CA IDMS - 19.0
Task Analyzer Reports

Date: 16-Jan-2018
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# Table of Contents

**Task Analyzer System Output** ................................................................. 9

CA IDMS Task Analyzer Reports .................................................................. 10

About CA IDMS Task Analyzer Billing Reports .......................................... 10
  Tying Task Activity to an ID and a Time .................................................. 11
  Three Reports One Set of CA IDMS Log or SMF File Statistics .................. 11
  Hierarchical Nature of Reports ............................................................... 11
  Overview of Billing Reports ..................................................................... 11

CA IDMS Task Analyzer Billing Details Report .......................................... 11
  Report Fields .......................................................................................... 12

CA IDMS Task Analyzer Billing Summary Report ...................................... 14
  Report Fields .......................................................................................... 15

CA IDMS Task Analyzer Billing System Summary Report .......................... 17
  Report Fields .......................................................................................... 18

About CA IDMS Task Analyzer Program Reports ...................................... 20
  Three Reports One Set of CA IDMS Log or SMF File Statistics .................. 20
  Hierarchical Nature of Reports ............................................................... 20
  Overview of Program Reports .................................................................. 20

CA IDMS Task Analyzer Program Details Report ....................................... 21
  Report Fields .......................................................................................... 21

CA IDMS Task Analyzer Program Summary Report ................................... 24
  Report Fields .......................................................................................... 25

CA IDMS Task Analyzer Program System Summary Report ....................... 27
  Report Fields .......................................................................................... 28

About CA IDMS Task Analyzer CA ADS Reports ....................................... 30
  Three Reports One Set of CA IDMS Log or SMF File Statistics .................. 30
  Hierarchical Nature of Reports ............................................................... 31
  Overview of CA ADS Reports .................................................................. 31

CA IDMS Task Analyzer CA ADS Details Report ....................................... 31
  Report Fields .......................................................................................... 31

CA IDMS Task Analyzer CA ADS Summary Report ................................... 34
  Report Fields .......................................................................................... 34

CA IDMS Task Analyzer CA ADS System Summary Report ....................... 37
  Report Fields .......................................................................................... 37

About CA IDMS Task Analyzer Abend Report ......................................... 39
  Tying Abend Activity to an ID and a Time ............................................... 40
CA IDMS Task Analyzer Parameters ................................................................. 60
  Parameters and Their Uses ........................................................................... 61
  Order of Parameter Statements .................................................................. 61
  Maximum Number of Reports Possible Per Execution .................................. 62
  Billing Report Parameters .......................................................................... 62
    How RTYPE, RUNAME, and NAME Parameters Interrelate ....................... 65
  Program Report Parameter .......................................................................... 66
  CA ADS Report Parameters ......................................................................... 68
  Abend Report Parameters .......................................................................... 71
  Program Loads Report Parameters ............................................................ 74
  Integrated Index Report Parameters .......................................................... 76
  Ranking Report Parameters ........................................................................ 79
Task Analyzer Reports

CA IDMS Task Analyzer produces seven major types of log reports, including:
Billing Reports -- Three Billing Reports relate CA IDMS/DC statistics to users. The CA IDMS Task Analyzer Billing Reports contain statistics from the CA IDMS Log (or optionally under z/OS, the SMF File) to assist your analysis of system resource use. Depending on the parameters you select, CA IDMS/DC task activity can be tied to a specific operator, terminal, task code, or group for CA IDMS/DC, CICS, z/VM, or batch transactions.

- Billing Details Report
- Billing Summary Report
- Billing System Summary Report

Program Reports -- Three Program Reports contain statistics from the CA IDMS Log (or optionally under z/OS, the SMF File) providing both detailed and summarized information on system and application programs. These reports provide statistics on terminal reads, writes, and errors; storage acquired, allocated, and kept; and scratch and queue usage.

- Program Details Report
- Program Summary Report
- Program System Summary Report

CA ADS Reports -- Three CA ADS Reports contain statistics from the CA IDMS Log (or optionally under z/OS, the SMF File) both detailed and summarized information on CA ADS dialogs. These reports provide statistics on dialog commands, processes, pageable map use, link levels, and record buffer blocks.

- CA ADS Detail Report
- CA ADS Summary Report
- CA ADS System Summary Report

Abend Report -- The Abend Report contains statistics from the CA IDMS Log (or optionally under z/OS, the SMF File) displaying tasks that abend under CA IDMS. Information on tasks that abend includes: the CA IDMS abend code, message number, and severity code.

- Abend Report

Program Loads Report -- The Program Loads Report contains statistics from the CA IDMS Log (or optionally under z/OS, the SMF File), and lists by task the primary program and all secondary programs called. Both the primary program and secondary programs are identified by name, version, and type; secondary programs are further identified by program, map, table, and subschema. The number of times each secondary program is called during each execution of the task is also presented.

- Program Loads Report
Integrated Index Report -- Three Integrated Index Reports contain statistics from the CA IDMS Log (or optionally under z/OS, the SMF File) providing detailed and summarized information showing how the execution of CA ADS dialogs affects your current integrated index structure. Unlike the other CA IDMS Task Analyzer reports, the Integrated Index Reports provide information on database activity. The reports show how programs and CA ADS dialogs affect and use integrated indexes.

- Integrated Index Details Report
- Integrated Index Summary Report
- Integrated Index System Summary Report

Ranking Report -- The Ranking Report arranges statistics from the CA IDMS Log (or optionally under z/OS, the SMF File) to compare how your CA IDMS/DC tasks are using your system resources.

- Ranking Report

Input Parameter Report -- Generated dynamically, the Input Parameter Report lists all the parameters you supplied as well as any processing messages.

Task Analyzer System Output

For more information, see the following topics:
- CA IDMS Task Analyzer Reports (see page 10)
- About CA IDMS Task Analyzer Billing Reports (see page 10)
- CA IDMS Task Analyzer Billing Details Report (see page 11)
- CA IDMS Task Analyzer Billing Summary Report (see page 14)
- CA IDMS Task Analyzer Billing System Summary Report (see page 17)
- About CA IDMS Task Analyzer Program Reports (see page 20)
- CA IDMS Task Analyzer Program Details Report (see page 21)
- CA IDMS Task Analyzer Program Summary Report (see page 24)
- CA IDMS Task Analyzer Program System Summary Report (see page 27)
- About CA IDMS Task Analyzer CA ADS Reports (see page 30)
- CA IDMS Task Analyzer CA ADS Details Report (see page 31)
- CA IDMS Task Analyzer CA ADS Summary Report (see page 34)
- CA IDMS Task Analyzer CA ADS System Summary Report (see page 37)
- About CA IDMS Task Analyzer Abend Report (see page 39)
- CA IDMS Task Analyzer Abend Report (see page 40)
- About CA IDMS Task Analyzer Program Loads Report (see page 42)
- CA IDMS Task Analyzer Program Loads Report (see page 43)
- About CA IDMS Task Analyzer Integrated Index Reports (see page 47)
- CA IDMS Task Analyzer Integrated Index Details Report (see page 48)
- CA IDMS Task Analyzer Integrated Index Summary Report (see page 51)
CA IDMS Task Analyzer Reports

CA IDMS Task Analyzer produces seven types of log reports and an input parameter report. Use this section as a general reference to CA IDMS Task Analyzer reports and as a preview of them for selecting parameters.

- Billing
- Program
- CA ADS
- Abend
- Program Loads
- Integrated Index
- Ranking

CA IDMS Task Analyzer also produces an Input Parameter Report that lists all parameters input and processed and also presents a list of all messages that were generated during execution.

About CA IDMS Task Analyzer Billing Reports

Contents

- Tying Task Activity to an ID and a Time (see page 11)
- Three Reports One Set of CA IDMS Log or SMF File Statistics (see page 11)
- Hierarchical Nature of Reports (see page 11)
- Overview of Billing Reports (see page 11)

The Billing Reports use information from the CA IDMS Log (or, optionally under z/OS, the SMF file) to produce both detailed and summarized report statistics. CA IDMS Task Analyzer Billing Reports can serve as supplements to building an effective billing system in your environment. You will get this report by specifying REPORT = BILL on the report parameter statement.
Tying Task Activity to an ID and a Time

Depending on the parameters you choose, task activity can be tied to a specific user, a group of users, a terminal, or a task code. For CA IDMS/DC tasks, the data reported under the headings OPER-ID, TERM-ID, or TASK CODE comes from the CA IDMS Log (or, optionally under z/OS, the SMF file). For CICS tasks, this information is taken from the External Request Element (ERE) Extension; the information is available only if GSISVCX was installed.

The CA IDMS Task Analyzer Billing Reports present this information within the framework of the time interval you select. Task totals are shown; they are also reflected as a ratio of the system totals (that is, the percentage of all time units, system resources, and CA IDMS resources consumed during the specified time interval).

Three Reports One Set of CA IDMS Log or SMF File Statistics

Physically, there are three Billing Reports to choose from. However, it is important to understand that each report is produced from the statistics that are found on the CA IDMS Log (or, optionally under z/OS, the SMF file). Statistics in the reports are presented in various formats and at two levels of summarization. The Billing Report is available at the detail, summary, and system summary levels.

Hierarchical Nature of Reports

Billing Reports are produced on a hierarchical level: If you ask for the lowest level report (LEVL = DET), you will also receive the higher-level reports. These would include the Billing Summary Report, which summarizes the data of the Billing Details Report (LEVL = SUM), and also the Billing System Summary Report (LEVL = SYS).

Overview of Billing Reports

- Billing Details Report -- presents detailed information for each task, reported in start time sequence. Depending on the parameter combination selected, this report allows you to identify task activity by operator ID, terminal ID, task code, group ID, or for all tasks.

- Billing Summary -- records the sum of all tasks invoked by an operator ID, terminal ID, task code, or group ID within the time interval you selected.

- Billing System Summary -- presents a sum of all Billing Summaries within the time interval you selected.

CA IDMS Task Analyzer Billing Details Report

Contents

- Report Fields (see page 12)
The CA IDMS Task Analyzer Billing Details Report presents a detailed view of the activity of each task activity reported in time sequence, based on the parameters selected. Depending on the parameter combination you select, this report allows you to identify task activity by operator ID, terminal ID, task code, group ID, or for all tasks.

Detailed information on CA ADS dialogs is presented within separate reports. For more information, see the Overview of CA ADS Reports.

You will get the Billing Details Report only if you specify LEVL = DET. In addition, with this specification, you will receive the Billing Summary Report and the Billing System Summary Report.

Report Fields

Here is a description of the various fields that make up the CA IDMS Task Analyzer Billing Details Report. The following Billing Details Report screen shows two possible types of Billing Details Reports CA IDMS Task Analyzer will generate.

REPORT TITLE -- The title line of this report varies depending on what you select on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date and time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

VARIABLE COLUMNS -- These two columns vary in content. Any combination of OPER-ID, TERM-ID, or TASK CODE can appear in the first two columns. (RUNAME types that do not appear in the REPORT TITLE will appear in these two columns.)

TASK INFORMATION

- NUMBER -- Number of the task within the date and time interval selected.
- VER -- Version of the task. Multiple versions of a task are reported separately.
- TY -- Type of task performed, indicating the language of the program the task invokes.
  - A: Assembler
  - C: COBOL
  - N: CA ADS
  - P: PL/1
  - F: Fortran
• **OR** -- Origin of the task. The operating system or environment where execution of the task originated.
  
  - **D**: CA IDMS/DC
  - **C**: CICS
  - **V**: z/VM
  - **B**: batch

• **START DATE-TIME** -- The start date and time of the task being reported.

• **C C** -- Condition code for CA IDMS. If the task abends while running under CA IDMS, an "X" appears on the report under "C C". If the task does not abend while running under CA IDMS, the "C C" column is blank.

**TOTAL TIME**

• **WALL CLOCK** -- The total elapsed real time, in seconds, reported to the nearest 1/10,000 second.

• **WAIT** -- Wait time, in seconds, reported to the nearest 1/10,000 second; this is the total idle time during the processing of the reported task, when no CPU time is used by either CA IDMS or the programs that make up the task.

• **SYSTEM** -- System time, in seconds, reported to the nearest 1/10,000 second; this is CPU time used by CA IDMS to process the reported task.

• **USER** -- User time, in seconds, reported to the nearest 1/10,000 second; this is CPU time used by the user's programs that make up the reported task.

• **TOTAL CPU** -- Total CPU time used by the task, in seconds, reported to the nearest 1/10,000 second.

**TOTAL I/O** -- Total number of database input/output operations performed by the programs that make up the reported task.

**TOTAL DB CALLS** -- Total number of DML verbs executed: this is the total number of calls issued to the database by programs that make up the reported task.

**TOTAL STOR ALLOC** -- Total amount of storage (in bytes) allocated for the reported task.

**TOTAL TERM I/O** -- Total number of terminal input/output operations performed by the programs that make up the reported task.

**CV NUMBER** -- The number of the CV that the statistics on this report apply to.

**PLAN ID** -- The statistics plan ID that the statistics on this report apply to.
CA IDMS Task Analyzer Billing Summary Report

Contents
- Report Fields (see page 15)

The CA IDMS Task Analyzer Billing Summary Report summarizes all tasks executed for an operator ID, terminal ID, task code, or group ID within the time interval you select. It is a summary of information from the CA IDMS Task Analyzer Billing Details Report.

You will get this report if you specify LEVL = SUM (or if you specify LEVL = DET). In addition to the Billing Summary Report, you will also receive the Billing System Summary Report.

When you look at the Billing Summary Report, focus on the % OF SYSTEM OCCURRENCES in the last column, as shown in the example in Billing Summary Report screen. These statistics reveal trends on the use of your CA IDMS/DC environment. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.
Report Fields

Here is an explanation of the fields that make up the CA IDMS Task Analyzer Billing Summary Report.

**REPORT TITLE** -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

**ACTUAL INTERVAL** -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

**SUMMARY FOR TASK CODE** -- Task code identification information; this includes task name, origin of execution, and version number. Multiple versions of a task are reported separately; tasks with multiple origins of execution are also reported separately.

**TOTAL RUN UNITS** -- The total number of occurrences of the reported task (within the time interval selected).

**TOTAL ABENDS** -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

**SYSTEM RESOURCES** -- as reported within the Billing Details Report.

- **WALL CLOCK TIME** -- The total elapsed real time, in seconds, reported to the nearest 1/10,000 second.

- **CPU TIME** -- Total CPU time used by the task, in seconds, reported to the nearest 1/10,000 second; this is the sum of SYSTEM time and USER time.

- **SYSTEM TIME** -- System time, in seconds, reported to the nearest 1/10,000 second; this is CPU time used by CA IDMS to process the reported task.

- **USER TIME** -- User time, reported to the nearest 1/10,000 second; this is CPU time used by the user's programs to perform the reported task.

- **WAIT TIME** -- Wait time, in seconds, reported to the nearest 1/10,000 second; this is the total idle time during the processing of the reported task, when no CPU time is used by either CA IDMS or the programs that make up the task.

- **I/O** -- Total number of database input/output operations performed by the programs that make up the reported task.

- **DATABASE CALLS** -- Total number of DML verbs executed: this is the total number of calls issued to the database by programs that make up the reported task.

- **STORAGE ALLOCATED** -- Total amount of storage allocated (in bytes) for the reported task.
- **TERMINAL I/O** -- Total number of terminal input/output operations performed by the programs that make up the reported task.

**HIGH VALUE** -- The highest value for each of the SYSTEM RESOURCES (depending upon the line) for the reported task.

**TASK CODE** -- The task code of the task with the highest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUM** -- Task number; this is the version number of the task with the highest value of the SYSTEM RESOURCES.

**LOW VALUE** -- The lowest value for each of the SYSTEM RESOURCES for the reported task.

**TASK CODE** -- The task code of the task with the lowest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUM** -- Task number; this is the version number of the task with the lowest value of the SYSTEM RESOURCES.

**MEAN VALUE** -- Average value per task occurrence within the reported SYSTEM RESOURCES.

**ACCUM VALUE** -- Total value for all task occurrences for the SYSTEM RESOURCES (depending upon the line) within the reported time interval.

**% OF SYSTEM OCCURRENCES** -- This ratio (expressed as a percentage) is the accumulated value for this task against the accumulated value for all system tasks within the reported time interval. This ratio highlights the tasks that are consuming the largest amount of system resources.

**SUMMARY FOR ALL TASKS** -- When the task has two or more versions or origins of execution, or both, a SUMMARY FOR ALL TASKS is produced. The summary lists high, low, mean, and accumulated values, as well as percent of system occurrences, for all tasks as identified by version and origin of execution.

<table>
<thead>
<tr>
<th>ID</th>
<th>TASK ANALYZER</th>
<th>RELEASE</th>
<th>DATE</th>
<th>CA-IDMS TIME</th>
<th>BILLING REPORT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>/yy</td>
<td>/yy hh:mm:ss</td>
<td>/yy hh:mm:ss</td>
<td>/yy hh:mm:ss</td>
<td>/yy hh:mm:ss</td>
<td>/yy hh:mm:ss</td>
<td>/yy hh:mm:ss</td>
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</tbody>
</table>

**SUMMARY FOR ALL TASKS**

<table>
<thead>
<tr>
<th>REQUESTED</th>
<th>ACTUAL</th>
</tr>
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<tbody>
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<td>mm/dd/yy</td>
<td>hh/mm - mm</td>
</tr>
<tr>
<td>mm/dd/yy</td>
<td>hh/mm - mm</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>TASK</th>
<th>MEAN</th>
<th>ACCUM</th>
<th>% OF SYSTEM</th>
<th>TASK</th>
<th>LOW</th>
<th>TASK</th>
<th>NUMBER</th>
<th>VALUE</th>
<th>OCCURRENCE</th>
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</tbody>
</table>

**SUMMARY FOR TASK CODE** SGSJARPT ORIGIN BTRCH VERSION 0

| TOTAL RUN UNITS | 1 |
| TOTAL ABENDS | 0 |
| WALL CLOCK TIME | 21.3424 |
| CPU TIME | 2.5037 |

| 2072 | 21.3424 | SGSJARPT | 2072 | 21.3424 | SGSJARPT |
| 2072 | 2.5037 | SGSJARPT | 2072 | 2.5037 | SGSJARPT |
The CA IDMS Task Analyzer Billing System Summary Report presents a sum-total of all Billing Summaries within the time interval you select. All statistical categories are reported within run-unit origin: CA IDMS/DC, CICS, z/vm, and BATCH; or ALL. The report shows actual accumulated values for RUN UNITS, ABENDS, and SYSTEM RESOURCES and presents the percentage that each value is of total system resources.

You will get this report by specifying LEVL = SYS. (This report will also be created if you specify LEVL = DET or LEVL = SUM.)
When you review this report, focus on % of SYSTEM OCCURRENCES in the last column, as shown in System Summary Report screen. These statistics reveal trends on the use of your CA IDMS/DC environment. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.

Report Fields

Here is a description of the various fields that make up the System Summary Report.

REPORT TITLE -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

SUMMARY FOR ALL TASKS -- This line indicates that a summarization of statistics follows.

TOTAL RUN UNITS -- The total number of run-units performed by programs that make up the reported task (within the time interval selected).

TOTAL ABENDS -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

SYSTEM RESOURCES: The CA IDMS/DC statistics are reported. For more information on the CA IDMS/DC statistics, see the CA IDMS Task Analyzer Billing Details Report.

- WALL CLOCK TIME
- CPU TIME
- SYSTEM TIME
- USER TIME
- WAIT TIME
- I/O
- DATABASE CALLS
- STORAGE ALLOCATED
- TERMINAL I/O

HIGH VALUE -- The highest value for each of the SYSTEM RESOURCES (depending upon the line) for the reported task.
**CA IDMS - 19.0**

**TASK CODE** -- The ID of the task with the highest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUM** -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

**LOW VALUE** -- The lowest value for each of the SYSTEM RESOURCES for the reported task.

**TASK CODE** -- The ID of the task with the lowest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUM** -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

**MEAN VALUE** -- Average value per program occurrence within the reported SYSTEM RESOURCES.

**ACCUM VALUE** -- Total value for all program occurrences for the SYSTEM RESOURCES (depending upon the line) within the reported time interval.

**% OF SYSTEM OCCURRENCES** -- This ratio (expressed as a percentage) is the accumulated value for this program against the accumulated value for all selected programs active within the reported time interval. This ratio highlights the programs that are consuming the largest amount of system resources.

<table>
<thead>
<tr>
<th>ID</th>
<th>TASK ANALYZER</th>
<th>RELEASE</th>
<th>DATE</th>
<th>CA-IDMS</th>
<th>TIME</th>
<th>SYSTEM SUMMARY REPORT</th>
<th>PAGE</th>
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<tr>
<td>/ /dd/yy</td>
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<td>BILLING SUMMARY</td>
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</tbody>
</table>

**SUMMARY FOR ALL TASKS**

**TOTAL RUN UNITS**

<table>
<thead>
<tr>
<th>TASK</th>
<th>MEAN TASK</th>
<th>HIGH TASK</th>
<th>ACCUM TASK</th>
<th>% OF SYSTEM OCCURRENCE</th>
</tr>
</thead>
</table>

**TOTAL ABENDS**

| WALL CLOCK TIME | 21.9847 | CMPCARLA | 3139 | 7.3436 | KENNIRPT |
| CPU TIME | 15.673564 | 172.4092 | 2.6 |
| SYSTEM TIME | 3.713136 | 40.8445 | 2.7 |
| USER TIME | 0.0000 | KENNIRPT | 928 | . |
| WAIT TIME | 18.8502 | SGSJARPT | 2072 | 5.1182 | KENNIRPT |
| DATABASE CALLS | 12.046445 | 132.5109 | 2.6 |
| STORAGE ALLOCATED | 0.0000 | 0.0000 | 0.0 |

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About CA IDMS Task Analyzer Program Reports

Contents
- Three Reports One Set of CA IDMS Log or SMF File Statistics (see page 20)
- Hierarchical Nature of Reports (see page 20)
- Overview of Program Reports (see page 20)

The CA IDMS Task Analyzer Program Reports are similar to the CA IDMS Task Analyzer Billing Reports. They use information from the CA IDMS Log (or, optionally under z/OS, from the SMF file) to offer detailed and summarized statistical reports that show how efficiently application programs are using system resources.

They differ in that they are organized by the programs that make up the tasks. Information about the application program is grouped by selected time intervals. Identifying information includes the program's name, version, type, and origin of execution. First, each program's totals are reported; then, they are reflected as a ratio of the system totals (that is, the percentage of all system resources consumed during the time interval by programs that were selected by CA IDMS Task Analyzer). You will get this report by specifying REPORT = PROG.

Three Reports One Set of CA IDMS Log or SMF File Statistics

Physically, there are three Program Reports to choose from. It is important to understand, however, that each report is produced from the same statistics taken from the CA IDMS Log (or, optionally under z/OS, from the SMF file). Statistics are presented in different formats and at various levels of summarization. The Program Report is available at the detail, summary, and system summary level.

Hierarchical Nature of Reports

Program reports are produced for three hierarchical levels: If you ask for the lowest level report (LEVL = DET), you will also receive the higher-level reports. This would include the Program Summary Report, which summarizes the data of the Program Details Reports (LEVL = SUM), and also the Program System Summary Report (LEVL = SYS).

Overview of Program Reports

Program Reports are of the following types:
- Program Details Report -- shows the information for programs that make up each task reported in time sequence, within the selected time interval. You may specify which program or class of programs CA IDMS Task Analyzer is to report on. You also control the time period.
• Program Summary Report -- records the sum for all tasks that use the application program within the time interval you select. In addition, if multiple versions of a reported task exist, a summary of all tasks by version is presented.

• Program System Summary -- presents a sum of all Program Summaries within the time interval you selected.

CA IDMS Task Analyzer Program Details Report

Contents

• Report Fields (see page 21)

The CA IDMS Task Analyzer Program Details Report presents a detailed view of application program CA IDMS/DC activity. (CA ADS dialog activity is reported separately. For more information, see the CA IDMS Task Analyzer CA ADS Report.) The statistics in the report are CA IDMS STATISTICS taken from the CA IDMS Log (or optionally under z/OS, from the SMF file). You will get this report when you request LEVL = DET.

Request this report after you have used the Billing Report to identify tasks that require large amounts of storage or that perform a large number of I/O operations.

Report Fields

The following is a description of the various fields that make up the CA IDMS Task Analyzer Program Details Report (see the Program Detail Report screen).

REPORT TITLE -- The title line of this report varies depending on what you select on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

VARIABLE COLUMNS -- These two columns vary in content. Any combination of OPER-ID, TERM-ID, or TASK CODE can appear in the first two columns. (RUNAME types that do not appear in the REPORT TITLE will appear in these two columns.)

TASK INFORMATION

• NUMBER -- Number of the task within the date and time interval selected.

• TY -- Type of task performed, indicating the language of the program the task invokes.

  • A: Assembler
- P: PL/1
- C: COBOL
- F: FORTRAN
- N: CA ADS

**OR**—Origin of the task. The operating system or environment where execution of the task originated.

- D: CA IDMS/DC
- C: CICS
- V: z/VM
- B: batch

**START DATE-TIME** -- The start date and time of the task being reported.

**CONDITION CODE** (C C) -- If the task abends while running under CA IDMS, an "X" appears on the report under "C C". If the task does not abend while running under CA IDMS, the "C C" column is blank.

**PROGRAM INFORMATION**
- NAME -- Name of the reported program.
- VER -- Version of the program.
- TY -- Type of program performed, according to the language that the program consists of (see the list under TASK INFORMATION).

**TERMINAL INFORMATION**
- RDS -- The total number of reads performed from the reported terminal.
- WRT -- The total number of writes performed from the reported terminal.
- ERR -- The total number of errors occurring during reads and writes from the reported terminal.

**STORAGE INFORMATION** -- These columns give you an idea of how much system storage is required for the reported tasks.
- ACQ -- The number of requests made to acquire system storage.
- ALLOC -- The total amount of storage requested (in bytes).
- KEPT -- The total amount of storage (in bytes) retained by the program and not released for reuse.

**SCRATCH INFORMATION**
• GET -- The number of times records were retrieved from the scratch area.

• PUT -- The number of times records were placed into the scratch area.

• DELETE -- The number of times records were deleted from the scratch area.

**QUEUE INFORMATION**

• GET -- The number of times records were retrieved from the queue area.

• PUT -- The number of times records were placed into the queue area.

• DELETE -- The number of times records were deleted from the queue area.

* -- Programs loaded and executed by the previous task (see the Program Details Report).

**CV NUMBER** -- The number of the CV that the statistics on this report apply to.

**PLAN ID** -- The statistics plan ID that the statistics on this report apply to.

---

**REQUESTED**: mm/dd

**ACTUAL**: mm/dd

---

**GET --** The number of times records were retrieved from the scratch area.

**PUT --** The number of times records were placed into the scratch area.

**DELETE --** The number of times records were deleted from the scratch area.
### CA IDMS Task Analyzer Program Summary Report

#### Contents
- Report Fields (see page 25)

The CA IDMS Task Analyzer Program Summary Report summarizes all executions of the first application program within the reported task within a time interval. The CA IDMS Task Analyzer Program Summary Report summarizes information taken from the CA IDMS Task Analyzer Program Details Report. You will get this report by specifying LEVL = SUM (or LEVL = DET).

When you look at the CA IDMS Task Analyzer Program Summary Totals Report, focus on the high, low, mean, and accumulated values, and percent (%) of system occurrences. These statistics reveal trends on the efficiency and use of your application programs.

```
<table>
<thead>
<tr>
<th>Program Name</th>
<th>Start Time</th>
<th>End Time</th>
<th>Run Time</th>
<th>Status</th>
<th>Count</th>
<th>Accumulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRCQUED1</td>
<td>04/14 08:53:07</td>
<td>04/14 08:53:07</td>
<td>00:00:00</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>VTAMLT03</td>
<td>04/14 08:53:07</td>
<td>04/14 08:53:07</td>
<td>00:00:00</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
```

16-Jan-2018 24/109
Report Fields

Here is an explanation of the fields that make up the Program Summary Report (see the following Program Summary Report screen).

REPORT TITLE -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

SUMMARY FOR TASK CODE -- Task code identification information; this includes task name, origin of execution, and version number. Multiple versions of a task are reported separately; tasks with multiple origins of execution are also reported separately.

TOTAL RUN UNITS -- The total number of run-units performed by programs that make up the reported task (within the time interval selected).

TOTAL ABENDS -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

SYSTEM RESOURCES: The CA IDMS/DC statistics are reported. For a detailed explanation of the CA IDMS/DC statistics, see the CA IDMS Task Analyzer Program Details Report.

- TERMINAL READS
- TERMINAL WRITES
- TERMINAL ERRORS
- STORAGE ACQUIRED
- STORAGE ALLOCATED
- STORAGE KEPT
- SCRATCH-GETS
- SCRATCH-PUTS
- SCRATCH DELETES
- QUEUE-GETS
- QUEUE-PUTS
- QUEUE-DELETES
**HIGH VALUE** -- The highest value for each of the SYSTEM RESOURCES (depending upon the line) for the reported task.

**TASK CODE** -- The ID of the task with the highest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUMBER** -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

**LOW VALUE** -- The lowest value for each of the SYSTEM RESOURCES for the reported task.

**TASK CODE** -- The ID of the task with the lowest value of the SYSTEM RESOURCES.

**TASK NUMBER** -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

**MEAN VALUE** -- Average value per program occurrence within the reported SYSTEM RESOURCES.

**ACCUM VALUE** -- Total value for all program occurrences for the SYSTEM RESOURCES within the reported time interval.

**% OF SYSTEM OCCURRENCES** -- This ratio (expressed as a percentage) is the accumulated value for this program against the accumulated value for all selected programs active within the reported time interval. This ratio highlights the programs that are consuming the largest amount of system resources.

### SUMMARY FOR ALL TASKS

<table>
<thead>
<tr>
<th>REQUESTED:</th>
<th>ACTUAL:</th>
<th>SYSTEM REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SUMMARY FOR TASK CODE OEDR0001 ORIGIN IDMS VERSION 1

<table>
<thead>
<tr>
<th>SYSTEM</th>
<th>HIGH TASK</th>
<th>TASK</th>
<th>LOW TASK</th>
<th>TASK</th>
<th>MEAN</th>
<th>ACCUM</th>
<th>% OF OCCUR</th>
<th>VALUE</th>
<th>CODE</th>
<th>NUMBER</th>
<th>VALUE</th>
<th>CODE</th>
<th>NUMBER</th>
<th>VALUE</th>
<th>VALUE</th>
<th>OCCUR</th>
</tr>
</thead>
</table>

TOTAL RUN UNITS 40
TOTAL ABENDS 0
TERMINAL READS 2
TERMINAL WRITES 3
TERMINAL ERRORS 0
STORAGE ACQUIRED 56
STORAGE ALLOCATED 52480
STORAGE KEPT 21952
SCRATCH - GETS 0
SCRATCH - PUTS 0
### CA IDMS Task Analyzer Program System

**Summary Report**

#### Contents
- Report Fields (see page 28)

---

**Program Summary Report:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Task Code</th>
<th>Origin</th>
<th>IDMS Version</th>
<th>Units</th>
<th>Abends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scratch - Deletes</strong></td>
<td>OEDR0001</td>
<td>890</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Queue - Gets</strong></td>
<td>OEDR0001</td>
<td>890</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Queue - Puts</strong></td>
<td>OEDR0001</td>
<td>890</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Queue - Deletes</strong></td>
<td>OEDR0001</td>
<td>890</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Summary for Task Code OEDR0002 Origin IDMS Version 1**

<table>
<thead>
<tr>
<th>Category</th>
<th>Task Code</th>
<th>Origin</th>
<th>IDMS Version</th>
<th>Units</th>
<th>Abends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Run Units</strong></td>
<td></td>
<td></td>
<td></td>
<td>61</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Total Abends</strong></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Terminal Reads</strong></td>
<td>OEDR0002</td>
<td>1689</td>
<td></td>
<td>1.95</td>
<td>119.4</td>
</tr>
<tr>
<td><strong>Terminal Writes</strong></td>
<td>OEDR0002</td>
<td>1689</td>
<td></td>
<td>2.93</td>
<td>179.4</td>
</tr>
<tr>
<td><strong>Terminal Errors</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Storage Acquired</strong></td>
<td>OEDR0002</td>
<td>2744</td>
<td></td>
<td>8.79</td>
<td>536.7</td>
</tr>
<tr>
<td><strong>Storage Allocated</strong></td>
<td>OEDR0002</td>
<td>2488</td>
<td>11328</td>
<td>17179.28</td>
<td>1047936.12</td>
</tr>
<tr>
<td><strong>Storage Kept</strong></td>
<td>OEDR0002</td>
<td>3309</td>
<td>256</td>
<td>18762.49</td>
<td>1144512.63</td>
</tr>
<tr>
<td><strong>Scratch - Gets</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Scratch - Puts</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Scratch - Deletes</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Queue - Gets</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Queue - Puts</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Queue - Deletes</strong></td>
<td>OEDR0002</td>
<td>900</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Summary for Task Code OLM Origin IDMS Version 1**

<table>
<thead>
<tr>
<th>Category</th>
<th>Task Code</th>
<th>Origin</th>
<th>IDMS Version</th>
<th>Units</th>
<th>Abends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Run Units</strong></td>
<td></td>
<td>OLM</td>
<td></td>
<td>858</td>
<td>44.7</td>
</tr>
<tr>
<td><strong>Total Abends</strong></td>
<td></td>
<td>OLM</td>
<td></td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Terminal Reads</strong></td>
<td>OLM</td>
<td>146</td>
<td></td>
<td>0.12</td>
<td>107.4</td>
</tr>
<tr>
<td><strong>Terminal Writes</strong></td>
<td>OLM</td>
<td>11</td>
<td></td>
<td>0.96</td>
<td>823.19</td>
</tr>
<tr>
<td><strong>Terminal Errors</strong></td>
<td>OLM</td>
<td>11</td>
<td></td>
<td>0.00</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Storage Acquired</strong></td>
<td>OLM</td>
<td>1387</td>
<td>4</td>
<td>0.53</td>
<td>45712.63</td>
</tr>
<tr>
<td><strong>Storage Allocated</strong></td>
<td>OLM</td>
<td>1367</td>
<td>12352</td>
<td>61847.27</td>
<td>53064960.60</td>
</tr>
<tr>
<td><strong>Storage Kept</strong></td>
<td>OLM</td>
<td>2063</td>
<td></td>
<td>3088.78</td>
<td>2650176.14</td>
</tr>
</tbody>
</table>

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16-Jan-2018  
27/109
The CA IDMS Task Analyzer Program System Summary Report presents a sum-total of all Program Summaries within the time interval you select. All statistical categories are reported within run-unit origin: CA IDMS/DC, CICS, z/VM, and BATCH; or ALL. The report shows actual accumulated values for RUN UNITS, ABENDS, and SYSTEM RESOURCES, and presents the percentage that each value is of total system resources.

You will get this report by specifying LEVL = SYS. (This report will also be created if you specify LEVL = DET or LEVL = SUM.)

When you review this report, focus on % of SYSTEM OCCURRENCES in the last column, as shown in Program System Summary Report screen. These statistics reflect trends on the use of your CA IDMS /DC environment. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.

**Report Fields**

Here is a description of the various fields that make up the Program System Summary Report.

**REPORT TITLE** -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

**ACTUAL INTERVAL** -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

**SUMMARY FOR ALL REQUESTED ENTITIES** -- This line indicates that a summarization of statistics follows.

**TOTAL RUN UNITS** -- The total number of run-units performed by programs that make up the reported task (within the time interval selected).

**TOTAL ABENDS** -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

**SYSTEM RESOURCES**: The CA IDMS/DC statistics are reported. For more information on the CA IDMS/DC statistics, see the CA IDMS Task Analyzer Program Details Report.

- TERMINAL READS
- TERMINAL WRITES
- TERMINAL ERRORS
- STORAGE ACQUIRED
- STORAGE ALlocated
• STORAGE KEPT
• SCRATCH-GETS
• SCRATCH-PUTS
• SCRATCH-DELETES
• QUEUE-GETS
• QUEUE-PUTS
• QUEUE-DELETES

HIGH VALUE -- The highest value for each of the SYSTEM RESOURCES (depending upon the line) for the reported task.

TASK CODE -- The ID of the task with the highest value of the SYSTEM RESOURCES (depending upon the line).

TASK NUMBER -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

LOW VALUE -- The lowest value for each of the SYSTEM RESOURCES for the reported task.

TASK CODE -- The ID of the task with the lowest value of the SYSTEM RESOURCES (depending upon the line).

TASK NUMBER -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

MEAN VALUE -- Average value per program occurrence within the reported SYSTEM RESOURCES.

ACCUM VALUE -- Total value for all program occurrences for the SYSTEM RESOURCES (depending upon the line) within the reported time interval.

% OF SYSTEM OCCURRENCES -- This ratio (expressed as a percentage) is the accumulated value for this program against the accumulated value for all selected programs active within the reported time interval. This ratio highlights the programs that are consuming the largest amount of system resources.
Program System Summary Report.

About CA IDMS Task Analyzer CA ADS Reports

Contents
- Three Reports One Set of CA IDMS Log or SMF File Statistics (see page 30)
- Hierarchical Nature of Reports (see page 31)
- Overview of CA ADS Reports (see page 31)

The CA IDMS Task Analyzer CA ADS Reports are available for reporting on dialogs. They use information from the CA IDMS Log (or, optionally under z/OS, from the SMF file) to offer detailed and summarized statistical reports that show how efficiently CA ADS dialogs are using system resources.

The CA ADS Reports are organized by the CA ADS dialogs that make up the tasks. Information about the CA ADS dialog is grouped by selected time intervals. Identifying information includes the dialog's name, version, type, and origin of execution. First, each dialog's totals are reported, then they are reflected as a ratio of the system totals (that is, the percentage of all system resources used during the time interval by dialogs that were selected by CA IDMS Task Analyzer).

You will get this report by specifying REPORT = ADSO.

Three Reports One Set of CA IDMS Log or SMF File Statistics

Physically, there are three CA ADS Reports to choose from. It is important, however, to understand that each report is produced from the same statistics taken from the CA IDMS Log (or, optionally under z/OS, from the SMF file). Statistics are presented in different formats and at various levels of summarization. The CA ADS Report is available at the detail, summary, and system summary level.
Hierarchical Nature of Reports

Program reports are produced for three hierarchical levels: if you ask for the lowest level report (LEVL = DET), you will also receive the higher-level reports. This would include the CA ADS Summary Report, which summarizes the data of the CA ADS Details Reports (LEVL = SUM), and also the CA ADS System Summary Report (LEVL = SYS).

Overview of CA ADS Reports

- **CA ADS Details Report** -- shows the information for CA ADS dialogs that make up each task reported in time sequence, within the selected time interval. You may specify which dialog or class of dialogs CA IDMS Task Analyzer is to report on. You also control the time period and duration of the time interval.

- **CA ADS Summary Report** -- records the sum for all tasks that use the CA ADS dialog within the time interval you select. In addition, if multiple versions of a reported task exist, a summary of all tasks by version is presented.

- **CA ADS System Summary** -- presents a sum of all CA ADS Summaries within the time interval you selected.

CA IDMS Task Analyzer CA ADS Details Report

**Contents**

- Report Fields (see page 31)

The CA IDMS Task Analyzer CA ADS Details Report is produced for CA ADS dialogs. The CA ADS Details Report presents a detailed view of the activity of each task that is an CA ADS dialog. The CA ADS dialogs are identified by CA ADS dialog name and version, and are reported in time sequence.

You will get the CA ADS Details Report only if you specify LEVL = DET. In addition, with this specification, you will receive the CA ADS Summary Report and the CA ADS System Summary Report.

Report Fields

Here is a description of the various fields that make up the CA IDMS Task Analyzer CA ADS Details Report. A sample report is shown in CA ADS Details Report screen.

**REPORT TITLE** -- The title line of this report varies depending on the RUNAME specified and on the dialog name and version number you select on the NAME parameter statement.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.
ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

VARIABLE COLUMNS -- These two columns vary in content. Any combination of OPER-ID, TERM-ID, or TASK CODE can appear in the first two columns. (RUNAME types that do not appear in the REPORT TITLE will appear in these two columns.)

TASK INFORMATION -- Identifying information on the reported task.

- **NUMBER** -- Number of the task within the date and time interval selected.
- **VER** -- Version of the task. Multiple versions of a task are reported separately.
- **OR** -- Origin of the task. The operating system or environment where execution of the task originated.
  - D: CA IDMS/DC
  - C: CICS
  - V: z/VM
  - B: batch
- **START DATE-TIME** -- The start date and time of the task being reported.
- **C C** -- Condition code for CA IDMS. If the task abends while running under CA IDMS, an "X" appears on the report under "C C". If the task does not abend while running under CA IDMS, the "C C" column is blank.

DIALOG INFORMATION

- **NAME** -- The name of each dialog contained within the reported task.
- **VER** -- The version of the dialog.

INTER DIALOG -- This is a summary of all commands issued by the CA ADS dialog.

- **DSP** -- The number of display and display continue commands issued by the dialog.
- **INV** -- The number of invoke commands issued by the dialog.
- **LINK** -- The number of link to dialog and link to program commands issued by the dialog.
- **RET** -- The number of return and return continue commands issued by the dialog.
- **TRN** -- The number of transfer commands issued by the dialog.
- **LEV** -- The number of leave CA ADS and leave applications commands issued by the dialog.

PRCS -- Premap and response processes.
- **PRE MAP** -- The number of premap processes.
- **RSP** -- The number of response processes.

**DETAIL** -- These statistics show the amount of processing performed using the Pageable Maps feature.
- **PUT NEW** -- The number of writes to the Detail scratch area.
- **PUT CUR** -- The number of rewrites to the Detail scratch area.
- **GET** -- The number of reads from the Detail scratch area.

**LINK** -- Link levels.
- **HGH** -- The highest level in the associated CA ADS transaction at which the reported task was executed.
- **LOW** -- The lowest level in the associated CA ADS transaction at which the reported task was executed.

**RBB** -- Record buffer block.
- **MAX** -- The maximum size (in bytes) of record buffer blocks allocated.
- **MIN** -- The minimum, or least, size (in bytes) of record buffer blocks allocated.

**CV NUMBER** -- The number of the CV that the statistics on this report apply to.

**PLAN ID** -- The statistics plan ID that the statistics on this report apply to.

---

**CA IDMS - 19.0**

**PLAN ID --** The statistics plan ID that the statistics on this report apply to.

<table>
<thead>
<tr>
<th>ID</th>
<th>TASK ANALYZER</th>
<th>RELEASE</th>
<th>DATE</th>
<th>TIME</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>nn</td>
<td>/TASK Analyzer</td>
<td>Rnn.</td>
<td>ADSO REPORT</td>
<td>mm/dd</td>
<td></td>
</tr>
<tr>
<td>/yy</td>
<td>hh:mm:ss</td>
<td>ADSO REPORT</td>
<td>mm/dd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CV NUMBER: 19**

**PLAN ID: PLAN0001**

**TASK CODE**

**ADSA**

**DETAILS FOR TASK CODE**

**REQUESTED: mm/dd/yy hh:mm**

**ACTUAL: mm/dd/yy hh:mm**

**OPER TERM**

**------------**

**INTER DIALO**

**-------**

**MAP**

**NEW CUR**

**MAP**

**NEW CUR**

**VTAMLT02**

**1504**

**1 1 0 0 0 0 0 0 0 0 0 0**

**16:15**

**16:15**

**VTAMLT02**

**1505**

**1 1 0 0 0 0 0 0 0 0 0 0**

**16:15**

**16:15**

**VTAMLT02**

**1506**

**1 1 0 0 0 0 0 0 0 0 0 0**

**16:16**

**16:16**

**VTAMLT02**

**1506**

**1 1 0 0 0 0 0 0 0 0 0 0**

**16:15**

**16:15**

**ADSOASVC**

**1 0 0 0 0 0 1**

**4288**

**42**


CA IDMS Task Analyzer CA ADS Summary Report

Contents
- Report Fields (see page 34)

The CA IDMS Task Analyzer CA ADS Summary Report is produced for CA ADS dialogs. The CA ADS Summary Report summarizes activity within the specified time period for all DC run-units (tasks) that are also CA ADS dialogs. The summaries are presented for all dialogs by version numbers.

You will get the CA ADS Summary Report if you specify LEVL = SUM (or if you specify LEVL = DET).

When you look at the CA ADS Summary Report, focus on the % OF SYSTEM OCCURRENCES in the last column, as shown in CA ADS Summary Report screen. These statistics reveal trends on the use of your CA IDMS/DC environment. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.

Report Fields

Here is a description of the various fields that make up the CA IDMS Task Analyzer CA ADS Summary Report (see the CA ADS Summary Report screen).

**REPORT TITLE** -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

**ACTUAL INTERVAL** -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

**SUMMARY FOR VERSION** -- The version number of the dialog. Summaries of multiple versions of a dialog are reported separately.

**TOTAL RUN UNITS** -- The total number of DC run-units (tasks) terminated within the reported time interval.
TOTAL ABENDS -- The total number of abends that occurred as a result of processing the reported tasks within the date and time interval selected.

CA ADS Dialog Statistics -- The CA ADS dialog statistics are reported (taken from the CA ADS Details Report).

- DISPLAY -- The number of display and display continue commands issued by the task.
- INVOKE -- The number of invoke commands issued by the task.
- LINK -- The number of link to dialog and link to program commands issued by the task.
- RETURN -- The number of return and return continue commands issued by the task.
- TRANSFER -- The number of transfer commands issued by the task.
- LEAVE -- The number of leave CA ADS and leave applications commands issued by the task.
- PROCESS - PREMAP -- The number of premap processes.
- PROCESS - RESPONSE -- The number of response processes.
- DETAIL - PUT NEW -- The number of writes occurring to the Detail scratch area.
- DETAIL - PUT CUR -- The number of records rewritten to the Detail scratch area.
- DETAIL - GET -- The number of details retrieved from the Detail scratch area.
- LINK LEVL - MAX -- The highest level in the associated CA ADS transaction at which the reported task was executed.
- LINK LEVL - MIN -- The lowest level in the associated CA ADS transaction at which the reported task was executed.
- RBB STORAGE - MAX -- The maximum size (in bytes) of record buffer blocks buffers allocated.
- RBB STORAGE - MIN -- The minimum, or least, size (in bytes) of record buffer blocks allocated.

HIGH VALUE -- The highest value for each of the CA ADS Dialog Statistics for the reported task (depending upon the line).

TASK CODE -- The task code of the task with the highest value of the CA ADS Dialog Statistics (depending upon the line).

TASK NUMBER -- Task number; this is the version number of the task with the highest value of the CA ADS Dialog Statistics (depending upon the line).

LOW VALUE -- The lowest value for each of the CA ADS Dialog Statistics for the reported task (depending upon the line).

TASK CODE -- The task code of the task with the lowest value of the CA ADS Dialog Statistics (depending upon the line).
**TASK NUMBER** -- Task number; this is the version number of the task with the lowest value of the CA ADS Dialog Statistics (depending upon the line).

**MEAN VALUE** -- Average value per DC run-unit occurrence within the reported CA ADS Dialog Statistics (depending upon the line).

**ACCUM VALUE** -- Total value for all DC run-unit occurrences for the CA ADS Dialog Statistics (depending upon the line) within the reported time interval.

**% OF SYSTEM OCCURRENCES** -- This ratio (expressed as a percentage) is the accumulated value for this DC run-unit (CA ADS dialog) against the accumulated value for all selected DC run-units active within the reported time interval. This ratio highlights the DC run-units that are consuming the largest amount of system resources.

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<thead>
<tr>
<th>ID/TASK ANALYZER</th>
<th>RELEASE</th>
<th>DATE</th>
<th>TIME</th>
<th>CA-IDMS PAGE</th>
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<tr>
<th>SUMMARY FOR ALL TASKS</th>
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<td>REQUESTED: mm/dd/yy</td>
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<td>hh:mm</td>
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<td>1506</td>
<td>4288</td>
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<td></td>
<td>ADSA</td>
<td>1505</td>
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</table>

RBB STORAGE - MAX13976
CA IDMS Task Analyzer CA ADS System Summary Report

Contents
- Report Fields (see page 37)

The CA IDMS Task Analyzer CA ADS System Summary Report presents a sum-total of all CA ADS Summaries within the time interval you select. All statistical categories are reported within run-unit type: CA IDMS/DC, CICS, and z/VM; or ALL.

You will get this report by specifying LEVL = SYS. (This report will also be created if you specify LEVL = DET or LEVL = SUM.)

When you review this report, focus on % of SYSTEM OCCURRENCES in the last column, as shown in ADS System Summary Report. These statistics reflect trends on the use of your CA IDMS/DC environment. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.

Report Fields

Here is a description of the various fields that make up the CA ADS System Summary Report.

REPORT TITLE -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

SUMMARY FOR ALL REQUESTED ENTITIES -- This line indicates that a summarization of statistics follows.

TOTAL RUN UNITS -- The total number of run-units performed by programs that make up the reported task (within the time interval selected).

TOTAL ABENDS -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

SYSTEM RESOURCES: The CA IDMS/DC statistics are reported. For a detailed explanation of the CA IDMS/DC statistics, see the CA IDMS Task Analyzer CA ADS Details Report.
- DISPLAY
- INVOKE
- LINK
- RETURN
- TRANSFER
- LEAVE
- PROCESS - PREMAP
- PROCESS - RESPONSE
- DETAIL - PUT NEW
- DETAIL - PUT CUR
- DETAIL - GET
- LINK LEVEL - MAX
- LINK LEVEL - MIN
- RBB STORAGE - MAX
- RBB STORAG - MIN

HIGH VALUE -- The highest value for each of the SYSTEM RESOURCES (depending upon the line) for the reported task.

TASK CODE -- The ID of the task with the highest value of the SYSTEM RESOURCES (depending upon the line).

TASK NUM -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

LOW VALUE -- The lowest value for each of the SYSTEM RESOURCES for the reported task.

TASK CODE -- The ID of the task with the lowest value of the SYSTEM RESOURCES (depending upon the line).

TASK NUM -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

MEAN VALUE -- Average value per program occurrence within the reported SYSTEM RESOURCES.

ACCUM VALUE -- Total value for all program occurrences for the SYSTEM RESOURCES (depending upon the line) within the reported time interval.
% OF SYSTEM OCCURRENCES -- This ratio (expressed as a percentage) is the accumulated value for this program against the accumulated value for all selected programs active within the reported time interval. This ratio highlights the programs that are consuming the largest amount of system resources.

<table>
<thead>
<tr>
<th>ID/TASK ANALYZER</th>
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<th>DATE</th>
<th>TIME</th>
<th>CA IDMS</th>
<th>PAGE</th>
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<td>ss</td>
<td>SYSTEM SUMMARY REPORT</td>
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</table>

ADSO SUMMARY

REQUESTED: mm/dd/yy hh:mm mm/dd/yy hh:mm
ACTUAL: mm/dd/yy hh:mm mm/dd/yy hh:mm

SYSTEM SUMMARY FOR REQUESTED ENTITIES

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<th>NUMBER</th>
<th>VALUE</th>
<th>CODE</th>
<th>NUMBER</th>
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</tr>
<tr>
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<td>ADSA</td>
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<td>ADSA</td>
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<td>ADSA</td>
<td>1505</td>
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<td>ADSA</td>
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<td>0</td>
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<tr>
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<td>ADSA</td>
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<td>1506</td>
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<td>4288</td>
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<td>1505</td>
<td>7517.33</td>
<td>22552</td>
</tr>
</tbody>
</table>

CA ADS System Summary Report:

About CA IDMS Task Analyzer Abend Report

Contents
- Tying Abend Activity to an ID and a Time (see page 40)
One Report One Set of CA IDMS Log Statistics (see page 40)
Overview of Abend Reports (see page 40)

The CA IDMS Task Analyzer Abend Report uses information from the CA IDMS Log (or, optionally under z/OS, the SMF file) to produce detailed report statistics. The Abend Report reports on those tasks that have abended while running under CA IDMS, whether or not the tasks have issued database calls. (If a task abends while running under CA IDMS, an "X" appears under "C C" on the Billing Details, Program Details, CA ADS Details, or Program Loads report.) You will get the Abend Report by specifying REPORT = ABND on the parameter statement.

Tying Abend Activity to an ID and a Time

Depending on the parameters you choose, abend activity can be tied to a specific operator, terminal, task code, or group. For CA IDMS/DC tasks, the data reported under the headings OPER-ID, TERM-ID, or TASK CODE comes from the CA IDMS Log (or, optionally under z/OS, the SMF file). For CICS tasks, this information is taken from the External Request Element (ERE) Extension; the information is available only if GSISVCX was installed.

The CA IDMS Task Analyzer Abend Report presents this information within the framework of the time interval you select. Task, time, and error message information is shown.

One Report One Set of CA IDMS Log Statistics

Physically, there is one Abend Report. The report is produced from the statistics that are found on the CA IDMS Log (or, optionally under z/OS, the SMF file). Statistics in the Abend Report are presented at the detail level.

Overview of Abend Reports

Abend Report presents detailed information for each task that abends while running under CA IDMS, reported in termination time sequence. Depending on the parameter combination selected, this report allows you to identify task activity by terminal ID, operator ID, task code, or program name.

CA IDMS Task Analyzer Abend Report

Contents
- Report Fields (see page 41)

The CA IDMS Task Analyzer Abend Report presents a detailed view of the activity of each task that abended while running under CA IDMS, reported in time sequence and based on the parameters selected. Depending on the parameter combination you select, this report allows you to identify by terminal ID, operator ID, task code, or program name tasks that abended while running under CA IDMS.

You will get the Abend Report only if you specify LEVL = DET.
Report Fields

Here is a description of the various fields that make up the CA IDMS Task Analyzer Abend Details Report. The Abend Report screen shows one possible type of Abend Report CA IDMS Task Analyzer will generate.

REPORT TITLE -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

VARIABLE COLUMNS -- These two columns vary in content. Any combination of OPER-ID, TERM-ID, or TASK CODE can appear in the first two columns. (RUNAME types that do not appear in the REPORT TITLE will appear in these two columns.)

TASK INFORMATION

- NUMBER -- Number of the task within the date and time interval selected.
- VER -- Version of the task.
- TYPE -- Type of task performed, indicating the language of the program the task invokes.
  - ASSEM: Assembler
  - COBOL: COBOL
  - ADSO: CA ADS
  - PL1: PL/1
  - FTRAN: FORTRAN
  - ORG -- Origin of the task. The operating system or environment where execution of the task originated.
  - IDMS: CA IDMS/DC
  - CICS: CICS
  - z/VM: z/VM
  - BTCH: batch
- START DATE-TIME -- The start date and time of the task being reported.
MESSAGE INFORMATION

ABEND CODE -- The return code received from CA IDMS.

MESSAGE NUMBER -- The CA IDMS message number.

SEVR CODE -- The severity code of the CA IDMS message, ranging from 0-3.

ABEND SUMMARY -- The total number of abends that occurred during the execution of the reported task.

CV NUMBER -- The number of the CV that the statistics on this report apply to.

PLAN ID -- The statistics plan ID that the statistics on this report apply to.

<table>
<thead>
<tr>
<th>ID</th>
<th>TASK ANALYZER</th>
<th>RELEASE</th>
<th>DATE</th>
<th>TIME</th>
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<td>mm/dd</td>
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CV NUMBER: 19 PLAN ID: PLAN0001

DETAILS FOR TASK CODE

REQUESTED: mm/dd/yy hh

ACTUAL: mm/dd/yy hh

TASK TERM ------------------------

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***** 3 ABENDS FOR TASK CODE ALL TASKS

Abend Report:

About CA IDMS Task Analyzer Program Loads Report

Contents

- Tying Task Activity to an ID and a Time (see page 43)
- One Report One Set of CA IDMS Log Statistics (see page 43)
- Overview of Program Loads Reports (see page 43)
The CA IDMS Task Analyzer Program Loads Report uses information from the CA IDMS Log (or, optionally under z/OS, the SMF file) to produce detailed report statistics. The Program Loads Report reports on the primary program and secondary programs (including tables, maps, and subschemas) that a task loads (calls). You will get the Program Loads Report by specifying REPORT=LOAD on the parameter statement.

Tying Task Activity to an ID and a Time

Depending on the parameters you choose, abend activity can be tied to a specific operator, terminal, task code, or group. The data reported under the headings OPER-ID, TERM-ID, or TASK CODE comes from the CA IDMS Log (or, optionally under z/OS, from the SMF file.)

For CICS, this information is taken from the External Request Element (ERE) Extension as it is built by the CA IDMS SVC exit routine. The CA IDMS Task Analyzer Program Loads Report presents this information within the framework of the time interval you select. Task, time, and error message information is shown.

One Report One Set of CA IDMS Log Statistics

Physically, there is one Program Loads Report. The report is produced from the statistics that are found on the CA IDMS Log or, optionally under z/OS, the SMF file. Statistics in the Program Loads Report are presented at the detail level.

Overview of Program Loads Reports

- **Program Loads Details Report**
  Presents for each specified task the primary program and all secondary programs (including tables, maps, and subschemas), reported in termination time sequence. Depending on the parameter combination selected, this report allows you to identify task activity by terminal ID, operator ID, task code, group name, or for all tasks.

CA IDMS Task Analyzer Program Loads Report

**Contents**

- Report Fields (see page 44)

The CA IDMS Task Analyzer Program Loads Report presents a detailed view of the primary program and all secondary programs (including tables, maps, and subschemas) that a task loads (calls). The tasks are identified by task code, and are reported in time sequence. You will get the Program Loads Report only if you specify LEVL = DET.
Report Fields

Here is a description of the various fields that make up the CA IDMS Task Analyzer Program Loads Report. A sample report is shown in Program Loads Report screen.

**REPORT TITLE** -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

**ACTUAL INTERVAL** -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

**VARIABLE COLUMNS** -- These two columns vary in content. Any combination of OPER-ID, TERM-ID, or TASK CODE can appear in the first two columns. (RUNAME types that do not appear in the REPORT TITLE will appear in these two columns.)

**TASK INFORMATION** -- Identifying information on the task.

- **NUMBER** -- Number of the task within the date and time interval selected.
- **VER** -- Version of the task. Multiple versions of a task are reported separately.
- **ORG** -- Origin of the task. The operating system or environment where execution of the task originated.
- **IDMS**: CA IDMS/DC
- **CICS**: CICS
- **z/VM**: z/VM
- **BTCH**: batch
- **START DATE-TIME** -- The start date and time of the task being reported.
- **C C** -- Condition code for CA IDMS. If the task abended while running under CA IDMS, an "X" appears on the report under "C C". If the task did not abend while running under CA IDMS, the "C C" column is blank.

**PRIMARY PROGRAM** -- Information about the program or dialog initiating the transaction.

- **NAME** -- The name of the primary program.
- **VER** -- The version of the primary program. Multiple versions are reported separately.
- **TYPE** -- Type of task performed, indicating the language of the program the task invokes.
SECONDARY PROGRAM -- Information about secondary programs (including tables, maps, and subschemas) loaded or linked by the primary program. These statistics reveal what programs are lower level programs within the reported task, and reveal how frequently the lower level programs are loaded or linked.

- **NAME** -- The name of the secondary program loaded or linked by the primary program for the reported task.
- **VER** -- The version of the secondary program. Multiple versions are listed separately.
- **TYPE** -- The type of the secondary program loaded or linked. Multiple types of a secondary program are listed separately.
- **ASSEM**: Assembler
- **COBOL**: COBOL
- **ADSO**: CA ADS
- **FTRAN**: Fortran
- **PL1**: PL/1
- **SUBS**: Subschema
- **MAP**: Map
- **COUNT** -- The number of times the secondary program is loaded or linked by the primary program during each execution of the reported task.

**CV NUMBER** -- The number of the CV that the statistics on this report apply to.

**PLAN ID** -- The statistics plan ID that the statistics on this report apply to.

```
CV NUMBER: 19  PLAN ID: PLAN0001  DETAILS FOR TASK CODE ADS

REQUESTED: mm/dd/yy  hh/mm - mm/dd

ACTUAL: mm/dd/yy  hh/mm - mm/dd
```
Program Loads Report:

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About CA IDMS Task Analyzer Integrated Index Reports

Contents

- Tying Task Activity to an ID and a Time (see page 47)
- Three Reports One Set of CA IDMS Log or SMF File Statistics (see page 47)
- Hierarchical Nature of Reports (see page 47)
- Overview of Integrated Index Reports (see page 48)

The CA IDMS Task Analyzer Integrated Index Reports use information from the CA IDMS Log (or, optionally under z/OS, the SMF file) to produce both detailed and summarized report statistics on how programs affect your integrated indexing structure. The Integrated Index Reports differ from the other CA IDMS Task Analyzer reports in that the Integrated Index Reports list database activity. You will get this report by specifying REPORT = INDEX on the parameter statement.

Tying Task Activity to an ID and a Time

Depending on the parameters you choose, task activity can be tied to a specific user, terminal, task code, or group. For CA IDMS/DC tasks, the data reported under the headings OPER-ID, TERM-ID, or TASK CODE comes from the CA IDMS Log (or, optionally under z/OS, the SMF file).

For CICS, this information is taken from the External Request Element (ERE) Extension as it is built by the CA version of the CA IDMS SVC exit routine.

The CA IDMS Task Analyzer Integrated Index Reports present this information within the framework of the time interval you select. The effects of task processing upon your current integrated indexing structure are displayed on the report.

Three Reports One Set of CA IDMS Log or SMF File Statistics

Physically, there are three Integrated Index Reports to choose from. However, it is important to understand that each report is produced from the statistics that are found on the CA IDMS Log (or, optionally under z/OS, the SMF file). Statistics in the reports are presented in various formats and at one level of summarization. The Integrated Index Report is available at the detail, summary, and system summary levels.

Hierarchical Nature of Reports

Integrated Index Reports are produced on a hierarchical level: if you ask for the lowest level report (LEVL = DET), you will also receive the higher-level report, the Integrated Index Summary Report, which summarizes the data of the Integrated Index Details Report (LEVL = SUM), and also the Integrated Index System Summary Report.
Overview of Integrated Index Reports

- **Integrated Index Details Report** -- presents detailed information for each task, reported in termination time sequence. Depending on the parameter combination selected, this report allows you to identify task activity by operator ID, terminal ID, task code, group ID, or for all tasks.

- **Integrated Index Summary** -- records the sum of all tasks invoked by an operator ID, terminal ID, task code ID, or group ID within the time interval you selected.

- **Integrated Index System Summary** -- presents a sum of all Integrated Index Summaries within the time interval you selected.

CA IDMS Task Analyzer Integrated Index Details Report

**Contents**

- **Report Fields (see page 48)**

The CA IDMS Task Analyzer Integrated Index Details Report presents a detailed view of the activity of each task activity reported in time sequence, based on the parameters selected. Depending on the parameter combination you select, this report allows you to identify task activity by terminal ID, operator ID, task code, group ID, or for all tasks.

You will get the Integrated Index Details Report only if you specify LEVL = DET. In addition, with this specification, you will receive the Integrated Index Summary Report and the Integrated Index System Summary Report.

**Report Fields**

Here is a description of the various fields that make up the CA IDMS Task Analyzer Integrated Index Details Report. Integrated Index Details Report shows one possible type of Integrated Index Details Reports CA IDMS Task Analyzer will generate.

**REPORT TITLE** -- The title line of this report varies depending on what you select on the RUNAME and NAME parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

**ACTUAL INTERVAL** -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

**VARIABLE COLUMNS** -- These two columns vary in content. Any combination of OPER-ID, TERM-ID, or TASK CODE can appear in the first two columns. (RUNAME types that do not appear in the REPORT TITLE will appear in these two columns.)
TASK INFORMATION

- **NUMBER** -- Number of the task within the date and time interval selected.
- **VER** -- Version of the task. Multiple versions of a task are reported separately.
- **TY** -- Type of task performed, indicating the language of the program the task invokes.
  - A: Assembler
  - C: COBOL
  - N: CA ADS
  - P: PL/1
  - F: Fortran
- **OR** -- Origin of the task. The operating system or environment where execution of the task originated.
  - D: CA IDMS/DC
  - C: CICS
  - V: z/VM
  - B: batch
- **START DATE-TIME** -- The start date and time of the task being reported.
- **C C** -- Condition code for CA IDMS. If the task abends while running under CA IDMS, an "X" appears on the report under "C C". If the task does not abend while running under CA IDMS, the "C C" column is blank.

PROGRAM INFORMATION

- **NAME** -- The name of the program invoked by the reported task.
- **VER** -- Version of the program. Multiple versions of a program are reported separately.
- **TY** -- Type of task performed, indicating the language of the program invoked by the task. A: Assembler C: COBOL N: CA ADS P: PL/1 F: Fortran

SR8 INDEX INFORMATION

- **SPLIT** -- The number of SR8 record splits that have occurred as a result of processing the reported task.
- **SPAWN** -- The number of SR8 record spawns that have occurred as a result of processing the reported task.
- **STORED** -- The number of SR8 records stored as result of processing the reported task.
- **ERASED** -- The number of SR8 records erased as a result of processing the reported task.

**SR7 INDEX INFORMATION**

- **STORED** -- The number of SR7 records stored as a result of processing the reported task.
- **ERASED** -- The number of SR7 records stored as a result of processing the reported task.

**B-TREE INFORMATION**

- **SEARCH** -- The number of searches into the integrated index required to locate the reported task.
- **LEVEL** -- The number of levels required to complete the search.

**ORPHANS ADOPTED** -- The number of integrated index orphans adopted as a result of processing the reported task.

*Programs loaded and executed by the previous task.

**CV NUMBER** -- The number of the CV that the statistics on this report apply to.

**PLAN ID** -- The statistics plan ID that the statistics on this report apply to.

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<th>RELEASE</th>
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<th>TIME</th>
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**CV NUMBER:** 19  **PLAN ID:** PLAN0001  **DETAILS FOR TASK CODE:** ALL TASKS

**REQUESTED:** mm/dd/yy hh/mm - mm/dd  **ACTUAL:** mm/dd/yy hh/mm - mm/dd

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16-Jan-2018  50/109
### CA IDMS Task Analyzer Integrated Index Summary Report

#### Contents
- Report Fields (see page 52)
The CA IDMS Task Analyzer Integrated Index Summary Report summarizes all tasks executed for a terminal ID, operator ID, task code, or group within the time interval you select. It is a summary of information from the CA IDMS Task Analyzer Integrated Index Details Report. You will get this report if you specify LEVL = SUM (or if you specify LEVL = DET).

When you look at the Integrated Index Summary Report, focus on the % OF SYSTEM OCCURRENCES in the last column, as shown in Index Summary Report screen. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.

Report Fields

Here is an explanation of the fields that make up the CA IDMS Task Analyzer Integrated Index Summary Report.

**REPORT TITLE** -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

**ACTUAL INTERVAL** -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

**SUMMARY FOR TASK CODE** -- Task code identification information; this includes task name, origin of execution, and version. Multiple versions of a task are reported separately; tasks with multiple origins of execution are also reported separately.

**TOTAL RUN UNITS** -- The total number of run-units performed by programs that make up the reported task (within the time interval selected).

**TOTAL ABENDS** -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

**SYSTEM RESOURCES** -- The CA IDMS/DC statistics are reported. For a detailed explanation of the integrated index statistics, see the CA IDMS Task Analyzer Integrated Index Details Report.

- SR8 Splits
- SR8 Spawns
- SR8 Stored
- SR8 Erased
- SR7 Stored
- SR7 Erased
- B-TREE Searches
- B-TREE LEVEL SEARCHES

- ORPHANS ADOPTED

**HIGH VALUE** -- The highest value for each of the INDEX INFORMATION lines (depending upon the line) for the reported task.

**TASK CODE** -- The task code of the task with the highest value of the INDEX INFORMATION lines (depending upon the line).

**TASK NUMBER** -- Task number; this is the version number of the task with the highest value of the INDEX INFORMATION.

**LOW VALUE** -- The lowest value for each of the INDEX INFORMATION lines for the reported task.

**TASK CODE** -- The task code of the task with the lowest value of the INDEX INFORMATION lines (depending upon the line).

**TASK NUMBER** -- Task number; this is the version number of the task with the lowest value of the INDEX INFORMATION lines.

**MEAN VALUE** -- Average value per task occurrence within the reported INDEX INFORMATION lines.

**ACCUM VALUE** -- Total value for all task occurrences for the INDEX INFORMATION lines (depending upon the line) within the reported time interval.

**% OF SYSTEM OCCURRENCES** -- This ratio (expressed as a percentage) is the accumulated value for this task against the accumulated value for all selected tasks active within the reported time interval. This ratio highlights the tasks that are consuming the largest amount of system resources.

```
ID / TASK NAME / RELEASE / DATE / TIME / PAGE
Rnn. /nn /yy / hh:mm:ss / INDEX REPORT / mm/dd

SUMMARY FOR ALL TASKS

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ACTUAL: mm/dd/yy hh/mm - mm/dd/yy hh

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<td>TASK CODE</td>
<td>TASK NUMBER</td>
<td>VALUE</td>
<td>CODE</td>
<td>NUMBER</td>
<td>VALUE</td>
</tr>
</tbody>
</table>
```

SUMMARY FOR TASK CODE ASFRDEFD ORIGIN IDMS VERSION 1

<table>
<thead>
<tr>
<th>TOTAL RUN UNITS</th>
<th>TOTAL ABENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>0.00</td>
</tr>
</tbody>
</table>

SR8 SPLITs: 4 ASFRDEFD 47 0 ASFRDEFD 404 1.5
SR8 SPAWNS: 0 ASFRDEFD 35 0 ASFRDEFD 404 0.0
SR8 STORED: 4 ASFRDEFD 47 0 ASFRDEFD 404 1.5
SR8 ERASED: 4 ASFRDEFD 65 0 ASFRDEFD 404 0.6
### Integrated Index Summary Report:

| Task Code | ORIGIN | IDMS | Version | TOTAL RUN UNITS | TOTAL ABENDS | SR7 STORED | SR7 ERASED | SR8 STORED | SR8 ERASED | SR8 SPLITS | SR8 SPAWNS | SR8 Splits | SR8 Spawns | SR8 STORED | SR8 ERASED | SR8 STORED | SR8 ERASED | B-TREE SEARCHES | B-TREE LEVEL SEARCHES | ORPHANS ADOPTED | SUMMARY FOR TASK CODE ASFSIGND ORIGIN IDMS VERSION 1 |
|-----------|--------|------|---------|----------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----------------------|--------------------------|----------------------|---------------------------------------------------|
| ASFRDEFD  | 35     | 0    | 0.00    | 3             | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 687                  | 1937                     | 0                    | 0.00                                              |
| ASFRDEFD  | 35     | 0    | 0.00    | 3             | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 4646                  | 4646                     | 0                    | 0.00                                              |
| ASFSIGND  | 374    | 0    | 0.00    | 3             | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 476                  | 4543                    | 0                    | 15.00                                             |
| ASFSIGND  | 374    | 0    | 0.00    | 3             | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 30                   | 9272                    | 0                    | 0.00                                              |
| ASFXDERD  | 36     | 0    | 0.00    | 3             | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 476                  | 4543                    | 0                    | 15.00                                             |
| ASFXDERD  | 36     | 0    | 0.00    | 3             | 0            | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 30                   | 9272                    | 0                    | 0.00                                              |

**B-TREE SEARCHES:**
- **ASFRDEFD:** 687
- **ASFRDEFD:** 4646
- **ASFSIGND:** 476
- **ASFXDERD:** 476

**B-TREE LEVEL SEARCHES:**
- **ASFRDEFD:** 1937
- **ASFRDEFD:** 4646
- **ASFSIGND:** 4543
- **ASFXDERD:** 4543

**ORPHANS ADOPTED:**
- **ASFRDEFD:** 0
- **ASFRDEFD:** 0
- **ASFSIGND:** 0
- **ASFXDERD:** 0
Integrated Index System Summary Report

Contents

- Report Fields (see page 55)

The CA IDMS Task Analyzer Integrated Index System Summary Report presents a sum-total of all Integrated Index Summaries within the time interval you select. All statistical categories are reported within run-unit origin: CA IDMS/DC, CICS, and z/VM; or ALL. You will get this report by specifying LEVL = SYS. (This report will also be created if you specify LEVL = DET or LEVL = SUM.)

When you review this report, focus on % of SYSTEM OCCURRENCES in the last column, as shown in System Summary Report screen. These statistics reflect trends on the use of your CA IDMS/DC environment. HIGH VALUE, LOW VALUE, MEAN VALUE, and ACCUMULATED VALUE are reported for each statistical category.

Report Fields

Here is a description of the various fields that make up the System Summary Report.

REPORT TITLE -- The title line of this report varies depending on what you selected on the RUNAME and NAME parameter statements.

REQUESTED TIME INTERVAL -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.

ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

SUMMARY FOR ALL REQUESTED ENTITIES -- This line indicate that a summarization of statistics follows.

TOTAL RUN UNITS -- The total number of run-units performed by programs that make up the reported task (within the time interval selected).

TOTAL ABENDS -- The total number of abends that occurred as a result of processing the programs that make up the reported task (within the date and time interval selected).

SYSTEM RESOURCES: The CA IDMS/DC statistics are reported. For a detailed explanation of the CA IDMS/DC statistics, see the CA IDMS Task Analyzer Integrated Index Details Report.

- SR8 SPLITS
- SR8 SPAWNS
- SR8 STORED
- SR8 ERASED
- **SR7 STORED**
- **SR7 ERASED**
- **B-TREE SEARCHES**
- **B-TREE LEVEL SEARCHES**
- **ORPHANS ADOPTED**

**HIGH VALUE** -- The highest value for each of the SYSTEM RESOURCES (depending upon the line) for the reported task.

**TASK CODE** -- The ID of the task with the highest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUM** -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

**LOW VALUE** -- The lowest value for each of the SYSTEM RESOURCES for the reported task.

**TASK CODE** -- The ID of the task with the lowest value of the SYSTEM RESOURCES (depending upon the line).

**TASK NUM** -- Task number; this is the number of the task with the highest value of the SYSTEM RESOURCES.

**MEAN VALUE** -- Average value per program occurrence within the reported SYSTEM RESOURCES.

**ACCUM VALUE** -- Total value for all program occurrences for the SYSTEM RESOURCES (depending upon the line) within the reported time interval.

**% OF SYSTEM OCCURRENCES** -- This ratio (expressed as a percentage) is the accumulated value for this program against the accumulated value for all selected programs active within the reported time interval. This ratio highlights the programs that are consuming the largest amount of system resources.

### System Summary Report

<table>
<thead>
<tr>
<th>ID</th>
<th>TASK ANALYZER</th>
<th>RELEASE</th>
<th>DATE</th>
<th>CA-IDMS TIME</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>nn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/yy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hh:mm:ss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REQUESTED:  mm/dd/yy  hh/mm - mm/dd

ACTUAL:  mm/dd/yy  hh/mm - mm/dd

<table>
<thead>
<tr>
<th>TASK NUMBER</th>
<th>TASK MEAN VALUE</th>
<th>HIGH ACCUM VALUE</th>
<th>TASK % OF SYSTEM CODE OCCURRENCE</th>
<th>TASK LOW NUMBER</th>
<th>TASK VALUE CODE</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Summary for All Tasks**

| TOTAL RUN UNITS | 93 | 7.40 |
| TOTAL ABENDS    | 0  | 0.00 |
### CA IDMS Task Analyzer Ranking Report

**Contents**

- Report Fields (see page 57)

The CA IDMS Task Analyzer Ranking Report uses system performance and resource consumption information derived from the original Details Reports. Statistics are ranked under ASCENDING or DESCENDING, depending on the ORDER parameter you select.

Unlike the Details Reports, however, which contain information for all attributes of a task presented in time sequence, the Ranking Report presents the specific task attribute you select, in the sequence you specify. You may also specify whether the ABSOLUTE value of the attribute is to be ranked or whether to rank the task by occurrence EQUAL, LESS THAN, LESS THAN OR EQUAL TO, GREATER THAN, or GREATER THAN OR EQUAL TO the occurrence of the attribute.

You will get this report if you specify REPORT = RANK on the parameter statement.

#### Report Fields

These fields make up the CA IDMS Task Analyzer Ranking Report. The following report fields are valid for all versions of the Ranking Report.

**REPORT TITLE** -- The title line of this report varies depending on what you select on the HOW and WHAT parameter statements.

**REQUESTED TIME INTERVAL** -- This line lists the start and stop date/time of the time interval you specified on the PROCESS statement. The data displayed in this line depends on what you select using the START and STOP parameters.
ACTUAL INTERVAL -- This line lists the first start date and time and the last start date and time on the CA IDMS Log or SMF File reported on. The data displayed in this line depends upon the actual time range of task activity within the CA IDMS Log or SMF File.

RANK -- Ranking of task as determined by CA IDMS Task Analyzer.

TASK CODE -- The identifying number of the task reported.

TASK NUMBER -- Number of the task within the date and time interval selected.

TASK VER -- Version of the task. Multiple versions of a task are reported separately.

TYPE -- Type of task performed, indicating the language of the program the task invokes.
  - ASSEM: Assembler
  - COBOL: COBOL
  - ADSO: CA ADS
  - PL1: PL/1
  - FTRAN: Fortran

ORIGIN -- Origin of the task. The operating system or environment where execution of the task originated.
  - IDMS: CA IDMS/DC
  - CICS: CICS
  - VM: z/VM
  - BTCH: batch

START DATE-TIME -- The start date and time of the task being reported.

VALUE -- Value of WHAT for the task attribute, (seconds, percentage, etc.).

CV NUMBER -- The number of the CV that the statistics on this report apply to.

PLAN ID -- The statistics plan ID that the statistics on this report apply to.

<table>
<thead>
<tr>
<th>ID</th>
<th>RELEASE</th>
<th>CA-IDMS</th>
<th>PAGE</th>
</tr>
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<td>TASK</td>
<td>ANALYZER</td>
<td>DATE</td>
<td>TIME</td>
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<tr>
<td>nnn.</td>
<td>Rnn.</td>
<td>RANKING REPORT</td>
<td>mm/dd</td>
</tr>
</tbody>
</table>

CV NUMBER: 19 PLAN ID: PLAN0001

REQUESTED: mm/dd/yy hh:mm - mm/dd/yy

ACTUAL: mm/dd/yy hh:mm - mm/dd/yy
<table>
<thead>
<tr>
<th>START DATE</th>
<th>TASK</th>
<th>RANK</th>
<th>CODE</th>
<th>VALUE</th>
<th>VER</th>
<th>TYPE</th>
<th>ORIGIN</th>
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<tr>
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<td>SCCULP</td>
<td>1</td>
<td>70</td>
<td>0</td>
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<td>BTCH</td>
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<td>BTCH</td>
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<td>17</td>
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<td>21</td>
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</tbody>
</table>

Ranking Report:

**CA IDMS Task Analyzer Input Parameter Report**

**Contents**
- Report Fields (see page 60)

The CA IDMS Task Analyzer Input Parameter Report contains a list of the parameters input to CA IDMS Task Analyzer and the messages that result from processing.
Report Fields

These fields make up the CA IDMS Task Analyzer Input Parameter Report (see the Input Parameter Report). This report and the fields that appear on the report vary, depending on the parameters input to CA IDMS Task Analyzer.

* -- Processing messages

** -- Input parameters

<table>
<thead>
<tr>
<th>ID</th>
<th>RELEASE</th>
<th>TASK ANALYZER</th>
<th>DATE</th>
<th>TIME</th>
<th>CA-IDMS</th>
<th>PAGE</th>
<th>REPORT</th>
<th>mm/dd</th>
</tr>
</thead>
<tbody>
<tr>
<td>/yy</td>
<td>hh:mm:ss</td>
<td></td>
<td></td>
<td></td>
<td>INPUT PARAMETER REPORT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V---+---1---+---2---+---3---+---4---+---5---+---6---+---7---+---

* USF0001I INPUT PARAMETER STATEMENT......................
PROCESS DCSYSRUN=N IDMSXXX=N **
USF0001I INPUT PARAMETER STATEMENT......................
*PROCESS CVNUM=0019 PLANID=PLAN0001
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=ABND LEVEL=DET RUTYPE=@RUNAME=@ALL
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=ADSO LEVEL=DET RUTYPE=@RUNAME=@ALL
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=BILL LEVEL=DET RUTYPE=@RUNAME=@ALL
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=INDEX LEVEL=DET RUTYPE=@RUNAME=@ALL
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=LOAD LEVEL=DET RUTYPE=@RUNAME=@ALL
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=PROG LEVEL=DET RUTYPE=@RUNAME=@ALL
USF0001I INPUT PARAMETER STATEMENT......................
REPORT=RANK ORDER=D WHAT=CPU
USF0006I REPORTS WILL BE PROCESSED......................

Input Parameter Report:

CA IDMS Task Analyzer Parameters

CA IDMS Task Analyzer is parameter-driven: you control the output by supplying the proper parameters which are used as input to a batch job that extracts the information from the CA IDMS log or SMF file and then formats the information to your specifications. CA IDMS Task Analyzer parameters let you select the report types you want to produce, the level of detail, the kind of detail, the time interval, as well as other useful selections.

- Parameters and Their Uses (see page 61)
- Order of Parameter Statements (see page 61)
- Maximum Number of Reports Possible Per Execution (see page 62)

This section is divided into the following sections:

- Parameters and Their Uses
Parameters and Their Uses

Two parameters control CA IDMS Task Analyzer output: PROCESS and REPORT. The PROCESS parameter initiates CA IDMS Task Analyzer processing. The REPORT parameter specifies which CA IDMS Task Analyzer report is to be printed.

The PROCESS parameter is mandatory and should precede all report parameters. It supplies certain global parameters that initiate all processing performed by CA IDMS Task Analyzer.

The REPORT parameter specifies which type of CA IDMS Task Analyzer report is to be created and defines the data that is to be printed. Up to 210 reports can be requested for each execution of CA IDMS Task Analyzer.

A parameter summary and examples of all statements are shown in Parameter Summary at the end of this section.

Order of Parameter Statements

The PROCESS Statement must be entered first. The spelling of the REPORT statement keywords is not important. The keywords, however, must be entered in the order presented.
Maximum Number of Reports Possible Per Execution

A total of 210 reports can be requested during each execution of CA IDMS Task Analyzer. A total of 30 reports per report group (Billing, Program, CA ADS, Abend, Program Loads, Integrated Index, or Ranking) can be requested during each execution of CA IDMS Task Analyzer. This means you can choose, for example, 30 Program Detail Reports, 30 CA ADS Summary Reports, and 30 Billing System Summary Reports, or any combination of reports and options available through CA IDMS Task Analyzer.

PROCESS

All keywords are written in UPPERCASE. Those portions of the keyword that must be entered are UNDERSCORED. When part of a keyword is not underscored, you may omit it without altering the meaning of the statement. You must, however, enter all values for variables within the columns indicated.

REPORT=BILL

A keyword phrase is made up of a major keyword followed by an equal sign (=), followed by a minor keyword or a variable. A keyword phrase cannot be split between two parameter cards.

NAME=name

Variables appear in lower case. Substitute an appropriate value for each variable if the keyword phrase is required.

[ LEVL=DET ]

Brackets indicate optional keyword phrases. If you omit the entire parameter, CA IDMS Task Analyzer will supply a default value.

/BILL / ADSO
REPORT = <ABEND>
LOAD
\INDX /

Braces enclose two or more options in a column. You must choose one of them. The last option listed in the column is the default value (unless otherwise stated). The PROCESS and REPORT parameters for CA IDMS Task Analyzer are positional: keywords and values must be entered in the designated columns, as identified in the following pages. For examples of correctly entered PROCESS and REPORT statements, see the Parameter Summary.

Billing Report Parameters

Contents

- How RTYPE, RUNAME, and NAME Parameters Interrelate (see page 65)

The Billing Reports are available at three levels: details, summary, and system. To generate these reports, use the parameter syntax listed here.
The parameters for CA IDMS Task Analyzer are *positional*. The following parameters for a REPORT statement example are:

```plaintext
REPORT = BILL
   / DET \ 
 LEVL = < SUM >
  \ SYS /
   / D \ 
 C
 RUTYPE = < V >
   B
  \ @ / 
   / OPER \ 
 TERM
 RUNAME = < TASK >
  \ @ALL / 
[NAME = name]
```

where:

`REPORT = BILL`

indicates that CA IDMS Task Analyzer is to create and print a BILLING Report.

**Rule:** You must enter BILL in columns 8 through 11.

**EXAMPLE:** REPORT STATEMENT, BILLING REPORT

```
- - - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 -
REPORT=BILL LEVL=DET RUTYPE=D RUNAME=@ALL NAME=* 
   / DET \ LEVL = < SUM > \ SYS /
```

Use this parameter to specify the level of reporting that you want printed.

- **DET** -- indicates that you want CA IDMS Task Analyzer to print the Billing Details Report. (A Billing Summary Report and a Billing System Summary Report also will be produced for each time interval.)

- **SUM** -- indicates that you want a Billing Summary Report by program name. (A Billing System Summary also will be produced for each time interval.)

- **SYS** -- indicates that you want only system summaries to be produced for each time interval.

**Default:** DET

**Rule:** The exact spelling of this keyword (LEVL) is not important. You must, however, enter DET, SUM, or SYS in columns 18 through 20.

```plaintext
   / D \ 
 C
 RUTYPE = < V >
   B
  \ @ / 
```
Use this parameter to specify the origin of execution for the tasks you want reported.

- **D** -- indicates that you want CA IDMS Task Analyzer to report on tasks with CA IDMS/DC as the origin of execution.
- **C** -- indicates that you want CA IDMS Task Analyzer to report on tasks with CICS as the origin of execution.
- **V** -- indicates that you want CA IDMS Task Analyzer to report on tasks with z/VM as the origin of execution.
- **B** -- indicates that you want CA IDMS Task Analyzer to report on tasks with Batch as the origin of execution.
- **@** -- indicates that you want CA IDMS Task Analyzer to report on tasks with all of the above origins of execution.

**Default:** @

Rule: The exact spelling of this keyword (RUTYPE) is not important. You must, however, enter D, C, V, B, or @ in column 29.

```
/ OPER \
TERM
RUNAME = < TASK >
GRUP
\ @ALL /
```

An individual task may be identified in a number of ways. The way CA IDMS Task Analyzer identifies a task is determined by three things:

- Whether this is a request for a Billing, Program, CA ADS, Program Loads, Abend, or Integrated Index Report.
- Whether execution of this task originates from an online transaction or a batch transaction.
- Whether this task has been invoked by an operator, from a terminal, by task code, or by a group.

Online and batch tasks can be identified by operator, terminal, task, or group.

- **OPER** -- specifies that tasks are to be identified by operator ID.
- **TERM** -- specifies that tasks are to be identified by logical terminal ID.
- **TASK** -- specifies that tasks are to be specified by task code.
- **GRUP** -- specifies that tasks are to be specified by a pre-defined group ID. For CA IDMS Task Analyzer purposes, group ID is in bytes 17-32 of Installation Code in the USER entity of the dictionary.
- **@ALL** -- specifies that CA IDMS Task Analyzer reports on all tasks invoked by operator ID, terminal ID, task code, and group ID.

**Default:** @ALL
Rule: The exact spelling of this keyword (RUNAME) is not important. You must, however, enter the OPER, TERM, TASK, GRUP, or @ALL in columns 38 through 41.

NAME = name

This parameter lets you select only those task records that have a specific (or generic) task name. The field that will contain this name is specified by the RUNAME parameter.

Use this parameter to specify the actual (or generic) operator ID, terminal ID, task code, or group ID that a task must have in order for that task to be selected for analysis on the Billing Report.

⚠️ Note: CA IDMS Task Analyzer will perform generic processing. For example, if you key in an asterisk (*) before a name field (that is, NAME = *ABC), all tasks (as specified by the RUNAME parameter) whose name field begins with ABC will be included in the report.

Default: None. When no characters are entered in columns 48 through 63, CA IDMS Task Analyzer searches for an operator, terminal, or group that has "blanks" (no characters) for an ID. If RUNAME=TASK is specified and NAME="blanks" (no characters), CA IDMS Task Analyzer returns an error message.

Rules:

- The exact spelling of this keyword (NAME) is not important. You must, however, enter the name of the operator, terminal, task, or group beginning in column 48 and at the maximum ending in column 63.

- A maximum of sixteen characters can be entered for the OPER, TERM, TASK, or GRUP name.

- You can enter an asterisk followed by 0 to 15 characters. When an asterisk is entered followed by blanks (no characters), CA IDMS Task Analyzer reports on all tasks as specified by RUNAME. When an asterisk followed by 1 to 15 characters is specified, CA IDMS Task Analyzer reports on all tasks with names beginning with the 1 to 15 characters.

How RUTYPE, RUNAME, and NAME Parameters Interrelate

RUTYPE indicates what processing environment is the origin of execution for the task you want CA IDMS Task Analyzer to report on; the default for RUTYPE is @, indicating CA IDMS Task Analyzer is to report on tasks executing in the processing environments CA IDMS/DC, CICS, z/VM, and batch.

RUNAME indicates the category of tasks you want CA IDMS Task Analyzer to report on, that is, by operator, terminal, task code, or group. The default for RUNAME is @ALL, indicating CA IDMS Task Analyzer is to report on all categories of tasks: operator, terminal, task code, and group. NAME indicates the actual name of the operator, logical terminal, task, or group that you want CA IDMS Task Analyzer to report on; there is no default for the NAME parameter (see the explanation under NAME).

When RUTYPE=@ is specified (or selected by default), CA IDMS Task Analyzer reports on all tasks originating from the four processing environments (CA IDMS/DC, CICS, z/VM, and Batch) for the specified RUNAME and NAME. When RUNAME=@ALL is specified (or selected by default), CA IDMS
Task Analyzer reports on all tasks originating in all processing environments previously specified, for all four categories of tasks: operator ID, logical terminal ID, task code, or group ID. Also when RUNAME=@ALL is specified, CA IDMS Task Analyzer overrides all characters specified after the NAME parameter, and reports on all occurrences of all tasks for all four categories of tasks. When NAME=@ is specified, CA IDMS Task Analyzer reports on all occurrences of tasks identified by the RUNAME.

Program Report Parameter

The Program Reports are available at three levels: details, summary, and system. To generate these reports, use the parameter syntax listed here.

The parameters for CA IDMS Task Analyzer are *positional*. The following example shows a REPORT statement example:

```
REPORT = PROG

/ DET \ LEVL = < SUM > \ SYS /
/ D \ RUTYPE = < V >
/ @ / RUNAME = < TASK >
/ GRUP \ @ALL /

[NAME = name]
```

where:

**REPORT = PROG**

indicates that CA IDMS Task Analyzer is to create and print a PROGRAM Report.

Rule: You must enter PROG in columns 8 through 11.

**EXAMPLE:** REPORT STATEMENT, PROGRAM REPORT

```
-------1---------2---------3---------4---------5---------6---------7-------
REPORT=PROG LEVL=SUM RUTYPE=C RUNAME=GRUP NAME=EXAMY
```

```
/ DET \ LEVL = < SUM > \ SYS /
```

Use this parameter to specify the level of reporting that you want printed.

- **DET** -- indicates that you want CA IDMS Task Analyzer to print the Program Details Report. (A Program Summary Report and a Program System Summary Report also will be produced for each time interval.)

- **SUM** -- indicates that you want a Program Summary Report by program name. (A Program System Summary also will be produced for each time interval.)
SYS -- indicates that you want only system summaries to be produced for each time interval.

Default: DET

Rule: The exact spelling of this keyword (LEVL) is not important. You must, however, enter DET, SUM, or SYS in columns 18 through 20.

```
/ D \
C
```

**RUTYPE = < V >**
```
\ B /
```

Use this parameter to specify the origin of execution for the tasks you want reported.

- **D** -- indicates that you want CA IDMS Task Analyzer to report on the first program in tasks with CA IDMS/DC as the origin of execution.
- **C** -- indicates that you want CA IDMS Task Analyzer to report on the first program in tasks with CICS as the origin of execution.
- **V** -- indicates that you want CA IDMS Task Analyzer to report on the first program in tasks with z/VM as the origin of execution.
- **B** -- indicates that you want CA IDMS Task Analyzer to report on the first program in tasks with Batch as the origin of execution.
- **@** -- indicates that you want CA IDMS Task Analyzer to report on the first program in tasks with all of the above origins of execution.

Default: @

Rule: The exact spelling of this keyword (RUTYPE) is not important. You must, however, enter D, C, V, B, or @ in column 29.

```
/ OPER \
TERM
```

**RUNAME = < TASK >**
```
\ GRUP 
\ @ALL /
```

An individual task may be identified in a number of ways. The way CA IDMS Task Analyzer identifies a task is determined by three things:

- Whether this is a request for a Billing, Program, CA ADS, Program Loads, Abend, or Integrated Index Report.
- Whether execution of this task originates from an online transaction or a batch transaction.
- Whether this task has been invoked by an operator, from a terminal, by task code, or by a group.

Online and batch tasks can be identified by operator, terminal, task, or group.

- **OPER** -- specifies that tasks are to be identified by operator ID.
- **TERM** -- specifies that tasks are to be identified by logical terminal ID.
• **TASK** -- specifies that tasks are to be specified by task code.

• **GRUP** -- specifies that tasks are to be specified by a pre-defined group ID. For CA IDMS Task Analyzer purposes, group ID is in bytes 17-32 of Installation Code in the USER entity of the dictionary.

• **@ALL** -- specifies that CA IDMS Task Analyzer reports on all tasks invoked by operator ID, terminal ID, task code, and group ID.

Rule: The exact spelling of this keyword (RUNAME) is not important. You must, however, enter OPER, TERM, TASK, GRUP, or @ALL in columns 38 through 41.

**NAME = name**

This parameter lets you select only those task records that have a specific (or generic) task name. The field that is to contain this name is specified by the RUNAME parameter.

Use this parameter to specify the actual (or generic) operator ID, logical terminal ID, task code, or group ID that a task must have in order for that task to be selected for analysis on the Program Report.

**Note:** CA IDMS Task Analyzer will perform generic processing. For example, if you key in an asterisk (*) before a name field (that is, NAME = *ABC), all tasks (as specified by the RUNAME parameter) whose name field begins with ABC will be included in the report.

**Default:** None. When no characters are entered in columns 48 through 63, CA IDMS Task Analyzer searches for an operator, terminal, or group that has “blanks” (no characters) for an ID. If RUNAME=TASK is specified and NAME=“blanks” (no characters), CA IDMS Task Analyzer returns an error message.

**Rules:**

- The exact spelling of this keyword (NAME) is not important. You must, however, enter the name of the operator, terminal, task, or group beginning in column 48 and at the maximum ending in column 63.

- A maximum of sixteen characters can be entered for the OPER, TERM, TASK, or GRUP name.

- You can enter an asterisk followed by 0 to 15 characters. When an asterisk is entered followed by blanks (no characters), CA IDMS Task Analyzer reports on all tasks as specified by RUNAME. When an asterisk followed by 1 to 15 characters is specified, CA IDMS Task Analyzer reports on all tasks with names beginning with the 1 to 15 characters.

---

**CA ADS Report Parameters**

The CA ADS Reports are available at three levels: details, summary, and system. To generate these reports, use the parameter syntax listed here.
The parameters for CA IDMS Task Analyzer are *positional*. See the following parameters for a REPORT statement example.

The parameters are:

\[
\text{REPORT} = \text{ADSO} \\
\text{LEVEL} = <\text{SUM}> \\
\text{RUTYPE} = <\text{V}> \\
\text{RUNAME} = <\text{TASK}> \\
\text{NAME} = \text{name}
\]

where:

\[
\text{REPORT} = \text{ADSO}
\]

indicates that CA IDMS Task Analyzer is to create and print an CA ADS Report.

Rule: You must enter ADSO in columns 8 through 11.

\[
\text{REPORT STATEMENT, CA ADS} \\
\text{REPORT}=\text{ADSO LEVL}=\text{SYS RUTYPE}=\text{V RUNAME}=\text{TASK NAME}=\text{EPOSED} \\
\text{LEVEL} = <\text{SUM}> \\
\]

Use this parameter to specify the level of reporting that you want printed.

- **DET** -- indicates that you want CA IDMS Task Analyzer to print the CA ADS Details Report. (A CA ADS Summary Report and a CA ADS System Summary Report will also be produced for each time interval.)
- **SUM** -- indicates that you want an CA ADS Summary Report by dialog name. (A CA ADS System Summary Report will also be produced for each time interval.)
- **SYS** -- indicates that you want only system summaries to be produced for each time interval.

**Default:** DET

Rule: The exact spelling of this keyword (LEVEL) is not important. You must, however, enter DET, SUM, or SYS in columns 18 through 20.

\[
\text{RUTYPE} = <\text{V}> \\
\]

\[
\text{DET} \\
\text{LEVEL} = <\text{SUM}> \\
\text{RUTYPE} = \text{V} \\
\text{RUNAME} = \text{TASK} \\
\text{NAME} = \text{EPOSED}
\]
Use this parameter to specify the origin of execution for the tasks (that have as their first program an CA ADS dialog) you want reported.

- D -- indicates that you want CA IDMS Task Analyzer to report on the first CA ADS dialog in tasks with CA IDMS/DC as the origin of execution.
- C -- indicates that you want CA IDMS Task Analyzer to report on the first CA ADS dialog in tasks with CICS as the origin of execution.
- V -- indicates that you want CA IDMS Task Analyzer to report on the first CA ADS dialog in tasks with z/VM as the origin of execution.
- @ -- indicates that you want CA IDMS Task Analyzer to report on the first CA ADS dialog in tasks with all of the above origins of execution.

Default: @

Rule: The exact spelling of this keyword (RUTYPE) is not important. You must, however, enter D, C, V, or @ in column 29.

```
/ OPER \  
TERM 
RUNAME = < TASK > 
GRUP 
\ @ALL / 
```

An individual task may be identified in a number of ways. How CA IDMS Task Analyzer identifies a task is determined by three things:

- Whether this is a request for a Billing, Program, CA ADS, Program Loads, Abend, or Integrated Index Report.
- Whether execution of this task originates from an online transaction or a batch transaction.
- Whether this task has been invoked by an operator, from a terminal, by task code, or by a group.

Online and batch tasks can be identified by operator, terminal, task, or group.

- OPER -- specifies that tasks are to be identified by operator ID.
- TERM -- specifies that tasks are to be identified by logical terminal ID.
- TASK -- specifies that tasks are to be specified by task code.
- GRUP -- specifies that tasks are to be specified by a pre-defined group ID. For CA IDMS Task Analyzer purposes, group ID is in bytes 17-32 of Installation Code in the USER entity of the dictionary.
- @ALL -- specifies that CA IDMS Task Analyzer reports on all tasks invoked by operator ID, terminal ID, task code, and group ID.

Default: @ALL
Rule: The exact spelling of this keyword (RUNAME) is not important. You must, however, enter OPER, TERM, TASK, GRUP, or @ALL in columns 38 through 41.

**NAME = name**

This parameter lets you select only those task records that have a specific (or generic) task name. The field that will contain this name is specified by the RUNAME parameter.

Use this parameter to specify the actual (or generic) operator ID, logical terminal ID, task code, or group ID that a task must have in order for that task to be selected for analysis on the CA ADS Report.

**Note:** CA IDMS Task Analyzer will perform generic processing. For example, if you key in an asterisk (*) before a name field (that is, NAME = *ABC), all tasks (as specified by the RUNAME parameter) whose name field begins with ABC will be included in the report.

**Default:** None. When no characters are entered in columns 48 through 63, CA IDMS Task Analyzer searches for an operator, terminal, or group that has "blanks" (no characters) for an ID. If RUNAME=TASK is specified and NAME="blanks" (no characters), CA IDMS Task Analyzer returns an error message.

**Rules:**

- The exact spelling of this keyword (NAME) is not important. You must, however, enter the name of the operator, terminal, task, or group beginning in column 48 and at the maximum ending in column 63.

- A maximum of sixteen characters can be entered for the OPER, TERM, TASK, or GRUP name.

- You can enter an asterisk followed by 0 to 15 characters. When an asterisk is entered followed by blanks (no characters), CA IDMS Task Analyzer reports on all tasks as specified by RUNAME. When an asterisk followed by 1 to 15 characters is specified, CA IDMS Task Analyzer reports on all tasks with names beginning with the 1 to 15 characters.

### Abend Report Parameters

The Abend Report is available at one level: detail. To generate this report, use the parameter syntax listed on this page.

The parameters for CA IDMS Task Analyzer are *positional*. See the following parameters for a REPORT statement example.

The parameters are:

```
REPORT  =  ABND
        [LEVL  =  DET  ]
              /  D  \
              C
```
RUTYPE = < V >
   B
 \ @ /

/ OPER \
TERM

RUNAME = < TASK >
 GRUP
 \ @ALL /

[NAME = name]

where:

REPORT = ABND

indicates that CA IDMS Task Analyzer is to create and print an ABEND Report.

Rule: You must enter ABND in columns 8 through 11.

EXAMPLE: REPORT STATEMENT, ABEND REPORT

----+----1----+----2----+----3----+----4----+----5----+----6----+----7--
REPORT=ABND LEVL=DET RUTYPE=B RUNAME=@ALL NAME=TERKK

LEVL = DET

Use this parameter to specify that you want printed the Abend Details Report.

- DET -- indicates that you want CA IDMS Task Analyzer to print the Abend Details Report.

Default: DET

Rule: The exact spelling of this keyword (LEVL) is not important. You must, however, enter DET in columns 18 through 20.

/ D \
 C

RUTYPE = < V >
   B
 \ @ /

Use this parameter to specify the origin of execution for the tasks you want reported. A report is generated for the specified tasks if they abend while processing under CA IDMS, even though processing began within CICS, z/VM, or Batch.

- D -- indicates that you want CA IDMS Task Analyzer to report on the tasks with CA IDMS/DC as the origin of execution.

- C -- indicates that you want CA IDMS Task Analyzer to report on the tasks with CICS as the origin of execution.

- V -- indicates that you want CA IDMS Task Analyzer to report on the tasks with z/VM as the origin of execution.

- B -- indicates that you want CA IDMS Task Analyzer to report on the tasks with Batch as the origin of execution.
@ -- indicates that you want CA IDMS Task Analyzer to report on the tasks with all of the above origins of execution.

Default: @

Rule: The exact spelling of this keyword (RUTYPE) is not important. You must, however, enter D, C, V, B, or @ in column 29.

```
/ OPER \ 
TERM
RUNAME = < TASK >
\ @ALL /
```

- **OPER** -- specifies that tasks are to be identified by operator ID.

- **TERM** -- specifies that tasks are to be identified by logical terminal ID.

- **TASK** -- specifies that tasks are to be specified by task code.

- **GRUP** -- specifies that tasks are to be specified by a pre-defined group ID. For CA IDMS Task Analyzer purposes, group ID is in bytes 17-32 of Installation Code in the USER entity of the dictionary.

- **@ALL** -- specifies that CA IDMS Task Analyzer reports on all tasks invoked by operator ID, terminal ID, task code, and group ID.

Default: @ALL

Rule: The exact spelling of this keyword (RUNAME) is not important. You must, however, enter OPER, TERM, TASK, GRUP, or @ALL in columns 38 through 41.

**NAME = name**

This parameter lets you select only those task records that have a specific (or generic) task name. The field that will contain this name is specified by the RUNAME parameter.

Use this parameter to specify the actual (or generic) operator ID, logical terminal ID, task code, or group ID that a task must have in order for that task to be selected for analysis on the Abend Report.

**Note:** CA IDMS Task Analyzer will perform generic processing. For example, if you key in an asterisk (*) before a name field (that is, NAME = *ABC), all tasks (as specified by the RUNAME parameter) whose name field begins with ABC will be included in the report.

Default: None. When no characters are entered in columns 48 through 63, CA IDMS Task Analyzer searches for an operator, terminal, or group that has "blanks" (no characters) for an ID. If RUNAME=TASK is specified and NAME="blanks" (no characters), CA IDMS Task Analyzer returns an error message.

Rules:
The exact spelling of this keyword (NAME) is not important. You must, however, enter the name of the operator, terminal, task, or group beginning in column 48 and at the maximum ending in column 63.

A maximum of sixteen characters can be entered for the OPER, TERM, TASK, or GRUP name.

You can enter an asterisk followed by 0 to 15 characters. When an asterisk is entered followed by blanks (no characters), CA IDMS Task Analyzer reports on all tasks as specified by RUNAME. When an asterisk followed by 1 to 15 characters is specified, CA IDMS Task Analyzer reports on all tasks with names beginning with the 1 to 15 characters.

### Program Loads Report Parameters

The Program Loads Report is available at one level: detail. To generate this report, use the parameter syntax listed on this page.

The parameters for CA IDMS Task Analyzer are positional. See the following parameters from a REPORT statement example.

The parameters are:

```plaintext
REPORT = LOAD
[LEVL = DET ]
/ D \ 
C
RUTYPE = < V >
  B
  @ /
/ OPER \ 
TERM
RUNAME = < TASK >
  GRUP
  @ALL /

[NAME = name]
```

where:

**REPORT = LOAD**

indicates that CA IDMS Task Analyzer is to create and print a Program Loads Report.

Rule: You must enter LOAD in columns 8 through 11.

**EXAMPLE:** REPORT STATEMENT, PROGRAM LOADS REPORT

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
REPORT=LOAD LEVL=DET RUTYPE=@ RUNAME=OPER NAME=KIKKS
```

**LEVL = DET**

Use this parameter to specify that you want printed the Program Loads Details Report.

- **DET** -- indicates that you want CA IDMS Task Analyzer to print the Program Loads Details Report.
Default: DET

Rule: The exact spelling of this keyword (LEVL) is not important. You must, however, enter DET in columns 18 through 20.

\ /  D  \  \
  C  

RUTYPE = < V >
  B  \
  @ /

Use this parameter to specify the origin of execution for the tasks you want reported.

- D -- indicates that you want CA IDMS Task Analyzer to report on the tasks with CA IDMS/DC as the origin of execution.

- C -- indicates that you want CA IDMS Task Analyzer to report on the tasks with CICS as the origin of execution.

- V -- indicates that you want CA IDMS Task Analyzer to report on the tasks with z/VM as the origin of execution.

- B -- indicates that you want CA IDMS Task Analyzer to report on the tasks with Batch as the origin of execution.

- @ -- indicates that you want CA IDMS Task Analyzer to report on the tasks with all of the above origins of execution.

Default: @

Rule: The exact spelling of this keyword (RUTYPE) is not important. You must, however, enter D, C, V, B, or @ in column 29.

\ /  OPER  \ 
  TERM  

RUNAME = < TASK >
  GRUP  \
  @ALL /

- OPER -- specifies that tasks are to be identified by operator ID.

- TERM -- specifies that tasks are to be identified by logical terminal ID.

- TASK -- specifies that tasks are to be specified by task code.

- GRUP -- specifies that tasks are to be specified by a pre-defined group ID. For CA IDMS Task Analyzer purposes, group ID is in bytes 17-32 of Installation Code in the USER entity of the dictionary.

- @ALL -- specifies that CA IDMS Task Analyzer reports on all tasks invoked by operator ID, terminal ID, task code, and group ID.

Default: @ALL

Rule: The exact spelling of this keyword (RUNAME) is not important. You must, however, enter OPER, TERM, TASK, GRUP, or @ALL in columns 38 through 41.
NAME = name

This parameter lets you select only those task records that have a specific (or generic) task name. The field that will contain this name is specified by the RUNAME parameter.

Use this parameter to specify the actual (or generic) operator ID, logical terminal ID, task code, or group ID that a task must have in order for that task to be selected for analysis on the Program Loads Report.

**Note:** CA IDMS Task Analyzer will perform generic processing. For example, if you key in an asterisk (*) before a name field (that is, NAME = *ABC), all tasks (as specified by the RUNAME parameter) whose name field begins with ABC will be included in the report.

**Default:** None. When no characters are entered in columns 48 through 63, CA IDMS Task Analyzer searches for an operator, terminal, or group that has "blanks" (no characters) for an ID. If RUNAME=TASK is specified and NAME="blanks" (no characters), CA IDMS Task Analyzer returns an error message.

**Rules:**

- The exact spelling of this keyword (NAME) is not important. You must, however, enter the name of the operator, terminal, task, or group beginning in column 48 and at the maximum ending in column 63.

- A maximum of sixteen characters can be entered for the OPER, TERM, TASK, or GRUP name.

- You can enter an asterisk followed by 0 to 15 characters. When an asterisk is entered followed by blanks (no characters), CA IDMS Task Analyzer reports on all tasks as specified by RUNAME. When an asterisk followed by 1 to 15 characters is specified, CA IDMS Task Analyzer reports on all tasks with names beginning with the 1 to 15 characters.

---

**Integrated Index Report Parameters**

The Integrated Index Reports are available at three levels: details, summary, and system. To generate these reports, use the parameter syntax listed here.

The parameters for CA IDMS Task Analyzer are *positional*. See the following parameters for a REPORT statement example.

The parameters are:

```
REPORT = INDX
/ DET
/ SUM
/ SYS
/ D
C
RUTYPE = < V >
```
where:

**REPORT = INDX**

demonstrates that CA IDMS Task Analyzer is to create and print an Integrated Index Report.

**Rule:** You must enter INDX in columns 8 through 11.

**EXAMPLE:** REPORT STATEMENT, INTEGRATED INDEX REPORT

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
REPORT=INDX LEVL=SUM RUTYPE=D RUNAME=@ALL NAME=*  
| DET | LEVL = < SUM > / SYS /  |
```

Use this parameter to specify the level of reporting that you want printed.

- **DET** -- indicates that you want CA IDMS Task Analyzer to print the Integrated Index Details Report. (An Integrated Index Summary Report and an Integrated Index System Summary Report also will be produced for each time interval.)

- **SUM** -- indicates that you want an Integrated Index Summary Report by program name. (An Integrated Index System Summary also will be produced for each time interval.)

- **SYS** -- indicates that you want only system summaries to be produced for each time interval.

**Default:** DET

**Rule:** The exact spelling of this keyword (LEVL) is not important. You must, however, enter DET, SUM, or SYS in columns 18 through 20.

```
| D | LEVL = < SUM > / SYS /  |
```

Use this parameter to specify the origin of execution for the tasks you want reported.

- **D** -- indicates that you want CA IDMS Task Analyzer to report on tasks with CA IDMS/DC as the origin of execution.

- **C** -- indicates that you want CA IDMS Task Analyzer to report on tasks with CICS as the origin of execution.

- **V** -- indicates that you want CA IDMS Task Analyzer to report on tasks with z/VM as the origin of execution.
- **B** -- indicates that you want CA IDMS Task Analyzer to report on tasks with Batch as the origin of execution.

- **@** -- indicates that you want CA IDMS Task Analyzer to report on tasks with all of the above origins of execution.

**Default:** @

**Rule:** The exact spelling of this keyword (RUTYPE) is not important. You must, however, enter D, C, V, B, or @ in column 29.

```
/ OPER \
TERM
RUNAME = < TASK >
 GRUP
 \ @ALL /
```

- **OPER** -- specifies that tasks are to be identified by operator ID.

- **TERM** -- specifies that tasks are to be identified by logical terminal ID.

- **TASK** -- specifies that tasks are to be specified by task code.

- **GRUP** -- specifies that tasks are to be specified by a pre-defined group ID. For CA IDMS Task Analyzer purposes, group ID is in bytes 17-32 of Installation Code in the USER entity of the dictionary.

- **@ALL** -- specifies that CA IDMS Task Analyzer reports on all tasks invoked by operator ID, terminal ID, task code, and group ID.

**Default:** @ALL

**Rule:** The exact spelling of this keyword (RUNAME) is not important. You must, however, enter OPER, TERM, TASK, GRUP, or @ALL in columns 38 through 41.

**NAME = name**

This parameter lets you select only those task records that have a specific (or generic) task name. The field that will contain this name is specified by the RUNAME parameter.

Use this parameter to specify the actual (or generic) operator ID, logical terminal ID, task code, or group ID that a task must have in order for that task to be selected for analysis on the Integrated Index Report.

**Note:** CA IDMS Task Analyzer will perform generic processing. For example, if you key in an asterisk (*) before a name field (that is, NAME = *ABC), all tasks (as specified by the RUNAME parameter) whose name field begins with ABC will be included in the report.
Default: None. When no characters are entered in columns 48 through 63, CA IDMS Task Analyzer searches for an operator, terminal, or group that has "blanks" (no characters) for an ID. If RUNAME=TASK is specified and NAME="blanks" (no characters), CA IDMS Task Analyzer returns an error message.

Rules:

- The exact spelling of this keyword (NAME) is not important. You must, however, enter the name of the operator, terminal, task, or group beginning in column 48 and at the maximum ending in column 63.
- A maximum of sixteen characters can be entered for the OPER, TERM, TASK, or GRUP name.
- You can enter an asterisk followed by 0 to 15 characters. When an asterisk is entered followed by blanks (no characters), CA IDMS Task Analyzer reports on all tasks as specified by RUNAME. When an asterisk followed by 1 to 15 characters is specified, CA IDMS Task Analyzer reports on all tasks with names beginning with the 1 to 15 characters.

Ranking Report Parameters

To generate Ranking Reports, use the parameter syntax listed here.

The parameters for CA IDMS Task Analyzer are positional. The following is an example of a Ranking REPORT statement example.

The parameters are:

- REPORT = RANK
- ORDER = < A >
  \ D /
- [NUMBER= nnn]
  / AB \
  EQ
- HOW = < LT >
  LE
  GT
  \ GE /
- [WHAT =item]
- [VALUE = nnnnnnnnnnn]

where:

- REPORT = RANK
  indicates that CA IDMS Task Analyzer is to create and print a Ranking Report.

Rule: You must enter RANK in columns 8 through 11.

EXAMPLE: REPORT STATEMENT, RANKING REPORT
Use this parameter to specify the order in which the tasks are to be reported.

- **A** -- indicates that you want CA IDMS Task Analyzer to print the Ranking Report in ascending order, with the task with the lowest value printed first and the task with the highest value printed last.

- **D** -- indicates that you want CA IDMS Task Analyzer to print the Ranking Report in descending order, with the task with the highest value printed first and the task with the lowest value printed last.

**Default:** A (for ascending)

**Rule:** The exact spelling of this keyword (ORDER) is not important. You must, however, enter A or D in column 19.

**NUMBER=nnn**

After all of the tasks have been selected and ranked, you may also request how many you want to see on the Ranking Report. For example, if you only want to see the first 10 when ranked according to your ORDER and HOW parameters, specify **NUMBER = 010**.

Use this parameter to specify the number of items to be reported on the Ranking Report.

**Default:** 020 (that is, 20 tasks will be listed on the report)

**Rules:**

- The maximum number of tasks that can be reported is 999.

- The exact spelling of this keyword (NUMBER) is not important. You must, however, enter a three digit number in columns 28 through 30.

- You **must** include leading zeroes (‘0’s). For example, if you want to indicate 5 tasks, you must specify "005".

**HOW = < LT > LE GT GE**

Use this keyword to specify how the attribute you select is to be ranked. There are six methods to choose from.

- **AB** -- indicates that tasks are to be ranked by the value of the attribute from the specified task. If you specify AB, you will obtain a report on all tasks compared by the item following the WHAT parameter.

- **EQ** -- the attribute will be ranked from a value EQUAL to the specified value.
- **LT** -- the attribute will be ranked from a value LESS THAN the specified value.
- **LE** -- the attribute will be ranked from a value LESS than or EQUAL to the specified value.
- **GT** -- the attribute will be ranked from a value GREATER THAN the specified value.
- **GE** -- the attribute will be ranked from a value GREATER than or EQUAL to the specified value.

**Default:** AB (for ABSOLUTE)

Rule: The exact spelling of this keyword is not important. You must, however, enter AB, EQ, LT, LE, GT, or GE in columns 36 and 37.

**WHAT = item**

specifies which attribute is to be ranked in the report (see the following table).

**Default:** None. You must select one of the available items.

**Rules:**
- The exact spelling of this keyword (WHAT) is not important. You must, however, enter the item in columns 44 through 52.
- You must spell the item exactly as it is presented in the following table.

<table>
<thead>
<tr>
<th>Item</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTREE</td>
<td>Number of integrated index searches</td>
</tr>
<tr>
<td>BTREELEVL</td>
<td>Number of levels required to complete a search</td>
</tr>
<tr>
<td>CLOCK</td>
<td>Clock time</td>
</tr>
<tr>
<td>CPU</td>
<td>CPU time</td>
</tr>
<tr>
<td>DBCALL</td>
<td>DML verbs</td>
</tr>
<tr>
<td>DETPUTNEW</td>
<td>New details written (pageable maps)</td>
</tr>
<tr>
<td>DETPUTCUR</td>
<td>Current details written (pageable maps)</td>
</tr>
<tr>
<td>DETGET</td>
<td>Details read (pageable maps)</td>
</tr>
<tr>
<td>DISPLAY</td>
<td>Number of display commands</td>
</tr>
<tr>
<td>INVOKE</td>
<td>Number of invoke commands</td>
</tr>
<tr>
<td>I/O</td>
<td>Physical I/Os</td>
</tr>
<tr>
<td>LEAVE</td>
<td>Number of leave commands</td>
</tr>
<tr>
<td>LINK</td>
<td>Number of link commands</td>
</tr>
<tr>
<td>LINKMAX</td>
<td>Maximum number of links</td>
</tr>
<tr>
<td>LINKMIN</td>
<td>Minimum number of links</td>
</tr>
<tr>
<td>ORPHANS</td>
<td>SR8 orphans adopted</td>
</tr>
<tr>
<td>PREMAP</td>
<td>Premap processes</td>
</tr>
<tr>
<td>QUEUEDEL</td>
<td>Records deleted (queue)</td>
</tr>
<tr>
<td>Item</td>
<td>Attribute</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>QUEUEGET</td>
<td>Records read (queue)</td>
</tr>
<tr>
<td>QUEUEPUT</td>
<td>Records written (queue)</td>
</tr>
<tr>
<td>RBBMAX</td>
<td>Maximum size of record buffer blocks</td>
</tr>
<tr>
<td>RBBMIN</td>
<td>Minimum size of record buffer blocks</td>
</tr>
<tr>
<td>RESPONSE</td>
<td>Response processes</td>
</tr>
<tr>
<td>RETURN</td>
<td>Number of return commands</td>
</tr>
<tr>
<td>SCRTCHDEL</td>
<td>Records deleted (scratch)</td>
</tr>
<tr>
<td>SCRTCHGET</td>
<td>Records read (scratch)</td>
</tr>
<tr>
<td>SCRTCHPUT</td>
<td>Records written (scratch)</td>
</tr>
<tr>
<td>SR7ERASED</td>
<td>SR7s erased</td>
</tr>
<tr>
<td>SR7STORED</td>
<td>SR7s stored</td>
</tr>
<tr>
<td>SR8ERASED</td>
<td>SR8s erased</td>
</tr>
<tr>
<td>SR8SPAWN</td>
<td>SR8 spawns occurring</td>
</tr>
<tr>
<td>SR8SPLIT</td>
<td>SR8 splits occurring</td>
</tr>
<tr>
<td>SR8STORED</td>
<td>SR8s stored</td>
</tr>
<tr>
<td>STORACQUR</td>
<td>Storage acquired</td>
</tr>
<tr>
<td>STORALLOC</td>
<td>Storage allocated</td>
</tr>
<tr>
<td>STORKEPT</td>
<td>Storage kept</td>
</tr>
<tr>
<td>SYSTEM</td>
<td>System time</td>
</tr>
<tr>
<td>TERMERROR</td>
<td>Terminal errors</td>
</tr>
<tr>
<td>TERM/I/O</td>
<td>Terminal I/Os</td>
</tr>
<tr>
<td>TERMREAD</td>
<td>Terminal reads</td>
</tr>
<tr>
<td>TERMWRITE</td>
<td>Terminal writes</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>Number of transfer commands</td>
</tr>
<tr>
<td>USER</td>
<td>User time</td>
</tr>
<tr>
<td>WAIT</td>
<td>CPU wait time</td>
</tr>
</tbody>
</table>

**VALUE = nnnnnnnnnnnn**

indicates what numeric value is to be used for comparison, where

- **nnnnnnnnnnnnn** represents a twelve digit number. The number can indicate quantity or time, depending upon the attribute specified after the WHAT parameter (columns 44 through 52). When time is indicated, units are presented in 1/10,000ths of a second.

**Default**: blank. This indicates that all tasks are to be ranked by the ABSOLUTE value, as specified after the HOW parameter (columns 36 and 37).

**Rules:**
The exact spelling of this keyword (VALUE) is not important. You must, however, enter a twelve digit number in columns 60 through 71.

You must include leading and trailing zeroes ('0's). For example, if you want to indicate 10 seconds, you must specify "000000100000".

If you leave the columns 60 through 71 blank, then you must specify AB after the HOW parameter (columns 36 and 37); or, leave columns 36 and 37 blank. Otherwise, no ranking report will be generated.

Do not include commas or decimal points.

Parameter Summary:

<table>
<thead>
<tr>
<th>Process</th>
<th>DCSYSRUN</th>
<th>IDMSXXX</th>
<th>START</th>
<th>STOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>[N]</td>
<td>[N]</td>
<td>[N]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

{DEP} (columns 60 through 71)

{TERM} (columns 36 and 37)

{ALL}

Note:

In the START and STOP keywords, the year is assumed to be 2000 if you specify less...
Note: In the START and STOP keywords, the year is assumed to be 2000 if you specify less than 69; the year is assumed to be 1900 if you specify 69 or greater.

Example: Process statement
---+---2----+---3----+----4----+----5----+----6----+----7---
PROCESS DCSYSRUS=Y IDMSXXXX=Y START=0420862030 STOP=0420862359
*PROCESS CVNUM=0254 PLANID=PLAN1111

Example: Report statement, Billing report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=BILL LEVL=DET RUTYPE=D RUNAME=@ALL NAME=*  

Example: Report statement, Program report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=PROG LEVL=SUM RUTYPE=C RUNAME=GRUP NAME=EXAMY

Example: Report statement, ADS/O report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=ADSO LEVL=SYS RUTYPE=V RUNAME=TASK NAME=EPOSED

Example: Report statement, ABEND report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=ABND LEVL=DET RUTYPE=B RUNAME=@ALL NAME=TERKK

Example: Report statement, Program loads report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=LOAD LEVL=DET RUTYPE=@ RUNAME=OPER NAME=KIKKS

Example: Report statement, Integrated Index report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=INDX LEVL=SUM RUTYPE=D RUNAME=@ALL NAME=*  

Example: Report statement, Ranking report
---+---2----+---3----+----4----+----5----+----6----+----7---
REPORT=RANK ORDER=D NUMBER=050 HOW=GT WHAT=TERMREAD VALUE=00000001000

Task Analyzer Operations

This section describes about z/OS, z/VSE and z/VM operations by the CA IDMS Task Analyzer.

- CA IDMS Task Analyzer Operating Requirements (see page 85)
- CA IDMS Task Analyzer Statistics Plan Options (see page 86)
- Task Analyzer z/OS Operation (see page 89)
- CA IDMS Task Analyzer z/VSE Operations (see page 97)
- CA IDMS Task Analyzer z/VM Operations (see page 102)
CA IDMS - 19.0

CA IDMS Task Analyzer Operating Requirements

The following are the operating requirements of CA IDMS Task Analyzer:

- **Terminal Type**: All 3270-type terminals, models 2 through 5

- **Storage Requirement**:
  - **Program Storage**: RHDCUXIT increases by 14K, and USFAOPT (Statistics Plan program) needs 11K of reentrant pool program storage.

  - **Storage Pool Usage**: For exit processing, each CA IDMS task acquires the following number of bytes:
    
    \[440 + (128 \times \text{maximum load/links})\]

    For the default of 16 maximum load/link levels, this would be 2488 bytes per CA IDMS task. USFAOPT (Statistics Plan program) needs 3656 bytes.

- **Queue Storage**: CA IDMS Task Analyzer uses 120 bytes of queue storage, having a storage ID of CA IDMS Task Analyzer.

- **User Exit Considerations**: If you add or subtract exit 0, 3, 4, 5, 13, or 15 after your initial installation of CA IDMS Task Analyzer, you must regenerate the USFUEXT table to reflect that change. If you add or subtract an exit other than 0, 3, 4, 5, 13, or 15 after your initial installation of CA IDMS Task Analyzer, you must regenerate the CA version of RHDCUXIT to reflect that change. For more information, see the Installation Sections.

- **GSISVCX module customization**: GSISVCX, the CA IDMS TOOLS version of the assembler language module IDMSSVCX is designed to create a 40-position extension to the CA IDMS External Request Element control block (ERE). The type of data that is placed into these 40 positions by the module depends, in part, on whether the run-unit being processed is identified by CA IDMS as BATCH or CICS.

  - **For any type of run-unit** -- the JOBNAME, the run-unit start date and time, and the step start time are moved into the ERE by GSISVCX.

  - **For BATCH run-units** -- up to 16 bytes of information contained in the account field of the jobcard are moved into the ERE by GSISVCX.

  - **For CICS run-units** -- the transaction ID, terminal ID, and operator ID are moved into the ERE by GSISVCX. You will need to customize this module if your installation already uses a version of IDMSSVCX and that function must be retained for continued use: if your account number is not in the first field of the z/OS JOB ACCT parameter; if your installation uses a TP monitor other than CICS; or if the data moved into the ERE is not sufficient for your billing system requirements.

To customize GSISVCX, your systems programmer must make the desired changes to the source code. For more information, see the Installation Sections.

When altering the source code for GSISVCX, follow these sectionlines:

- The ERE may be defined as any length between 40 and 32767 but only the first 40 positions will be written by CA IDMS to the Task Statistics Record.
After the GSISVCX source code is modified, the CA IDMS SVC macro must be identified to the CA IDMS SVC. For more information, see the CA IDMS Installation and Maintenance Section.

CA IDMS Task Analyzer Statistics Plan Options

Contents
- Screen Fields (see page 86)
- Enable CA-IDMS Task Analyzer User Exits (see page 89)

CA IDMS Task Analyzer has an online front-end with which you specify options to control the collection and writing of statistics. Selection of these options creates your statistics plan for CA IDMS Task Analyzer.

One of the main features of the statistics plan is the ability to assign a Plan ID to any collection run. If you make changes to CA IDMS/DC (for example, maintenance tapes, new applications) and assign a different Plan ID to the collection run, you can generate reports by the new Plan ID and compare them to reports of other collection runs.

The Statistics Control Planning screen is divided into three areas: collection control, exit control, and write control.

The collection control area lets you specify what statistics are to be collected and what, if any, programs and/or tasks can be excluded from collection.

The exit control area lets you enable or disable CA IDMS/DC user exits in three ways: all user exits, CA IDMS Task Analyzer exits, and specific user exits. In addition, hours of operation can be specified for the CA IDMS Task Analyzer exits as a group.

The write control area lets you specify whether to write statistics to the CA IDMS/DC Log and/or the SMF file, and also gives you several SMF options.

For more information, see the following Task Analyzer Statistics Collection Planning Screen and the descriptions.

To specify statistics collection options, call up the Statistics Collection Planning screen by entering task USFAOPT from the CA IDMS/DC prompt. Then tab to each field you want to change from the default. To update the plan with options you have specified, press ENTER. If errors have been made, a general error message is displayed. To get help on a specific error, press the PF1 key. To exit the screen, press the CLEAR key or the PF3 key.

Screen Fields

Here is a description of the fields that appear on the following Statistics Collection Planning screen.

PLAN ID -- Enter 8 alpha-numeric characters to identify the statistics plan. PLAN ID may be used to identify the type of environment that CA IDMS Task Analyzer is operating in. For example, you may want to use PLAN ID to identify the CA IDMS maintenance level currently installed or to identify the type of CA IDMS Task Analyzer processing.
DATABASE -- Specify Y (yes) if you want CA IDMS Task Analyzer to collect database statistics including those for integrated indexes or N (no) if you do not want CA IDMS Task Analyzer to collect database statistics.

CA ADS -- Specify Y (yes) if you want CA IDMS Task Analyzer to collect CA ADS statistics or N (no) if you do not want CA IDMS Task Analyzer to collect CA ADS statistics.

PROGRAM -- Specify Y (yes) if you want CA IDMS Task Analyzer to collect program statistics or N (no) if you do not want CA IDMS Task Analyzer to collect program statistics.

CA IDMS Task Analyzer Statistics Collection Planning Screen:

DC/INTERNAL -- Specify Y (yes) if you want CA IDMS Task Analyzer to collect CA IDMS/DC internal tasks statistics or N (no) if you do not want CA IDMS Task Analyzer to collect CA IDMS/DC internal tasks statistics.

LOAD/LINK -- Specify Y (yes) if you want CA IDMS Task Analyzer to collect program load statistics. Specify N (no) if you do not want CA IDMS Task Analyzer to collect program load statistics.

ERUS -- Specify Y (yes) if you want CA IDMS Task Analyzer to collect external run unit statistics. Specify N (no) if you do not want CA IDMS Task Analyzer to collect external run unit statistics.

MAXIMUM LOAD/LINK LEVELS -- Specify the program load threshold for tasks. The program load threshold is the maximum number of modules loaded by a task acceptable in your environment. If the maximum number of modules is exceeded, the task that exceeds the threshold is identified on the Program Loads Report. The default is 16.

EXCLUDE -- If you want to specifically exclude programs and/or tasks from CA IDMS Task Analyzer statistics collection (thereby reducing overhead), you may identify them here. To exclude a program, specify P and a program name. To exclude a task, specify T and a task name. To exclude groups of related tasks and/or programs, specify a T or P and a mask for the name. For example, to exclude all programs with names beginning with 'ABC', specify P and ABC#### for the name.
CA IDMS Task Analyzer will bypass statistical collection for programs having a matching value in PDEPGMID of the Program Definition Element. CA IDMS Task Analyzer will bypass statistical collection for tasks having a matching value in TDETSKCD of the Task Definition Element.

To remove programs or tasks from the exclusion list, specify D and the appropriate name.

GLOBAL STATUS -- Specify E to enable or D to disable all CA IDMS/DC user exits, including CA IDMS Task Analyzer collection exits. If you disable all exits, CA IDMS/DC statistics collection is disabled. The default is E.

COLLECTION STATUS -- Specify E to enable or D to disable the CA IDMS Task Analyzer collection exits. You may also choose the hours of operation. You may also choose the days of operation. The default is E.

O (for Option) -- Specify E to enable or D to disable specific user exits that were previously specified in the USFUEXT table. Each installed exit is identified with its specific exit number, its mode ((D) for CA IDMS/DC or (S) for IBM), its name, and its current status (active or disabled). The default is E.

LOG FILE -- Specify Y (yes) if you want CA IDMS Task Analyzer to write its statistics to the CA IDMS Log. Specify N (no) if you do not want CA IDMS Task Analyzer to write its statistics to the CA IDMS Log. The default is Y. LOG TYPE -- Specify the record type to be used by CA IDMS Task Analyzer when writing records to the CA IDMS/DC Log. Record types of 1 (messages), 2 (trace), or 4 (snap/dump) may be specified. The default is 2 (trace).

DC STATISTICS -- Specify Y (yes) if you want the CA IDMS/DC task statistics gathered by CA IDMS written to the CA IDMS/DC Log. Specify N (no) if you do not want the CA IDMS/DC task statistics gathered by CA IDMS written to the CA IDMS/DC Log. The default is Y. However, if CA IDMS/DC task statistics gathered by CA IDMS are written to the Log, they will duplicate many of the CA IDMS/DC task statistics collected by CA IDMS Task Analyzer.

z/OS -- Specify Y (yes) if you want CA IDMS Task Analyzer to write its statistics to the SMF file. Specify N (no) if you do not want CA IDMS Task Analyzer to write its statistics to the SMF file. The default is N. This option applies to z/OS only.

NUMBER -- Specify the z/OS SMF file user record number. The default is 129.

BLOCK MODE -- Specify the block mode for writing statistics to the SMF file. Specify 1 for maximum blocking efficiency. Specify 2 for blocking by transaction (that is, only those statistics for a specific transaction are included in a single SMF record).

BLOCK SIZE -- Specify the block size for the SMF file. The default is 4096. If block mode is 1, you must specify a minimum block size of (150 * the maximum number of links).

JES ID -- The JES ID that CA IDMS Task Analyzer includes on the records written to SMF is displayed here.

AUTHORIZATION MODE -- Specify the mode in which the SMF records are written. Specify 1 if the CA IDMS CV region is authorized to write to SMF. Specify 2 if the CA IDMS Task Analyzer SVC for SMF is installed.

AUTHORIZATION SVC -- If the authorization mode is 2, specify the specific SVC number for the CA IDMS Task Analyzer SMF SVC.
Enable CA-IDMS Task Analyzer User Exits

To enable the CA-IDMS Task Analyzer Exits, change the startup JCL for your CV(s) to include the required SYSIDMS parameter.

\[
\text{TASK_ANALYZER_EXITS} = \text{ON} \mid \text{OFF}
\]

- **ON**
  - Enables the CA IDMS Task Analyzer User Exits. ON must be specified if CA IDMS Task Analyzer is to be used in the CV.

- **OFF**
  - Disables the CA IDMS Task Analyzer User Exits.
  
  **Default:** OFF

Task Analyzer z/OS Operation

Depending upon the collection options you specify on the Statistics Collection Planning screen, you may want to consider how frequently you archive the CA IDMS Log, or whether you should use multiple logs to store large quantities of statistics. To collect batch run-unit statistics, install the CA IDMS SVC exit module GSISVCX supplied with CA IDMS Task Analyzer. To use authorization mode 2 with SMF, the CA IDMS Task Analyzer SVC (USFASVC) must be installed.

- JCL to Create an Extract File from the CA IDMS Log (see page 90)
- JCL to Create an Extract File from the SMF File (see page 92)
- Report Execution JCL (see page 93)

CA IDMS Task Analyzer report programs are written in CA Culprit. To customize CA IDMS Task Analyzer reports, copy the report program modules from your dictionary, and then modify the programs to create reports that meet your current needs. The following list contains the report program module names and the reports each program generates:

- **USFBILL** -- Billing Reports
- **USFPROG** -- Program Reports
- **USFADSO** -- CA ADS Reports
- **USFPABND** -- Abend Reports
- **USFLOAD** -- Program Loads Reports
- **USFINDEX** -- Integrated Index Reports
- **USFPRANK** -- Ranking Reports

The following JCL required to direct CA IDMS Task Analyzer was cataloged during installation:

1. To create an Extract File from the CA IDMS Log, modify and run the CA IDMS Task Analyzer Extract JCL contained in Target or Distribution source library member USFEXLOG.
2. To create an Extract File from the SMF File, modify and run the CA IDMS Task Analyzer Extract JCL contained in Target or Distribution source library member USFEXSMF.

3. To create CA IDMS Task Analyzer reports from the Extract File, modify and run the CA IDMS Task Analyzer Report Execution JCL contained in Target or Distribution source library member USFREPT.

JCL samples are shown on the following pages.

**JCL to Create an Extract File from the CA IDMS Log**

Use this JCL to extract data from the CA IDMS Archive Log file and reformat it for input into the CA IDMS Task Analyzer reporting process. A key to the required variables (shown in bold) follows the JCL.

```plaintext
//USFEXLOG JOB (job card parameters)
//* ***************************************************************
//* EXTRACTS DATA FROM THE CA-IDMS ARCHIVE LOG FILE AND REFORMATS IT *
//* FOR INPUT INTO THE CA-IDMS/Task Analyzer REPORTING PROCESS       *
//* THE FOLLOWING VARIABLES MUST BE SUPPLIED:                       *
//*   your.idms.loadlib    - The load library where CA-IDMS was       *
//*                     installed.                                    *
//*   printout            - SYSOUT print class.                      *
//*   errorout            - ERROR print class.                       *
//*   wrkunit             - Work unit.                             *
//*   your.idms.sysctl    - SYSCtrl when running in CV mode.         *
//*   local-dmcl          - Local DMCL name.                        *
//*   dictname            - DBNAME of dictionary containing          *
//*                     CA-IDMS/Task Analyzer Culprit source.       *
//*   your.sortlib        - System SORT library.                     *
//*   your.idms.plog      - CA-IDMS archive PLOG.                    *
//*   your.taska.extract  - CA-IDMS/Task Analyzer extract file.      *
//* ***************************************************************
//* OPTIONAL STEP TO DELETE CA-IDMS/Task Analyzer EXTRACT FILE.      *
//* IF THIS STEP IS NOT USED, AND YOU INTEND ON USING A PREVIOUSLY     *
//* CREATED FILE, STEP CULL4 MUST BE CHANGED TO MAKE THIS FILE        *
//* DISP=SHR.                                                       *
//* DELETE EXEC PGM=IEFBR14                                         *
//*    DD     DD DSN=your.taska.extract,DISP=(MOD,DELETE),
//*             UNIT=DISK,SPACE=(TRK,0)
//* CULL0 EXEC PGM=CULP0,REGION=4048K                              *
//* STEPLIB DD DISP=SHR,DSN=your.idms.loadlib//SYSOUT DD SYSOUT=printout//SYSPRINT*  *
//* SYSPRINT DD SYSOUT=printout//SYSUVDUMP DD SYSOUT=errorout//SYS004 DD SYSOUT=printout,
//* DBC=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//* SYS005 DD DISP=(NEW,PASS),
//* DSN=6&UPRMWORK,UNIT=wrkunit,
//* SPACE=(CYL,(10,5),RLSE),
//* DBC=(RECFM=F,LRECL=320,BLKSIZE=320)
//* SYSCTL DD DISP=SHR,DSN=your.idms.sysctl//SYSIDMS DD *
//* DMCL=local-dmcl DBNAME=dictname/*
//* SYSIN DD *
//* PARAM=NOLIST
//* COPY 'USFPEXTR' 1
//* CULL1 EXEC PGM=SORT,PARM='MSG,AP',REGION=508K                  *
//* SORTLIB DD DISP=SHR,DSN=your.sortlib//SORTWK01 DD UNIT=wrkunit,SPACE=(CYL,(5),
//* CONTIG)
//* SORTWK02 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)                *
//* SORTWK03 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)                *
//* SORTWK04 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)                *
//* SORTOUT DD DSN=&SRPMWORK,UNIT=wrkunit,                          *
```
// SPACE=(CYL,(5),,CONTIG),
// DISP=(NEW,PASS),
// DCB=(RECFM=F,LRECL=320,BLKSIZE=320)
// SYSOUT DD SYSOUT=printout//SYSPRINT DD SYSOUT=printout//SYSDUMP DD SYSOUT=err
// /SORTIN DD DISP=(OLD,DELETE),DSN=&&UPRMWORK
// SYSIN DD *
// SORT FIELDS=(1,69,A),FORMAT=BI
// RECORD TYPE=F,LEN(320,320)
// END

/* */
/* */
// CULL2 EXEC PGM=CULL,REGION=4040K
// STEPLIB DD DISP=SHR,DSN=your.idms.loadlib//SYS010 DD DISP=SHR,DSN=your.idms.
// plog//SYSCTL DD DISP=SHR,DSN=your.idms.sysctl//SYSDMS DD *
// IDMSDBG=OFF
/* */
// SYSUDUMP DD SYSOUT=errorout//SYS004 DD SYSOUT=printout,
// DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
// SYS005 DD DSN=&&SPRMWORK,DISP=(OLD,DELETE)
// SYS006 DD DISP=(NEW,PASS),
// DSN=&&JUXWORK,UNIT=wrkunit,
// SPACE=(CYL,(10,5),RLSE),
// DCB=(RECFM=VB,LRECL=1000,BLKSIZE=1004)
// SYS007 DD DISP=(NEW,PASS),
// DSN=&&SRTPWORK,UNIT=wrkunit,
// SPACE=(TRK,(1,1),RLSE),
// DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
// SYS008 DD DISP=(NEW,PASS),
// DSN=&&NSRTWORK,UNIT=wrkunit,
// SPACE=(CYL,(10,5),RLSE),
// DCB=(RECFM=FB,LRECL=1000,BLKSIZE=1004)
/* */
// CULL3 EXEC PGM=SORT,PARM='MSG,AP',REGION=500K
// SORTLIB DD DISP=SHR,DSN=your.sortlib//SORTWK01 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
// SORTWK02 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
// SORTWK03 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
// SORTWK04 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
// SORTOUT DD DSN=&&SEXWORK,UNIT=SYSDA,
// SPACE=(CYL,(5,5),,CONTIG),
// DISP=(NEW,PASS),
// DCB=(RECFM=VB,LRECL=1000,BLKSIZE=1004)
// SYSOUT DD SYSOUT=printout//SYSDUMP DD SYSOUT=err
// /SORTIN DD DISP=(OLD,DELETE),DSN=&&JUXWORK
// SYSIN DD DISP=(OLD,DELETE),DSN=&&SRTPWORK
/* */
// CULL4 EXEC PGM=CULE,REGION=548K
// STEPLIB DD DISP=SHR,DSN=your.taska.extract,UNIT=DISK,
// VOL=SER=WKR06A,
// SPACE=(CYL,(10,5),RLSE),
// DISP=(NEW,CATLG,DELETE),
// DCB=(RECFM=FB,LRECL=6200,BLKSIZE=6200)
// SYSCTL DD DISP=SHR,DSN=your.idms.sysctl//SYSDMS DD *
// IDMSDBG=OFF
/* */
// SYSUDUMP DD SYSOUT=errorout//SYS004 DD SYSOUT=printout,
// DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
// SYS006 DD DISP=(OLD,DELETE),DSN=&&SEXWORK
// SYS008 DD DISP=(OLD,DELETE),DSN=&&NSRTWORK
// SYSABEND DD SYSOUT=*,OUTLIM=0
// SYSIN4 DD DUMMY

Note: For more information on the CA IDMS Task Analyzer CA Culprit procedure used by USFEXLOG, see the appendix "CA Culprit Procedure JCL."
- **job card parameters** -- The job card parameters required at your installation.
- **your.idms.loadlib** -- The load library where CA IDMS was installed.
- **printout** -- SYSOUT print class.
- **errorout** -- ERROR print class.
- **wrkunit** -- Work unit.
- **your.idms.sysctl** -- The name of the SYSCTL when running in CV mode.
- **local-dmcl** -- The local DMCL name.
- **dictname** -- The DBNAME of the dictionary containing CA IDMS Task Analyzer CA Culprit source.
- **your.sortlib** -- The system SORT library.
- **your.idms.plog** -- CA IDMS archive PLOG.
- **your.taska.extract** -- CA IDMS Task Analyzer Extract file.

### JCL to Create an Extract File from the SMF File

Use this JCL to extract CA IDMS Task Analyzer record from an SMF dump file and format the data for input into the CA IDMS Task Analyzer reporting process. A key to the variables (shown in bold) and the return codes follows the JCL.

```jcl
//USFEXSMF JOB (job card parameters)
//*
//****************************************************************************
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ожет быть, все просто.著
```
-- The job card parameters required at your installation.

- smfrecid -- The SMF file user record number as specified on the USFAOPT screen.

- your.loadlib -- The appropriate STEPLIB DSNAME(s).

- printout -- The SYSOUT print class.

- errorout -- The ERROR print class.

- your.taska.extract -- The CA IDMS Task Analyzer extract file.

- wrkunit -- Work unit.

- blksize -- The CA IDMS Task Analyzer extract block size.

- your.smf.dump.file -- The DSNAME of the SMF dump file to be processed.

**Return Codes:**

- 0 -- Successful creation of an CA IDMS Task Analyzer file.

- 4 -- No SMF rec ID parameter was supplied. The parameter defaults to '129'.

- 8 -- No records were extracted from the SMF dump file.

- 16 -- Condition indicates that an error occurred during this run. See the report listing for error messages.

---

### Report Execution JCL

Use this JCL to generate CA IDMS Task Analyzer reports. A key to the variables (shown in bold) follows the JCL.

```jcl
/*USFREPT JOB (job card parameters)
   *------------------------------------------------------------------
   * GENERATES CA-IDMS/Task Analyzer REPORTS.                      *
   *------------------------------------------------------------------
   */
```
THE FOLLOWING VARIABLES MUST BE SUPPLIED:

- your.idms.loadlib - The load library where CA-IDMS was installed.
- your.idms.sysctl - SYSCTL when running in CV mode.
- printout - SYSOUT print class.
- errorout - ERROR print class.
- wrkunit - Work unit.
- primary - Primary SORT CYL(inder) allocation.
- secondary - Secondary SORT CYL(inder) allocation.
- your.taska.extract - CA-IDMS/Task Analyzer extract file.
- your.sorted.taska.extract - Sorted CA-IDMS/Task Analyzer extract file.
- primout - Sorted CA-IDMS/Task Analyzer extract primary CYL(inder) allocation.
- secout - Sorted CA-IDMS/Task Analyzer extract secondary CYL(inder) allocation.
- blkout - Sorted CA-IDMS/Task Analyzer extract block size.
- local-dmcl - Local DMCL name.
- dictname - DBNAME of dictionary containing CA-IDMS/Task Analyzer Culprit source.
- your.sortlib - System SORT library.

OPTIONAL STEP TO DELETE CA-IDMS/Task Analyzer EXTRACT FILE.
IF THIS STEP IS NOT USED, AND YOU INTEND ON USING A PREVIOUSLY CREATED FILE, STEP SORT MUST BE CHANGED TO MAKE THIS FILE DISP=SHR.

DELETE EXEC PGM=IEFBR14
/STEPLIB DD DISP=SHR,DSN=your.idms.loadlib/SORTLIB DD DISP=SHR,DSN=your.sortlib/
/SYSPRINT DD SYSOUT=printout/SYSOUT=printout/SYSUDUMP DD SYSOUT=errorout/SORTWK01 DD UNIT=wrkunit,SPACE=(CYL,(primary,secondary))/SORTWK02 DD UNIT=wrkunit,SPACE=(CYL,(primary,secondary))/SORTWK03 DD UNIT=wrkunit,SPACE=(CYL,(primary,secondary))/SORTWK04 DD UNIT=wrkunit,SPACE=(CYL,(primary,secondary))/SORTWK05 DD UNIT=wrkunit,SPACE=(CYL,(primary,secondary))/SORTWK06 DD UNIT=wrkunit,SPACE=(CYL,(primary,secondary))/SORTIN DD DISP=SHR,DSN=your.taska.extract//SORTOUT DD DSN=your.sorted.taska.extract,
/SYSIN DD *
SORT FIELDS=(7,14,A),FORMAT=BI,EQUALS
/CULL0 EXEC PGM=CULP0,REGION=4048K
/STEPLIB DD DISP=SHR,DSN=your.idms.loadlib/SYSCTL DD DISP=SHR,DSN=your.idms.
/SYSPRINT DD SYSOUT=printout/SYSOUT=printout,
/DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
/SYSDUMP DD SYSOUT=errorout/SYSOUT=errorout/DDN=USERPWORK,UNIT=wrkunit,
/SPACE=(CYL,(10,5),RLSE),
/DCB=(RECFM=F,LRECL=320,RLSE=320)
/SYSDMS DD *
DMCL=local-dmcl DBNAME=ictname/*
/USFPMAIN and USFPWORK are always needed
/ Others needed based on requested reports
/SYSIN DD *
PARAM=NOLIST
=COPY 'USFPMAIN'
=COPY 'USFPWORK'
=COPY 'USFPBILL'
=COPY 'USFPABND'
=COPY 'USFPADSO'
=COPY 'USFPINDEX'
=COPY 'USFPLOAD'
=COPY 'USFPROG'
=COPY 'USFPINDEX'

/*/ CULL1 EXEC PGM=SORT,PARM='MSG,AP',REGION=500K
//STEPLIB DD DISP=SHR,DSN=your.idms.loadlib/SORTLIB DD DISP=SHR,DSN=your.sortlib/
//SORTWK01 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTWK02 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTWK03 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTWK04 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTOUT DD DSN=&SPRMWORK,UNIT=wrkunit,
// SPACE=(CYL,(5,5),,CONTIG),
// DISP=(NEW, PASS),
// DCB=(RECFM=F,LRECL=320,BLKSIZE=320)
//SYSOUT DD SYSOUT=prinout//SYSPRINT DD SYSOUT=prinout//SYSUDUMP DD SYSOUT=errorout
//SYSIN DD *
// SORT FIELDS=(1,69,A),FORMAT=B1
// END
/*/ CULL2 EXEC PGM=CULL,REGION=4048K
//STEPLIB DD DISP=SHR,DSN=your.idms.loadlib/SYS011 DD DISP=SHR,DSN=your.sorted.
taska.extract//SYSCTL DD DISP=SHR,DSN=your.idms.sysctl/DD SYSOUT=errorout//SYS010 DD *
//IDMSDBG=OFF
/*/ SYS004 DD SYSOUT=prinout,
// DCB=(RECFM=FBA,LRECL=133,BLKSIZE=1330)
//SYS005 DD DSN=&SPRMWORK,DISP=(OLD,DELETE)
//SYS006 DD DISP=(NEW,PASS),
// DSN=&JUEXTWORK,UNIT=wrkunit,
// SPACE=(CYL,(10,5),RLSE),
// DCB=(RECFM=VB,LRECL=1000,BLKSIZE=1004)
//SYS007 DD DISP=(NEW,PASS),
// DSN=&SRTFWORK,UNIT=wrkunit,
// SPACE=(TRK,(1,1),RLSE),
// DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYS008 DD DISP=(NEW,PASS),
// DSN=&NSRTWORK,UNIT=wrkunit,
// SPACE=(CYL,(10,5),RLSE),
// DCB=(RECFM=VB,LRECL=1000,BLKSIZE=1004)
/*/ PROCESS and REPORT request statements
/*/ SYS010 DD *
// PROCESS DCSYSRUS=N IDMSXXXX=N START=0101870000 STOP=1231002359
*PROCESS CVNUM=ALL PLANID=ALL
REPORT=BILL LEVEL=DET RUTYPE=@ RUNAME=ALL NAME=* REPORT=ABND LEVEL=DET RUTYPE=@ RUNAME=ALL NAME=* REPORT=ADSO LEVEL=DET RUTYPE=@ RUNAME=ALL NAME=* REPORT=INDEX LEVEL=DET RUTYPE=@ RUNAME=ALL NAME=* REPORT=LOAD LEVEL=DET RUTYPE=@ RUNAME=ALL NAME=* REPORT=PROG LEVEL=DET RUTYPE=@ RUNAME=ALL NAME=* REPORT=RANK ORDER=D NUMBER=035 HOW=GT WHAT=TERMREAD VALUE=000000001000
/*/ CULL3 EXEC PGM=SORT,PARM='MSG,AP',REGION=500K
//STEPLIB DD DISP=SHR,DSN=your.idms.loadlib/SORTLIB DD DISP=SHR,DSN=your.sortlib/
//SORTWK01 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTWK02 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTWK03 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTWK04 DD UNIT=wrkunit,SPACE=(CYL,(5),,CONTIG)
//SORTOUT DD DSN=&SEXTWORK,UNIT=wrkunit,
// SPACE=(CYL,(5,5),,CONTIG),
Note: For more information on the CA IDMS Task Analyzer CA Culprit procedure used by USFREPT, see the appendix "CA Culprit Procedure JCL."

- **job card parameters** -- The job card parameters required at your installation.
- **your.idms.loadlib** -- The load library where CA IDMS was installed.
- **your.idms.sysctl** -- The SYSCTL when running in CV mode.
- **printout** -- The SYSOUT print class.
- **errorout** -- The ERROR print class.
- **wrkunit** -- Work unit.
- **primary** -- The primary SORT CYL(inder) allocation.
- **secondary** -- The secondary SORT CYL(inder) allocation.
- **your.taska.extract** -- The CA IDMS Task Analyzer Extract file.
- **your.sorted.taska.extract** -- The sorted CA IDMS Task Analyzer Extract file.
1. **primout** -- The sorted CA IDMS Task Analyzer Extract primary CYL(inder) allocation.

2. **secout** -- The sorted CA IDMS Task Analyzer Extract secondary CYL(inder) allocation.

3. **blkout** -- Sorted CA IDMS Task Analyzer Extract block size.

4. **local-dmcl** -- The local DMCL name.

5. **dictname** -- The DBNAME of the dictionary containing the CA IDMS Task Analyzer CA Culprit source.

6. **your.sortlib** -- The system SORT library.

---

### CA IDMS Task Analyzer z/VSE Operations

Depending upon the collection options you specify on the Statistics Plan screen, you may want to consider how frequently you archive the CA IDMS Log, or whether you should use multiple logs to store large quantities of statistics. To collect batch run-unit statistics, install the CA IDMS SVC exit module GSISVCX supplied with CA IDMS Task Analyzer.

- **z/VSE File Assignments (see page 98)**

CA IDMS Task Analyzer report programs are written in CA Culprit. To customize CA IDMS Task Analyzer reports, copy the report program modules from your dictionary, and then modify the programs to create reports that meet your current needs. The following list contains the report program module names and the reports each program generates:

- **USFPBILL** -- Billing Reports
- **USFPPROG** -- Program Reports
- **USFPADSO** -- CA ADS Reports
- **USFPABND** -- Abend Reports
- **USFPLOAD** -- Program Loads Reports
- **USFPRINDEX** -- Integrated Index Reports
- **USFPRANK** -- Ranking Reports

The JCL required to direct CA IDMS Task Analyzer was cataloged during installation. The use of the JCL and the names of the TOOLJCL library members containing the JCL are as follows:

1. To create an Extract File from the CA IDMS Log, modify and run the CA IDMS Task Analyzer Extract JCL contained in TOOLJCL library member USFEXTRC.S (z/VSE).

2. To create CA IDMS Task Analyzer reports from the Extract File, modify and run the CA IDMS Task Analyzer Report Execution JCL contained in TOOLJCL library member USFEXEC.S (z/VSE).

Both sets of JCL are shown on the following pages.
z/VSE File Assignments

Even if you use a storage management tool such as CA DYNAM, CA IDMS Task Analyzer requires an ASSGN statement for every file except SORTWKnn. This ASSGN is required because CA IDMS Task Analyzer has its own device-independent support which dynamically builds a DTF based on the device type indicated by the ASSGN. Unless the ASSIGN specifies VSAM or BDAM, the file may be defined with either DLBL or TLBL.

// (job card parameters)
* FOR z/VSE USE THE FOLLOWING STATEMENTS
// DLBL  lib-filename,'your.idms.library'
// EXTENT  volser,'LIBDEF SOURCE,SEARCH=lib-filename.sublib/' LIBDEF PHASE,SEARCH=lib
-fname.sublib* * * * * * * * * * * * * * * *
* FOR z/VSE USE THE FOLLOWING STATEMENTS
// DLBL  IJSYSCL,'idms.corelib'
// EXTENT  volser,' DLBL IJSYSSL,'yourHLQ.CAGJSRC'
// EXTENT  volser,' LIBDEF SL,SEARCH=IJSYSSL
// LIBDEF CL,SEARCH=IJSYSCL

* ******************************************************
// UPSI 1
// OPTION LOG,PARTDUMP
* ******************************************************
* If running in LOCAL mode, include dataset containing
* the DDLML area of the dictionary containing Culprit modules
* ******************************************************
// DLBL  DICTDB,'your.dict.ddlml'
// EXTENT  SYSnnn,volser,,rel-trk-blk.amount// ASSGN  SYSnnn,DISK,VOL=volser,SHR

* ******************************************************
* FOR CV runs specify:
// DLBL  SYSCTL,'your.sysctl.file'
// EXTENT  SYSnnn,volser,,starttrack,#tracks// ASSGN  SYSnnn,DISK,VOL=volser,SHR

* ******************************************************
// ASSGN  SYS004,SYSLST
// DLBL  SYS005,'CULPRIT.PARMS',0
// EXTENT  SYS005,volser,,rel-trk-blk.amount// ASSGN  SYS005,DISK,VOL=volser,SHR
// DLBL  SYS006,'CULPRIT.EXTRACT',0
// EXTENT  SYS006,volser,,rel-trk-blk.amount// ASSGN  SYS006,DISK,VOL=volser,SHR
// DLBL  SYS007,'CULPRIT.SORTCARD',0
// EXTENT  SYS007,volser,,rel-trk-blk.amount// ASSGN  SYS007,DISK,VOL=volser,SHR
// DLBL  SYS008,'CULPRIT.NOSORT',0
// EXTENT  SYS008,volser,,rel-trk-blk.amount// ASSGN  SYS008,DISK,VOL=volser,SHR
// DLBL  SORWK1,'CULSORT.WORK',0
// EXTENT  SYS001,volser,,rel-trk-blk.amount// ASSGN  SYS001,DISK,VOL=volser,SHR
// DLBL  SYS010,'your.archive.log'
// EXTENT  SYS010,volser// ASSGN  SYS010,DISK,VOL=volser,SHR
// DLBL  SYS020,'your.extract.file',0
// EXTENT  SYS020,volser,,rel-trk-blk.amount// ASSGN  SYS020,DISK,VOL=volser,SHR
// DLBL  SYSIDMS,'#SYSIPT',0,SD
// EXEC  CULPRIT,SIZE=1024K
PARAM=NOLIST
=COPY 'USFPEXTR'
/*
* Fill in appropriate Rnn.n SYSIDMS parameters
*
* ECHO=ON OR OFF
LOCAL=OFF OR ON
DICTNAME=your-dmcl-name DICTNAME=your-dictionary-name/*
&

Use the CA IDMS Task Analyzer EXTRACT JCL to:

1. Select data from the CA IDMS Log.

2. Reformat the data for use by CA IDMS Task Analyzer report programs.
3. Copy the data to the Extract File.

4. **job card parameters** -- The job card parameters required at your company.

5. **lib-filename** -- The file name of the z/VSE library where your CA IDMS executable phases and source reside.

6. **your.idms.library** -- The data set name of the library where your CA IDMS executable phases and source reside.

7. **volser** -- The volume serial number or generic assignment of the disk volume on which the library or file, specified in the preceding DLBL statement, resides.

8. **sublib** -- The name of the sublibrary of the z/VSE library specified in the preceding DLBL statement.

9. **idms.corelib** -- The name of your CA IDMS core image library.

10. **yourHLQ.CAGJSRC** -- The name of your CA IDMS source statement library.

11. **rel-trk-blk** -- The starting position on the DASD for storage of the work file. z/VSE Users: do not start track assignment at 000000.

12. **amount** -- The number of tracks or blocks you need for storage of the work file.

13. **your.archive.log** -- The name of the CA IDMS Log from which the records are to be extracted.

14. **your.extract.file** -- The name of the extract file to which the CA IDMS Task Analyzer records from the CA IDMS Log are to be copied.

```plaintext
// JOB USFEXEC (job card parameters)
/*   ****  CREATE A SYSIDMS PARAMETER FILE (nn.n)  *** */
// UPSI 1
// OPTION   LOG,PARTDUMP
// DLBL   anyname,'work.file.SYSIDMS',0,SD
// EXTENT   SYS060,volser,.,rel-trk-blk.amount//  ASSGN SYS060,DISK,VOL=volser,SHR
// EXEC      DITTO
$$DITTO CS0 FILEOUT=anyname* Rnn.n SYSIDMS parameters.
* For Local Mode specify :
  DMCL=dmcl-name,LOCAL=ON,JOURNAL=OFF,DBNAME=your.dbname*
* For CV runs specify :
  DMCL=dmcl-name,LOCAL=OFF,JOURNAL=OFF,DBNAME=your.dbname/*
$$DITTO EOJ
/*
// UPSI 0
* FOR z/VSE USE THE FOLLOWING STATEMENTS
// DLBL   lib-filename,'your.idms.library'
// EXTENT   volser// LIBDEF SOURCE,SEARCH=lib-filename.sublib// LIBDEF PHASE,SEARCH=lib
-filename.sublib*
* FOR z/VSE USE THE FOLLOWING STATEMENTS
// DLBL   IJSYSCL,'idms.corelib'
// EXTENT   volser// DLBLL IJSYSCL, 'yourHLQ.CAGJSRC'
// EXTENT ,volser// LIBDEF SL,SEARCH=IJSYSCL
// LIBDEF CL,SEARCH=IJSYSCL
* ***********************************************************************
* // OPTION   LOG,PARTDUMP
// ASSGN   SYS004,SYSLST
```
Use the CA IDMS Task Analyzer REPORT EXECUTION JCL to:

1. Identify and run CA IDMS Task Analyzer reports. For more information on the use of parameters, see the beginning of this section.

2. Use the CA IDMS Task Analyzer report programs.
3. **job card parameters** -- The job card parameters required at your company.

4. **anyname** -- Any suitable name for your SYSIDMS file. Note the name chosen must be identical to the FILEOUT value in the DITTO copy step.

5. **volser** -- The volume serial number or generic assignment of the disk volume on which the library or file, specified in the preceding DLBL statement, resides.

6. **rel-trk-blk** -- The starting position on the DASD for storage of the work file. z/VSE Users: do not start track assignment at 000000.

7. **amount** -- The number of tracks or blocks you need for storage of the work file.

8. **lib-filename** -- The file name of the z/VSE library where your CA IDMS executable phases and source reside.

9. **your.idms.library** -- The data set name of the library where your CA IDMS executable phases and source reside.

10. **sublib** -- The name of the sublibrary of the z/VSE library specified in the preceding DLBL statement.

11. **idms.corelib** -- The name of your CA IDMS core image library.

12. **yourHLQ.CAGJSRC** -- The name of your CA IDMS source statement library.

13. **your.dict.ddldml** -- The file ID of the dictionary into which the CULPRIT report statements have been loaded.

14. **your.sysctl.file** -- The file ID of your SYSCTL file.

15. **your.extract.file** -- The name of the extract file to which the CA IDMS Task Analyzer records from the CA IDMS Log are to be copied.

16. **work.file.SYSIDMS** -- The file ID of your SYSIDMS work file.

17. **xxxx** -- The suffix of the report program name: BILL, PROG, ADSO, ABND, LOAD, INDX, or RANK.

---

**Note:** The Report Execution JCL, contained in USFEXEC, contains PROCESS and REPORT statement examples. For more information on the use of parameters, see the section "Parameters."
CA IDMS Task Analyzer z/VM Operations

Before operating CA IDMS Task Analyzer in a z/VM environment, review the following considerations. Depending upon the collection options you specify on the Statistics Plan Screen, you may want to consider how frequently you archive the CA IDMS Log, or whether you should use multiple logs to store large quantities of statistics. To collect batch run-unit statistics, install the CA IDMS SVC exit module GSISVCX supplied with CA IDMS Task Analyzer.

- The Extract EXEC USFXTRCT (see page 102)
- The Report Execution EXEC USFRPRT (see page 104)

CA IDMS Task Analyzer report programs are written in CA Culprit. To customize CA IDMS Task Analyzer reports, copy the report program modules from your dictionary, and then modify the programs to create reports that meet your current needs. The following list contains the report program module names and the reports each program generates:

- USFPBILL -- Billing Reports
- USFPPROG -- Program Reports
- USFPADSO -- CA ADS Reports
- USFPABND -- Abend Reports
- USFPLOAD -- Program Loads Reports
- USFPINDEX -- Integrated Index Reports
- USFP_RANK -- Ranking Reports

USFXTRCT and USFRPRT, the EXECs required to direct CA IDMS Task Analyzer, were cataloged during installation and are shown on the following pages.

The Extract EXEC USFXTRCT

USFXTRCT, the Extract EXEC, is shown on the next two pages. To create an Extract File from the CA IDMS Log:

1. Create a SYSIN file with the following CA Culprit parameters:

   DATABASE DICTNAME=your.dict.name PARAM=NOLIST
   COPY 'USFPEXTR'

   where:
   your.dict.name is the name of the dictionary in which the Extract programs reside.
   If you do not use a secondary dictionary, do not create a DATABASE parameter.

2. Modify and run the CA IDMS Task Analyzer Extract EXEC contained in source library member USFXTRCT.
TRACE OFF; SIGNAL ON ERROR

IDMS_LOADLIB_FN = 'idms.loadlib'
SORT_TXTLIB_FN = 'your.sortlib'

/* Link and access the Minidisks containing the required librarie(s) */

'CP SPOOL PRINTER NOCONT CLOSE'
'CP SPOOL PRINTER TO * NOHOLD CONT FORM OFF DIST OFF'
'GLOBAL LOADLIB ' IDMS_LOADLIB_FN
'GLOBAL TXTLIB ' SORT_TXTLIB_FN

'FILEDEF SYSLST DISK FILE SYSLST fm'
'FILEDEF SYSPRINT DISK FILE SYSPRINT fm'
'FILEDEF SYSUDUMP DISK FILE SYSUDUMP fm'
'FILEDEF SORTPRNT DISK FILE SORTPRNT fm'
'FILEDEF SORTMSGS DISK FILE SORTMSGS fm'
'FILEDEF SYSOUT DISK FILE SYSOUT fm'

'FILEDEF SYSIN4 DUMMY'

'FILEDEF SYS004 DISK FILE SYS004 fm4 (RECFM FBA LRECL 133 BLKSIZE 133'

'FILEDEF SYS005 DISK FILE SYS005 fm4 (RECFM F LRECL 320 BLKSIZE 320'

'FILEDEF SYS006 DISK FILE SYS006 fm4 (RECFM VB LRECL 1000 BLKSIZE 1004'

'FILEDEF SYS007 DISK FILE SYS007 fm4 (RECFM F LRECL 80 BLKSIZE 80'

'FILEDEF SYS008 DISK FILE SYS008 fm4 (RECFM VB LRECL 1000 BLKSIZE 1004'

'FILEDEF SYS010 TAP1 (dcb'

'FILEDEF SYS020 DISK TASKA EXTRACT fm (RECFM FB LRECL 200 BLKSIZE 2000'

'FILEDEF SYSPCH DUMMY'

'FILEDEF CULSRT1I DISK FILE CULSRT1I fm'

'SYSP1 CULPRIT Parameters'

'SYSP1 CULSRTI DISK USFXTRCT SYSIN fm'

You must create a file 'SYSIDMS INPUT A' containing the SYSIDMS parameters you use to specify your runtime environment.

SIGNAL OFF ERROR
SAY 'STARTING CA-IDMS/Task Analyzer CULPRIT EXTRACT PROCESSING'

*/
Use the CA IDMS Task Analyzer EXTRACT EXEC to:

1. Select data from the CA IDMS Log.
2. Reformat the data for use by CA IDMS Task Analyzer report programs.
3. Copy the data to the Extract File.
4. `idms.loadlib` -- The file name of the load library containing your CA IDMS modules.
5. `your.sortlib` -- The file name of the library containing your sort module.
6. `dcb` -- DCB information for the archive log tape: record format, logical record length, and block size.
7. `fm4` -- The file mode of the relevant file. File mode 4 indicates z/OS file simulation.

**The Report Execution EXEC USFRPRT**

USFRPRT, the Report Execution EXEC, is shown on the next two pages. To create CA IDMS Task Analyzer reports from the Extract File:

1. Create a SYSIN file with the following CA Culprit parameters:
   ```
   DATABASE DICTNAME=your.dict.name PARM=NOLIST
   =COPY 'USFPMAIN'
   =COPY 'USFPWORK'
   =COPY 'USFPxxxx'
   ```
where:

your.dict.name is the name of the dictionary into which the CA IDMS Task Analyzer Report programs were loaded.

If you do not use a secondary dictionary, do not create the DATABASE parameter.

xxxx is the suffix of the report program name: BILL, PROG, ADSO, ABND, LOAD, INDEX, or RANK.

2. Create a SYS010 file for the CA IDMS Task Analyzer parameters. Use as parameters the PROCESS and REPORT statements, supplying values in the correct positions. For more information on the use of parameters, see the section "Parameters."

3. Modify and run the CA IDMS Task Analyzer Report Execution EXEC contained in source library member USFRPRT.

```sql
/* */
TRACE OFF; SIGNAL ON ERROR

/* */

IDMS_LOADLIB_FN = 'idms.loadlib'
SORT_TXTLIB_FN = 'your.sortlib'

/* */

/* Link and access the Minidisks containing the required library(s) */

'CP SPOOL PRINTER NOCONT CLOSE'
'CP SPOOL PRINTER TO * NOHOLD CONT FORM OFF DIST OFF'
'GLOBAL LOADLIB ' IDMS_LOADLIB_FN
'GLOBAL TXTLIB ' SORT_TXTLIB_FN

/* */

/* Input Program Listing */

'FI SYS004 DISK FILE SYS004 fm4 (RECFM FA LRECL 133 BLKSIZE 133'

/* */

/* */

'FI SYS005 DISK FILE SYS005 fm4 (RECFM F LRECL 320 BLKSIZE 320'

/* */

/* IDMS10 Sort Parameters */

'FILEDEF CULSRTII DISK FILE CULSRTII fm'

/* */

/* Extract Work File */

'FI SYS006 DISK FILE SYS006 fm4 (RECFM VB LRECL 1000 BLKSIZE 1004'

/* */

/* */

'FI SYS007 DISK FILE SYS007 fm4 (RECFM F LRECL 80 BLKSIZE 80'

/* */

/* Work File */

'FI SYS008 DISK FILE SYS008 fm4 (RECFM VB LRECL 1004 BLKSIZE 1004'

/* */

/* CA-IDMS/Task Analyzer Parameter File */

'FILEDEF SYS010 DISK TASKA SYS010 fm'

/* */

'FILEDEF SYSPCH DUMMY'
```
Use the CA IDMS Task Analyzer REPORT EXECUTION EXEC to:

1. Identify and run CA IDMS Task Analyzer reports.

2. Use the CA IDMS Task Analyzer report programs.

3. **idms.loadlib** -- The name of your CA IDMS load library.
4. **your.sortlib** -- The name of your sort text library.

5. **fn ft fm** -- The file name, file type, and file mode of the relevant file.

6. **fn ft fm4** -- The file name, file type, and file mode of the relevant file. File mode 4 indicates z/OS file simulation.

---

**Note:** For more information on the use of parameters, see the section "Parameters."

---

**External Request Element Extension 1**

This section provides a description of the External Request Element (ERE) extension. Altering the ERE description is necessary if you want to tailor the CA IDMS Log Analyzer Billing Reports. To change the ERE extension you must alter GSISSVCX, USLBILX, and USLRPT5.

```plaintext
*--------------------------------------------------------------*
*    ERE LAYOUT (AS CREATED BY GSISVCX)                      *
*                                                            *
*    NOTE: THESE FIELDS ARE CONTAINED WITHIN                  *
*    THE LOG STATISTICS                                      *
*    TYPE '28' RECORD (TST - TASK - STATISTICS)              *
*--------------------------------------------------------------*

  10 TST-STATS-BLOCK-ID
  15 TST-ERE
     20 FILLER       PIC X(12).
     20 TST-ERE-EXT-ONL.
        25 TST-ERE-TRAN-ID    PIC X(4).
        25 TST-ERE-TERM-ID    PIC X(4).
        25 TST-ERE-OPER-ID    PIC X(3).
        20 TST-ERE-EXT-BTC    REDEFINES TST-ERE-EXT-ONL.
        25 TST-ERE-ACCT      PIC X(11).
        20 TST-ERE-ID       PIC X
          88 TST-ERE-ONL     VALUE 'C'.
          88 TST-ERE-BTC     VALUE 'B'.
          88 TST-ERE-CICS    VALUE 'C'.
          88 TST-ERE-DIALOGE VALUE 'D'.
        20 TST-ERE-JOB-NAME PIC X(8).
        20 TST-ERE-JOB-START.

THE FOLLOWING DATE IS IN JULIAN FORMAT (0OYYDDD)
FOR OS BATCH, THE TIME IS IN 24 HOUR FORMAT (HHMMSSSTHTT)
IE. DIVISION BY 10000 YIELDS HHMMSS
FOR DOS BATCH/CICS, THE TIME IS IN UNITS OF 1/10000 SEC

        25 TST-ERE-JOB-START-DATE PIC S9(7) COMP-3
        25 TST-ERE-JOB-START-TIME PIC S9(9) COMP.
        20 TST-PGM-NAME.
           25 FILLER      PIC X(4).
             88 TST-IDMS-PGM VALUE 'IDMS'
           25 FILLER      PIC X(4)
```

---
CA Culprit Procedure JCL

The JCL for the CA Culprit procedure used in CA IDMS Task Analyzer is shown here. The CA Culprit procedure, found in source library member USFPCULP, is used to generate reports.

When the CA IDMS Task Analyzer Report Execution JCL is run, it executes the CA Culprit procedure contained in the source member USFPCULP. The JCL for the CA Culprit procedure is shown in this appendix.

```
//USFPCULP PROC PRINT=A, ** OUTPUT PRINT CLASS
// ERML=D, ** ERROR PRINT CLASS
// UNIT=3380, ** UNIT FOR WORK FILES
// SYSCTL='YOUR.IDMS.SYSCCTL',
// IDMSLD2='YOUR.IDMS.LOADLIB',
// IDMSRC='YOUR.IDMS.SRCLIB',
// SORTLIB='YOUR.SYS1.SRTLIB'
//*****************************************************************************/
//* CA-Culprit PROCEDURE
//*****************************************************************************/
//CULPO EXEC PGM=CULPO,REGION=320K,
//STEPLIB DD DSN=&IDSMLD,DISP=SHR
//SYS004 DD SYSOUT=&PRINT,DCB=(RECFM=FBA,LRECL=133,
//                        BLKSIZE=133)
//SYS005 DD DSN=&UPRMWORK,UNIT=&UNIT,
//          DISP=(NEW,PASS),
//          SPACE=(CYL,(10,5),RLSE,
//          DCB=(RECFM=F,LRECL=320,BLKSIZE=320)
//SYSCTL DD DSN=&SYSCTL,DISP=SHR
//*
//CULP1 EXEC PGM=SORT,REGION=320K,PARM='MSG=AP'
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=&UNIT,
//          SPACE=(CYL,(5),,CONTIG)
//SORTWK02 DD UNIT=&UNIT,
//          SPACE=(CYL,(5),,CONTIG)
//SORTWK03 DD UNIT=&UNIT,
//          SPACE=(CYL,(5),,CONTIG)
//SORTWK04 DD UNIT=&UNIT,
//          SPACE=(CYL,(5),,CONTIG)
//SORTOUT DD DSN=&SPRMWORK,UNIT=&UNIT,Vol=SER=&VOLSER,
//          DISP=(NEW,PASS),
//          SPACE=(CYL,(5),,CONTIG),
//          DCB=(RECFM=F,LRECL=320,BLKSIZE=320)
//SYSOUT DD SYSOUT=&PRINT
//SYSPRINT DD SYSOUT=&PRINT
//SORTIN DD DSN=&UPRMWORK,DISP=(OLD,DELETE)
//SYSIN DD DSN=6IDMSRC.(SORT1),DISP=SHR
//*
//CULP2 EXEC PGM=CUL,REGION=320K,
//STEPLIB DD DSN=&IDSMLD,DISP=SHR
//SYS004 DD SYSOUT=&ERML,DCB=(RECFM=FBA,LRECL=133,
//                        BLKSIZE=133)
//SYS005 DD DSN=&UPRMWORK,DISP=(OLD,DELETE)
//SYS006 DD DSN=&UXETWORK,UNIT=&UNIT,
//          DISP=(NEW,PASS),
//          SPACE=(CYL,(10,5),RLSE),
//          DCB=(RECFM=F,LRECL=1000,BLKSIZE=1004)
//SYS008 DD DSN=&NSRTWORK,UNIT=&UNIT,
//          DISP=(NEW,PASS),
//          SPACE=(CYL,(10,5),RLSE),
//          DCB=(RECFM=F,LRECL=1000,BLKSIZE=1004)
//SYS007 DD DSN=&SRTWORK,UNIT=&UNIT,
//          DISP=(NEW,PASS),
//          SPACE=(CYL,(10,5),RLSE),
//          DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
```
//SYS009 DD DUMMY
//SYSJRNL DD DUMMY
//*
//CULP3 EXEC PGM=SORT,REGION=320K,PARM='MSG=AP'
//SORTLIB DD DSN=&SORTLIB,DISP=SHR
//SORTWK01 DD UNIT=UNIT, //
// SPACE=(CYL,(5),,CONTIG)
//SORTWK02 DD UNIT=UNIT, //
// SPACE=(CYL,(5),,CONTIG)
//SORTWK03 DD UNIT=UNIT, //
// SPACE=(CYL,(5),,CONTIG)
//SORTWK04 DD UNIT=UNIT, //
// SPACE=(CYL,(5),,CONTIG)
//SORTOUT DD DSN=&&SEXTWORK,UNIT=UNIT,DISP=(NEW,PASS), //
// SPACE=(CYL,(15,5),RLSE), //
// DCB=(RECFM=VB,LRECL=1000,BLKSIZE=1004)
//SYSOUT DD SYSOUT=PRINT
//SYSPRINT DD SYSOUT=PRINT
//SORTIN DD DSN=&&UEXTWORK,DISP=(OLD,DELETE)
//SYSIN DD DSN=&&SRTPWORK,DISP=(OLD,DELETE)
//*
//CULP4 EXEC PGM=CULE,REGION=512K
//STEPLIB DD DSN=&IDSMLD,DISP=SHR
//SYS004 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS006 DD DSN=&&SEXTWORK,DISP=(OLD,DELETE)
//SYS008 DD DSN=&&NSRTWORK,DISP=(OLD,DELETE)
//SYS030 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS031 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS032 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS033 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS034 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS035 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS036 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS037 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS038 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS039 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS040 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS041 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS042 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS043 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS044 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS045 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYS046 DD SYSOUT=PRINT,DCB=(RECFM=FBA,LRECL=133, //
// BLKSIZE=133)
//SYSABEND DD DUMMY,OUTLIM=0
//SYSIN DD DUMMY,DCB=BLKSIZE=80
//PEND **** END OF PROCEDURE ****