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Subject: Methods for reducing data access and loading time from the
CD-ROM subsystem.

ABSTRACT

The following provides methods for reducing the data access and loading times from the PlayStation CD-ROM subsystem.

Many quick-loading games implement the methods described.

From the experience of technical support activity in R&D division in SCE Tokyo, it can be assumed that the loading time will be less than 10 seconds by applying method(s) below.

METHODS FOR REDUCING DATA ACCESS AND LOADING TIME

1. Reduction of data access time

- a) Perform background reading.
Make assumption of the data area to be read in and start background reading before actual data usage.
- b) Process all necessary CdSearchFile() at the beginning.
Process all CdSearchFile() calls at the beginning and create a table that holds the information obtained.

CdSearchFile() function is used to obtain file location and size information. Calling this function upon each file read will result in long loading time.

2. Reduction of data loading time

- a) Minimize the number of seek commands.
In case of reading two or more files, put them contiguously on the disc and read them with only a single seek command.
- b) Compress Data.
The amount of the data that should be read from CD can be reduced by compressing the data.
- c) Read in double-speed and do not stop rotation.
Needless to say, read data in double-speed and NEVER stop rotation (never issue a STOP command).