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Identification

Dedicated Resource usage metering
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Purpose

Section B0.1.05 describes the method for metering the usage of dedicated resources other than those which belong to the file system. These resources are not shared, by definition, and so it is sufficient to meter the number of seconds they have been dedicated to a particular process, to account for their use.

Method

General dedicated resource usage figures are sent to accounting in the form of calls from the Reserver when the devices are assigned to or unassigned from a process. Page faults are permitted at this time and the metering is done entirely in the Account Data Segment for the process which attaches the resource.

When the reserver allocates a resource to a proces, it calls accounting as follows:

```
call signon_resource (resource_name);
```

resource_name is the registry file name of the resource (e.g., "37KSR/G00157"). It is a character string of up to 31 characters.

This call

1. Searches the resource name table in the Account Data Segment being charged by this process for resource name. If an entry does not already exist for this resource, the table is extended and one is created.
2. Sets the corresponding entry in the resource price table to a price determined by a call to the system pricing routine as follows:

```
call getprice("dedicated", resource_name, userid,
processid);
```

3. Sets the resource clock to the current time, the resource meter to zero, and the resource flag to "ON" for this resource. These items are all entries in the Accounting Data Segment entry for the resource.
4. Returns

Every time that update accounting (B0.4.02) is called, the number of seconds connected is computed for all resources with the resource flag "on". This number is added to the resource meter; the resource clock is then set to the current time.

When the process releases the resource, the reserver will make the call to accounting

```
call signoff_resource (resource_name);
```

This call will do final metering and charging for the resource, and then set the resource flag "off".