

Maintenance

This service is used to define and maintain the parameters and definitions that are required by Adabas System Coordinator.

- Maintenance Menu
- Maintain Job Parameters
- Maintain Daemon Groups

Maintenance Menu

▶ To display the Maintenance menu

- Select service 1 from the main menu.

Note:

The Current LFILE 152 Settings window may appear before the Maintenance menu. See the section System Settings for more information.

```

08:31:59          ***** A D A B A S SYSTEM COORDINATOR 7.4.2 ***** 2002-09-09
                   - Maintenance -                                     C11000M1

                   Code      Service
                   ----      -
                   1         Job Parameters
                   2         Daemon Group Parameters
                   .         Exit
                   ----      -
Code...: _

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit Refr                                     Add      Menu

```

From this menu, you can	Service	Cmd
maintain job parameter values	1	1.1
maintain daemon group parameter values	2	1.2

Maintain Job Parameters

This function is used to define/maintain job parameters for jobs that use Adabas System Coordinator services.

Note:

See section Parameters for a complete description of all job parameters.

Note:

Job parameters are shared between all installed optional products, and can be defined by any of the administration applications (SYSCOR, SYSAVI, SYSAFP, SYSATM).

- List Job Parameters
- Add a Job Parameter
- Maintain a Job Parameter

List Job Parameters**▶ To display a list of existing jobs**

1. Select service 1 from the Maintenance menu or enter the command 1 . 1 on the command line.

```

08:47:45          ***** A D A B A S SYSTEM COORDINATOR 7.4.2 ***** 2002-09-09
                  - Maintain Job Parameters List -                               C11000M1

                                                                 <-- Reposition -->
                                                                 Job Type:_____
                                                                 Name:_____

C Job Type      Job Name      SysCo      Cluster
_ Batch        *DEFAULT    Group Name Service Name
_ CICS Cluster DAEFCI18   PRODGRP    PRODCICS

Mark with (D)isplay, (M)odify, (P)urge, (R)ename, (C)opy, (O)verrides

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit Refr                               Add Prods Menu

```

Press PF11 to view the products for which a job parameter is currently defined. From the next screen you can press PF11 again to select a product in order to modify the parameters related to that product.

Press PF8 to move to the next page, or use the Reposition field to position anywhere within the list.

Add a Job Parameter**▶ To add a new job definition**

1. Press PF10 from the Maintain Job Parameters screen.

The following window will appear:

```

+-----+
! 09:24:13      Add      2003-05-16 !
!           Job Parameters C11110M1 !
! ! !
! Job Name: _____ !
! (D= Default for Job Type) !
! ! !
!   _      Batch      !
!   _      COM-LETE   !
!   _      CICS Cluster !
!   _      CICS       !
!   _      IMS/DC     !
!   _      UTM        !
!   _      TSO        !
!   _      CMS        !
!   _      TIAM       !
!   _      None above !
! Mark to Select a Job Type !
! ! !
! Command ==>        !
!   PF1 Help      PF3 Exit !
! ! !
+-----+

```

2. In the field Job Name, enter the name of the job to be added.

Note:

If you enter the value D in this field, a default job name will be assigned according to the job type defined for the job.

Note:

Default job definitions are not available for job type CICS Cluster.

3. Select a job type for the job from the list provided.

Each different job type has different characteristics and it is therefore important to select the correct type.

Note:

Select the job type "CICS" if CICS/MRO is to be used without dynamic transaction routing or for other CICS environments. Select the job type "CICS Cluster" if CICS/MRO is to be used with dynamic transaction routing.

If you mark the selection "None of the above", another selection window will appear with additional job types. If you need to use any of these, contact Software AG for advice.

4. After selecting a job type, press ENTER. In the following example, the job type "CICS Cluster" was selected which results in the following screen being displayed:

```

16:14:13          ***** A D A B A S SYSTEM COORDINATOR 7.4.2 *****          2002-09-09
                  - Add Job Parameters -                                     C11110M3

Runmode: Local                                         Session: Local

Job Type: CICS Cluster
Job Name.....: CICSP*_
                (D = Default for Job Type)
Estimated Client Sessions.....: 1000
Fixed Memory Pool Size (k).....: 256
Managed by Daemon.....: Y (Y/N)
  Daemon Group Name.....: PRODGRP
  Clustered Application Service Name.....: CICSPROD
  Daemon manages Terminal Sessions only..: X
  or manages All Sessions.....: _

Adabas Activity - Maximum Idle Times
  for Terminal Sessions.....: 3600          S (S/M/H/D)
  give response 9: Y (Y/N) up to: 0          seconds later
  for Background Sessions.....: _____

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
Help          Exit          Add          More          Menu

```

The initial parameter values set up for the new job are copied from those specified in the *DEFAULT entry for the selected job type. If no default entry exists for the job type, then product default values are used.

5. In the field Job Name, enter the name of the job.

A job name may contain one or more asterisks (*) to indicate a wild card. For example, the job parameter with the name CICS**PR will be found by any job with the value "CICS" in positions 1-4 and the value "PR" in positions 7-8, no matter what the characters are in positions 5-6. If an asterisk (*) is the last character in a job name, the remainder of positions in the name through the eighth are padded with asterisks.

Job parameters are always matched on type. The order of search within type is

1. Match on exact job name.
2. Match on wild card definitions.
3. Use the default for the job type, if one has been defined.

Note that the number of wild card job names defined for a job type has a direct effect on the number of Adabas commands needed to establish the job parameters at initialization. This is particularly relevant to batch jobs that process relatively few Adabas commands.

6. Enter/modify any of the following settings for the job:

Parameter	Description
Estimated Client Sessions	This parameter is used to determine initial memory pool size and frequency of user timeout checking. Note that the user memory pool takes the name of the defined Clustered Applications Service Name.
Fixed Memory Pool Size	<p>Fixed pools are created dynamically and extended by the supported optional products. Specify the initial size of fixed pools here. For batch jobs the minimum pool size is 32K. For all other job types it is 256K.</p> <p>Note: Pool sizes can be reviewed by using the Session Monitoring function. These parameters may need to be adjusted if pools frequently expand into secondary extents.</p>
Managed by Daemon Daemon Group Name Clustered Application Service Name: Daemon Managed Sessions	<p>Specify "Y" if this job is a clustered application which will be managed by a coordinator daemon</p> <p>If "Y" is specified in the field Managed by Daemon, the following fields must also be completed:</p> <ul style="list-style-type: none"> ● Daemon Group Name and Clustered Application Service Name. Specify the group and service name of the clustered application service that is to manage the job. These are required if you are defining a parameter for a job that is using dynamic transaction routing. You must specify the same group and service name for all jobs that are part of the same clustered application. The group that you specify must have been previously defined. ● Daemon Managed Sessions. Specify which sessions are to be managed by the Adabas System Coordinator group. This is required only for clustered applications. If non-terminal ("background") sessions do not participate in dynamic transaction routing it is not necessary for them to be managed by the coordinator group. Since, in some installations non-terminal sessions may be very frequent, it will be more efficient to exclude them.

Parameter	Description
Maximum Idle Times	<p>Specify a time limit, after which sessions are eligible for timeout termination if no activity has occurred. Sessions that are timed out will receive response code 9, subcode 79 if they are re-activated.</p> <p>If desired, the return of response code 9 can be limited to an elapsed time period, or it can be suppressed altogether:</p> <ul style="list-style-type: none"> ● To limit the time period for return of response 9, specify “Y” in the “give response 9 (Y/N) field, and a non-zero value in the “Up to seconds later” field. If a timed-out terminal re-activates, response 9 will only be returned if the re-activation occurs within the specified time period after the timeout. If this time period has elapsed the re-activation will be treated as a new session. ● To suppress the response 9 completely, specify “N” in the “give response 9 (Y/N)” field.

7. When you have entered all job parameter settings, press PF5 to save them. If required, additional optional command retry and debug settings can be entered by pressing PF10. The following screen will be displayed:

```

16:38:31                Job Parameters                2002-09-09
                        - Additional -                U1SCJAM1

                        Code  Service
                        ----  -
                        1    Command Retry
                        2    Debug Settings
                        .    Exit
                        ----  -
Code.....: _

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit                                Menu

```

Command Retry

```

12:04:32                               Additional Parameters                2002-09-09
                                         Retry Settings                    U1SCJEM1

      You may define automatic Adabas call retries for nominated
      response codes (and optionally, subcodes).
      For more details please press PF1.

Response  Subcode  Retries  Delay (Unit)  Dbid  Fnr  Console
   55      _____  20      15      sec      199  _____  -
_____  _____  _____  _____  _____  _____  _____  -
_____  _____  _____  _____  _____  _____  _____  -
_____  _____  _____  _____  _____  _____  _____  -

                                         PF1 Help   PF3 Exit   PF5 Upd

```

You can use this screen to define an automatic retry of Adabas commands that complete with a specified response and subcode. The command will be retried a specified number of times, until a zero response code is received. The calling application will received only the successful response.

Up to five response codes can be specified for a job. You can limit the number of retries to be attempted. You can also restrict the retry attempts to a specific data base and file number. You can specify a time delay between retries.

Enter "Y" in the Console Message column to get an operator message when a retry is attempted (the message is issued once only for each command retry).

In the above example, command retry is to be performed for response code 55, with a limit of 20 retrys, with a delay of 15 seconds between each retry, and retrys are only to be attempted for database 199.

Command Debug Settings

```

17:02:13                               Additional Parameters                2002-09-09
                                         Debug Settings                    U1SCJBM1

      Set debug event for
      Adabas Response Code : ____
      Or mark for any non-0: _
          Sub-code: _____
      Restrict to dbid: _____
          file number: _____

      Debug event action:
          Snap off: X
          Snap user memory: _
          Snap all users memory: _
          Mark One

                                         PF1 Help   PF3 Exit   PF5 Upd

```

This feature can be used to assist in diagnosing problems with Adabas commands by generating a memory snap dump.

In the field Set Debug Event, enter values to indicate whether the dump is to be taken for a specific Adabas response code or for all non-zero response codes, whether the dump is to be restricted to a specific subcode, database and/or file number.

In the field Debug Event Action, select whether memory is to be dumped for a single user or for all users.

Caution:

The Snap All Users Memory option will create a large amount of output and therefore should only be used at the request of Software AG support.

Maintain a Job Parameter

► To maintain a job parameter

- Select it by entering one of the following options in column C on the Maintain Job Parameters screen:

d	display
m	modify
p	purge
r	rename
c	copy

Display and modify will provide screens in which you can make modifications to the job parameters. See section Parameters for information on each parameter. For purge, rename, and copy, you are prompted to confirm the action to be taken.

Maintain Daemon Groups

This section describes how to add/maintain daemon groups.

Adabas System Coordinator daemon groups are used to manage clustered (multiregion or IBM Sysplex) applications.

The daemon group defines the types of applications to be managed and the Node IDs of the daemons (group members) that will manage those applications. One daemon must be active on each operating system image that hosts the application. Any application job can then be defined to this group using the Job Parameters function of SYSCOR, SYSAVI, SYSAFP, or SYSATM Online Services.

- Main Menu
- Adding a Daemon Group Definition

- Maintaining a Daemon Group Definition
- Defining SYSCO Files

Main Menu

▶ To invoke the daemon group maintenance menu

1. Select service 2 from the Maintenance menu or enter the command 1 . 2 on a command line.

```

09:20:09 ***** A D A B A S SYSTEM COORDINATOR 7.4.2 (I002) *****      2004-03-08
          - System Coordinator Groups -                                     C11200M1

Job Type:_____

          Cluster Facility
C Group Name  Type      SVC ID  Name      Members
_ PRODGRP    Sysplex  234    PRODCLS   0
_ TESTADD    Standard  111
Mark with D(isplay),M(odify),P(urge),R(ename),E(xpand),F(iles)

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit Refr                                     Add      Menu

```

The following information is provided on the System Coordinator Groups screen for each group:

Field	Description
C	<p>The following options are available:</p> <p>D: display group definition M: modify group definition P: purge group definition E: expand group definition F: work with group file definitions</p> <p>Use PF10 to add a new group definition.</p>

Adding a Daemon Group Definition

▶ to add a new daemon group definition

1. Press PF10 on the System Coordinator Group menu. The following screen will appear:

```

17:22:22                ***** Add *****                2002-09-09
                        - System Coordinator Group Member -    C11210M1

Job Type: _____

Group Name: _____          SVC ID: _____

System Type: _ Standard (Single-system images)
             (Mark one) _ Standard (Multi-system images)
                   _ Sysplex (IBM Parallel Sysplex)

Cluster Facility Name: _____
Automatic Pool Recovery: Y

Command ==>
                PF1 Help    PF3 Exit    PF5 Add

```

2. In the field Group Name, enter the name for the group.

The group name is used to control communication between Adabas System Coordinator daemon peers in an operating system cluster. For example, the daemons communicate using an XCF group with this name in an IBM parallel sysplex. This name must be specified in the job definition for Adabas options such as Adabas Fastpath or Adabas Vista.

3. In the field SVC ID, define the router (SVC) number that is used for communicating with the group (not applicable to BS2000 or z/VM systems).

This must be the same in all parts of a cluster.

4. In the fields System Type, specify whether the group is to coordinate:

- A single system image.
- Multiple system images without dynamic transaction routing. This is used to support coordinator daemons running Adabas Fastpath buffers across multiple system images. It does not support dynamic transaction routing across a Parallel Sysplex.
- Multiple system images with dynamic transaction routing, using an IBM Parallel Sysplex.

If you select system type "sysplex", you must provide the name of the cluster facility used to record the global client list. In an IBM Parallel Sysplex, this is the name of the cache structure in the coupling facility as defined in the installation process.

5. In the field Automatic Pool Recovery, select whether or not automatic pool recovery is to be activated. This feature is recommended in that it ensures that, should a Adabas System Coordinator daemon fail for any reason, existing client session will continue to operate. When the daemon is restarted, it will recover the user pools from the failing daemon.
6. If you are running under BS2000, specify the global common memory pool using the additional parameters that appear in the Add System Coordinator Group Member window.

Specify a name, virtual start address, and size for the pool.

The pool you specify is used for allocation of all shared user memory for clustered applications defined to this System Coordinator group.

Maintaining a Daemon Group Definition

▶ to maintain a daemon group member definition

1. On the System Coordinator Group menu, enter 'e' in the C column adjacent to an entry in the Group Name column. The following screen will appear:

```

11:19:05          ***** A D A B A S SYSTEM COORDINATOR 7.4.2 *****          2002-09-09
                  - System Coordinator Group Members -                          C11260M1

Job Type:_____

Group Name: PRODGRP          Cluster Facility Name: PRODCLS
SVC ID: 234                  Operating System      : Sysplex

Purge(P)   Member Job Name      Node ID
           SYSCO33              33
           SYSCO34              34
           SYSCO35              35

No records found for selection

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit Refr Upd                          Add      Menu
    
```

From this screen, you can

- purge a member by entering 'p' in the Purge column adjacent to the Member Job Name entry;
 - update the member entry by pressing PF5; or
 - add a new member entry by pressing either PF5 or PF10.
2. If you are adding a new group, you must add at least one member.

For each member, specify the following:

- Member Job Name: The name of the job or started task that will run the Adabas System Coordinator daemon (SYSCO).
- Node ID: The Adabas Node ID (target) used to identify the daemon to the network.

Defining SYSCO Files

A System Coordinator group provides a central file-store facility that can be used by Adabas options such as the Adabas Transaction Manager. If an Adabas option requires a SYSCO file to be defined, its documentation will give details of the requirement.

A SYSCO file is a logical collection of records which are stored in an Adabas file. The file can be defined on any Adabas database. A database that contains a system file for job parameters will probably be a suitable location for your SYSCO file, since high availability is likely to be a requirement. A single database file can contain just one SYSCO file.

▶ to add a new SYSCO file definition for a daemon group

1. To create a database file for use as a SYSCO file, run a standard ADALOD job, using input from the distribution tape. Sample job CORI050F can be edited according to site requirements, and used for this purpose.
2. On the System Coordinator Group menu, once you have defined your System Coordinator group, enter 'f' in the C column adjacent to the appropriate entry in the Group Name column. The following screen will appear:

```

10:02:10 ***** A D A B A S SYSTEM COORDINATOR 7.4.2 (I002) ***** 2004-03-08
                - System Coordinator File Definitions -                      C11270M1

Runmode: Local                               Session: Local

Group Name: CORGROUP

C   File Name  DB ID   Fnr    Description

Mark with D(isplay),M(odify),P(urge)
No records found for selection

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit  Refr                                Add      Menu

```

3. Press PF10 to add a SYSCO file definition for this group. The following window will appear:

```

10:05:23                Add File Definition                2004-03-08
                                                                C11270M2

Group Name: CORGROUP

File Name: _____ DB ID: _____ File Number: _____ SVC:

Description:

        Press PF5 to confirm

Command ==>

                                PF1 Help      PF3 Exit      PF5 Add
    
```

4. Enter values for the following parameters for the SYSCO file:

Parameter	Description
File Name	The logical name of the SYSCO file. This name identifies the ownership and purpose of the SYSCO file. Therefore it must exactly match the name given in the documentation of the Adabas option that requires this file.
DB ID	The ID of the database that contains the SYSCO file.
File Number	The number of the SYSCO file.
SVC	The number of the Adabas SVC that is used by the database which contains the SYSCO file. This parameter is only needed for z/OS and VSE systems.
Description	Free-format text describing the SYSCO file.

5. When you have entered the parameter settings, press PF5 to save them.
6. The SYSCO file is now ready for use. You might need to restart any software component that will rely on the newly defined file.

 **to maintain a SYSCO file definition**

1. On the System Coordinator Group menu, enter ‘f’ in the C column adjacent to an entry in the Group Name column. The following screen will appear:

```

10:22:02      ***** A D A B A S SYSTEM COORDINATOR 7.4.2 (I002) *****      2004-03-08
                - System Coordinator File Definitions -                               C11270M1

Runmode: Local                                     Session: Local

Group Name: CORGROUP

C   File Name  DB ID   Fnr     Description
_   ATMMTR     135     175     ATM MIGRATED TRANSACTION RECOR  <== End of List

Mark with D(isplay),M(odify),P(urge)

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help           Exit  Refr                               Add           Menu

```

From this screen, you can

- display a file definition by entering ‘d’ in the C column adjacent to the File Name entry;
 - modify a file definition by entering ‘m’ in the C column adjacent to the File Name entry;
 - purge a file definition by entering ‘p’ in the C column adjacent to the File Name entry;
 - add a new file definition by pressing PF10.
2. If you choose to display or modify a file definition, you will see a window of the same format as when you first defined the file. If you are modifying the definition, you must press PF5 after making your changes, to save them.