

Scheduling a Job

This subsection covers the following topics:

- Defining Scheduling Parameters at the Job Level
- Time Frames
- Field Descriptions: Scheduling Parameters
- Special PF Keys: Scheduling Parameters
- Sending a Late Message to One or More Users
- Job Accounting Data
- Field Descriptions: Date / Run Number Selection
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Defining Scheduling Parameters at the Job Level

► To define scheduling parameters at the job level

1. Type **S** in the line command input field of the selected job in the Job Maintenance screen.
2. Press Enter.

The Scheduling Parameters window opens:

```

15.11.01          *** Entire Operations 4.1.1 ***          09:53:18
Owner REQUEST          Job Maintenance          Network P-126551N2
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
!
!                               Scheduling Parameters          !
!   Job J-2                               !
!
!
!   Estimated Elapsed Time ==> _____ Min.   Average ==>   0.03   !
!   History Elapsed Time  ==>   0.03   0.03   0.03   0.03   0.03   !
!
!
!   Earliest Start Time   ==> 11:00:00  ___ days later          !
!   Latest Start Time     ==> 10:59:00  3__ days later          !
!   Deadline Time         ==> 10:59:00  4__ days later          !
!
!   Schedule Dependency   ==> N                               !
!
!   ---PF1---PF3-----PF5-----PF9---PF10---PF11---PF12--- !
!   Help  End          Save          LMsg  Acct  ScDep  Menu    !
+-----+-----+-----+-----+-----+-----+-----+
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Add  End          Save          Up    Down          Menu

```

If scheduling parameters for an existing job are already defined, they appear in this window and you can modify them for the job. When defining a new schedule, some default values are already displayed. You can override them by overtyping them here.

Time Frames

Time frames defined on the job level override time frame definitions made on the network level for this job. If no time frames are defined here, the job network defaults apply.

Note:

If this function is invoked for an active job, the time frames contain the complete calculated date and time. Both can be modified.

Field Descriptions: Scheduling Parameters

You can define the following parameters:

Field	Description
Estimated Elapsed Time	The expected total running time for the job. If not specified explicitly , this value is derived from the average running time of previous runs of the same job, displayed in the field directly below. If, for a dummy job , this value is not equal to zero (# 0), then the dummy job is executed for exactly this amount of time. This enables you to perform time simulations, etc. Special value: For NET-type jobs, 999999 can be specified. In this case, all start times after that are set to the ending times in the sub-network.
Average	Average running time computed from 5 previous runs (see next field History Elapsed Time).
History Elapsed Time	Shows real running times of previous runs of the job. The average running time of all previous runs is used to compute the probable time the job will finish.
Earliest Start Time	The job will not be started before this time. See the subsection Time Frames above. Use "days later", if the earliest start time is more than 1 day later than the network start time.
Latest Start Time	The job will not be started after this time. See the subsection Time Frames above. If this time precedes the earliest start time, and "days later" is null, "days later" is set to 1 so this time follows the earliest start time.
Deadline Time	The job should be finished before this time. If the job cannot be finished before this time, it is not submitted. See the subsection Time Frames above. Dummy jobs with Estimated Elapsed Time not equal to zero (# 0) are finished at this time at the latest. If this time precedes the earliest start time, and "days later" is null, "days later" is set to 1 so this time follows the earliest start time.
days later	You can use this field for Earliest Start, Latest Start and Deadline to define a time span lasting longer than 24 hours. Note: If Latest Start or Deadline is before the Earliest Start and their "days later" fields are empty, the "days later" value of Earliest Start (or the following day, if necessary) is used for the Latest Start and Deadline "days later" fields, by default whichever is closer to and after the Earliest Start. Note: If Latest Start or Deadline is before the Earliest Start, the same time on the following day is assumed by default.
Schedule Dependency	A Y here indicates that this job has a schedule dependency. To define schedule dependency, press PF11(ScDep). For more information, see the subsection Defining Schedule Dependency for a Job.

Notes:

The behavior for schedule times is:

1. If Latest or Deadline *both* time and "days later" are empty, global defaults are applied.
 2. If Latest or Deadline time is given and "days later" is empty, "days later" is automatically filled as described above.
 3. If applying any of above rules, and the Latest Start Deadline 'days later' becomes greater than 999, it remains empty and an error message is issued.
- Press PF5 (Save) to save the job scheduling parameters.
 - Press PF3 (End) to return to the Job Maintenance screen.

Special PF Keys: Scheduling Parameters

You can perform the following functions from the Scheduling Parameters window using these PF keys:

Key	Name	Function
PF9	LMsg	Send late message. Define users to be informed, if the job was not executed in the defined time range.
PF10	Acct	Job Accounting. Display job accounting data for the job.
PF11	ScDep	Schedule-dependent activation. Define days on which the job is to be replaced by a DUMMY job.

Sending a Late Message to One or More Users

▶ **To send a message informing one or more users that the job could not be submitted**

- Press PF9 (LMsg).

A window opens in which you can define message destinations.

The functionality of message receiver tables is described here.

Job Accounting Data

▶ **To display job accounting history from the Scheduling Parameters window**

- Press PF10 (Acct).

A window opens displaying the time and run number interval:

```

15.11.01          *** Entire Operations 4.1.1 ***          15:59:20
Owner SN          Job Maintenance          Network BIG-1
+-----+-----+-----+-----+-----+-----+-----+-----+
!
!                      Scheduling Parameters          !
! Job JOB-014          !                               !2
!                               Tape Drives ==> ____ !1
!                               !                               !1
! Estimated Elapsed Time ==> _____ Min.   Average ==>   7.00 !1
! History Elapsed Time  ==>   2.00   12.00          !
!                               !                               !1
!                               !                               !2
! Earliest +-----+-----+-----+-----+-----+-----+ !1
! Latest St !                               !                               !1
! Deadline ! Owner SN Network BIG-1 Job JOB-014          !
!                               Date / Run Number Selection !
! Schedule !                               !                               !
! From Date 15.11.01  00:00   to 15.11.01  16:00          !
! ---PF1---P ! From Run 1_____ to 99999          !12-- !
! Help E !                               !nu !g
+-----+-----+-----+-----+-----+-----+
Enter-PF1---PF +-----+-----+-----+-----+-----+1---PF12---
Help Add End Save Up Down Menu
    
```

The default interval is the current date from midnight until the present time.

Field Descriptions: Date / Run Number Selection

The input fields of the Date / Run Number Selection window are described in the following table:

Field	Description
From Date	Enter the date and time from which to display accounting data.
to	Enter the date and time until which to display accounting data.
From Run ... to	Enter the range of run numbers for which to display accounting data.

- Enter dates, times and run numbers and press Enter. The following screen appears:

```

15.11.01          *** Entire Operations 4.1.1 ***          10:56:18
Owner  SN                Job Accounting Data                Network DEMO-NET
-----
Job      Run  JobId  Date      Start      Stop      Elapsed min CPU Time sec
JOB1     748  1450  10.10.01  10:00:09   10:00:09   0.01      0.01
          749  1783                12:00:30   12:00:31   0.01      0.01
          750  1005                14:00:22   14:00:23   0.01      0.01
          752  1867  10.10.01  12:00:16   12:00:16   0.01      0.01
          757  3975  04.11.01  10:00:06   10:00:06   0.01      0.01
          758  4314                12:00:17   12:00:18   0.01      0.01
          759  4679                14:00:09   14:00:10   0.01      0.01
          765  4085  10.11.01  14:08:57   14:08:57   0.01      0.01

          -----
Averages from 10.10.01 10:00 to 10.11.01 14:08 are          0.01      0.01
***** Bottom of Data *****
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          End                Up      Down

```

The Job Accounting Data screen contains job execution time information collected by the **Entire Operations Monitor**. The job elapsed time is in minutes and the CPU time is in seconds. Average values are available at the bottom of the screen.

This function is also available for job networks.

Column Headings: Job Accounting Data

For explanation of the column headings on the Job Accounting Data screen, see the subsection Column Headings: Job Accounting Data in the section Reporting.

Note:

BS2000/OSD

Since the BS2000/OSD LOGOFF message does not contain seconds, the elapsed time cannot be calculated exactly.