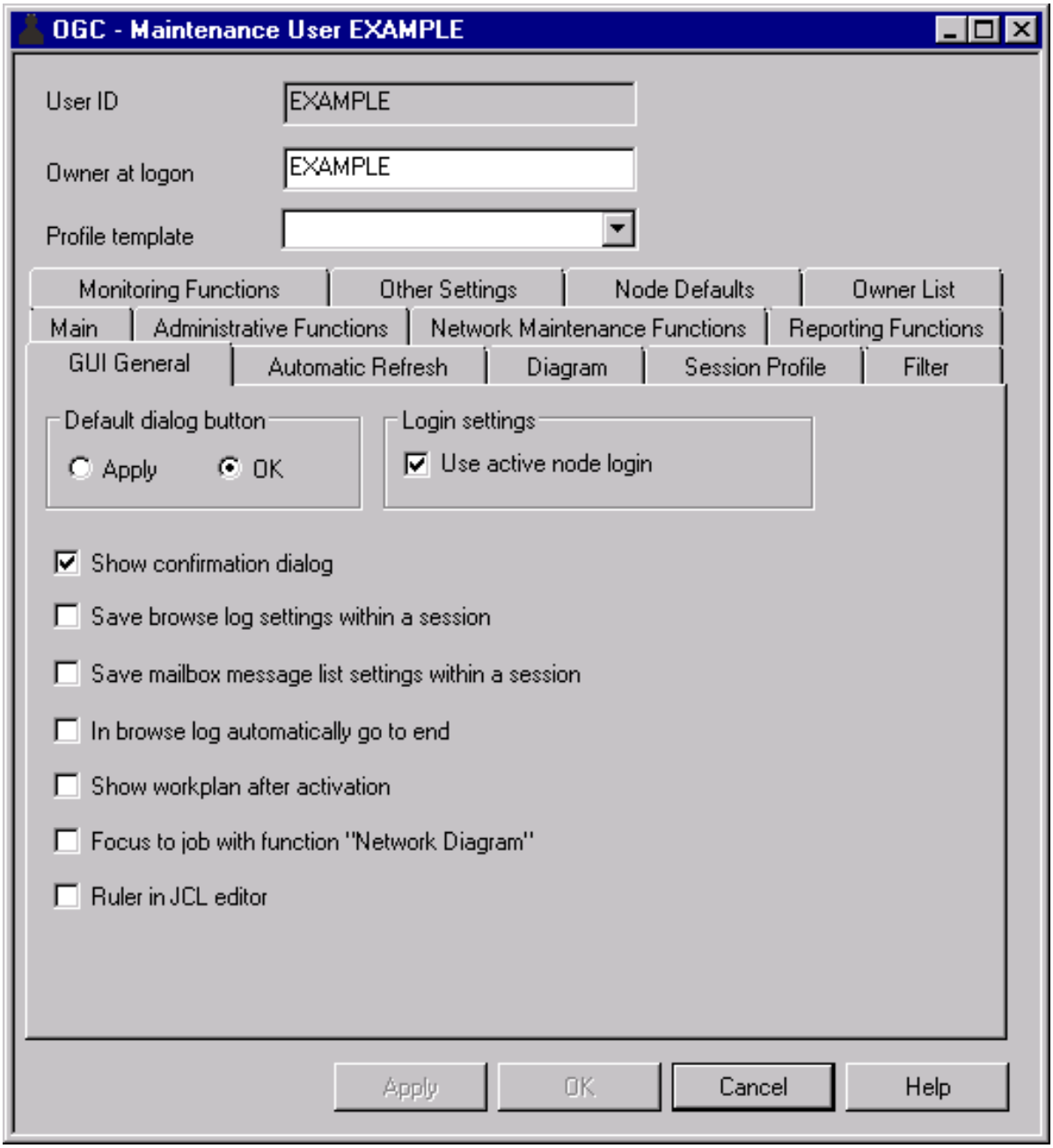
The following tabbed pages of the **Maintenance/Create new User** window can be used to define GUI-specific attributes for a user:

- GUI General
- Automatic Refresh
- Diagram
- Session Profile
- Filter

GUI General

To specify general attributes

1 Open the tabbed page **GUI General**:



The option settings available are described in the following table:

Option	Description
Default dialog button	Specify whether **Apply** or **OK** (default) is performed when you press ENTER. Select either function.

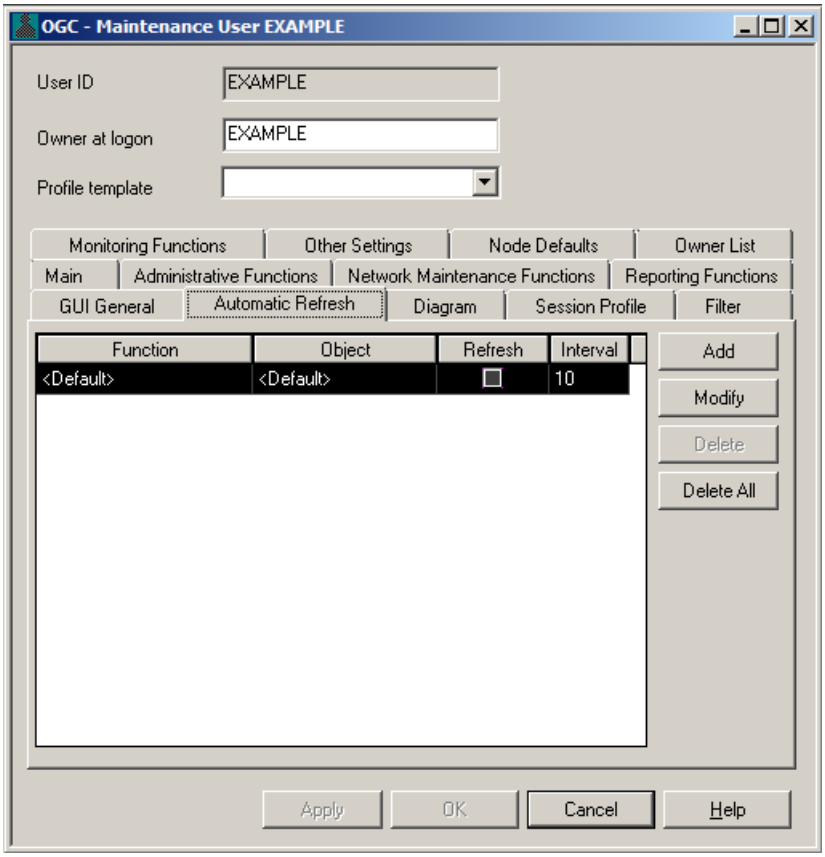
Option	Description
Use active node login	Select this check box (default) to use the active node logon each time a logon is needed. See also *Logon Function* in the *User's Guide*.
Show confirmation dialog	Select this check box (default) if you want the confirmation dialog to appear when you modify but not save an object. Clear the check box to switch off the confirmation dialog.
Save browse log settings within a session	Select this check box to save the settings of the **Browse Log** function for later use within the same session. Default: Check box not selected. See also *Displaying Logged Information - Browse Log Function* in the *User's Guide*.
Save mailbox message list settings within a session	Select this check box to save mailbox message list settings for later use within the same session. Default: Check box not selected. See also *Show Messages* in the *User's Guide*.
In browse log automatically go to end	Select this check box if you want to scroll automatically to the end of a log file displayed when the **Browse Log** window opens. Default: Check box not selected. See also *Displaying Logged Information - Browse Log Function* in the *User's Guide*.
Show workplan after activation	Select this check box to display the workplan after network activation. Default: Check box not selected. See also *Show Workplan* in the *User's Guide*.
Focus to job with function "Network Diagram"	Select this check box to position an opened network diagram to the job for which the **Network Diagram** function is performed. Default: Check box not selected.
Ruler in JCL editor	Select this check box to show or hide the ruler displayed in the editor window (described in *Using the Editor* in the *User's Guide*). Default: Check box not selected.

2 Choose **OK** to save your settings.

Automatic Refresh

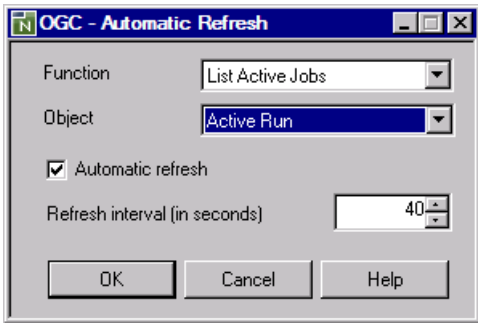
To set refresh options for Entire Operations functions

1 Open the tabbed page **Automatic Refresh**:



2 Choose **Add**.

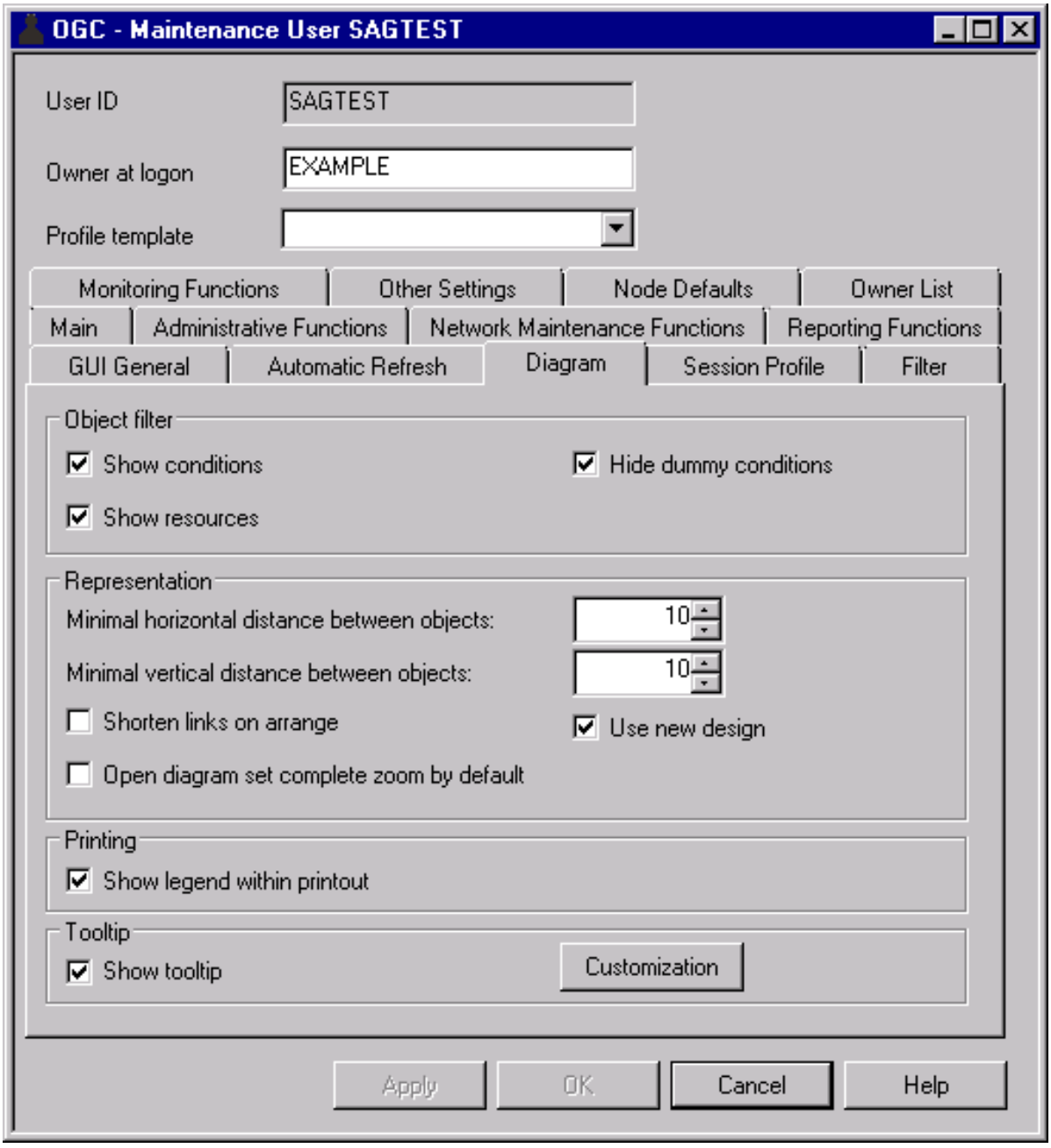
A window like the example below opens where you can select a function, an object and a refresh interval, and mark a check box to enable automatic refresh:



Diagram

To specify diagram attributes

1 Open the tabbed page **Diagram**:



Here you can specify diagram attributes, use the **Object** filter for resources and conditions (hide/show these resources and conditions in the diagram), and modify diagram representation.

If **Show conditions** is selected, you can, additionally, select **Hide dummy conditions** to specify whether to hide (default) dummy conditions in the diagram and show real conditions only.

If the option **Open diagram set complete zoom by default** is selected, the diagram opens the diagram with complete zoom.

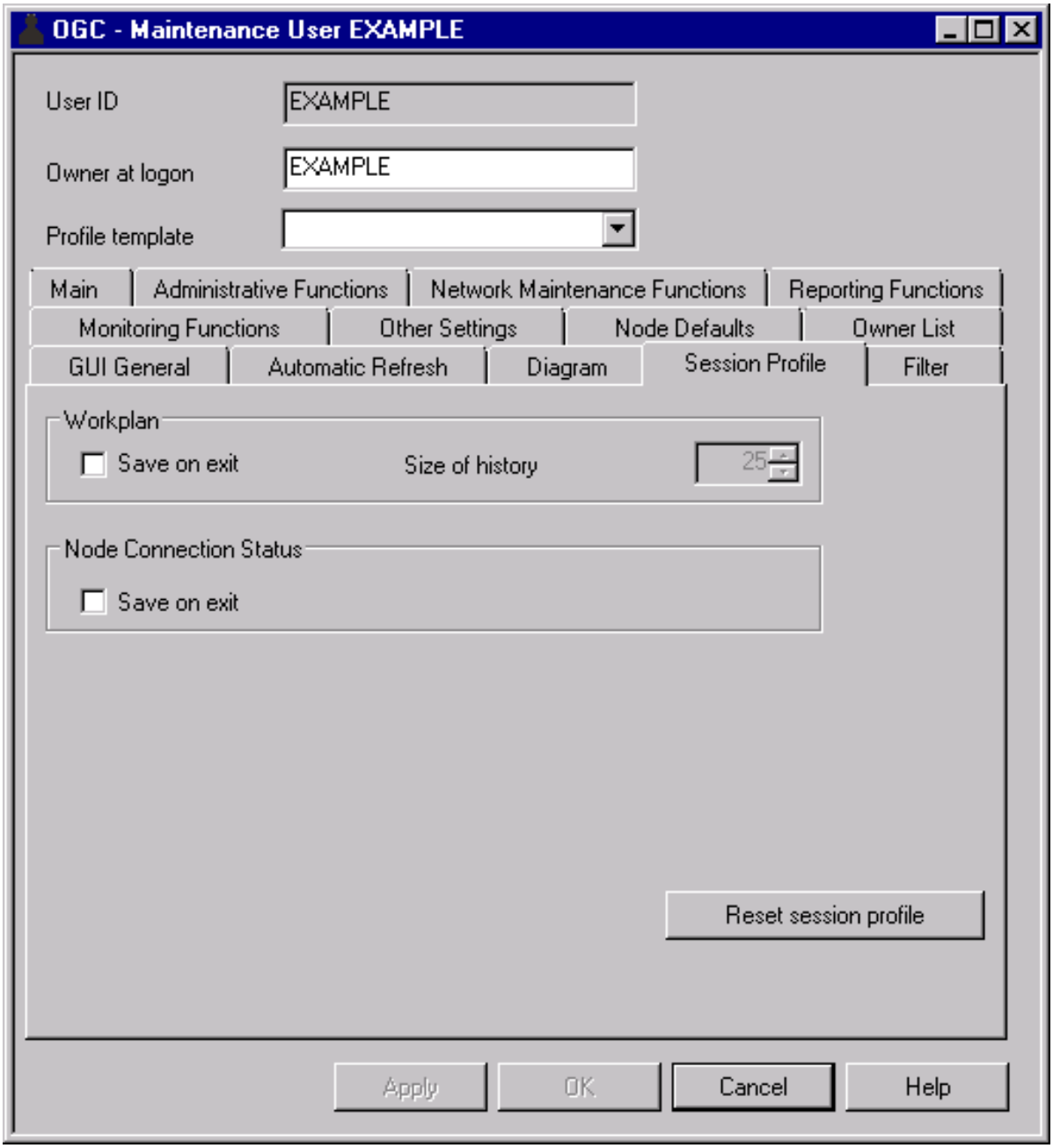
It is possible to define a tooltip for diagram objects. The tooltip can be switched on and off and the information displayed in the tooltip can be customized by choosing the **Customization** button.

2 Choose **OK** to save your settings.

Session Profile

To make a workplan persistent

1 Select the **Session Profile** tab to modify the Entire Operations GUI Client profile settings stored in the database.



2 Select the **save on exit** check box next to **Workplan** to make the workplan persistent. If required, change the size of the workplan pool in the **Size of history** box.

Note: For further information, see *Show Workplan* in the *User's Guide*.

To make the node connection status persistent

1 Select the **Session Profile** tab to modify the Entire Operations GUI Client profile settings stored in the database.

2 Select the **save on exit** check box next to **Node Connection Status** to enable the status persistent connections.

> **Note:** For further information, see *Monitoring the Node Connection Status* in the *User's Guide*.

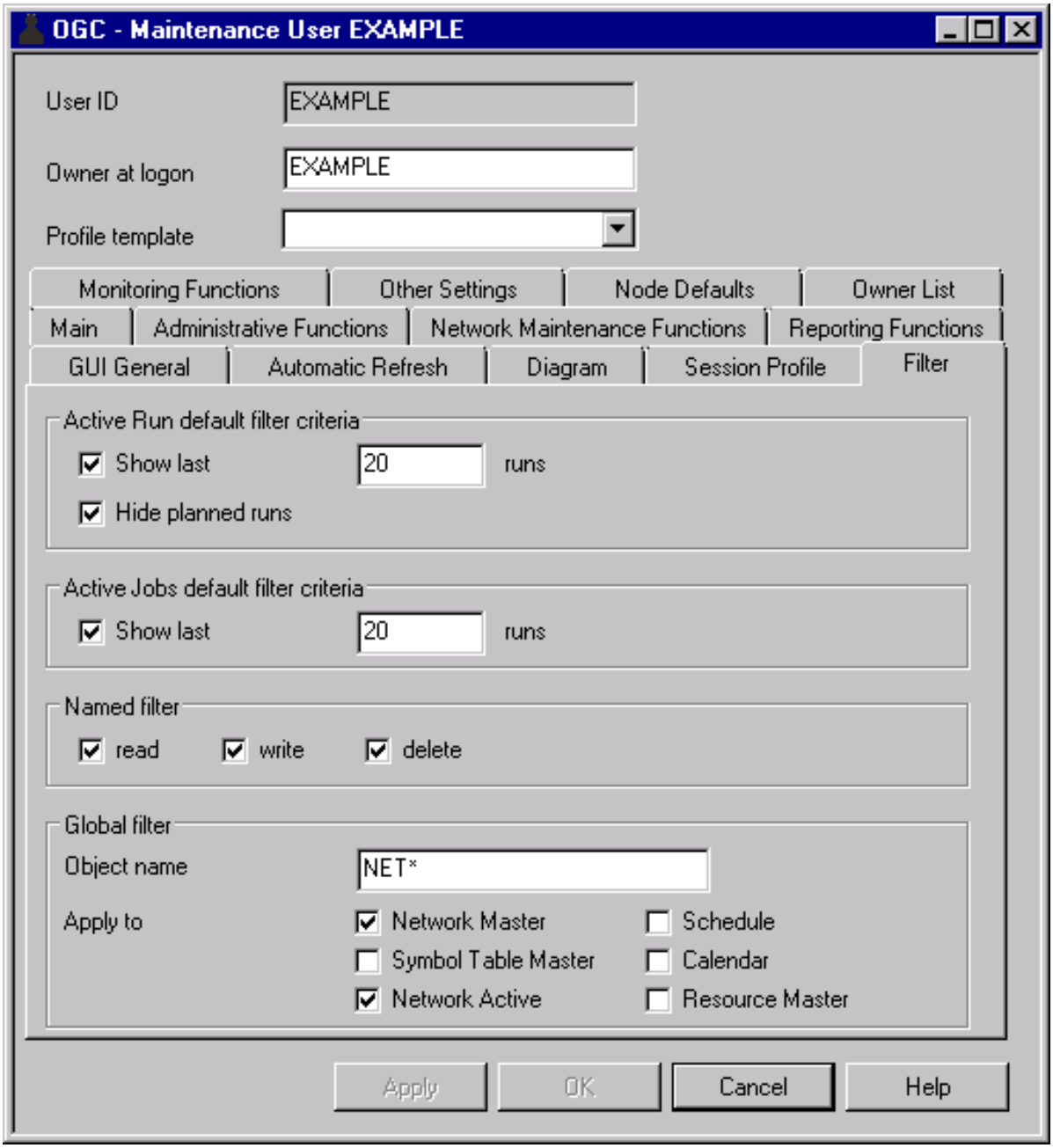
Filter

You can set default filter criteria for active jobs, provide access rights for named filters, and specify objects to be filtered in a global filter.

For more information on filters, see *Filtering Objects* in the *User's Guide*.

To specify default filter criteria

1 Open the tabbed page **Filter**:



2 Set the required options explained in the following table:

Field/Option	Description
Show last *n* runs	For **Active Run**: Show the last *n* runs of all active runs, where *n* is any number between 1 and 999. For active jobs: Show the last *n* runs of all active jobs, where *n* is any number between 1 and 999999999. **Note:** If **Show last runs** is greater than zero (0), the initial sorting for the **Active Job List** window is always in descending order by **Time**. The sort order definition in **Other Settings** is ignored.
Hide planned runs	For **Job Active/Active Job**: Hide planned runs.
Named filter	Permissions for named filters. Select the check box next to the access right (read, write and/or delete) to be granted to the user.
Object name	For a global filter only. Specify the search criteria to be used for the objects selected in **Apply to**. For valid name ranges, see *Specifying Filter Criteria* in the *User's Guide*. The filter criteria apply to the objects of the user and its granted owners.
Apply to	For a global filter only. Select the check box next to the type of objects to be filtered (for example, **Network Master**).

3 When you are finished, choose **OK** to save your settings.

A global filter is in effect until removed from the user profile.

To remove a global filter

- Clear the **Object name** field on the **Filter** page and choose **OK**.

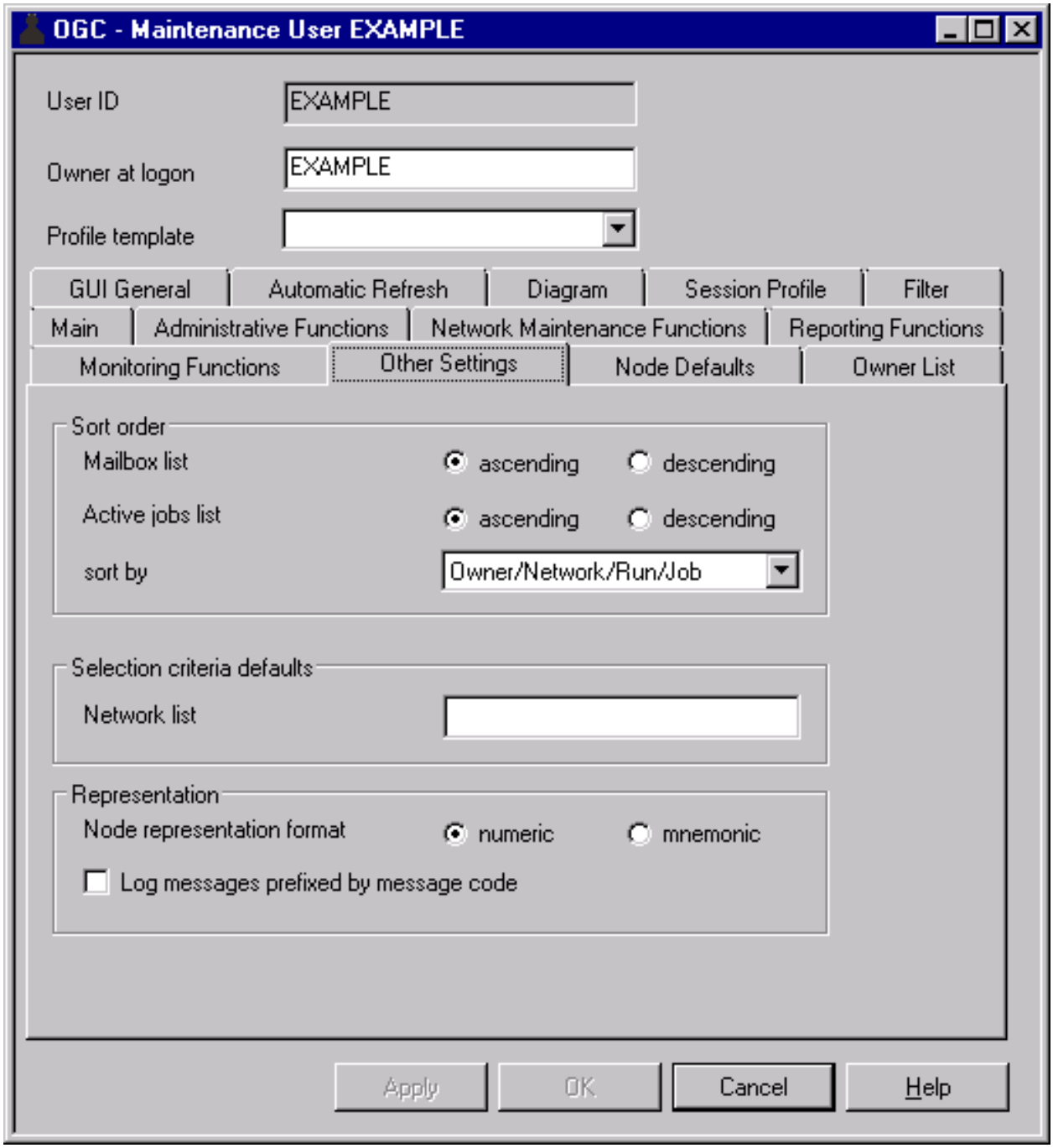
  Or:

  Remove all marks from the check boxes in the **Apply to** section.

  The global filter settings are removed for the user (and granted owners), and any named filters defined by the user are reactivated.

Other Settings - Display Options for Lists

You can set default display options and sort orders for object lists on the **Other Settings** page of the **Maintenance/Create new User** window:



The fields contained on the page are explained in the following table:

Field	Meaning	
Mailbox List	Sort sequence for the mailbox list.	
	ascending	Sorted in ascending order.
	descending	Sorted in descending order.
Active Jobs List	Sort sequence for listing active jobs (see *Active Job Networks* in the *User's Guide*).	
	ascending	Sorted in ascending order.
	descending	Sorted in descending order.
sort by	Active jobs list sorted by:	
	Owner/Network/Run/Job	Sorted by owner/network/run/job.
	Time	Sorted by timestamp.
Network List	Presets filter criteria for a network list. Restriction: The values `O`, `G`, `A` and `U` are only evaluated in the character user interface application.	
	`O`	Networks of owner.
	`G`	Owner granted networks.
	`A`	Active networks only.
	`R`	With active runs count. Only if `R` is specified, active networks will be counted.
	`I`	With active runs indicator. If `I` is specified, an asterisk (`*`) indicates that the network has at least one active run.
	`U`	User granted networks.
Node representation format	**numeric**	Nodes are displayed in numeric format (default).
	mnemonic	Nodes are displayed in mnemonic format.
	Note: For master objects, symbol usage is possible in both cases.	
Log messages prefixed by message code	Log display behavior. Possible button settings:	
	checked	Messages in the log display are prefixed with their message code (if one exists), for example: `EOR2260 - Network activation performed`. See also See also the **Message** column in the example of a system log shown in the *User's Guide*.
	unchecked	Messages in the log display are not prefixed with their message code (default).

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*.

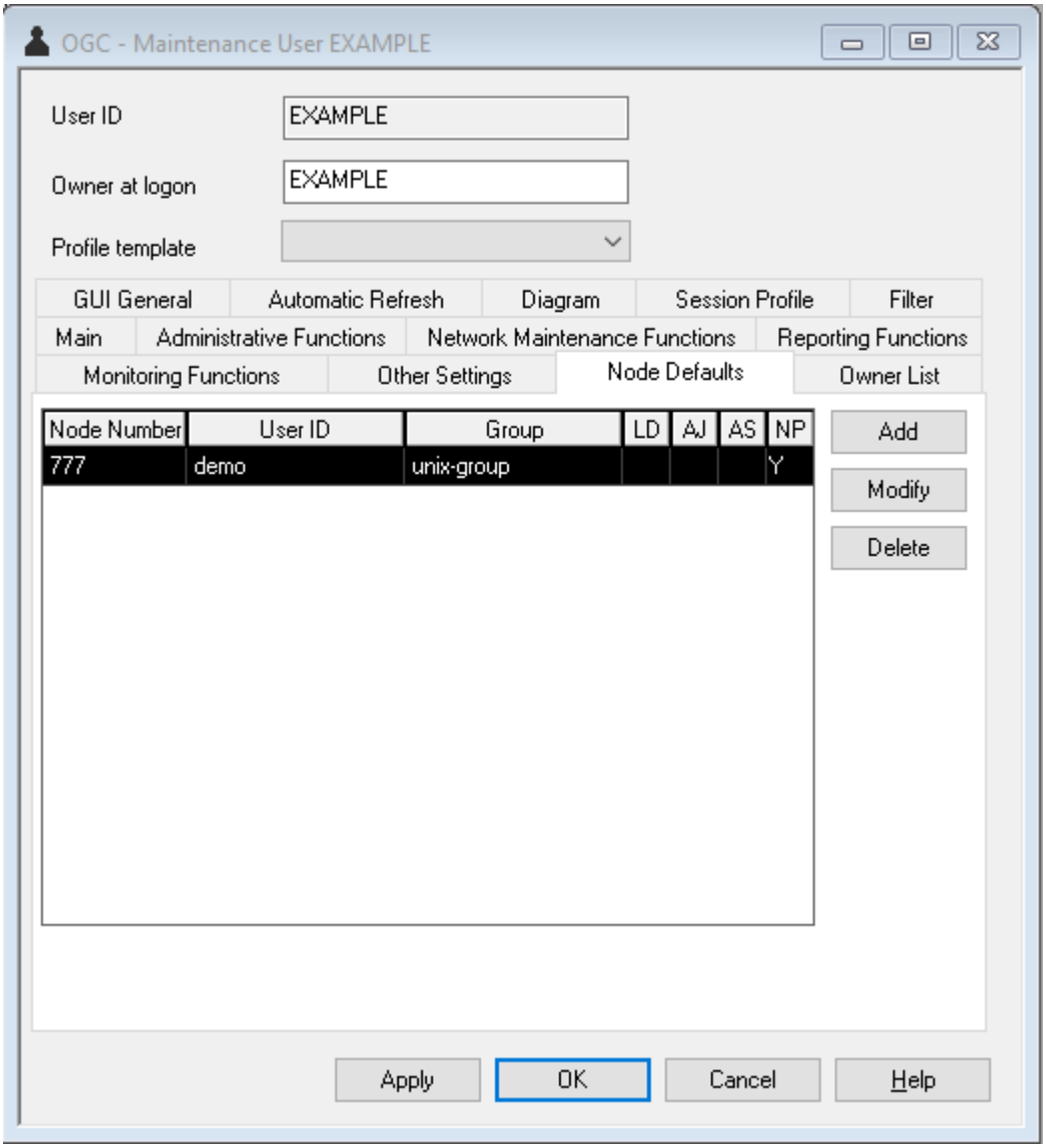
Related Topics:

- *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 In the **Maintenance/Create new User window**, open the tabbed page **Node Defaults**:



All node default user IDs defined for the selected user are displayed in the table.

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

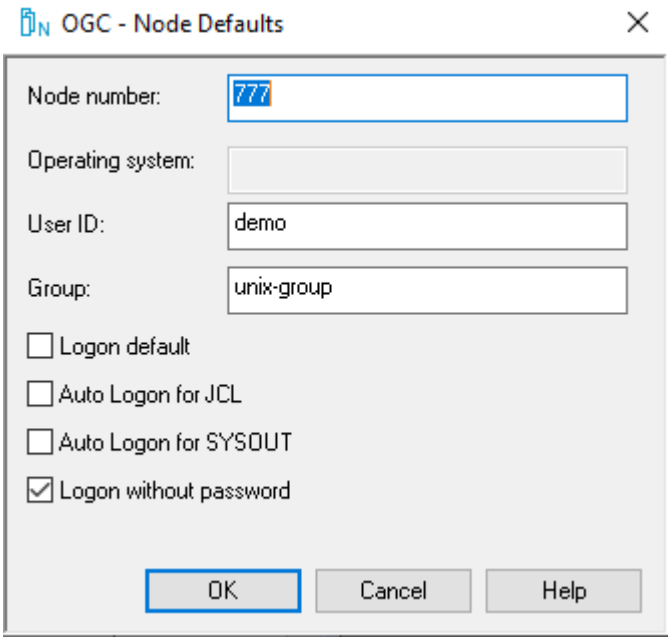
The table columns are described in *Fields and Columns: Node Default User IDs*.

2 If you want to modify a user definition, select the required table row and choose **Modify**.

Or:

If you want to add a user definition, choose **Add**.

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



3 Add or replace the required values.

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

4 Choose **OK** to save your entries.

The window closes, and the node defaults definition is added to or updated on the **Node Defaults** page.

Fields and Columns: Node Default User IDs

The columns on the **Node Defaults page** and the corresponding fields in the **Node Defaults window** are explained in the following table:

Field/Column	Description
Node Number	Number defined for a node (see also *Fields: Node Definition*).
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.

Field/Column	Description	
	If no logon default is specified, the default user ID (if defined) of the node is used. See also *Special Definitions for a Node (Mainframe)* and *Special Definitions for a Node (UNIX and Windows)*. If only one operating system user ID is defined for a user and node, the **Logon Node** dialog is preset to this user ID. Possible column entries:	
	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 column entries:	
	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 column entries:	
	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).
Operating System	Information field/column containing the operating system returned for the specified node.	

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.

Deleting Node Default User ID Definitions

To delete a node default user IDs for a user

- On the tabbed page **Node Defaults**, select the table row that contains the node definition you want to remove and choose **Delete.**

  The node definition is removed from the table.

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 In the object workspace, select the **General** node and choose **Monitor Status** from the context menu.

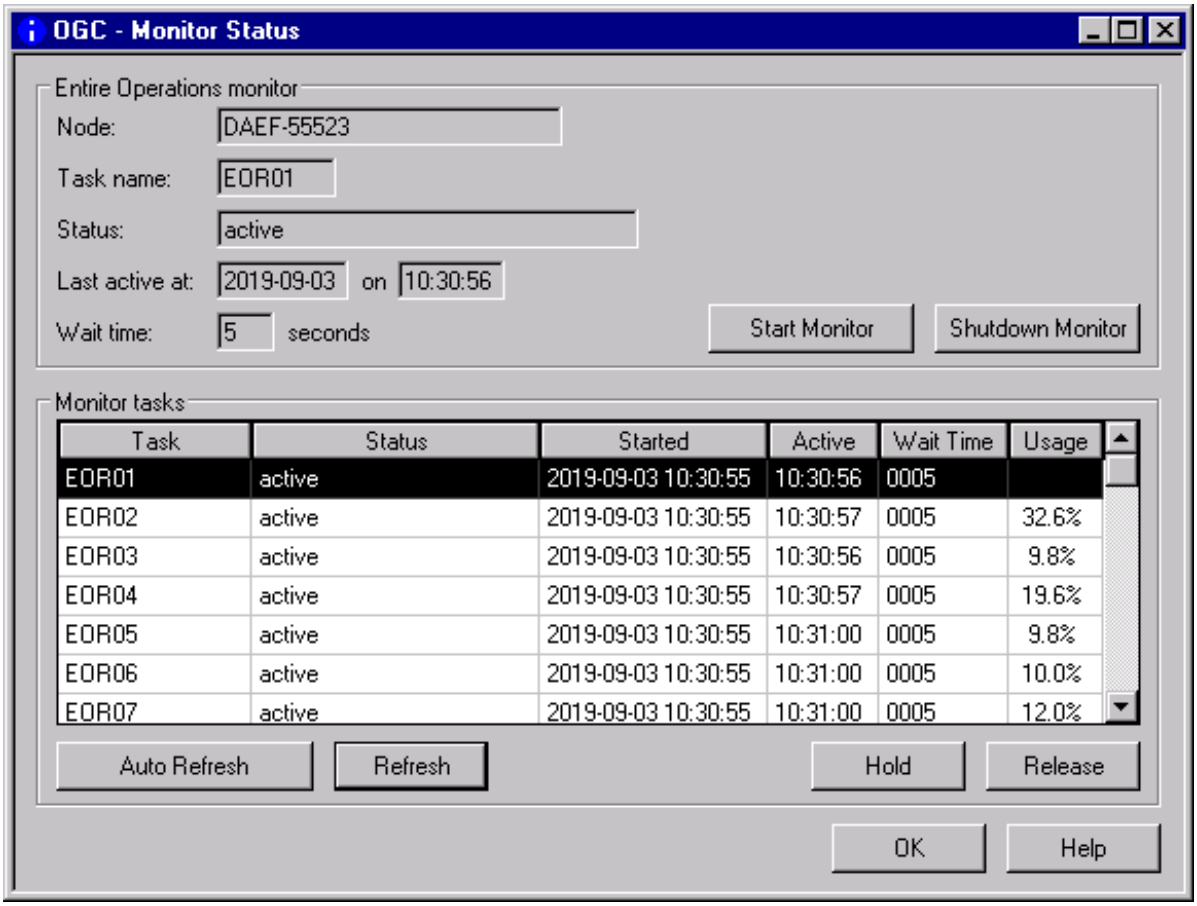
Or:

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

If required, a **Logon Node** window prompts you to logon to the specified node (see *Logon Function* in the *User's Guide*).

2 Enter your credentials and choose **OK**.

A **Monitor Status** window like the example below opens:



If tasks have been defined for the Monitor (see *Defining a Monitor Task Profile*), these tasks are listed in the **Monitor tasks** section of the window. The columns in this section are explained in *Columns: Monitor Tasks*.

The fields in the upper half of the window are explained in *Monitor Status*.

This section covers the following topics:

- Fields: Monitor Status
- Columns: Monitor Tasks

- Functions: Monitor Status

Fields: Monitor Status

The fields in the upper half of the **Monitor Status** window are explained in the following table:

Field	Meaning
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**.

Columns: Monitor Tasks

The columns in the **Monitor tasks** section of the **Monitor Status** window are explained in the following section.

Column	Meaning
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.

Column	Meaning
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 Defaults - Monitor Task Profile*.
Usage	Percentage of task activity within real time, calculated from the task start or from the last task reconfiguration.

Functions: Monitor Status

The functions available in the **Monitor Status window** are explained in the following table:

Function	Meaning
Start Monitor	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.
Shutdown Monitor	Shut down the Monitor. No data is lost.
Auto Refresh	Switch on/off automatic refresh of the **Monitor tasks** list after a specified time interval. See also *Refreshing Object Lists* in the *User's Guide*.
Refresh	Refresh the **Monitor tasks** list. See also *Refreshing Object Lists* in the *User's Guide*.
Hold	Hold a selected Monitor task.
Release	Release a selected Monitor task.

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

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 AG products Entire Net-work and EntireX Broker, which allow a transparent connection of nodes, irrespective of how they are physically linked.

Related Topic:

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

Available Functions: Node

To list all available functions for a Node metanode

- In the object workspace, select the **Node** metanode and open the context menu.

  The following functions are available:

Function	Shortcut	Description
List	F8	See ***Listing all Nodes***.
New	CTRL+N	See ***Adding a Node Definition***.
Refresh	F5	See *Refreshing Object Lists* in the *User's Guide*.
Filter	F3	See *Filtering Objects* in the *User's Guide*.
Logoff	--	Log off from all Entire System Server nodes to which you are currently connected.
Show Connection Status	---	See *Monitoring the Node Connection Status* in the *User's Guide*.
Export	---	Open the **Export Objects** window to export all items of the **Node** metanode: see *Exporting Objects* in the *Import/Export Functions* documentation.
Set Drag And Drop Function	--	See *Drag & Drop* in the *User's Guide*.

To list all available functions for a Node instance

- In the object workspace, select a **Node** instance and open the context menu.

  The following functions are available:

Function	Shortcut	Description
Open	CTRL+O	See *Displaying or Modifying a Node Definition*.
Display	CTRL+D	See *Displaying or Modifying a Node Definition*.
Delete	DELETE	See *Deleting a Node Definition*.
List Active Jobs	---	See *Listing Active Jobs*.
Logon	CTRL+ALT+L	Explicitly log on to an Entire System Server node. For details, see *Logging on to an Operating System Server Node* in the *User's Guide*.
Logoff	---	Explicitly log off from an Entire System Server node.
Add to Connection Status	---	See *Monitoring the Node Connection Status* in the *User's Guide*.
Trace Level	--	See *Trace Levels for UNIX and Windows Nodes*.
Export	---	Open the **Export Objects** window to export a node: see *Exporting Objects* in the *Import/Export Functions* documentation.
Add to Workplan	---	See *Add to Workplan* in the *User's Guide*.

This section covers the following topic:

- Trace Levels for UNIX and Windows Nodes

Trace Levels for UNIX and Windows Nodes

The **Trace Level** function only applies to UNIX and Windows nodes.

It is used to specify whether a trace is written to the log file and to determine the trace level (complexity) of the trace if written to the file. Valid input values:

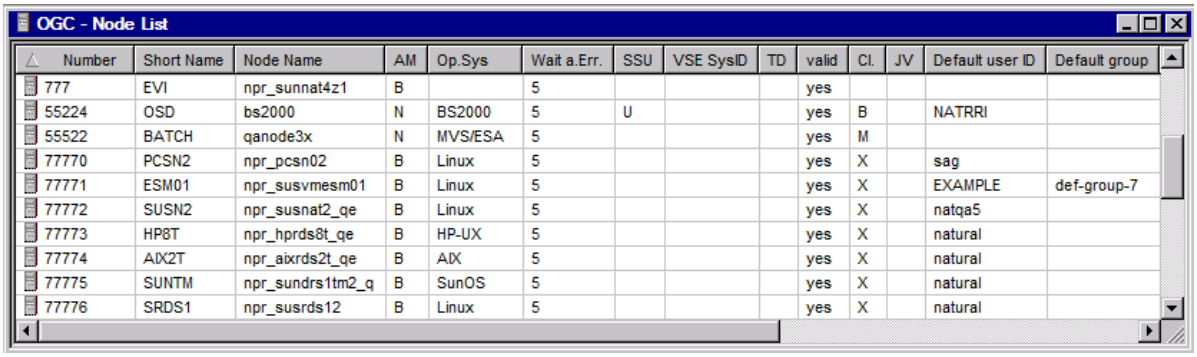
Trace Level	Description
0	No trace is written to the log file.
1 - 99999	A trace is written to the log file with different complexity levels from 1 (low) to 99999 (high).

Listing all Nodes

To list all nodes defined to Entire Operations

1 In the object workspace, select the **Node** metanode and choose **List** from the context menu, or press F8.

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



Number	Short Name	Node Name	AM	Op.Sys	Wait a.Err.	SSU	VSE SysID	TD	valid	Cl.	JV	Default user ID	Default group
777	EVI	npr_sunnat4z1	B		5				yes				
55224	OSD	bs2000	N	BS2000	5	U			yes	B		NATRRI	
55522	BATCH	qanode3x	N	MVS/ESA	5				yes	M			
77770	PCSN2	npr_pcsn02	B	Linux	5				yes	X		sag	
77771	ESM01	npr_susvmesm01	B	Linux	5				yes	X		EXAMPLE	def-group-7
77772	SUSN2	npr_susnat2_qe	B	Linux	5				yes	X		natqa5	
77773	HP8T	npr_hprds8t_qe	B	HP-UX	5				yes	X		natural	
77774	AIX2T	npr_aixrds2t_qe	B	AIX	5				yes	X		natural	
77775	SUNTM	npr_sundrs1tm2_q	B	SunOS	5				yes	X		natural	
77776	SRDS1	npr_susrds12	B	Linux	5				yes	X		natural	

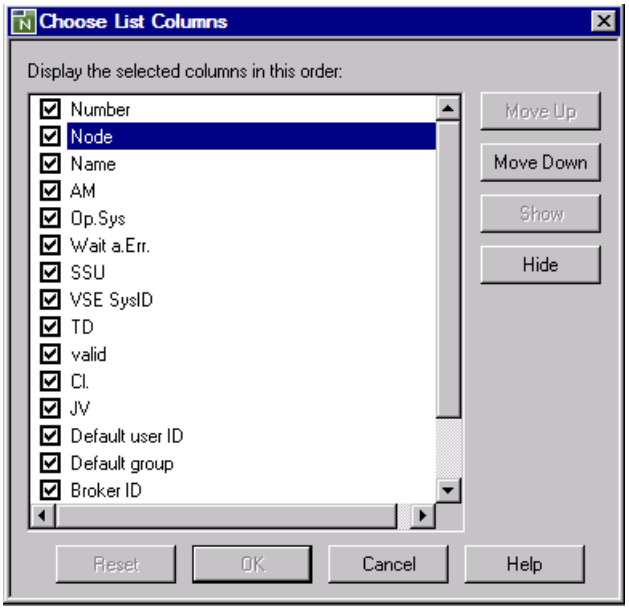
The list is sorted by the **Number** column (default) in ascending order.

You can click on the column by which you want to sort the list. A triangle in the column indicates the column by which a list is sorted (in the example above, the **Number** column).

All columns are shown by default.

The columns are explained in *Columns: Operating System Server Table*.

2 If you want to reorder columns or reduce the number of columns shown in the **Node List** window, choose **Columns** from the context menu:



3 Uncheck the column(s) you want to hide from the list and choose **Hide**.

Or:

Select the column you want to shift and choose **Move Up** or **Move Down** to move the selected column left or right in the list.

You cannot move or hide the **Number** column.

4 When you are finished, choose **OK** to save and apply your changes.

Or:

Choose **Cancel** to undo all changes.

Any column changes are persistent and retained for future sessions.

If required, choose **Reset** to restore the default settings for the columns.

This section covers the following topics:

Columns: Node List

The columns contained in the **Node List window** are explained in the following table.

Column	Description	
Number	Entire System Server or UNIX node number.	
Short Name	Short node name.	
Node Name	User-defined (long) node name.	
AM	Access mode:	
	N	Use Entire Net-Work for Mainframe nodes.
	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.Err.	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 - General*. If empty, the system-wide default is in effect for this node.	
VSE SysID	The SYSID defined for a z/VSE node is added to the job cards of jobs submitted on this node.	
TD	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.
Cl.	Operating system class:	
	B	BS2000
	M	z/OS
	V	z/VSE
	W	Windows
	X	UNIX, Linux
JV	Applies to BS2000 nodes only. Indicates whether a BS2000 job variable is supported. Possible values:	

Column	Description
	`Y` Variable is supported. *empty column* Variable is not supported.
	The value is returned by Entire System Server for each BS2000 node defined in your environment. **Note:** Information on job variable support is only provided in the **JV** field.
Default user ID	UNIX or Windows user ID the Monitor uses for operations that are independent of a specific network or job.
Default group	UNIX: If this column is empty, the default group name as defined in `/etc/passwd` is used. Otherwise, this column contains the name displayed when you issue the UNIX command `groups`. Windows: The domain name used to log on to the server.
Broker ID **Server Name** **Service** **User ID**	Attributes of the EntireX Broker service definition for the node. See also ***Node - Broker*** in *Modifying a Node Definition*.

Displaying, Modifying and Adding a Node Definition

This section covers the following topics:

- Displaying or Modifying a Node Definition
- Adding a Node Definition
- Fields: Node Definition - General

Displaying or Modifying a Node Definition

To display or modify a node definition

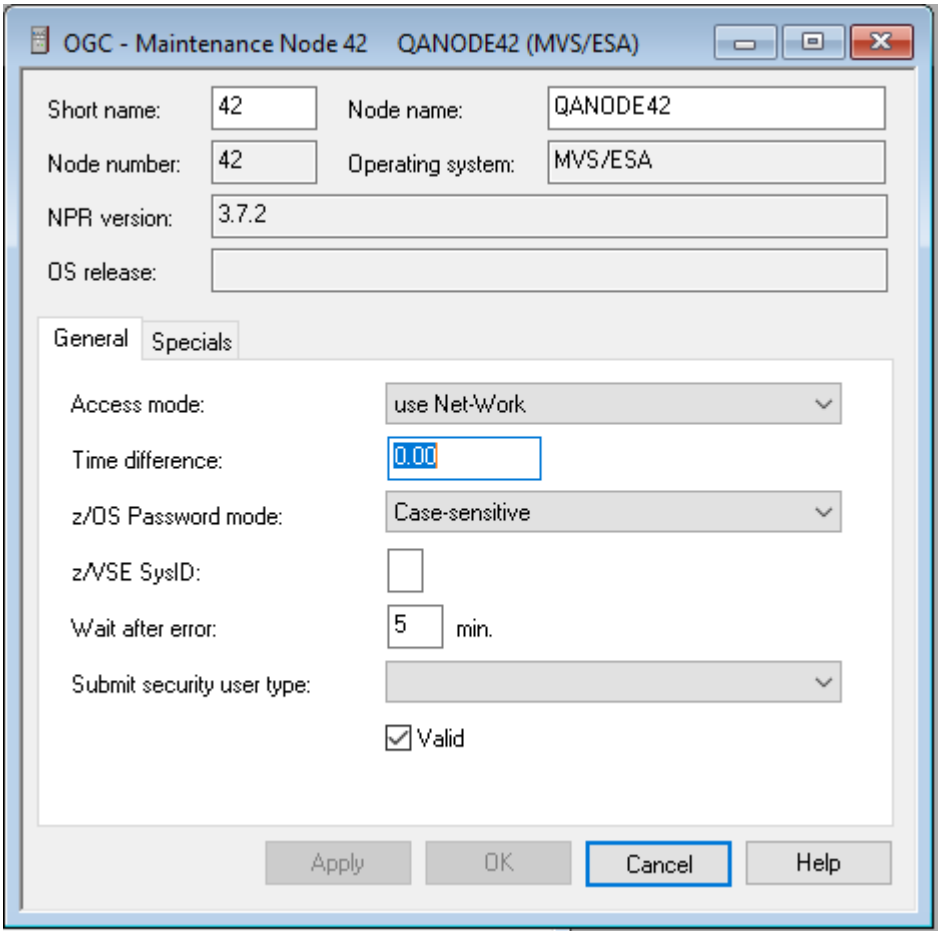
1 In the object workspace, select a **Node** instance.

2 If you want to display a node definition, choose **Display** from the context menu or press CTRL+D.

Or:

If you want to modify a node definition, choose **Open** from the context menu or press CTRL+O.

A **Display Node** or **Maintenance Node** window (respectively) with an open **General** page like the example below opens:



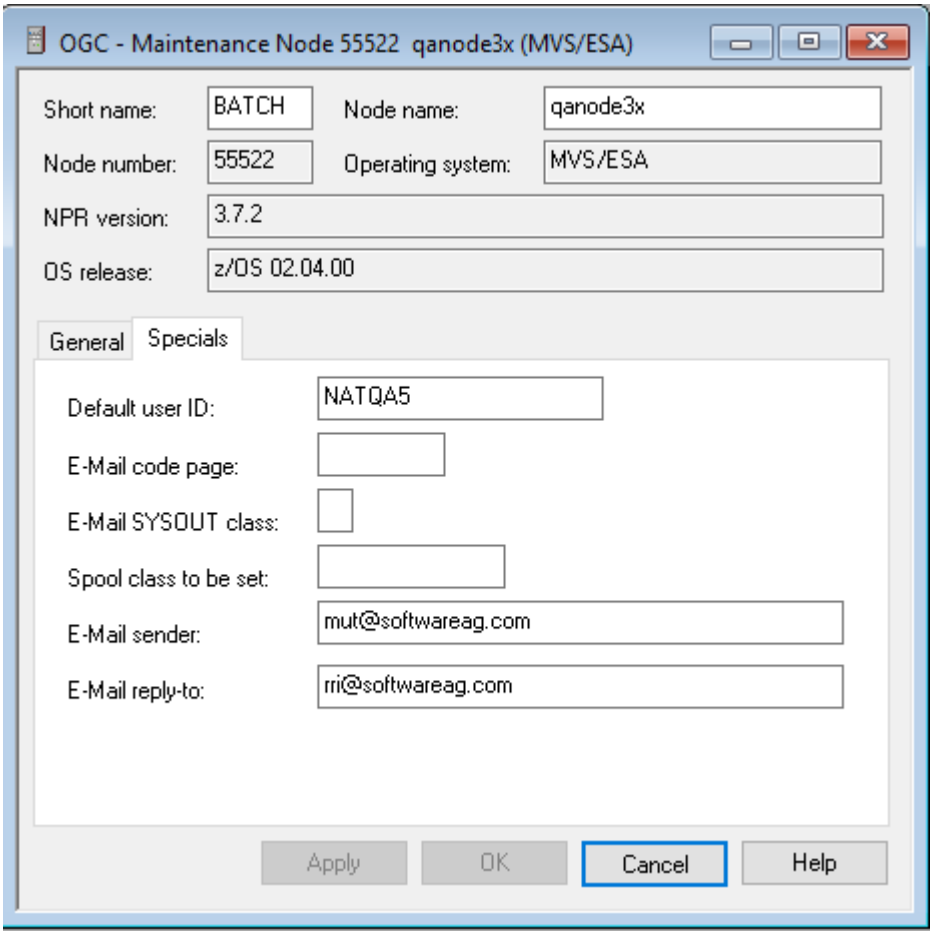
3 Now you can change the definitions for the selected node.

The fields in the upper section of the window and on the tabbed page **General** are used to specify general definitions for the node. They are explained in *Fields: Node Definition - General*.

The fields on the other tabbed pages available are explained in the following section.

Node - Specials

The tabbed page **Specials** specifies user- and group-specific information for the node as shown in the example below:

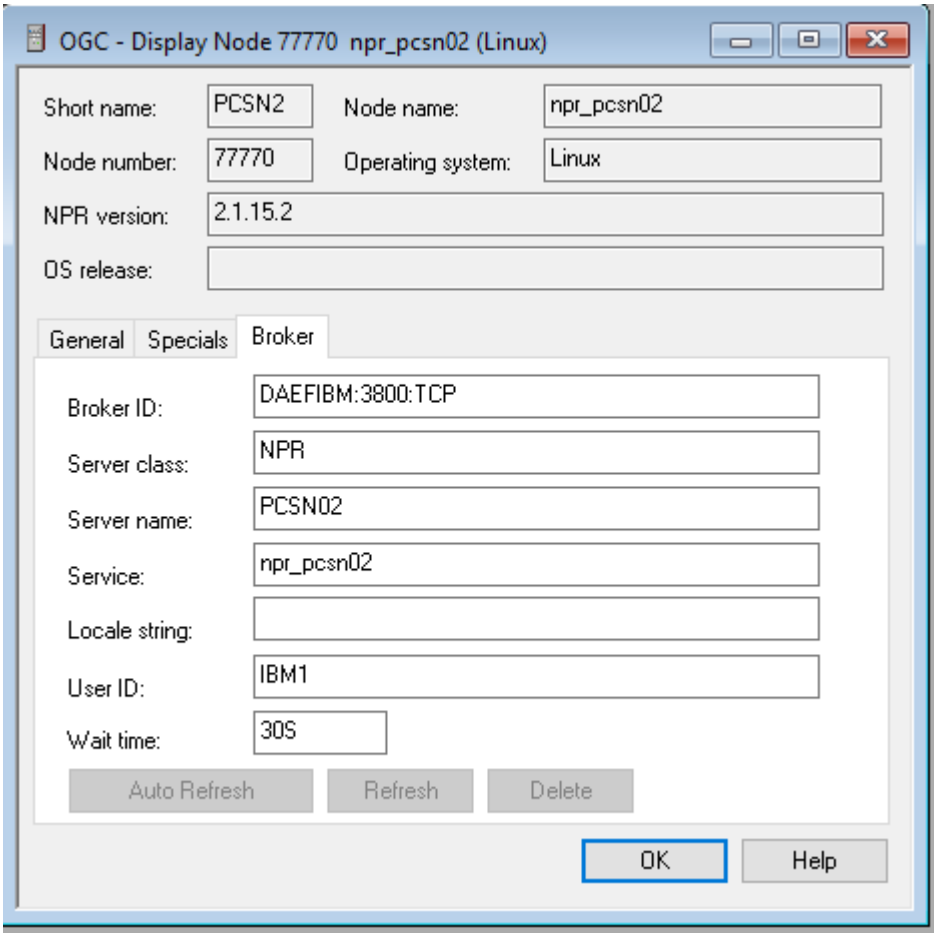


The fields available on the **Specials** page are described in

- *Special Definitions for a Node (Mainframe)* and
- *Special Definitions for a Node (UNIX and Windows)*.

Node - Broker

If **use Broker** is specified as the **access mode**, the additional tab **Broker** is displayed which contains EntireX Broker details for UNIX and Windows nodes.



The fields contain the current attributes of the EntireX Broker service definition for the node.

The EntireX Broker service definition can only be modified in the SATSRV text object in the Natural SYSSATU system library on the server. If you change the service definition, choose **Refresh** to force a re-read of the service definition from SATSRV/SYSSATU into Entire Operations.

Choose **Delete** if you want to delete all fields of an EntireX Broker service definition in Entire Operations at once.

Note: This does not delete any entries in SATSRV/SYSSATU.

4 Choose **OK**.

Your changes are saved.

Adding a Node Definition

To add a node definition

1 In the object workspace, select the **Node** metanode and choose **New** from the context menu, or press CTRL+N.

A **Create new Node** window opens.

The input fields and tabbed pages available in the window correspond to the fields and tabbed pages in the **Maintenance Node** window:

- The fields in the upper section of the window and on the tabbed page **General** are explained in *Fields: Node Definition - General*.
- The fields on the **tabbed page Specials** are explained in *Fields: Node Definition - Specials (Mainframe)* and *Fields: Node Definition - Specials (UNIX and Windows)*.
- The fields on the tabbed page **Broker**(if available) is explained in *Node - Broker*.

2 Enter the required values and choose **OK** to save the new node definition.

Fields: Node Definition - General

The fields in the upper section of a **Create new Node** or **Maintenance Node** window and on the **tabbed page General** 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 **Other Settings** of the user profile.
Node Name	Unique, user-defined node name. For nodes with access mode **Use Network**: Enter a short description to help the user select an appropriate node for a network or job run. For nodes with access mode **Use Broker**: 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. This field is case-sensitive.
NPR Version	(Information field only.) Version of the Entire System Server (NPR) currently installed.

Field	Description	
Operating System	(Information field only.) Operating system that hosts the server node.	
OS Release	(Information field only.) Detailed information (where available) on the operating system installed.	
Access Mode	Possible selection options:	
	use Network	Use Entire Net-Work for mainframe nodes.
	use Broker	Use EntireX Broker.
	local node	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.	
z/OS Password Mode	This setting is evaluated for nodes on z/OS only. Conversion mode to be used for password entries. Possible selection options:	
	Upper case	Passwords are converted to upper case (default for mainframe nodes).
	Case-sensitive	Passwords in lower or mixed case are not converted to upper case (default for UNIX and Windows nodes).
	z/VSE SysID	ID added to the job cards of jobs submitted on a z/VSE node. Valid range: 1 to 9.
Wait after Error	Time in minutes to wait until the next node access after a temporary error. Default: 5 minutes.	
Submit Security User Type	Submit security user type can be set individually for each node. If this field is blank, the global default applies to this node: see the **Submit Security User Type** field described in ***Monitor Defaults*** for possible values of this field.	
Valid	Allow or disallow use of the node. Possible check box settings:	
	checked	Allow use.
	unchecked	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.

Special Definitions for a Node (Mainframe)

The fields available on the **tabbed page Specials** of the **Maintenance Node** window depend on the access mode selected on the **General page** and the operating system of the server node.

Possible fields for a mainframe node are described in the following section.

Fields: Node Definition - Specials (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 or z/VSE 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**).

Field	Meaning
	3. Spool class defined in the Entire Operations **defaults for z/OS or z/VSE**. **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.

Special Definitions for a Node (UNIX and Windows)

The fields available on the **tabbed page Specials** of the **Maintenance Node** window depend on the access mode selected on the **General page** and the operating system of the server node.

Possible fields for a UNIX or Windows node are described in the following section.

Fields: Node Definition - Specials (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.

Field	Meaning
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.
	
	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.

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

- From the **Node** metanode in the object workspace, select the node you want to delete and choose **Delete** from the context menu, or press DELETE.

  A dialog opens where you must confirm the deletion.

6 Entire Operations Defaults

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

Features specific to the character user interface of Entire Operations;
Entire Operations system file and log files;
Defaults for z/OS and z/VSE, **BS2000**, **UNIX and Windows**;
User definitions;
Display options (language, calendar, date);
Interface settings and **escape characters**;
Retention periods and start/end dates for networks and jobs;
Logging, **activation and APIs**;
Scheduling, symbols, JCL and SYSOUT.

Accessing Default Settings for Entire Operations

To access default settings for Entire Operations

1 In the object workspace, select **Administration**.

2 Open the context menu and select **Entire Operations Defaults**.

An **Entire Operations Defaults** window with an open **System/Log files** page like the example below opens:

Each tabbed page represents a set of default settings you can specify for your environment.

The tabbed pages are explained in the following section.

3 If required, choose **Export** to open the **Export Objects** window and export the default settings currently defined. See also *Exporting Current Settings* in the *Import/Export Functions* documentation.

Defaults: System/Log Files

The system and log files shown on the **System/Log files page** of the **Entire Operations Defaults window** are explained in ***Entire Operations Files***.

The fields in the **Logging settings** section of the page are described in the following table:

Field	Description	
Log logon/logoff to node	If this check box is selected, all logons and logoffs to and from Entire System Server nodes (by users and Monitor tasks) will be logged. Be aware of the overhead in the log file.	
Log symbol values in submitted JCL	Possible check-box settings:	
	checked	Log symbol values (default).
	unchecked	Do not log values.
Log the changes made to an active/pregen. JCL	Possible check-box settings:	
	checked	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 checked, the editor buffer pool space may have to be increased.
	unchecked	Disable this feature (default).
Log API Usage	If this check box is selected, some API executions will be logged. The API return code is contained. Be aware of the overhead in the log file.	

Defaults for Operating System Specials

The fields provided on the **Operating System Specials** page of the **Entire Operations Defaults window** depend on the operating system selected, as shown in the following example of z/OS:

The fields are explained in the following operating system specific sections:

- *Defaults for z/OS and z/VSE*
- *Defaults for BS2000*
- *Defaults for UNIX and Windows*

Defaults for Time Ranges

The fields on the **Time Ranges** page of the **Entire Operations Defaults window** are described in the following table:

Field/Section	Description
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 is 2 days. **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 time, even if the active network is not completed. Default is 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 **Keep until explicit release** (K). Default is 7 days. See also the **Deactivation mode for active conditions** option for a single network that determines when active conditions are removed 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 is 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, as well as job accounting information. Default is 180 days.

Field/Section	Description
Accounting data	Maximum number of days Entire Operations keeps job and monitor accounting data. Default is 180 days.
Extraction of schedules before activation	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 was 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 reference PDA for input condition references the production date, not the current calendar 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*.
Automatic cleanup	Possible selection options: ■ **No automatic cleanup for new day** If selected, no automatic **cleanup of the active database** and log data is performed. ■ **Automatic cleanup for new day / Monitor start at** If selected, automatic **cleanup of the active database** and log data is performed. The interval between two subsequent automatic cleanups is at least one hour (default). You can enter the time to perform daily automatic cleanup. ■ **Once per day**

Field/Section	Description
	If selected, automatic cleanup will not be performed if a cleanup (automatic or manual) was already performed on the same day. **Note:** The cleanup must be triggered at least once a day to avoid an overflow of the active database.

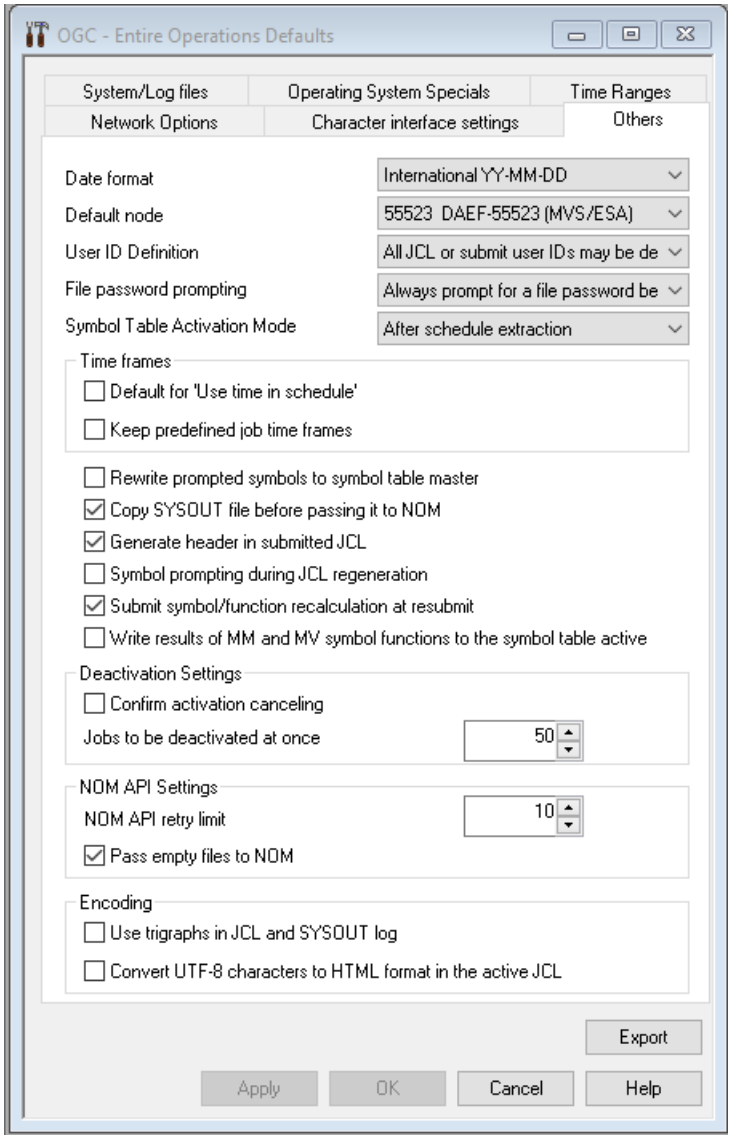
Defaults for Network Options

The fields on the **Network Options** page of the **Entire Operations Defaults window** are described in the following table:

Field	Description
Activation escape	Global escape character used as the prefix for Natural code lines and symbols that are to be replaced at activation time. Default is the dollar sign (`$`). You can define specific escape characters for each operating system on the **Operating System Specials page**. **Note:** Dynamic JCL might become invalid if this escape character is changed.
Submission escape	Global escape character used as the prefix for symbols that are to be replaced at submission time. You can define specific escape characters for each operating system on the **Operating System Specials page**. Default is the dollar sign (`$`). The character recommended for BS2000 is the semi-colon (`;`), and for z/VSE the number sign (`#`). **Note:** Dynamic JCL might become invalid if this escape character is changed.
SYSOUT line limit	Determine the line limit for SYSOUT. Valid values: 0 - 9999999999999. 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. 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.

Field	Description	
Interrupt End-of-Job Checking on BS2000 if limit is reached	Applies to BS2000 only. Select this option (not selected by default) to 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`.	
Run number limit	Maximum run number which can be assigned to a network or job activation. The maximum must not exceed 99999. Default: If 0 is specified, the limit is 99999.	
Subnetwork activation mode	Possible selection options:	
	At activation time	At activation time of the caller (default).
	During the network activation	At submission time of the caller.
	See also the section *Time of Activation of a Subnetwork* in the *User's Guide*.	
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 selection options:	
	No symbol table required	No symbol table definition required.
	Required for all networks	Symbol table required for all networks.
	Required for subnetworks only	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*.	
Max. number of versions per network or symbol table	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.	
Allow setting of preferred run number at activation	If this check box is selected, users are allowed 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* (*Job Maintenance*) in the *User's Guide*. This check box is not selected by default.	

Defaults for Other Settings



The fields on the **Others** page of the **Entire Operations Defaults window** are described in the following table:

Field/Section	Description
Date format	Date format to be used for date fields. For explanations of the possible selection options, see *Date and Time Formats* in the *User's Guide*.
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	Possible selection options:
	All JCL or submit user IDs may be defined All JCL or submit user IDs can be defined (default).
	User must have logged on successfully to a node First, the user must have logged on successfully to a node. Then a JCL or submit user ID may be defined.
	A logon is always required for: ■ User ID `TSOS` on BS2000 nodes; ■ User ID `root` on UNIX nodes.
File password prompting	Possible selection options:
	Do not prompt for password Do not prompt for a password (default). Use the defined password, if necessary.
	Always prompt for a file password before editing If a file is password-protected, always prompt for a file password before editing.
Symbol table activation mode	Possible selection options:
	After schedule extraction Symbol prompting can be used for scheduled networks (default).
	During the network activation No symbol prompting is possible.
Time frames	**Default for 'Use time in schedule'** 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 an **Activate Network** or **Activate Job** window (see *Manual Activation* in the *User's Guide*). Possible check-box settings:
	checked — Use the time defined in the schedule used by the network or job.

Field/Section	Description	
	unchecked	Use the time entered in the **Activate Network** or **Activate Job** window (default). Possible network or job schedule definitions are ignored.
	Keep predefined job time frames Possible check-box settings:	
	checked	Keep predefined job time frames.
	unchecked	Use the calling job's time frame for subnetwork jobs (default).
Rewrite prompted symbols to symbol table master	Possible check-box settings:	
	checked	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.
	unchecked	Update prompted symbols only in the currently active symbol table (default).
Copy SYSOUT file before passing it to NOM	Applies to BS2000 only. Possible check-box settings:	
	checked	Copy the SYSOUT file physically and pass the copy to the Entire Output Management (NOM) API (default). This doubles the necessary disk storage for SYSOUT files created by Entire Operations.
	unchecked	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.	
Generate header in submitted JCL	Possible check-box settings:	
	checked	Generate header.
	unchecked	Do not generate header.
Symbol prompting during JCL regeneration	Possible check-box settings:	
	checked	Symbols will be prompted again during JCL regeneration.
	unchecked	No symbol prompting during JCL regeneration (default).

Field/Section	Description	
Submit symbol/function recalculation at resubmit	Active submit symbol/function recalculation at job resubmission. This setting determines the handling of submit symbol and function values during the resubmit with submission symbol replacement. Possible check-box settings:	
	checked	Active submit symbols and functions will be deleted and activated (calculated) anew (default).
	unchecked	Resubmission will be performed with the same submit symbol and function values.
Write results of MM and MV to symbol table active	Possible check box settings:	
	checked	The 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 *Functions for Symbol Replacement* in the *User's Guide*.
	unchecked	The values returned for the symbol functions `MM` and `MV` are not written to the active symbol table (default).
Deactivation Settings	**Confirm activation cancelling** Possible check box settings:	
	checked	The confirmation dialog is used if future activations are cancelled (default).
	unchecked	No confirmation dialog is used if future activations are cancelled.
	Jobs to be deactivated at once The maximum number of active jobs to be deactivated in one Monitor cycle. Default: 50.	
NOM API Settings	**NOM API retry limit** The maximum number of attempts for passing a file to Entire Output Management (NOM). Default: 1000.	
	Pass empty files to NOM Possible check box settings:	
	checked	Empty files are passed to Entire Output Management (default).

Field/Section	Description	
	unchecked	Empty files are not passed to Entire Output Management.
	Note: A log message is written in any case.	
Encoding	Applies to UNIX and Windows JCL only. **Use trigraphs in JCL and SYSOUT logging** Possible check box settings:	
	checked	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*.
	unchecked	Encoding is not used (default).
	Applies to UNIX JCL only.	
	Convert UTF-8 characters to HTML format in the active JCL Possible check box settings:	
	checked	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.
	unchecked	UTF-8 characters are not converted (default).

Defaults for Character Interface Settings

The fields on the **Character interface settings** page of the **Entire Operations Defaults window** are described in the following table.

These settings only affect the application screens of the Entire Operations character user interface.

Field/Section	Description	
Language	Determine the Entire Operations default language code. Possible selection options: **English** **German**	
User application in menu	Integrate a user-defined application into the Entire Operations **Main Menu**.	
	Application	The name of the required application.
	Menu text	The name to be used in the **Main Menu**.
Calendar display	Select **Support highlighting** to enable highlighting in calendar displays provided that your terminal supports highlighting.	
Session control	**Stack 'RETURN' on logoff** Possible check box settings:	
	checked	Terminate an Entire Operations online session with the Natural command `RETURN`. Only with `RETURN` can control be given back to another Natural application.
	unchecked	Terminate a Natural session with the Entire Operations session.
	Logon screen obligatory Possible check box settings:	
	checked	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.
	unchecked	The Entire Operations logon screen is not presented.

Defaults for BS2000

This section describes the fields provided for BS2000 default settings:

Fields: Defaults for BS2000

BS2000-specific fields on the **Operations System Specials page** of the **Entire Operations Defaults** window 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:		
Make the SYSOUT Collection File shareable	Entire Operations creates its own **SYSOUT Collection File** for each BS2000 job running under control of Entire Operations. Select this check box if the Entire Operations Monitor should make these files shareable; do not select this check box if not.	
Append the SYSLST File(s) to the SYSOUT File	Select this check box if the SYSLST files created by a job should be appended to the Entire Operations **SYSOUT Collection File**; do not select this check box if not.	
Monitor Job Variables:		
Remove internal Monitor Job Variables after End-of-Job handling	Select this check box to remove internal Monitor job variables immediately after End-of-Job checking. This creates fewer catalog entries. Do not select this check box 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:		

Field	Meaning
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.
Message codes, which force 'job not ok' by default	See *BS2000 Default Message Codes*.

BS2000 Default Message Codes

The following BS2000 message codes can be contained in the message code table on the **Operating System Specials** page:

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.
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.)

Message Code	Message Text
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 ended not ok** is selected on the **Global Messages for Events** page.
  - A global message and/or an event store notification is sent.
- 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 **Restore Defaults** function.
- 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 and z/VSE

This section describes the fields provided for z/OS and z/VSE default settings.

Fields: Defaults for z/OS and z/VSE

The fields available for z/OS-specific and z/VSE-specific default settings on the **Operations System Specials page** of the **Entire Operations Defaults** window 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 this option is selected, 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*. This option is not selected be default.
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:**

Field	Meaning
	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.
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	
Collect z/OS step accounting data:	
checked	Applies to z/OS only. If this check box is selected, accounting data for steps will be collected additionally for z/OS jobs. Be aware of the overhead in the accounting data file.
unchecked	If this check box is not selected, accounting data for steps will not be collected (default).
JCL Location VSE:	
Default Member Type	Applies to z/VSE only. The default member type is inserted into JCL definitions if nothing else is specified.
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 describes the fields provided for UNIX and Windows default settings.

Note: Specials for UNIX and Windows nodes can be defined on the **tabbed page Specials** of the **Maintenance Node** window; see also *Special Definitions for a Node (UNIX and Windows)*.

Fields: Defaults for UNIX and Windows

The fields specific to UNIX or Windows on the **Operations System Specials page** of the **Entire Operations Defaults** window 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.
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

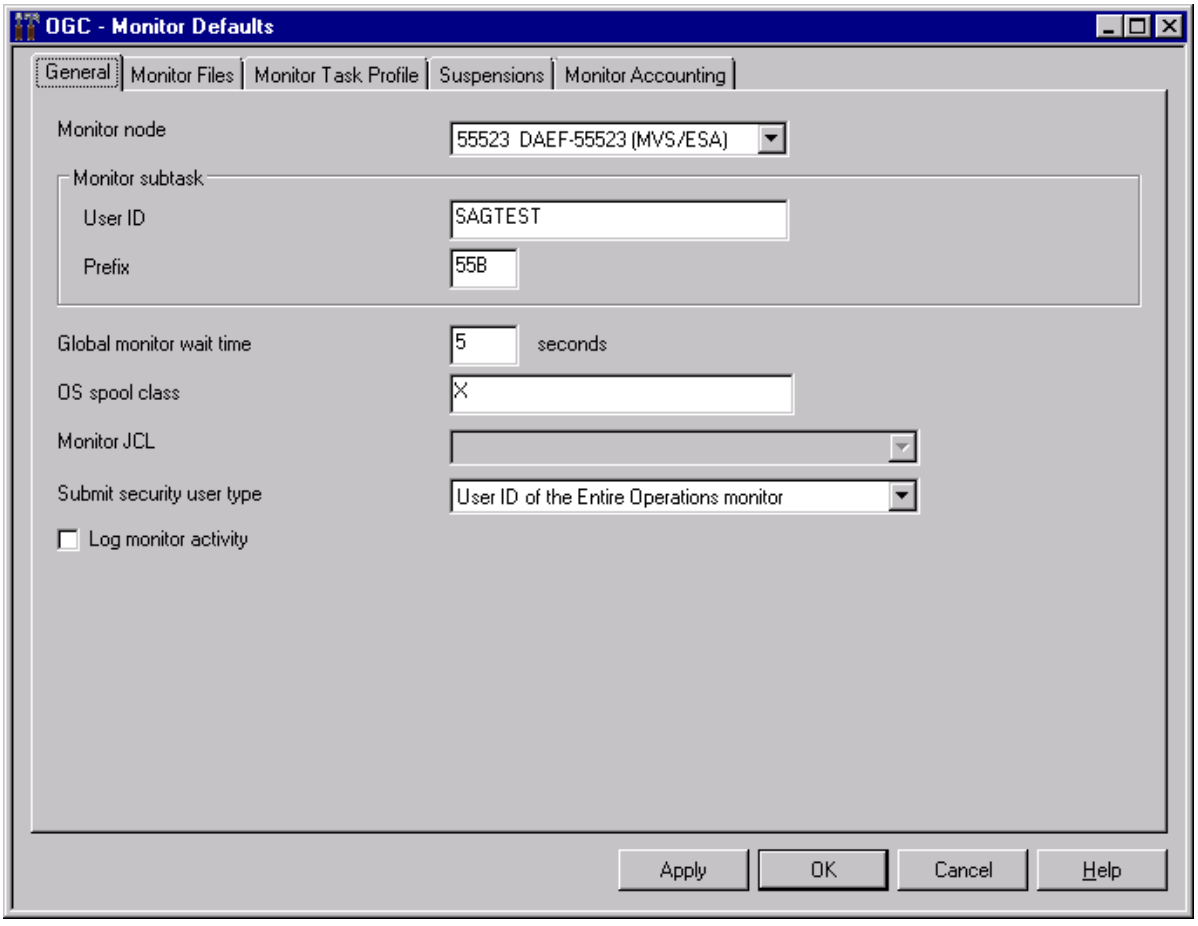
You can define defaults for the Entire Operations Monitor. The defaults must be set before the first start of the Monitor.

To set defaults for the Monitor

1 In the object workspace, select **Administration**.

2 From the context menu, select **Monitor Defaults**.

A **Monitor Defaults** window like the example below opens:



The fields on the tabbed page **General** are explained in *Fields: Monitor Defaults - General*.

- The read-only fields on the tabbed page **Monitor Files** show the default database IDs (**DBID**) and file numbers (**FNR**) of the **Entire Operations files** currently used by the Monitor. The fields are explained in *Entire Operations Files*.

Example:

- The **tabbed page Monitor Task Profile** is explained in *Defining a Monitor Task Profile*.
- The **tabbed page Suspensions** is explained in *Defining Filters to Suspend Entire Operations Functions*.
- The **tabbed page Monitor Accounting** is explained in *Monitor Accounting*.

3 Make your definitions on each of the tabbed pages and choose **OK**.

The defaults are set and become active by starting the Monitor the next time.

Fields: Monitor Defaults - General

The following table explains the fields on the tabbed page **General** of the **Monitor Defaults window**.

Field	Description
Monitor Node	Node under which the Entire Operations Monitor runs. The node can be the same as the default Entire System Server node.
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 **User ID**. This field is not used if the Monitor node is a UNIX or Windows node. **Note:** If specified on a z/OS or BS2000 system, this user ID must be a defined system user ID.
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:** 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.

Field	Description
	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:** `EOR`*`pppnn`* 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`.
Global Monitor Wait Time	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 Defaults - Monitor Task Profile*.
Log Monitor Activity	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 check-box settings: *checked* — Log additional information. *not checked* — Do not log additional information (default).
Monitor JCL	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.
OS Spool Class	For z/OS only. Spool class to be used by the Monitor for all background printouts.

Field	Description	
Submit 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 selection options:	
	User ID of the Entire Operations monitor	User ID of the Monitor (default). See also the field **Monitor User ID**.
	Network owner	Network owner.
	Job's submit user ID	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*.
	Job's submit user ID, no replace for 'DUM'	Like **Job's submit user ID**, but `DUM` jobs are assigned the user ID of the Monitor in the Entire Operations log.
	Submit user ID same as the network owner	Submit user ID must be the same as for the network owner.
	Submit user ID same as the last mod. user	Submit user ID must be the same as for the last modifying user.
	Note: With **User ID of the Entire Operations monitor**, 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.	

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
- Dynamic Task Profile Reconfiguration

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, z/VSE) 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 and z/VSE, 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.

Note: All tasks use the same database files.

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

Dynamic Task Profile Reconfiguration

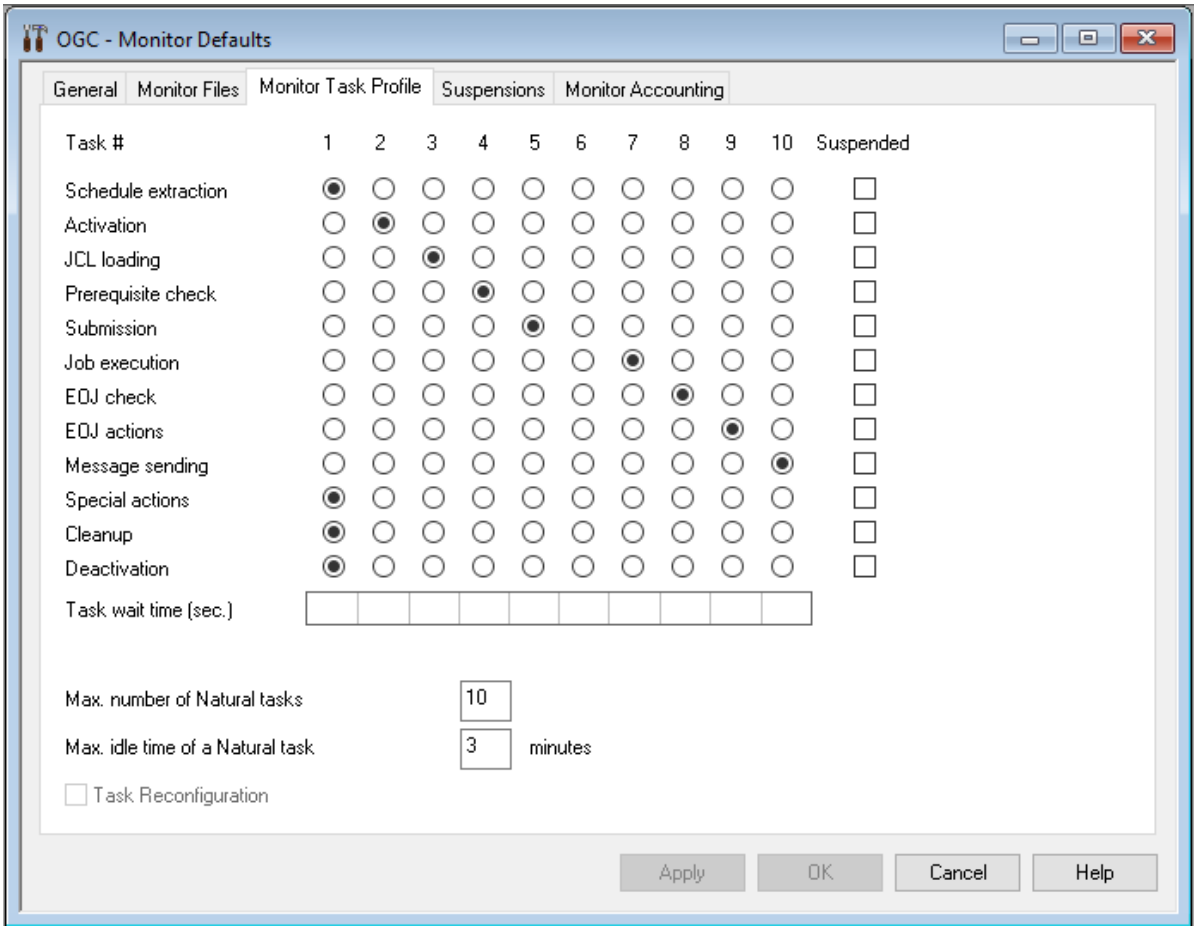
The tasks defined in the **task profile** can be modified while the Monitor is running. All tasks stop briefly, then the unused tasks are stopped, and the newly-defined tasks are started.

This permits adaptation to different workloads in the running Monitor.

Defining a Monitor Task Profile

To define Monitor tasks

1 In the **Monitor Defaults window**, open the tabbed page **Monitor Task Profile**:



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 Defaults - Monitor Task Profile*.

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

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

3 Select **Task Reconfiguration** (selected by default) and choose **Apply** or **OK** if you want the changes to take immediate effect.

If **Task Reconfiguration** is not selected, the changes take effect at the next Monitor start, regardless of whether you choose **Apply** or **OK**.

This section covers the following topics:

- Fields: Monitor Defaults - Monitor Task Profile
- Available Monitor Tasks

Fields: Monitor Defaults - 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 in the **Suspended** column by selecting the check box next to the required function (see 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 in the **Monitor Status** window.
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.

Field/Column	Meaning
Task Reconfiguration	Select this check box (default) to immediately change the Monitor defaults. Otherwise, the changes take effect at the next Monitor start.

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.

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.

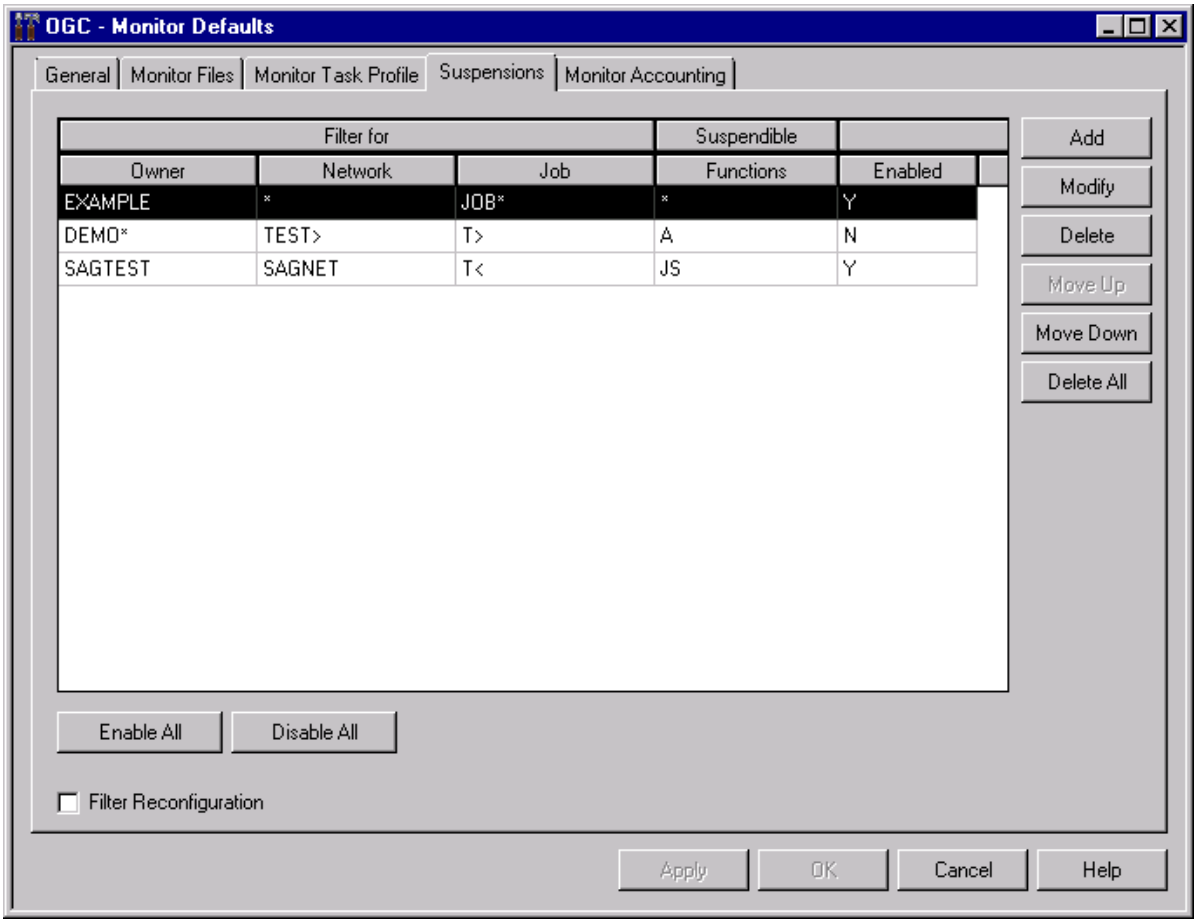
Defining Filters to Suspend Entire Operations Functions

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 In the **Monitor Defaults window**, open the tabbed page **Suspensions**:

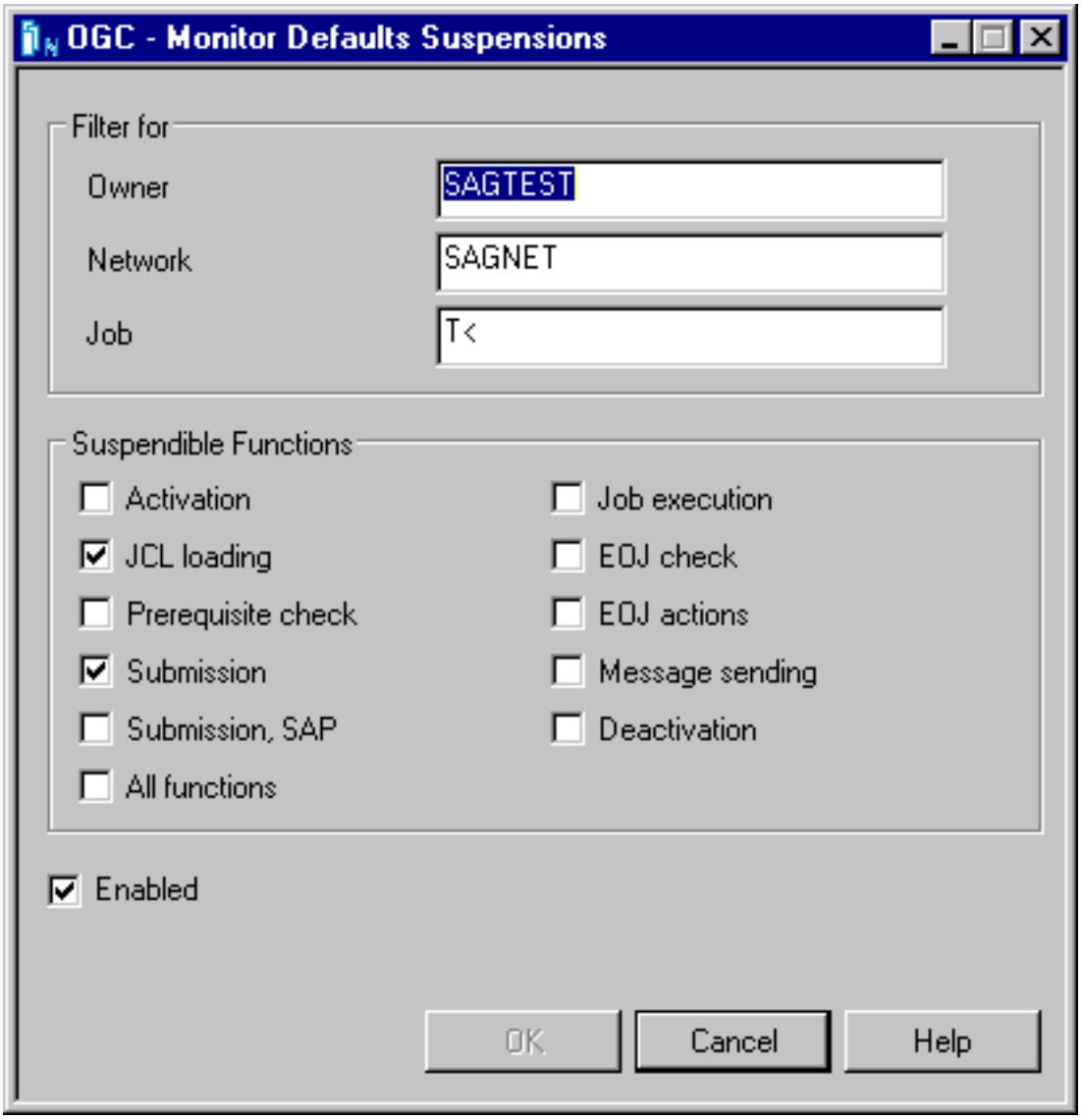


A table lists all suspensions defined in your environment (empty if no suspensions exist).

The columns are explained in *Fields and Columns: Monitor Defaults - Suspensions.*

2 Modify, move or delete a suspension by selected the required table row and choosing a function. All functions available are described in *Functions: Monitor Defaults - Suspensions*.

If you choose **Modify** or **Add**, a **Monitor Defaults Suspensions** window like the following opens:



3 Enter the required filter criteria, select the functions to be suspended and select the **Enabled** option, if required.

The input fields and options correspond to the columns on the **Suspensions** page. They are described in *Fields and Columns: Monitor Defaults - Suspensions.*

4 Choose **OK** when you are finished.

Functions: Monitor Defaults - Suspensions

The functions available on the **Suspensions page** are explained in the following table:

Function	Meaning
Add	Add a new suspension.
Modify	Modify the suspension selected in the table.
Delete	Delete the suspension selected in the table.
Move up	Move up one row in the table.
Move down	Move down one row in the table.
Delete All	Delete all suspensions listed in the table.
Enable All	Enable (activate) all suspensions listed in the table.
Disable All	Disable (deactivate) all suspensions listed in the table.

Fields and Columns: Monitor Defaults - Suspensions

The columns on the **Suspensions page** and the corresponding fields and options in the **Monitor Defaults Suspensions window** are explained in the following table:

Column/Field	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 column entries and corresponding selection options:	
	A	**Activation** Activate networks.
	J	**JCL loading** Load JCL.
	P	**Prerequisite check** Perform prerequisite checks.
	S	**Submission** Submit jobs.

Column/Field	Description	
	U	**Job execution** Execute jobs.
	E	**EOJ check** Perform End-of-Job checking.
	O	**EOJ actions** Perform End-of-Job actions.
	M	**Message sending** Send messages.
	D	**Deactivation** Deactivate networks.
	*	**All functions** Perform all functions.
	Enabled	Enable (activate) or disable (deactivate) the functions entered in **Suspendible Functions**. Possible column entries and corresponding selection options:
		Y **Enabled** option selected. Enable function.
		N **Enabled** option not selected. Disable function.
		You can use **Enable All** or **Disable All** from the **Suspensions** page to enable or disable all filters, respectively.
Filter Reconfiguration	Select this check box if you want the Monitor to immediately evaluate all enabled suspendible functions. If not selected (default), the defined suspensions are available for future evaluation.	

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.

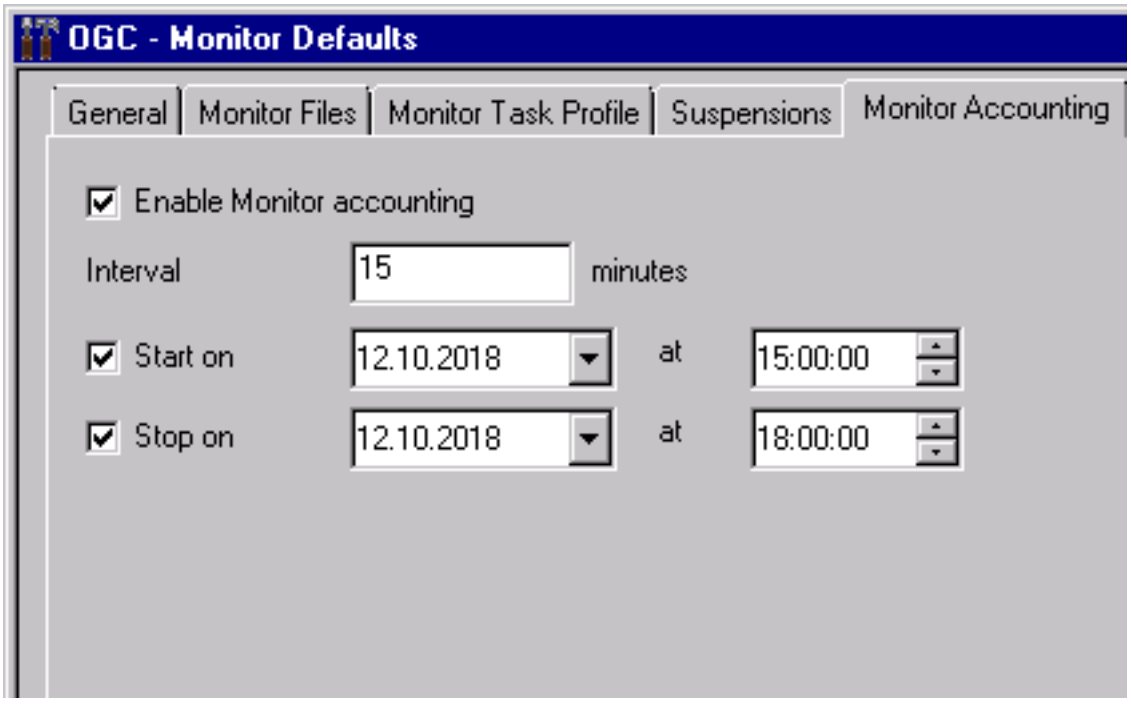
The data collected by Monitor accounting is written to the Entire Operations accounting file (see also ***Entire Operations Files***).

You can generate reports from Monitor accounting data by using the **Monitor Tasks** report types described in the *User's Guide* (see also *Example of Monitor Tasks and Functions Overview* and *Example of Monitor Tasks and Exits Overview*.

Enabling Monitor Accounting

To enable and disable Monitor accounting

1 In the **Monitor Defaults window**, open the tabbed page **Monitor Accounting**:



2 In the input fields, enter the required values and choose **OK** 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** page are explained in the following table:

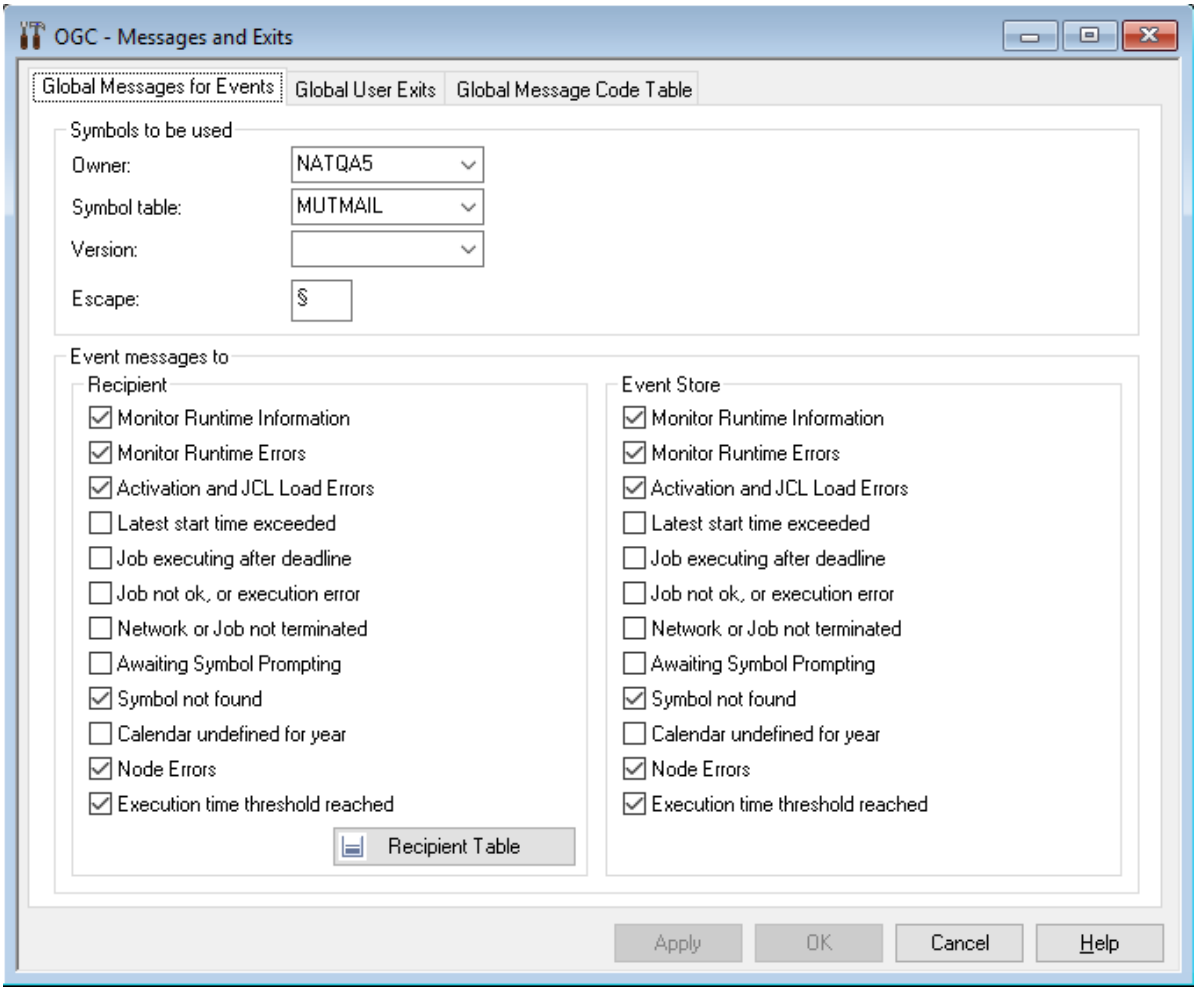
Field	Description	
Enable Monitor Accounting	Enable or disable Monitor accounting. Possible check-box settings:	
	checked	Enable Monitor accounting. Data collection starts immediately or on the date/time defined in **Start Accounting**.
	not checked	Disable Monitor accounting (default).
Interval	Time 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 this option is not selected (default), data collection starts immediately. (The date and time boxes always contain values, they cannot be cleared.)	
Stop Accounting	Date and time when Monitor accounting stops. If accounting is enabled and this option is not selected (default), data collection remains active until the **Enable Monitor Accounting** option is disabled. (The date and time boxes always contain values, they cannot be cleared.)	

9 Global Messages and Exits

To define messages and exits

1 In the object workspace, select the **Administration** metanode and choose **Messages and Exits** from the context menu.

A **Messages and Exits** window like the example below opens:

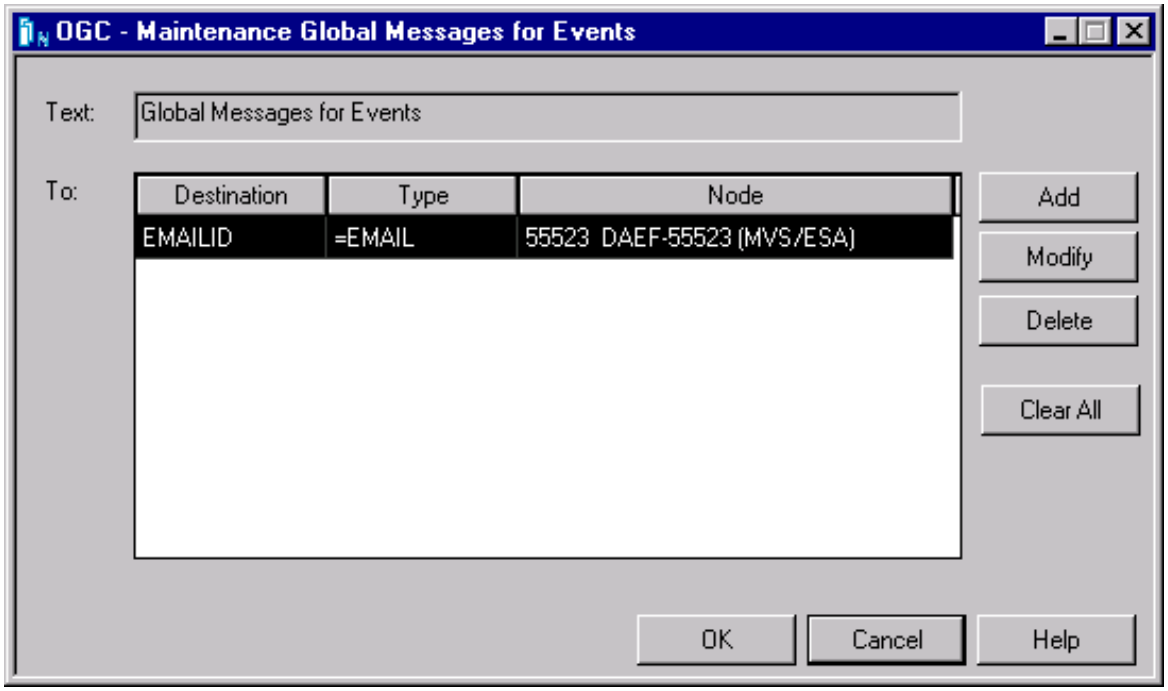


2 If you want to distribute a message among specified recipients:

- In the **Recipient** section on the tabbed page **Global Messages for Events**, check all events for which you want to send a message.

  The  icon of the **Recipient Table** button indicates that message recipients have already been defined for events. The  icon indicates that no recipient has yet been defined.

- Choose **Recipient Table**:



- Define all recipients for the selected events and choose **OK**.

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

  The functions provided in the window are explained in *Available Functions: Message and Message Recipients* in the section *Message Sending* in the *User's Guide*.

If you want to save a message in the event store of System Automation Tools:

- In the **Event Store** section on the tabbed page **Global Messages for Events**, check all events for which you want to save a message in the event store.

For further information, see ***Global Messages for Events***.

3 Make your specifications on the tabbed page **Global User Exits**.

For further information, see ***Global User Exits***.

4 Make your specifications on the tabbed page **Global Message Code Table**.

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

For further information, see ***Global Message Code Table***.

To export a global user exit

1 On the tabbed page **Global User Exits**, choose **Export**.

The **Export Objects** window opens.

2 Proceed as described in *Exporting Objects* in the *Import/Export Functions* documentation.

10 Global Messages for Events

The tabbed page **Global Messages for Events** of the **Messages and Exits** window is used to determine the message recipients for specified events.

Recipient Table

For all events checked in the **Recipient** section, a predefined message will always be sent to all message recipients defined in the **Recipient Table** 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** page.

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 checked in the **Event Store** section, 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** window, 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 select a name from a drop-down list box.

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 **Event message to** section of the **Global Messages for Events** window, 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 marking the check boxes next to the required events.

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*. ■ 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 *Defaults for Time Ranges* 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 on the **Scheduling Parameters** page (see the section *Schedule Maintenance* in the *User's Guide*).

11 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.

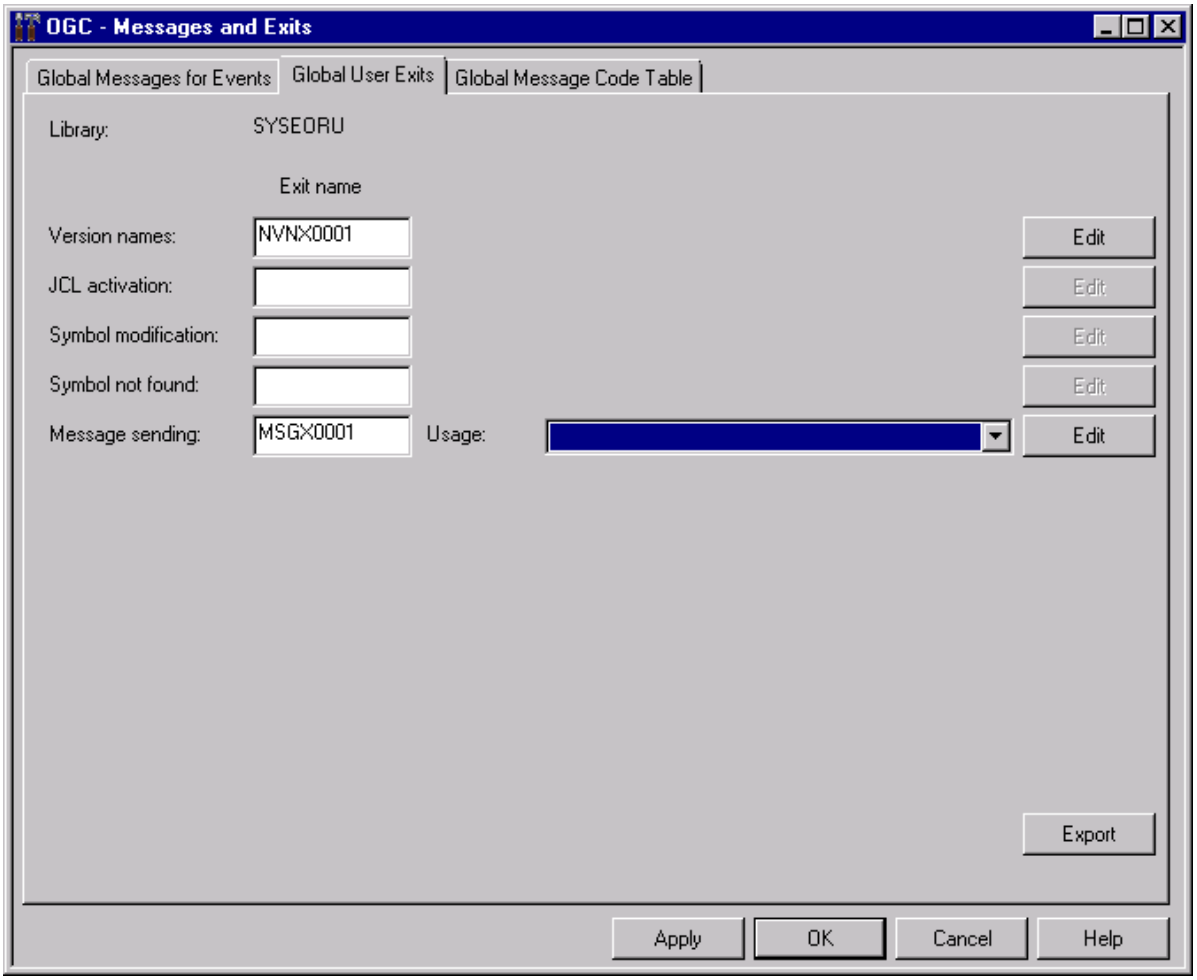
Related Topic:

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

Accessing Global User Exits

To access and maintain global user exits

1 In the **Messages and Exits window**, open the tabbed page **Global User Exits**:



2 Enter or change the required values.

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

3 If required, choose **Edit** next to the global user exit whose source you want to modify.

4 If required, choose **Export** to open the **Export Objects** window and export the current settings. See also *Exporting Current Settings* in the *Import/Export Functions* documentation.

5 When finished, choose **OK** to save your entries.

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**.	
Message Sending	Name of the user exit to be used as the **global message sending exit**.	
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 selection options:	
	Never use this exit	Never use this exit.
	Explicit sending via exit	Use for explicit sending via exit only (`=EXIT`).
	Additionally for all messages	Additionally, for all defined message send actions.
	For all events	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

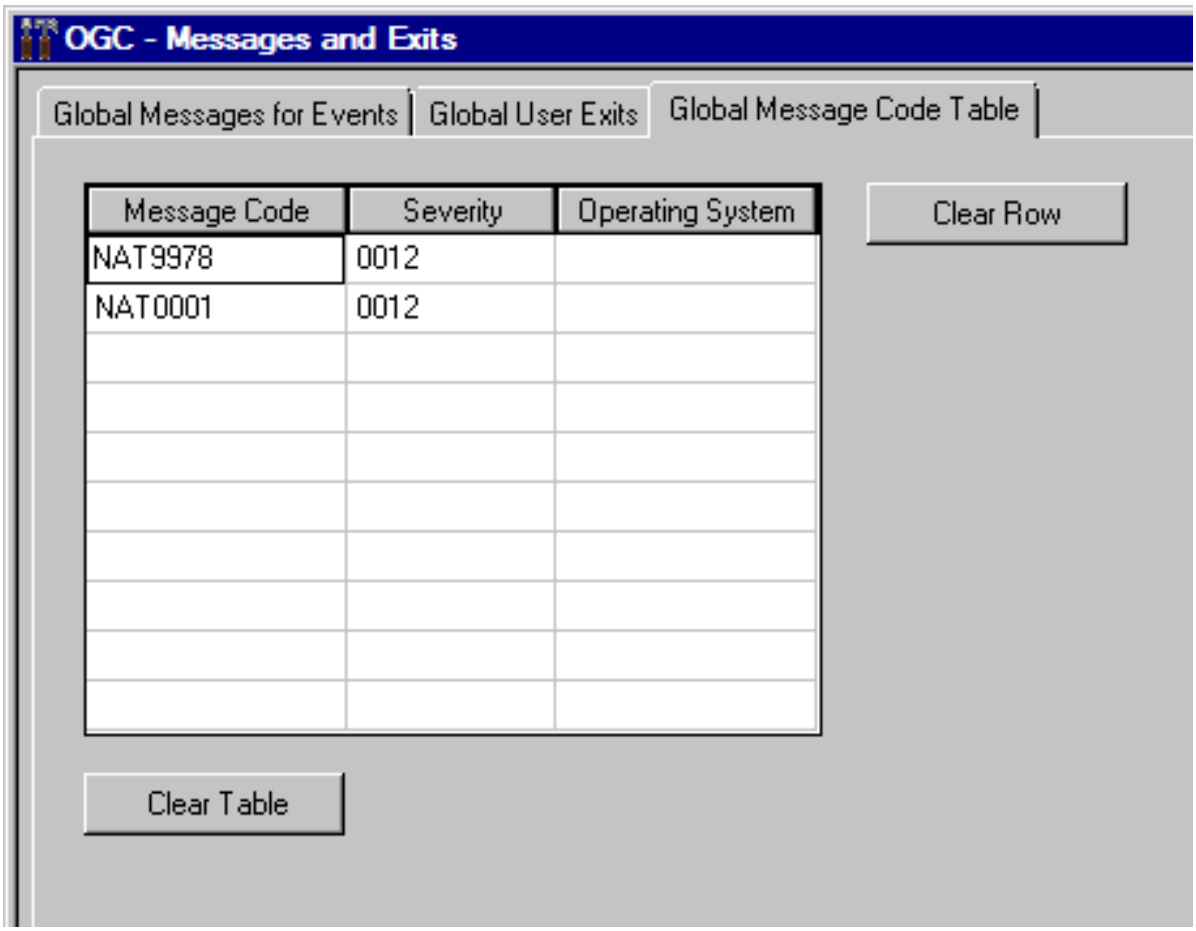
P-RC	Meaning
0	Exit execution was OK.
1	Temporary error. The Entire Operations Monitor should try to send the message through the exit later.
2	Permanent error. The Entire Operations Monitor should not try to send the message through the exit later.

12 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

- In the **Messages and Exits window**, open the tabbed page **Global Message Code Table**:



Columns: Global Message Code Table

The columns of the **Global Message Code Table page** 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 **Operating System Specials** page. For details, see ***Defaults for z/OS and z/VSE*** in the section ***Entire Operations Defaults***.	
Operating System	Operating system for which the message code is valid. Possible selection options:	
	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.

13 Resources

The maintenance functions provided for the **Resource Master** metanode 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*

Functions: Resource Master

To list all available functions for the Resource Master metanode

- In the object workspace, select the **Resource Master** metanode and open the context menu.

  The following functions are available:

Function	Shortcut	Description
List	F8	Open the **Resource Master List** window with a list of all available resources: see ***Listing Resources***.
New	CTRL+N	See ***Viewing, Adding and Modifying a Resource Master***.
Refresh	F5	See *Refreshing Object Lists* in the *User's Guide*.
Filter	F3	See *Filtering Objects* in the *User's Guide*.
Export	---	Open the **Export Objects** window to export all items of the metanode **Resource Master**: see *Exporting Objects* in the *Import/Export Functions* documentation.

Function	Shortcut	Description
Set Drag And Drop Function	--	See *Drag & Drop* in the *User's Guide*.

To list all available functions for a Resource Master instance

- In the object workspace, select a **Resource Master** instance and open the context menu.

  The following functions are available:

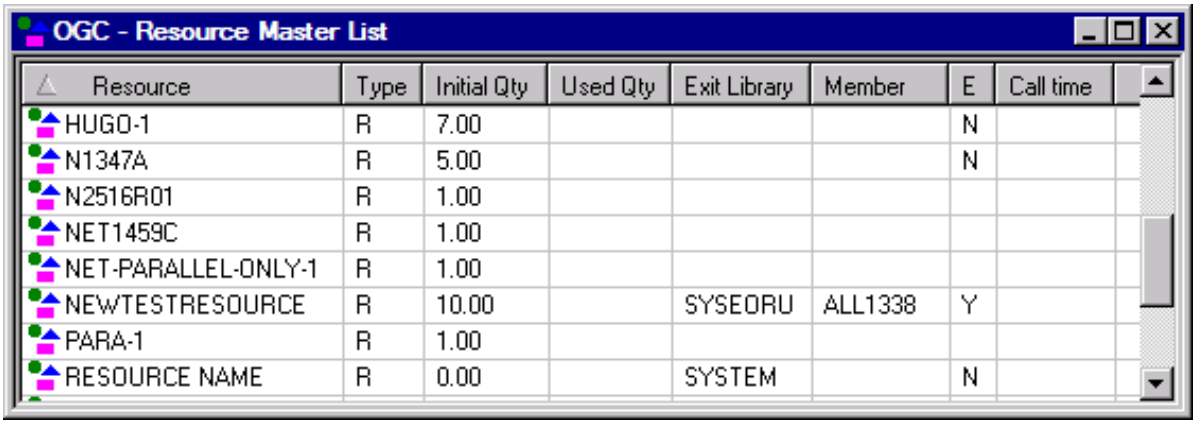
Function	Shortcut	Description
Open	CTRL+O	See ***Viewing, Adding and Modifying a Resource Master***.
Display	CTRL+D	See ***Viewing, Adding and Modifying a Resource Master***.
Where used	---	See ***Listing Jobs Defined for a Resource***.
Active Usage	---	See ***Listing Jobs Currently Using a Resource***.
Delete	DELETE	See ***Deleting a Resource Master***.
Export	---	Open the **Export Objects** window to export a user: see *Exporting Objects* in the *Import/Export Functions* documentation.
Add to Workplan	---	See *Add to Workplan*.
Set Drag And Drop Function	--	See *Drag & Drop* in the *User's Guide*.

Listing Resources

To list available resources

- In the object workspace, select the **Resource Master** metanode and choose **List** from the context menu, or press F8.

  A **Resource Master List** window like the example below opens:



Resource	Type	Initial Qty	Used Qty	Exit Library	Member	E	Call time
HUGO-1	R	7.00				N	
N1347A	R	5.00				N	
N2516R01	R	1.00					
NET1459C	R	1.00					
NET-PARALLEL-ONLY-1	R	1.00					
NEWTESTRESOURCE	R	10.00		SYSEORU	ALL1338	Y	
PARA-1	R	1.00					
RESOURCE NAME	R	0.00		SYSTEM		N	

The window 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 **Resource Master List window** are described in the following table:

Column	Meaning	
Resource	Name of the resource. This can reflect real resources or can describe a fictitious resource.	
Type	Type of the resource. Possible values:	
	U	Not reusable, quantitative.
	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 functions available for user exit usage are described in *Fields: Resource Definition* and *Functions: Resource Definition*.	
Member	Natural object of the resource determination user exit. The fields and functions available for user exit usage are described in *Fields: Resource Definition* and *Functions: Resource Definition*.	

Column	Meaning	
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*.	

Viewing, 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 view a resource master definition

1 In the object workspace, select a **Resource Master** instance.

2 From the context menu, choose **Display**, or press CTRL+D.

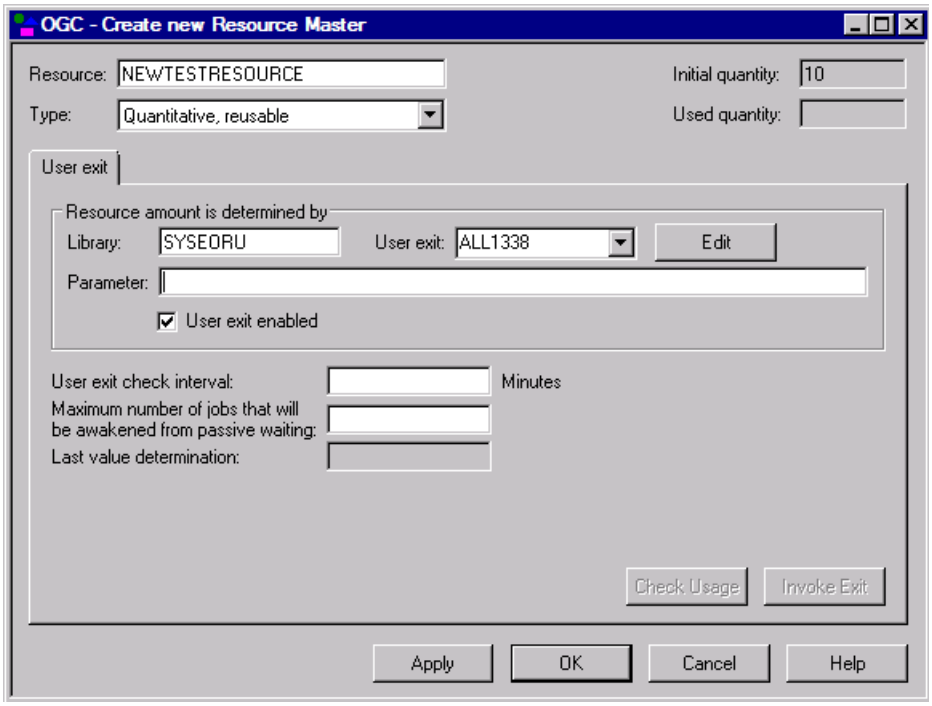
A **Display Resource Master** window opens. The read-only fields contained in the window correspond to the fields of the **Maintenance Resource Master** window. They are described in ***Fields: Resource Definition***.

To create a resource master

1 In the object workspace, select **Resource Master**.

2 From the context menu, choose **New**, or press CTRL+N.

A **Create new Resource Master** window like the example below opens:



3 Enter the required definitions.

The input fields available are described in *Fields: Resource Definition*.

For the functions available, see *Functions: Resource Definition*.

4 When you are finished, choose **OK**.

The resource master definition is saved.

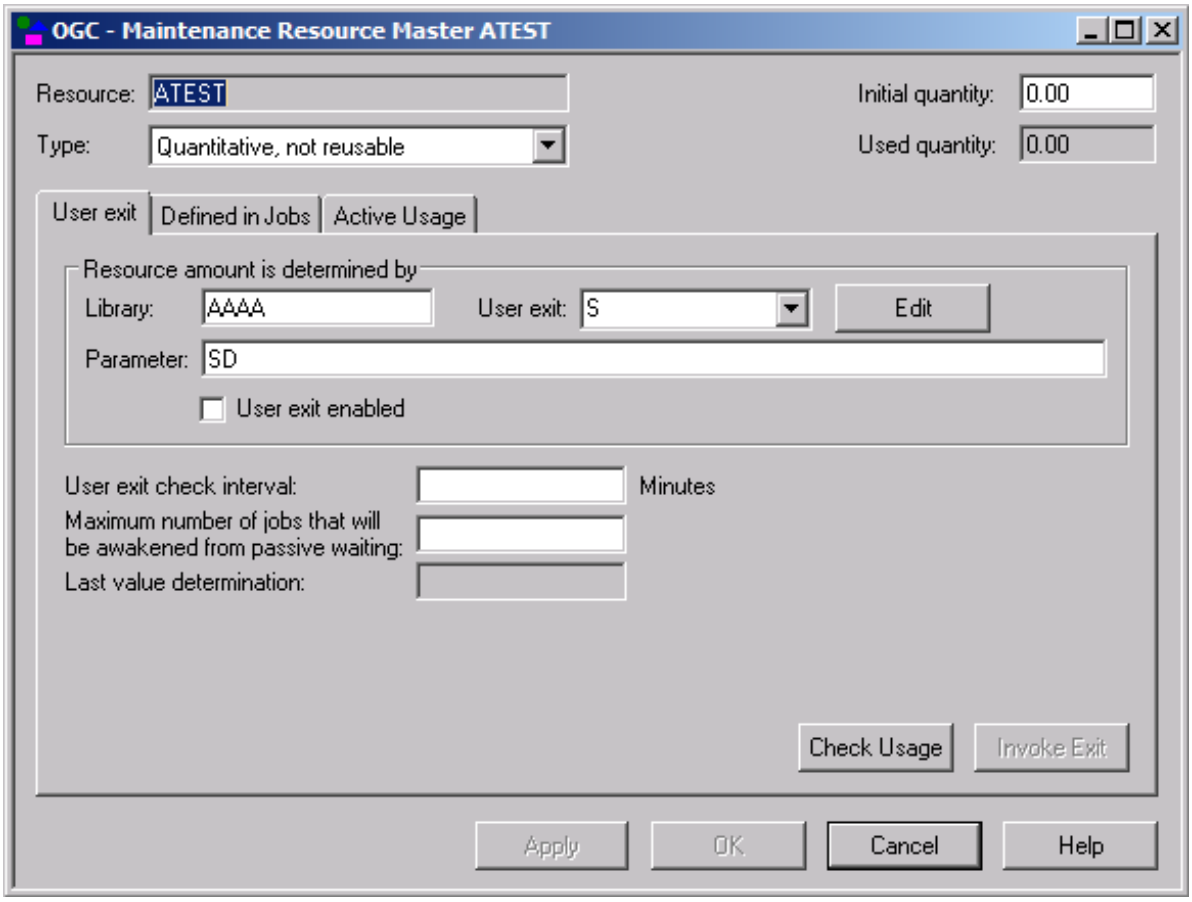
When you open the newly created resource in the **Maintenance Resource Master** window, the additional pages **Defined in Jobs** and **Active Usage** are available. They are described in *Listing Jobs Defined for a Resource* and *Listing Jobs Currently Using a Resource*, respectively.

To modify a resource master definition

1 In the object workspace, select a **Resource Master** instance.

2 From the context menu, choose **Open**, or press CTRL+O.

A **Maintenance Resource Master** window like the example below opens:



The fields contained in the window are explained in *Fields: Resource Definition*. The functions available are explained in *Functions: Resource Definition*.

Fields: Resource Definition

The fields in the **Display/Maintenance/Create new Resource Master** 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 selection options:	
	Quantitative, not reusable	Not reusable, quantitative. The amount of the resource (e.g., paper) used by a job is not released at job completion.

Field	Meaning	
	Quantitative, reusable	Reusable, quantitative. The amount of the resource (e.g., address space) used by a job is released at job completion.
	Not quantitative (binary)	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 **Quantitative, not reusable** and **Quantitative, reusable**. 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.	
User exit page:	The tabbed page **User exit** is used to define a determination user exit routine.	
User 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. 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.	
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`.	
User 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.	

Field	Meaning	
	Possible check box settings:	
	checked	Enables the user exit.
	unchecked	Disables the user exit.
User exit check interval	Minimum interval between two determinations of the resource. The overhead of resource determinations increases with smaller intervals.	
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*.	
Defined in Jobs page:	This page is not available in a **Create new Resource Master** window. The tabbed page **Defined in Jobs** shows a list of jobs in which the selected resource is defined as a prerequisite resource. See *Listing Jobs Defined for a Resource*.	
Active Usage page:	This page is not available in a **Create new Resource Master** window. The tabbed page **Active Usage** shows a list of active jobs which are currently using a resource. See *Listing Jobs Currently Using a Resource*.	

Functions: Resource Definition

The following functions are available on the **User exit** page of the **Maintenance Resource Master window**:

Function	Description
Edit	Edit the user exit.
Check Usage	Calculate 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.
Invoke Exit	**Invoke the 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

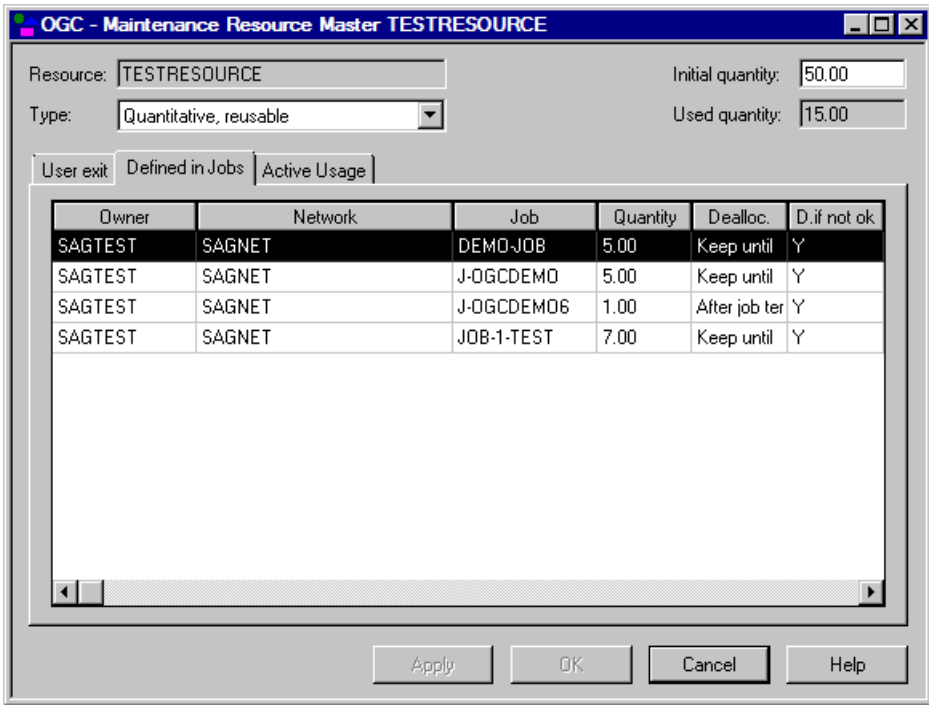
To view all jobs defined for a resource

- In the object workspace, select a **Resource Master** instance and choose **Where Used** from the context menu.

  Or:

  In the **Maintenance Resource Master** window, select the **Defined in Jobs** tab.

  A **Defined in Jobs** page like the example below opens:



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

  The fields and columns on the page 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 page** 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	
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

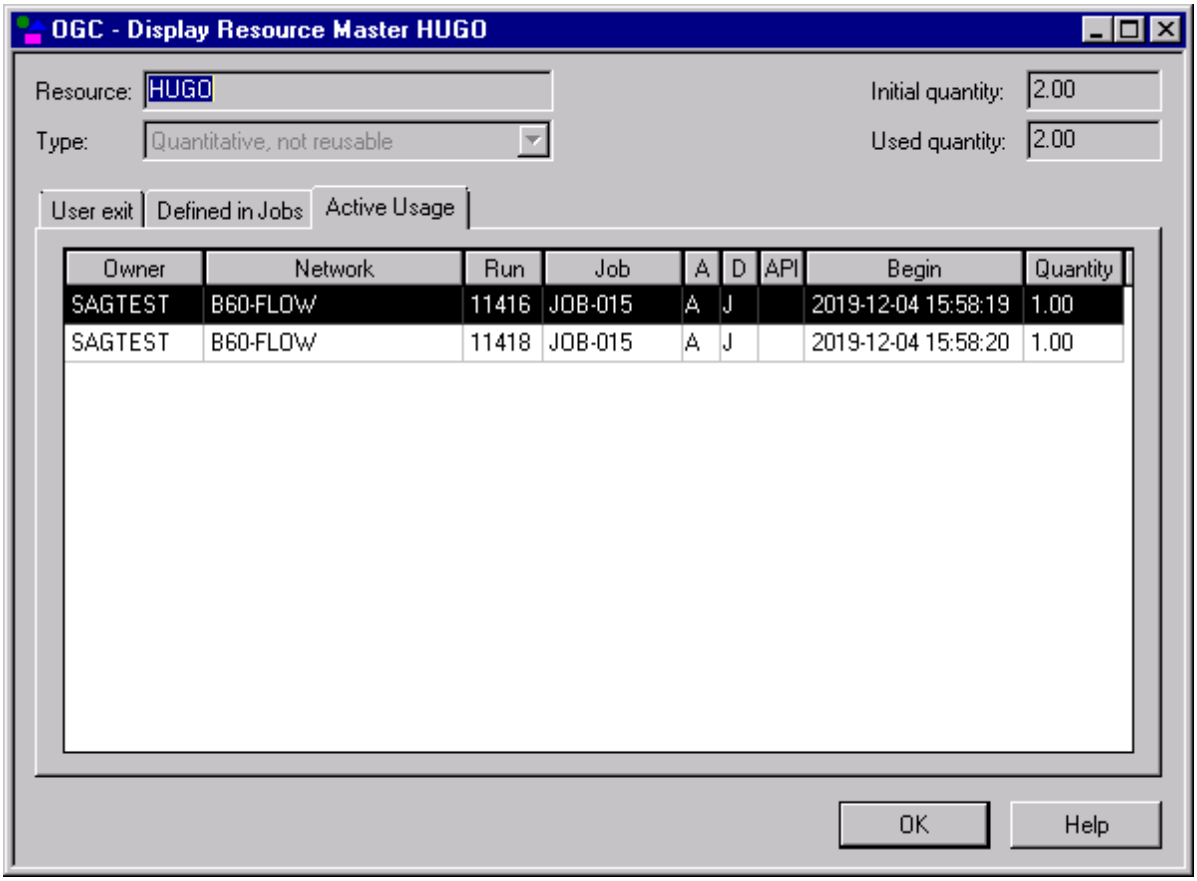
To view all active jobs using a resource

- In the object workspace, select a **Resource Master** instance and choose **Active Usage** from the context menu.

  Or:

  In the **Maintenance Resource Master** window, select the **Active Usage** tab.

  The **Active Usage** page of the **Display/Maintenance Resource Master** window like the example below opens:



This page shows a list of active jobs that use partial quantities of the resource.

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

This section covers the following topics:

- Fields and Columns: Active Resource Usage

Fields and Columns: Active Resource Usage

The fields and columns on the **Active Usage page** of the **Display/Maintenance Resource Master window** 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*).

Field/Column	Meaning
Used Quantity	Sum of all amounts of single usages of the resource.
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.

Deleting a resource master

To delete a resource master

1 In the object workspace, select a **Resource Master** instance.

2 Open the context menu and choose **Delete**, or press DELETE.

A confirmation window opens.

3 Choose **Yes** to confirm the deletion or **No** to cancel the action.

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.

14 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*

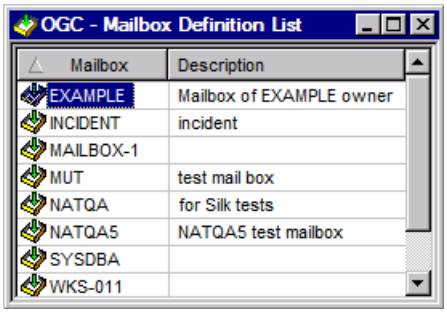
Listing Mailboxes defined to Entire Operations

To list mailboxes

1 In the object workspace, select the **Mailbox Definition** metanode.

2 Open the context menu and choose **List** or press F8.

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



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

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

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

Available Functions: Mailbox Definition

To list all available functions for the Mailbox Definition metanode

- In the object workspace, select the **Mailbox Definition** metanode and open the context menu.

  The following functions are available:

Function	Shortcut	Description
List	F8	Lists mailboxes: see *Listing Mailboxes defined to Entire Operations*.
New	CTRL+N	Defines a new mailbox: see *Adding or Modifying a Mailbox Definition*.
Refresh	F5	See *Refreshing Object Lists* in the *User's Guide*.
Filter	F3	See *Filtering Objects* in the *User's Guide*.
Export	---	See *Exporting Objects* in the *Import/Export Functions* documentation.
Set Drag And Drop Function	--	See *Drag & Drop* in the *User's Guide*.

To list all available functions for a Mailbox Definition instance

- Select a **Mailbox Definition** instance and open the context menu.

  The following functions are available:

Function	Shortcut	Description
Open	CTRL+O	Modifies a **mailbox definition**: see *Adding or Modifying a Mailbox Definition*.
Display	CTRL+D	Displays a **mailbox definition** see *Adding or Modifying a Mailbox Definition*.
Delete	DELETE	Deletes a mailbox definition. See also *Deleting a Mailbox Definition*.
Export	---	See *Exporting Objects* in the *Import/Export Functions* documentation.

Function	Shortcut	Description
Show Messages	---	See *Viewing Mailbox Messages* in the *User's Guide*.
Add to Workplan	---	See *Add to Workplan* in the *User's Guide*.
Set Drag And Drop Function	--	See *Drag & Drop* in the *User's Guide*.

Adding and Modifying Mailbox Definitions

To add a mailbox definition

1 In the object workspace, select the **Mailbox Definition** metanode.

2 Open the context menu and choose **New**, or press CTRL+N.

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

3 Define the mailbox as required: see ***Fields: Mailbox Definition***.

4 Choose **OK**.

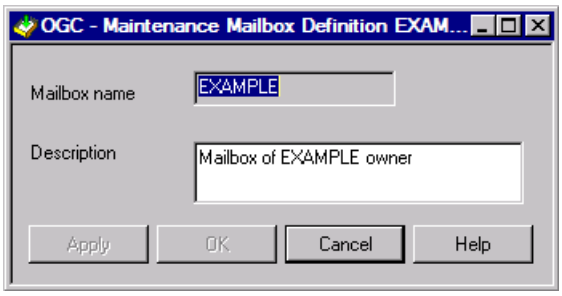
The changes are saved.

To modify a mailbox description

1 In the object workspace, select a **Mailbox Definition** instance.

2 Open the context menu and choose **Open**, or press CTRL+O.

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



3 Change the description of the mailbox as required: see ***Fields: Mailbox Definition***.

(You cannot modify the mailbox name.)

4 Choose **OK**.

The changes are saved.

Fields: Mailbox Definition

The fields contained in the **Maintenance/Create new 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 In the object workspace, select the **Mailbox Definition** instance you want to delete.

2 Open the context menu and choose **Delete**, or press DELETE.

A confirmation window opens.

3 Choose **Yes** to confirm the deletion or **No** to cancel the action.

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.

15 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

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:

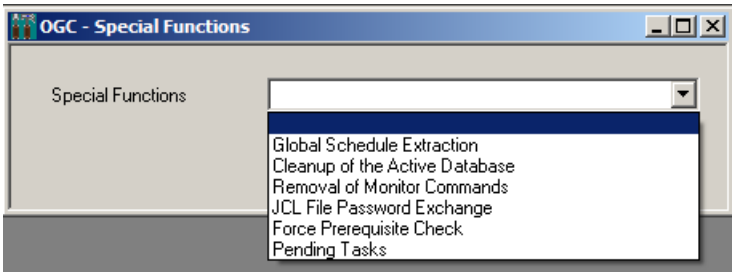
- Preparation of symbol tables for other networks;
- Activation of other networks;
- Condition setting;
- Any Entire System Server functions.

Accessing Special Functions

To access special functions

1 In the object workspace, select **Administration** and choose **Special Functions** from the context menu.

A **Special Functions** window like the example below opens.



2 Open the drop-down list box and select the required function.

3 Choose **OK**.

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

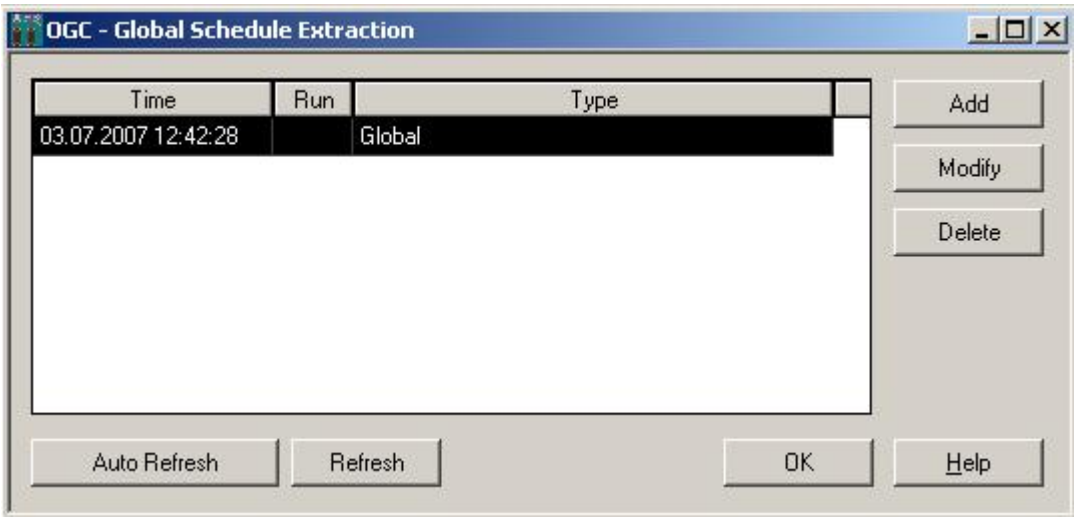
To add an extraction date and time for schedule extraction

1 In the object workspace, select **Administration**.

2 Invoke the context menu and select **Special Functions**.

3 From the **Special Functions** drop-down list box, select **Global Schedule Extraction**.

A **Global Schedule Extraction** window like the example below opens:



The columns are explained in *Columns/Fields: Global Schedule Extraction*.

4 Choose **Add**.

An **Add new Start time** window opens. The fields are explained in *Columns/Fields: Global Schedule Extraction*.

5 Select or enter the required date and time and choose **OK**.

The window closes, and the new start date and time are listed in the **Global Schedule Extraction** window.

To modify a date and time set for schedule extraction

1 In the **Global Schedule Extraction window**, select the row that contains the date and time you want to modify.

2 Choose **Modify**.

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

Deleting Dates and Times Set for Extraction

To delete a date and time set for schedule extraction

1 In the **Global Schedule Extraction window**, select the row that contains the date and time you want to delete.

2 Choose **Delete** and then **Yes** to confirm the deletion.

The window closes, and the selected date and time are removed from the **Global Schedule Extraction** window.

Columns/Fields: Global Schedule Extraction

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

Column/Fields	Meaning
Global Schedule Extraction window:	
Time	Date and time of activation extraction. See also *Date and Time Formats* in the *User's Guide*.
Status	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
Add new Start time window:	

Column/Fields	Meaning	
Date/Time	Date and time to be used for activation extraction. See also *Date and Time Formats* in the *User's Guide*.	
Modify Start time window:		
New start time/Old start time	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*.	
Keep predefined Job Time Frames	Adapt the job time frames. Possible check box settings:	
	unchecked	All job time frames are adapted (default).
	checked	Jobs with master time frame definitions are not adapted.

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 ***Defaults for Time Ranges***) 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 In the object workspace, select **Administration**.

2 Invoke the context menu and select **Special Functions**.

3 From the **Special Functions** drop-down list, select **Cleanup of the Active Database**.

4 Choose **OK** and then **Yes** to confirm the cleanup.

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 In the object workspace, select **Administration** and choose **Special Functions** from the context menu.

2 From the **Special Functions** drop-down list, select **Removal of Monitor Functions**.

3 Choose **OK** and then **Yes** to confirm the removal.

The Monitor functions are removed.

JCL File Password: Global Exchange

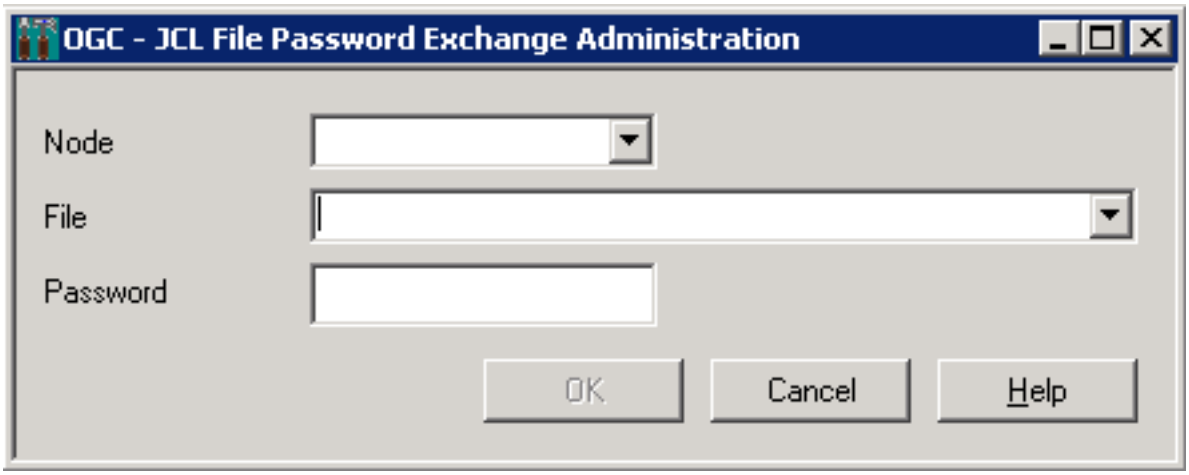
The **JCL File Password Exchange** function allows the system administrator to exchange the file password for all definitions of a given file. This function should be used after the modification of a file password on the operating system level.

To exchange the JCL file password

1 In the object workspace, select **Administration** and choose **Special Functions** from the context menu.

2 From the **Special Functions** drop-down list, select **JCL File Password Exchange** and choose **OK**.

A **JCL File Password Exchange** window like the example below opens:



3 Select the required node and file and enter a password. The input fields are explained in *Fields: JCL File Password Exchange Administration*.

4 Choose **OK** when you are finished.

The password is changed.

This section covers the following topics:

- Fields: JCL File Password Exchange Administration

Fields: JCL File Password Exchange Administration

Field	Meaning
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 In the object workspace, select **Administration** and choose **Special Functions** from the context menu.

2 From the **Special Functions** drop-down list, select **Force Prerequisite Check**.

3 Choose **OK** and then **Yes** to confirm the action.

The prerequisite check is performed.

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

1 In the object workspace, select **Administration** and choose **Special Functions** from the context menu.

2 From the **Special Functions** drop-down list, select **Pending Tasks**.

A **Pending Tasks** window opens.

All pending tasks are listed in the window. (The list is empty if no tasks are pending.)

The columns in the window are explained in *Columns: Pending Tasks*.

You can refresh the list by using the **Refresh** button.

3 Choose **OK**.

Columns: Pending Tasks

The columns of the **Pending Tasks** window 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.
Wait	Hours since the delete request is pending.	
File	File affected by the delete request.	

16 RPC Server Defaults

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

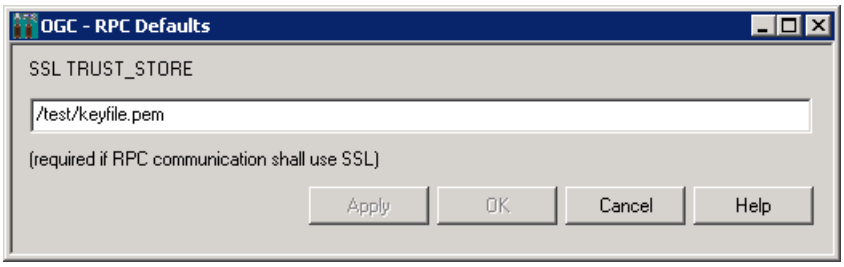
Defining RPC Server Defaults for SSL Communication

To define the SSL trust store file

1 In the object workspace, select the **Administration** metanode.

2 Open the context menu and select **Special Functions**.

An **RPC Defaults** window like the example below opens:



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

4 Choose **OK**.

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 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.

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.

17 Entire Operations Files

The **tabbed page System/Log files** of the **Entire Operations Defaults** window 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 tabbed page **System/Log files**:

Field	System File Description
NOP System File	Contains definitions required by Entire Operations (NOP).
SAT Log	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).