

# Monitor - Server

This subsection covers the following topics:

- Entire Operations Monitor Functions
  - Two Modes of Monitor Operation
  - Distribute Monitor Functions to Subtasks
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## Entire Operations Monitor Functions

The Entire Operations Monitor activates and processes job networks according to their scheduled dates and times. This includes the following functions:

- Activation of scheduled job networks;
- Check of prerequisites to job submission (input conditions and resources);
- Job submission;
- End-of-job checking and actions;
- Logging of all events.

## Two Modes of Monitor Operation

- Subtask(-s)
- Batch Task

In technical terms, there are two ways of running the Monitor: as one or several subtask(s) or as a batch task.

### Subtask(-s)

The Monitor can be run as one or several subtask(s) of an Entire System Server task in OS/390 or VSE/ESA operating systems.

The JCL of the Entire System Server task (XCOM node) must be extended to meet the needs of the Monitor. The XCOM parameters must also be extended. The REGION assignment for the Entire System Server task must be large enough to contain the Monitor. For more details, see the section Installation and Customization on Mainframe Platforms in the Entire Operations Installation Documentation.

The advantages of this method are:

- all Entire System Server calls of the Monitor against its host node are handled locally, without any inter-PROCESS communication, and
- Entire System Server and the Entire Operations Monitor share the same address space.

### Batch Task

The Monitor can be run as **its own batch task** in BS2000/OSD.

The Monitor can run as any normal batch job. The functions it provides in this mode are the same as when it runs as an Entire System Server subtask. However, as a batch task, the Monitor requires that the operating system server node must be active all the time it is active itself.

From an implementation point of view, the Entire Operations Monitor is a special user within Entire Operations. The difference is that the Monitor is not driven by any terminal input but by its own processing rules.

The system administrator can define a time interval between Monitor **cycles**. At the beginning of a cycle, the Monitor "wakes up" and checks the Entire Operations work queues, performing any necessary actions such as submitting jobs and end-of-job analysis. The time between cycles depends on the number of jobs defined to the system and the average job run time. The shorter the **wait time**, the shorter the interval between job termination and its end-of-job analysis. The price for this is increased overhead due to Monitor reactivation.

## **Distribute Monitor Functions to Subtasks**

The individual functions that the Entire Operations Monitor performs can be distributed to several subtasks. This subtasking allows processes to run in parallel and increases performance. Monitor functions can be distributed to subtasks under OS/390, VSE/ESA ,BS2000/OSD and UNIX.

For information on how the usual Monitor functions can be distributed, see the subsection Monitor Task Profile in the section System Administrator Services of the Entire Operations Administration Documentation.