CAPACITY MANAGEMENT TOOLS
USER MANUAL

Version 2.0

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Department of Veterans Affairs
VistA Health Systems Design & Development (HSD&D)
Capacity Planning (CP) Service

Revision History

Documentation Revisions

The following table displays the revision history for this document. Revisions to the documentation are based on patches and new versions released to the field.

Date	Revision	Description	Author
03/24/04	1.0	Initial Capacity Management Tools V. 2.0 software documentation creation.	Robert Kamarowski, Bay Pines, FL Office of Information Field Office (OIFO) and Thom Blom, Oakland, CA OIFO
04/15/04	1.1	Corrected references to CPRS and OE/RR software versions with regard to Patch OR*3.0*209 in the "Start/Stop Timing Collection" topic in Chapter 3, "CM Tools: Options."	Robert Kamarowski, Bay Pines, FL OIFO and Thom Blom, Oakland, CA OIFO
12/20/04	1.2	Reviewed document and edited for the "Data Scrubbing" and the "PDF 508 Compliance" projects. **Data Scrubbing—**Changed all patient/user TEST data to conform to HSD&D standards and conventions as indicated below: • The first three digits (prefix) of any Social Security Numbers (SSN) start with "000" or "666." • Patient or user names are formatted as follows: MMPDPATIENT,[N] or KMPDUSER,[N] respectively, where the N is a number written out and incremented with each new entry (e.g., KMPDPATIENT, ONE, KMPDPATIENT, TWO, etc.). • Other personal demographic-related data (e.g., addresses, phones, IP addresses, etc.) were also changed to be generic. **PDF 508 Compliance—**The final PDF document was recreated and now supports the minimum requirements to be 508 compliant (i.e., accessibility tags, language selection, alternate text for all images/icons, fully functional Web links, successfully passed Adobe Acrobat	Thom Blom, Oakland, CA OIFO

Date	Revision	Description	Author
		Quick Check).	
05/31/05	1.3	Updated the CP Environment Check option [KMPD STATUS] based on changes introduced with Capacity Management Tools Patch KMPD*2.0*03.	Robert Kamarowski, Bay Pines, FL OIFO and Thom Blom, Oakland, CA OIFO
05/22/06	1.4	Updated the Edit CP Parameters File option [KMPD PARAM EDIT] and added references to the VistA Monitor program based on changes introduced with Capacity Management Tools Patch KMPD*2.0*05.	Capacity Planning Development Team • Kornel Krechoweckyj—Project Manager • Robert Kamarowski—Lead Developer • Gurbir Singh—SQA • Thom Blom—Technical Writer

Table i. Documentation revision history

Patch Revisions

For the current patch history related to this software, please refer to the Patch Module on FORUM.

Contents

Figures and Tables

Acknowledgements

The Capacity Planning (CP) Service's Capacity Management (CM) Tools Project Team consists of the following Development and Infrastructure Service (DaIS) personnel:

- DaIS Program Director—Catherine Pfeil
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- Enterprise VistA Support (EVS) Release Manager—Lewis Tillis
- Technical Writer—Thom Blom

The Capacity Planning Service's CM Tools Project Team would like to thank the following sites/organizations/personnel for their assistance in reviewing and/or testing CM Tools V. 2.0 software and documentation (sites are listed alphabetically):

- CAVHCS—Thomas E. Ash
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- Reno, NV—Kathy Smith
- West Haven, CT

Orientation

How to Use this Manual

Throughout this manual, advice and instructions are offered regarding the use of Capacity Management Tools software and the functionality it provides for Veterans Health Information Systems and Technology Architecture (VistA) software products.

This manual uses several methods to highlight different aspects of the material:

- Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:

Symbol	Description
	**NOTE/REF:** Used to inform the reader of general information including references to additional reading material.
	**CAUTION:** Used to caution the reader to take special notice of critical information.

Table ii. Documentation symbol descriptions

- Descriptive text is presented in a proportional font (as represented by this font).
- Conventions for displaying TEST data in this document are as follows:
  - The first three digits (prefix) of any Social Security Numbers (SSN) will begin with either "000" or "666".
  - Patient and user names will be formatted as follows: [Application Name]PATIENT,[N] and [Application Name]USER,[N] respectively, where "Application Name" is defined in the Approved Application Abbreviations document and "N" represents the first name as a number spelled out and incremented with each new entry. For example, in Kernel (KRN) test patient and user names would be documented as follows: KRNPATIENT,ONE; KRNPATIENT,TWO; KRNPATIENT,THREE; etc.
- Sample HL7 messages, "snapshots" of computer online displays (i.e., character-based screen captures/dialogues) and computer source code are shown in a *non*-proportional font and enclosed within a box. Also included are Graphical User Interface (GUI) Microsoft Windows images (i.e., dialogues or forms).
  - User's responses to online prompts will be boldface.
  - The "**<Enter>**" found within these snapshots indicate that the user should press the Enter key on their keyboard. Other special keys are represented within angle brackets (< >). For example, pressing the PF1 key can be represented as pressing **<PF1>**.
  - Author's comments, if any, are displayed in italics or as "callout" boxes.

NOTE: Callout boxes refer to labels or descriptions usually enclosed within a box, which point to specific areas of a displayed image.

- All uppercase is reserved for the representation of M code, variable names, or the formal name of options, field and file names, and security keys (e.g., the XUPROGMODE key).

How to Obtain Technical Information Online

Exported file, routine, and global documentation can be generated through the use of Kernel, MailMan, and VA FileMan utilities.

NOTE: Methods of obtaining specific technical information online will be indicated where applicable under the appropriate topic.

REF: Please refer to the *Capacity Management Tools Technical Manual* for further information.

Help at Prompts

VistA software provides online help and commonly used system default prompts. Users are encouraged to enter question marks at any response prompt. At the end of the help display, the user is immediately returned to the point from which he/she started. This is an easy way to learn about any aspect of VistA software.

To retrieve online documentation in the form of Help in any VistA character-based product:

- Enter a single question mark ("**?**") at a field/prompt to obtain a brief description. If a field is a pointer, entering one question mark ("**?**") displays the HELP PROMPT field contents and a list of choices, if the list is short. If the list is long, the user will be asked if the entire list should be displayed. A YES response will invoke the display. The display can be given a starting point by prefacing the starting point with an up-arrow ("^") as a response. For example, **^M** would start an alphabetic listing at the letter M instead of the letter A while **^127** would start any listing at the 127th entry.
- Enter two question marks ("**??**") at a field/prompt for a more detailed description. Also, if a field is a pointer, entering two question marks displays the HELP PROMPT field contents and the list of choices.
- Enter three question marks ("**???**") at a field/prompt to invoke any additional Help text stored in Help Frames.

  The Help Frames themselves are grouped according to function. The lead frame for a function contains the "keywords" or reference words, highlighted in reverse video, for linking to related frames. For example, while in a Help Frame, enter the desired keyword at the "Select HELP SYSTEM action or <return>:" prompt. The user can return to the previous Help frame simply by pressing the **<Enter>** key at the message prompt.

Obtaining Data Dictionary Listings

Technical information about files and the fields in files is stored in data dictionaries. You can use the List File Attributes option on the Data Dictionary Utilities submenu in VA FileMan to print formatted data dictionaries.

REF: For details about obtaining data dictionaries and about the formats available, please refer to the "List File Attributes" chapter in the "File Management" section of the *VA FileMan Advanced User Manual*.

Assumptions About the Reader

This manual is written with the assumption that the reader is familiar with the following:

- VistA computing environment
- VA FileMan data structures and terminology
- Microsoft Windows
- M programming language

It provides an overall explanation of configuring the Capacity Management Tools interface and the changes contained in Capacity Management Tools Version 2.0. However, no attempt is made to explain how the overall VistA programming system is integrated and maintained. Such methods and procedures are documented elsewhere. We suggest you look at the various VA home pages on the World Wide Web (WWW) and VA Intranet for a general orientation to VistA. For example, go to the Veterans Health Administration (VHA) Office of Information (OI) Health Systems Design & Development (HSD&D) Home Page at the following Intranet Web address:

http://vista.med.va.gov/

Reference Materials

Readers who wish to learn more about the Capacity Management Tools software should consult the following:

- *Capacity Management Tools Installation Guide*
- *Capacity Management Tools Technical Manual*
- The Capacity Planning (CP) Service's Home Page at the following Web address:

  http://vista.med.va.gov/capman/default.htm

  This site contains additional information and documentation.

VistA documentation is made available online in Microsoft Word format and Adobe Acrobat Portable Document Format (PDF). The PDF documents *must* be read using the Adobe Acrobat Reader (i.e., ACROREAD.EXE), which is freely distributed by Adobe Systems Incorporated at the following Web address:

http://www.adobe.com/

REF: For more information on the use of the Adobe Acrobat Reader, please refer to the *Adobe Acrobat Quick Guide* at the following Web address:

http://vista.med.va.gov/iss/acrobat/index.asp

VistA documentation can be downloaded from the Enterprise VistA Support (EVS) anonymous directories or from the Health Systems Design and Development (HSD&D) VistA Documentation Library (VDL) Web site:

http://www.va.gov/vdl/

VistA documentation and software can also be downloaded from the Enterprise VistA Support (EVS) anonymous directories:

- Albany OIFO ftp.fo-albany.med.va.gov
- Hines OIFO ftp.fo-hines.med.va.gov
- Salt Lake City OIFO ftp.fo-slc.med.va.gov
- Preferred Method download.vista.med.va.gov

  This method transmits the files from the first available FTP server.

DISCLAIMER: The appearance of any external hyperlink references in this manual does not constitute endorsement by the Department of Veterans Affairs (VA) of this Web site or the information, products, or services contained therein. The VA does not exercise any editorial control over the information you may find at these locations. Such links are provided and are consistent with the stated purpose of this VA Intranet Service.

1. Introduction

The Capacity Management Tools software is intended for use by Information Resource Management (IRM) staff responsible for the capacity planning functions at their site. The CM Tools software allows a site to collect Veterans Health Information Systems and Technology Architecture (VistA) Health Level Seven (HL7) workload information.

The CM Tools software is strongly dependent on the site to schedule and run the background task on a regular basis. Menus and options are provided locally at the site to allow IRM staff to accomplish and monitor this task.

The background task obtains VistA HL7 information from the site and automatically transfers this data via network mail (i.e., VistA MailMan) to the Capacity Planning National Database

The Veterans Health Administration (VHA) developed the CM Tools software in order to obtain more accurate information regarding the current and future system and VistA HL7 workload at VA sites (e.g., VA Medical Centers [VAMCs]).

The purpose of this manual is to provide information about the Capacity Management Tools software. This manual defines the use of this software as a resource to IRM staff responsible for capacity planning functions at the site. It also highlights the use of the options that are available at the site.

2. CM Tools: Software Overview and Use

Functional Description

The Capacity Management Tools software application provides fully automated support tools developed by Capacity Planning Service. It entails the daily capture of the following data from participating sites:

- **VistA Health Level Seven (HL7) Workload Information—**VistA HL7 workload data is summarized and transmitted on a weekly basis.
- **VistA Timing Data—**Timing data is summarized and transmitted on a daily and weekly basis.

Data collected is automatically transferred via network mail (i.e., VistA MailMan) to the Capacity Planning National Database. The data is displayed graphically on the Capacity Planning Statistics Web page located at:

http://vista.med.va.gov/capman/Statistics/Default.htm

REF: For more information on the Capacity Planning National Database and data display, please refer to the "Statistics and Projections" topic that follows in this chapter.

The IRM staff utilizes the options that are available at the site to manage the CM Tools software. IRM staff responsible for capacity planning tasks at the site can use these options to review VistA HL7 workload trends.

REF: For more information on the CM Tools options, please refer to Chapter 3 "CM Tools: Options," in this manual.

The current version of the software is compatible with all current operating system platforms at VA sites and has minimal impact on IRM support staff.

Data Collection Process

Installing the CM Tools software creates the collection process mechanism and other necessary components of the software. The fully automated data collection mechanism entails capturing the following data:

- **VistA HL7 workload specifics at the site—**This data is gathered into a temporary ^TMP("KMPDH",$J) collection global.
- **Timing data at the site—**This data is gathered into the temporary ^KMPTMP("KMPDT") collection global.

The collection mechanism is continuously monitoring each process on the system while trapping system timing and VistA HL7 workload data.

On a nightly basis, the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] does the following:

- Moves the data within the ^TMP("KMPDH",$J) collection global to the CM HL7 DATA file (#8973.1).
- Moves the data within the ^KMPTMP("KMPDT") collection global. to the CP TIMING file (#8973.2)

Upon completion, the data within both the ^TMP("KMPDH",$J) and ^KMPTMP("KMPDT") temporary collection globals is purged.

REF: For more information on the CM Tools Background Driver option [KMPD BACKGROUND DRIVER], please refer to the "CM Tools Background Driver" topic in Chapter 3 "CM Tools: Options," in this manual.

Statistics and Projections

Every Sunday night, the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] monitors and trims (records deleted) the following files to ensure that the correct maximum number of day's data is maintained as determined by the appropriate CP parameters:

- CM HL7 DATA file (#8973.1)—The maximum amount of data collected is determined by the Purge HL7 Data After CP parameter.
- CP TIMING file (#8973.2)—The maximum amount of data collected is determined by the Purge Timing Data After CP parameter.

REF: For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic in Chapter 3, "CM Tools: Options," in this manual.

On a nightly basis, the CM Tools Background Driver option automatically compresses the information contained within the CP TIMING file (#8973.2) into daily statistics. These daily statistics are converted into an electronic mail message that is automatically transferred via network mail (i.e., VistA MailMan) and merged into a Capacity Planning National Database where this data is used for evaluation purposes.

Also, each Sunday night, the CM Tools Background Driver option automatically compresses the information contained within both the CM HL7 DATA (#8973.1) and CP TIMING (#8973.2) files into weekly statistics. These weekly statistics are converted into an electronic mail message that is automatically transferred via network mail (i.e., VistA MailMan) and merged into a Capacity Planning National Database where this data is used for evaluation purposes.

The data is also available on the Capacity Planning Web site at the following Web addresses:

- Statistics—Provides statistics for each listed site:

  http://vista.med.va.gov/capman/Statistics/Default.htm

- Projections—Provides data trends for each listed site:

  http://vista.med.va.gov/capman/TrendSetter/Default.htm

Software Management

The Capacity Management Tools software is managed by IRM staff through the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU], which is located under the Capacity Planning menu [XTCM MAIN]. The XTCM MAIN menu is found under the Eve menu and should be assigned to IRM staff member(s) who support(s) this software and other capacity management tasks.

REF: For more information on CM Tools software management and maintenance, please refer to the *Capacity Management Tools Technical Manual*.

3. CM Tools: Options

This chapter discusses the Capacity Management Tools software options.

Capacity Planning (Synonym: **CM**)	**[XTCM MAIN]**

The Capacity Planning menu [XTCM MAIN] is located under the Operations Management menu [XUSITEMGR], which is located under Kernel's Systems Manager Menu [Eve], as shown below:

```
Select Systems Manager Menu Option: Operations Management


          System Status
          Introductory text edit
          CPU/Service/User/Device Stats
   CM     Capacity Planning ...                                  [XTCM MAIN]
          Alert Management ...
          Alpha/Beta Test Option Usage Me
          Clean old Job Nodes in XUTL
          Delete Old (>14 d) Alerts
          Kernel Management Menu ...
          Post sign-in Text Edit
          RPC Broker Management Menu ...
          User Management Menu ...

Select Operations Management Option: Capacity Planning
```

The Capacity Planning menu is accessed via the Operations Management menu.

Figure 3-1. Accessing the Capacity Planning menu—User prompts

The Capacity Planning menu holds all the currently available capacity planning options. The XTCM MAIN menu may be assigned to the IRM staff member(s) who support(s) this software and other capacity planning tasks.

The Capacity Planning menu contains the following options:

```
Select Operations Management Option: Capacity Planning


   CPG    Capacity Planning Mail Group Edit                  [KMP MAIL GROUP EDIT]
   RUM    RUM Manager Menu ...                             [KMPR RUM MANAGER MENU]
   TLS    CP Tools Manager Menu ...                      [KMPD CM TOOLS MANAGER MENU]
   VPM    VAX/ALPHA Capacity Management ...                          [XUCM MAIN]
          Move Host File to Mailman                        [XTCM DISK2MAIL]
          Response Time Log Menu ...                                 [XURTLM].

Select Capacity Planning Option:
```

Figure 3-2. Capacity Planning—Menu option

The Capacity Planning menu-related options that will be discussed in greater detail in the topics that follow include the following:

- Capacity Planning Mail Group Edit option
- CP Tools Manager Menu and subordinate options

REF: For more information on the RUM Manger Menu [KMPR RUM MANAGER MENU], please refer to the *Resource Usage Monitor (RUM) User Manual*.

For more information on the VAX/ALPHA Capacity Management [XUCM MAIN], Move Host File to Mailman [XTCM DISK2MAIL], and Response Time Log Menu [XURTLM] menus/options, please refer to the *Kernel Toolkit User Manual*.

Capacity Planning Mail Group Edit (Synonym: **CPG**)	**[KMP MAIL GROUP EDIT]**

The Capacity Planning Mail Group Edit option [KMP MAIL GROUP EDIT] is located on the Capacity Planning menu [XTCM MAIN] (Figure 3-2). It is used to edit the KMP-CAPMAN mail group. The KMP-CAPMAN mail group is defined with the installation of the CM Tools software.

The following example shows the prompts and user responses for the Capacity Planning Mail Group Edit option:

```
Select Capacity Planning Option: Capacity Planning Mail Group Edit

                    Edit Capacity Planning Mail Group

NAME: KMP-CAPMAN
Select MEMBER: KMPDUSER,ONE// ?
    Answer with MEMBER
   Choose from:
   KMPDUSER,ONE
   KMPDUSER,TWO

        You may enter a new MEMBER, if you wish
        Enter a local user who should receive mail addressed to this group.
        User must have an access code and a mailbox.

 Answer with NEW PERSON NAME, or INITIAL, or SSN, or VERIFY CODE, or
     NICK NAME, or SERVICE/SECTION, or DEA#, or ALIAS
 Do you want the entire NEW PERSON List? n <Enter>  (No)
Select MEMBER: KMPDUSER,ONE// <Enter>
  TYPE: CC// ??
        This field indicates what type of recipient this is.

        If this field has nothing in it, it indicates that this recipient is
        a primary recipient, and may reply.

        CC:  indicates that the recipient is being sent a copy, but is not the
        primary recipient.  The recipient may reply.

        INFO: indicates that the recipient may not reply to the message; the
        message is being transmitted to the recipient for information purposes
        only.

     Choose from:
       C        CC
       I        INFO
  TYPE: CC// <Enter>
Select MEMBER: <Enter>
DESCRIPTION:
This mail group will receive messages for all Capacity Planning software
(i.e., CM Tools, SAGG, RUM).

  Edit? NO// <Enter>
TYPE: public// ??
        The type of mail group determines who can send mail to it.
        Provided there are no AUTHORIZED SENDERS specified, anyone can send mail
        to a public group and only its members can send mail to a private group.
        If there are AUTHORIZED SENDERS specified, only those users can address
        the group.

     Choose from:
       PU       public
       PR       private
TYPE: public// <Enter>
ORGANIZER: KMPDUSER,TWO// <Enter>
COORDINATOR: KMPDUSER,TWO// <Enter>
Select AUTHORIZED SENDER: <Enter>
```

Enter users to the KMP-CAPMAN mail group. These mail group members (e.g., IRM personnel) will receive messages from Capacity Planning-related software (e.g., CM Tools).

Indicate whether or not the mail group member is a primary recipient.

Choose whether or not the mail group is public or private.

Choose the mail group organizer and coordinator. The coordinator is responsible for maintaining the membership of the mail group. Also, enter any authorized senders.

```
ALLOW SELF ENROLLMENT?: NO// ?
     If users may join this group by themselves, say "YES"
     Choose from:
       y        YES
       n        NO
ALLOW SELF ENROLLMENT?: NO// <Enter>
Select MEMBER GROUP NAME: ?
        You may enter a new MEMBER GROUPS, if you wish
        If you would like another mail group to be a member of this one enter
        a partial match to its name.
        A mail group may not be a member of itself.

 Answer with MAIL GROUP NAME
 Do you want the entire MAIL GROUP List? n <Enter>  (No)
Select MEMBER GROUP NAME: <Enter>
Select REMOTE MEMBER: ?
        You may enter a new MEMBERS - REMOTE, if you wish
        Enter a remote address (name@domain) or local device (D.device or
        H.device) or local server (S.server).

Select REMOTE MEMBER: <Enter>
Select DISTRIBUTION LIST: ?
        You may enter a new DISTRIBUTION LIST, if you wish

    Answer with DISTRIBUTION LIST NAME
   Choose from:
   486 TEAM
   G.IMG@RD4.VA.GOV
   GUESS
   IRM
   IRM
   K7 TESTING
   K7.1 DISTRIBUTION
   SHARED

        You may enter a new DISTRIBUTION LIST, if you wish
        NAME MUST BE 3-30 CHARACTERS, NOT NUMERIC OR STARTING WITH
        PUNCTUATION

Select DISTRIBUTION LIST: <Enter>
Select FAX RECIPIENT: ?
        You may enter a new FAX RECIPIENT, if you wish
        Enter the fax recipient who should receive faxes sent to this mail
        group.

  Pointed-to File does not exist!
Select FAX RECIPIENT: <Enter>
Select FAX GROUP: ?
        You may enter a new FAX GROUP, if you wish
        Enter the fax group which should receive faxes sent to this mail
        group.
        Group must be public or user must be (surrogate of) creator of group.

Select FAX GROUP: <Enter>
```

This series of prompts is used to enter any additional remote users, mail groups, distribution lists, or FAX recipients/groups as members to the KMP-CAPMAN mail group.

Figure 3-3. Capacity Planning Mail Group Edit option—User prompts

CP Tools Manager Menu (Synonym: **TLS**)	**[KMPD CM TOOLS MANAGER MENU]**

The CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] is located on the Capacity Planning menu [XTCM MAIN] (Figure 3-2). It contains the following options:

```
Select Capacity Planning Option: CP Tools Manager Menu

   STA    CP Environment Check                                  [KMPD STATUS]
   SST    Start/Stop Timing Collection                    [KMPD TMG START/STOP]
   PRM    Edit CP Parameters File                             [KMPD PARAM EDIT]
   TMT    Timing Monitor                                    [KMPD TMG MONITOR]
   RPT    CP Tools Reports ...                           [KMPD CM TOOLS REPORTS]
```

Figure 3-4. CP Tools Manager Menu—Menu option

Each of these options is discussed in greater detail in the topics that follow.

CP Environment Check (Synonym: **STA**)	**[KMPD STATUS]**

The CP Environment Check option [KMPD STATUS] is located on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] (Figure 3-4). It allows users to check the capacity planning environment at their site. It displays data from the following areas (see Figure 3-5):

- Health Level Seven (HL7)
- Resource Usage Monitor (RUM)
- Statistical Analysis of Global Growth (SAGG)
- Timing

```
Select CP Tools Manager Menu Option: STA <Enter>  CP Environment Check

                  Check Capacity Planning Environment


     Select one of the following:

          H         HL7
          R         RUM
          S         SAGG
          T         Timing

Enter response:
```

Figure 3-5. CP Environment Check option—User prompts

HL7 Data

Users can use the CP Environment Check option to display the current status of Health Level Seven (HL7)-related statistics by choosing **HL7** or **H** from the option list, as shown below:

```
                  Check Capacity Planning Environment


     Select one of the following:

          H         HL7
          R         RUM
          S         SAGG
          T         Timing

Enter response: HL7
```

Figure 3-6. CP Environment Check option: HL7—User prompts

For both the HL7 and Timing options (see Figure 3-7 and Figure 3-19), the CP Environment Check option [KMPD STATUS] displays the following information regarding the scheduled CM Tools Background Driver option [KMPD BACKGROUND DRIVER]:

Data	Description
CM Tools Background Driver	Indicates the name of the CM Tools Background Driver option [KMPD BACKGROUND DRIVER].
QUEUED TO RUN AT	Indicates the date and time that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is scheduled to first run at the site. The job will run at this scheduled time depending on the Rescheduling Frequency indicated. **NOTE:** The installation of the CM Tools software creates and sets this field automatically. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the CM Tools Background Driver job later.
RESCHEDULING FREQUENCY	Indicates the frequency at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is run (e.g., 1 day).
TASK ID	This is the TaskMan task ID scheduled to run the CM Tools Background Driver option [KMPD BACKGROUND DRIVER].

Data	Description
QUEUED BY	This is the person who schedules the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] to run via TaskMan. **NOTE:** The installation of the CM Tools software creates and sets this field automatically. It sets it to the name of the person doing the installation of the CM Tools V. 2.0 software.

Table 3-1. CP Environment Check option—CM Tools Background Driver option statistics

If the CP Environment Check option [KMPD STATUS] detects that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] has *not* been scheduled, it will only display the following statement:

```
The CM Tools Background Driver [KMPD BACKGROUND DRIVER] is not scheduled
```

This alerts users to schedule the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] to run every day at 1:30 a.m. To schedule this option, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], which is located under the Taskman Management menu [XUTM MGR].

CAUTION: Capacity Planning Service *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- **^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as prescribed by the Purge HL7 Data After CP parameter, which is stored in the HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].**
- **^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as prescribed by the Purge Timing Data After CP parameter, which is stored in the TIMING WEEKS TO KEEP DATA field (#4.11 in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].**

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.

In addition to the information regarding the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] (Table 3-1), the CP Environment Check option—HL7 [KMPD STATUS] displays the following HL7-specific report information (see Table 3-2 and Figure 3-7):

Data	Description
HL7 DAILY BACKGROUND LAST START	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run started HL7 data collection.
HL7 DAILY BACKGROUND LAST STOP	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run stopped HL7 data collection.
HL7 DAILY BACKGROUND TOTAL TIME	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] took in its most recent daily run of HL7 data collection.
HL7 WEEKLY BACKGROUND LAST START	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last weekly run started HL7 data collection.
HL7 WEEKLY BACKGROUND LAST STOP	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last weekly run stopped HL7 data collection.
HL7 WEEKLY BACKGROUND TOTAL TIME	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] took in its most recent weekly run of HL7 data collection.
HL7 PURGE DATA AFTER	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] should purge HL7 data in the CM HL7 DATA file (#8973.1) (e.g., 2 weeks).
HL7 TRANSMIT DATA TO	Indicates the mail group(s) to which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] transmits HL7 data.

Table 3-2. CP Environment Check option: HL7—Report data fields

The CP Environment Check option—HL7 [KMPD STATUS] also displays the following additional HL7 information (see Figure 3-8):

- Number of entries within the CM HL7 DATA file (#8973.1). This file is populated when the data collection is started. The report also includes the date range of data in this file from the oldest date to the most recent date.

  REF: For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.

- Number of CM TOOLS routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.
- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this mail group as necessary.

```
KMPD STATUS                      Apr 07, 2005@06:55:23          Page:    1 of    3
                              Environment Check for HL7
                         CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**

   CM Tools Background Driver.. KMPD BACKGROUND DRIVER
   QUEUED TO RUN AT............ APR 08, 2005@01:30 (Friday)
   RESCHEDULING FREQUENCY...... 1 day
   TASK ID..................... 3334287
   QUEUED BY................... CAPMANUSER,ONE A  (Active)

   Hl7 Dly Bckgrnd Last Start.. Apr 07, 2005@01:30:03
   HL7 Dly Bckgrnd Last Stop... Apr 07, 2005@01:49:16
   HL7 Dly Bkgrnd Total Time... 00:19:13

   HL7 Wkly Backgrnd Last Start Apr 03, 2005@01:33:03
   HL7 Wkly Bckgrnd Last Stop.. Apr 03, 2005@01:33:18
   HL7 Wkly Bckgrnd Total Time. 00:00:15
   HL7 Purge Data After........ 2 weeks
   HL7 Transmit Data to........ CAPACITY,MANAGEMENT@FO-ALBANY.MED.VA.GO
                                S.KMP4-CM-SERVER@FO-ALBANY.MED.VA.GOV

+         Enter ?? for more actions

Select Action:Next Screen// <Enter>
```

Figure 3-7. CP Environment Check option: HL7—Report (1 of 3)

```
KMPD STATUS                    Apr 07, 2005@06:56:23          Page:    2 of    3
                          Environment Check for HL7
                     CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**
+
                                     # of     Oldest     Recent
   File                             Entries    Date       Date
   -------------------------       -------   -------   -------
   8973.1 - CM HL7 DATA              4,560   3/20/05   4/6/05


   CM TOOLS routines.......... 50 Routines - No Problems

   Node/CPU Data.............. 573A01  hp AlphaServer ES80 7/1000 (6)
                               573A02  hp AlphaServer ES80 7/1000 (6)
                               573A03  hp AlphaServer ES80 7/1000 (6)
                               573A04  hp AlphaServer ES80 7/1000 (6)

   KMP-CAPMAN Mail Group..... CAPMANUSER,TWO
                               CAPMANUSER,THREE R
                               CAPMANUSER,FOUR A
                               CAPMANUSER,FIVE E
+         Enter ?? for more actions

Select Action:Next Screen// <Enter>
```

Figure 3-8. CP Environment Check option: HL7—Report (2 of 3)

```
KMPD STATUS                    Apr 07, 2005@06:56:43          Page:    3 of    3
                          Environment Check for HL7
                     CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**
+


     HL7 = Health Level Seven









          Enter ?? for more actions

Select Action:Quit//
```

Figure 3-9. CP Environment Check option: HL7—Report (3 of 3)

RUM Data

Users can use the CP Environment Check option to display the current status of Resource Usage Monitor (RUM)-related statistics by choosing **RUM** or **R** from the option list, as shown below:

```
                  Check Capacity Planning Environment


     Select one of the following:

          H         HL7
          R         RUM
          S         SAGG
          T         Timing

Enter response: R <Enter>  RUM
```

Figure 3-10. CP Environment Check option: RUM—User prompts

The CP Environment Check option—RUM [KMPD STATUS] displays the following information regarding the RUM Background Driver option [KMPR BACKGROUND DRIVER]:

Data	Description
RUM Background Driver	Indicates the name of the RUM Background Driver option [KMPR BACKGROUND DRIVER].
QUEUED TO RUN AT	Indicates the date and time that the RUM Background Driver option [KMPR BACKGROUND DRIVER] is scheduled to first run at the site. The job will run at this scheduled time depending on the Rescheduling Frequency indicated. **NOTE:** The installation of the RUM software creates and sets this field automatically. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the RUM Background Driver job later.
RESCHEDULING FREQUENCY	Indicates the frequency at which the RUM Background Driver option [KMPR BACKGROUND DRIVER] is run (e.g., 1 day).
TASK ID	This is the TaskMan task ID scheduled to run the RUM Background Driver option [KMPR BACKGROUND DRIVER].

Data	Description
QUEUED BY	This is the person who schedules the RUM Background Driver option [KMPR BACKGROUND DRIVER] to run via TaskMan. **NOTE:** The installation of the RUM software creates and sets this field automatically. It sets it to the name of the person doing the installation of the CM Tools V. 2.0 software.

Table 3-3. CP Environment Check option—RUM Background Driver option statistics

If the CP Environment Check option—RUM [KMPD STATUS] detects that the RUM Background Driver option [KMPR BACKGROUND DRIVER] has *not* been scheduled, it will only display the following statement:

```
The RUM Background Driver [KMPD BACKGROUND DRIVER] is not scheduled
```

This alerts users to schedule the RUM Background Driver option [KMPR BACKGROUND DRIVER] to run every day at 1:00 a.m. To schedule this option, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], which is located under the Taskman Management menu [XUTM MGR].

CAUTION: Capacity Planning (CP) Service *strongly* recommends that the RUM Background Driver option [KMPR BACKGROUND DRIVER] be scheduled to run every day at 1 a.m., because this background driver is the main mechanism by which the ^KMPTMP("KMPR") temporary collection global is purged nightly and the RESOURCE USAGE MONITOR file (#8971.1) is trimmed (records deleted) to contain a maximum of 21 days of data every Sunday night.

Modification of the frequency and time may have adverse effects on the size of the ^KMPTMP("KMPR") temporary collection global and on the number of entries within the RESOURCE USAGE MONITOR file.

REF: For more information on the RUM software, please consult the RUM documentation located on the VDL at the following Web address:

http://www.va.gov/vdl/Infrastructure.asp?appID=130

In addition to the information regarding the RUM Background Driver option [KMPR BACKGROUND DRIVER] (Table 3-3), the CP Environment Check option—RUM [KMPD STATUS] also displays the following additional RUM information (see Figure 3-12 and Figure 3-13):

- Number of entries within the RESOURCE USAGE MONITOR file (#8971.1). This file is populated when the data collection is started. The report also includes the date range of data in this file from the oldest date to the most recent date.

  REF: For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.

- Number of RUM routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.
- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this mail group as necessary.

```
KMPD STATUS                    Apr 07, 2005@06:57:06          Page:    1 of    3
                            Environment Check for RUM
                        CAPACITY MANAGEMENT - RUM v2.0 **1**

   RUM Background Driver....... KMPR BACKGROUND DRIVER
   QUEUED TO RUN AT............ APR 08, 2005@01:31 (Friday)
   RESCHEDULING FREQUENCY...... 1 day
   TASK ID..................... 3334332
   QUEUED BY................... CAPMANUSER,TWO  (Active)

   Temporary collection global..
   ^KMPTMP("KMPR").............. Present


   RUM Dly Bckgrnd Last Start... Apr 07, 2005@01:31
   RUM Dly Bckgrnd Last Stop.... Apr 07, 2005@01:42:57
   RUM Dly Bkgrnd Total Time.... 00:11:57

   RUM Wkly Backgrnd Last Start. Apr 03, 2005@01:33:56
   RUM Wkly Bckgrnd Last Stop... Apr 03, 2005@01:42:04
   RUM Wkly Bckgrnd Total Time.. 00:08:08
+         Enter ?? for more actions

Select Action:Next Screen// <Enter>
```

Figure 3-11. CP Environment Check option: RUM—Report (1 of 3)

```
KMPD STATUS                    Apr 07, 2005@06:57:25          Page:    2 of    3
                            Environment Check for RUM
                         CAPACITY MANAGEMENT - RUM v2.0 **1**
+
   RUM Purge Data After..... 2 weeks
   RUM Transmit Data to..... CAPACITY,MANAGEMENT@FO-ALBANY.MED.VA.GO
                             S.KMP2-RUM-SERVER@FO-ALBANY.MED.VA.GOV

                                 # of     Oldest     Recent
   File                        Entries    Date       Date
   -------------------------   -------   -------   -------
   8971.1-RESOURCE USAGE MONITOR   231,257   3/20/05   4/6/05


   RUM routines.............. 17 Routines - No Problems

   Node/CPU Data............. 573A01  hp AlphaServer ES80 7/1000 (6)
                             573A02  hp AlphaServer ES80 7/1000 (6)
                             573A03  hp AlphaServer ES80 7/1000 (6)
                             573A04  hp AlphaServer ES80 7/1000 (6)

+         Enter ?? for more actions

Select Action:Next Screen// <Enter>
```

Figure 3-12. CP Environment Check option: RUM—Report (2 of 3)

```
KMPD STATUS                    Apr 07, 2005@06:57:41          Page:    3 of    3
                            Environment Check for RUM
                         CAPACITY MANAGEMENT - RUM v2.0 **1**
+
   KMP-CAPMAN Mail Group..... CAPMANUSER,TWO
                              CAPMANUSER,THREE R
                              CAPMANUSER,FOUR A
                              CAPMANUSER,FIVE E


     RUM = Resource Usage Monitor









          Enter ?? for more actions

Select Action:Quit//
```

Figure 3-13. CP Environment Check option: RUM—Report (3 of 3)

SAGG Data

Users can use the CP Environment Check option to display the current status of Statistical Analysis of Global Growth (SAGG)-related statistics by choosing **SAGG** or **S** from the option list, as shown below:

```
                  Check Capacity Planning Environment


     Select one of the following:

          H         HL7
          R         RUM
          S         SAGG
          T         Timing

Enter response: S <Enter>  SAGG
```

Figure 3-14. CP Environment Check option: SAGG—User prompts

The CP Environment Check option—SAGG [KMPD STATUS] displays the following information regarding the SAGG Master Background Task option [KMPS SAGG REPORT]:

Data	Description
SAGG Master Background Task	Indicates the name of the SAGG Master Background Task option [KMPS SAGG REPORT].
QUEUED TO RUN AT	Indicates the date and time that the SAGG Master Background Task option [KMPS SAGG REPORT] is scheduled to first run at the site. The job will run at this scheduled time depending on the Rescheduling Frequency indicated. **NOTE:** The installation of the SAGG software creates and sets this field automatically. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the SAGG Master Background Task job later.
RESCHEDULING FREQUENCY	Indicates the frequency at which the SAGG Master Background Task option [KMPS SAGG REPORT] is run (e.g., 28 days).
TASK ID	This is the TaskMan task ID scheduled to run the SAGG Master Background Task option [KMPS SAGG REPORT].

Data	Description
QUEUED BY	This is the person who schedules the SAGG Master Background Task option [KMPS SAGG REPORT] to run via TaskMan. **NOTE:** The installation of the SAGG software creates and sets this field automatically. It sets it to the name of the person doing the installation of the CM Tools V. 2.0 software.

Table 3-4. CP Environment Check option—SAGG Master Background Task option statistics

If the CP Environment Check option—SAGG [KMPD STATUS] detects that the SAGG Master Background Task option [KMPS SAGG REPORT] has *not* been scheduled, it will only display the following statement:

```
The SAGG Master Background Task [KMPS SAGG REPORT] is not scheduled
```

This alerts users to schedule the SAGG Master Background Task option [KMPS SAGG REPORT] to run every 28 days on Friday, Saturday, or Sunday. The specific time to run is left up to the site. To schedule this option, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], which is located under the Taskman Management menu [XUTM MGR].

REF: For more information on the SAGG software, please consult the SAGG documentation located on the VDL at the following Web address:

http://www.va.gov/vdl/Infrastructure.asp?appID=115

In addition to the information regarding the SAGG Master Background Task option [KMPS SAGG REPORT] (Table 3-4), the CP Environment Check option—SAGG [KMPD STATUS] also displays the following additional SAGG information (see Figure 3-15 and Figure 3-16):

- ^XTMP("KMPS") temporary global status (i.e., Present or NOT Present).
- List of VMS disk drives and directories that the SAGG Project collection routines will be monitoring.
- Number of entries within the SAGG PROJECT file (#8970.1). This file is populated when the data collection is started.

  REF: For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.
- Number of SAGG routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.
- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this mail group as necessary.

```
KMPD STATUS                      Apr 07, 2005@06:57:59          Page:    1 of    3
                            Environment Check for SAGG
                           SAGG PROJECT v1.8 **1,2,3**

   Current Status.............. SCHEDULED

   SAGG Master Background Task. KMPS SAGG REPORT
   QUEUED TO RUN AT............ APR 15, 2005@21:00 (Friday)
   RESCHEDULING FREQUENCY...... 28 days
   TASK ID..................... 9201441
   QUEUED BY................... CAPMANUSER,TWO  (Active)

   Temporary collection global.
   ^XTMP("KMPS")............... NOT Present

   SAGG Project collection routines will monitor the following:

          _$1$DGA101:[NFL.ROU]           _$1$DGA101:[NFL.VCC]
          _$1$DGA101:[NFL.VDD]           _$1$DGA101:[NFL.ZSHARE]
          _$1$DGA102:[NFL.VAA]           _$1$DGA102:[NFL.VHH]
          _$1$DGA103:[NFL.VEE]           _$1$DGA103:[NFL.VFF]
+         Enter ?? for more actions

Select Action:Next Screen// <Enter>
```

Figure 3-15. CP Environment Check option: SAGG—Report (1 of 3)

```
KMPD STATUS                      Apr 07, 2005@06:58:15          Page:    2 of    3
                            Environment Check for SAGG
                           SAGG PROJECT v1.8 **1,2,3**
+
          _$1$DGA103:[NFL.VGG]           _$1$DGA104:[NFL.SQL]
          _$1$DGA104:[NFL.VBB]           _$1$DGA104:[NFL.VII]

                                  # of
   File                          Entries
   --------------------------    -------
   8970.1-SAGG PROJECT                 1


   SAGG routines............... 7 Routines - No Problems

   Node/CPU Data............... 573A01  hp AlphaServer ES80 7/1000 (6)
                                573A02  hp AlphaServer ES80 7/1000 (6)
                                573A03  hp AlphaServer ES80 7/1000 (6)
                                573A04  hp AlphaServer ES80 7/1000 (6)

   KMP-CAPMAN Mail Group....... CAPMANUSER,TWO
+         Enter ?? for more actions

Select Action: Next Screen// <Enter>
```

Figure 3-16. CP Environment Check option: SAGG—Report (2 of 3)

```
KMPD STATUS                    Apr 07, 2005@06:58:29          Page:    3 of    3
                          Environment Check for SAGG
                         SAGG PROJECT v1.8 **1,2,3**
+
                                CAPMANUSER,THREE R
                                CAPMANUSER,FOUR A
                                CAPMANUSER,FIVE E


   SAGG = Statistical Analysis of Global Growth

          Enter ?? for more actions

Select Action:Quit//
```

Figure 3-17. CP Environment Check option: SAGG—Report (3 of 3)

Timing Data

Users can use the CP Environment Check option to display the current status of Timing-related statistics by choosing **Timing** or **T** from the option list, as shown below:

```
                  Check Capacity Planning Environment


     Select one of the following:

          H         HL7
          R         RUM
          S         SAGG
          T         Timing

Enter response: Timing
```

Figure 3-18. CP Environment Check option: Timing—User prompts

For both the HL7 and Timing options (see Figure 3-7 and Figure 3-19), the CP Environment Check option [KMPD STATUS] displays statistical information regarding the CM Tools Background Driver option [KMPD BACKGROUND DRIVER], see Table 3-1.

In addition to the information regarding the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] (Table 3-1), the CP Environment Check option—Timing [KMPD STATUS] displays the following Timing-specific report information (see Table 3-5 and Figure 3-19):

Data	Description
TIMING COLLECTION STATUS	Indicates whether or not the timing data is being collected (e.g., Running).
TIMING DAILY BACKGROUND LAST START	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run started Timing data collection.
TIMING DAILY BACKGROUND LAST STOP	Indicates the most recent date and time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] last daily run stopped Timing data collection.
TIMING DAILY BACKGROUND TOTAL TIME	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] took in its most recent daily run of Timing data collection.
TIMING PURGE DATA AFTER	Indicates the total time at which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] should purge Timing data in the CP TIMING file (#8973.2) (e.g., 4 weeks).
TIMING TRANSMIT DATA TO	Indicates the mail group(s) to which the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] transmits timing data.

Table 3-5. CP Environment Check option: Timing—Report data fields

The CP Environment Check option—Timing [KMPD STATUS] also displays the following additional system timing information (see Figure 3-19 and Figure 3-20):

- Number of entries within the CP TIMING file (#8973.2). This file is populated when the data collection is started. The report also includes the date range of data in this file from the oldest date to the most recent date.

  REF: For more information on this file, please refer to the Chapter 3, "Files," in the *Capacity Management Tools Technical Manual*.

- Number of SAGG routines and any problems, if any.
- List of node(s) and CPU data. If sites believe this information is incorrect they should contact the Capacity Planning Team.

- KMP-CAPMAN mail group members. Sites should review this list and adjust membership in this mail group as necessary.

```
                  Check Capacity Planning Environment



     Select one of the following:

          H         HL7
          R         RUM
          S         SAGG
          T         Timing

Enter response: Timing



KMPD STATUS                    Apr 07, 2005@06:58:46          Page:    1 of    2
                          Environment Check for Timing
                     CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**

   CM Tools Background Driver.. KMPD BACKGROUND DRIVER
   QUEUED TO RUN AT............ APR 08, 2005@01:30 (Friday)
   RESCHEDULING FREQUENCY...... 1 day
   TASK ID..................... 3334287
   QUEUED BY................... CAPMANUSER,ONE A  (Active)

   TMG Collection Status....... Running
   TMG Dly Bckgrnd Last Start.. Apr 07, 2005@01:49:16
   TMG Dly Bckgrnd Last Stop... Apr 07, 2005@01:52:57
   TMG Dly Bkgrnd Total Time... 00:03:41
   TMG Purge Data After........ 4 weeks
   TMG Transmit Data to........ CAPACITY,MANAGEMENT@FO-ALBANY.MED.VA.GO
                                S.KMP6-TIMING-SERVER@FO-ALBANY.MED.VA.GOV

                                    # of     Oldest     Recent
   File                            Entries    Date       Date
   -------------------------       -------   -------   -------
+         Enter ?? for more actions

Select Action:Next Screen// <Enter>
```

Figure 3-19. CP Environment Check option: Timing—User prompts and report (1 of 2)

```
KMPD STATUS                    Apr 07, 2005@06:59:06          Page:    2 of    2
                          Environment Check for Timing
                     CAPACITY MANAGEMENT TOOLS v2.0 **1,2,3**
+
   8973.2 - CP TIMING              686,245   3/6/05    4/6/05


   CM TOOLS routines.......... 50 Routines - No Problems

   Node/CPU Data.............. 573A01  hp AlphaServer ES80 7/1000 (6)
                               573A02  hp AlphaServer ES80 7/1000 (6)
                               573A03  hp AlphaServer ES80 7/1000 (6)
                               573A04  hp AlphaServer ES80 7/1000 (6)

   KMP-CAPMAN Mail Group..... CAPMANUSER,TWO
                               CAPMANUSER,THREE R
                               CAPMANUSER,FOUR A
                               CAPMANUSER,FIVE E


     TMG = Timing Data
          Enter ?? for more actions

Select Action:Quit//
```

Figure 3-20. CP Environment Check option: Timing—Report (2 of 2)

Start/Stop Timing Collection (Synonym: **SST**)	**[KMPD TMG START/STOP]**

The Start/Stop Timing Collection option [KMPD TMG START/STOP] is located under the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU]. It is used to start/stop the CM Tools collection routines to start/stop collecting VistA HL7 workload data.

NOTE: This option requires that Patch OR*3.0*209 be installed in order to start collecting timing data and enable the data collection and report-related CM Tools software options..

Users should first invoke the CP Environment Check option [KMPD STATUS] to ensure that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is scheduled to run every day at 1:30 a.m.

REF: For more information on the CP Environment Check option, please refer to the "CP Environment Check" topic in this chapter.

If the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is *not* shown as being scheduled to run in the future, use TaskMan's Schedule/Unschedule Options option [XUTM SCHEDULE], located under the Taskman Management menu [XUTM MGR], to schedule the KMPD BACKGROUND DRIVER option to run every day at 1:30 a.m.
)

CAUTION: Capacity Planning Service *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- **^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as prescribed by the Purge HL7 Data After CP parameter, which is stored in the HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].**
- **^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as prescribed by the Purge Timing Data After CP parameter, which is stored in the TIMING WEEKS TO KEEP DATA field (#4.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].**

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.

Starting:

To start the CM Tools collection, do the following:

```
Select CP Tools Manager Menu Option: Start/Stop Timing Collection

Timing Collection is currently [ STOPPED ]

Do you want to 'Start' the collection? N// y <Enter>  YES

Timing Collection has been [ Started ]


   STA    CP Environment Check
   SST    Start/Stop Timing Collection
   PRM    Edit CP Parameters File
   TMT    Timing Monitor
   RPT    CP Tools Reports ...

Select CP Tools Manager Menu Option:
```

Data collection is stopped.

Data collection is now started.

Figure 3-21. Starting timing collection—User prompts

Stopping:

To stop the CM Tools collection, do the following:

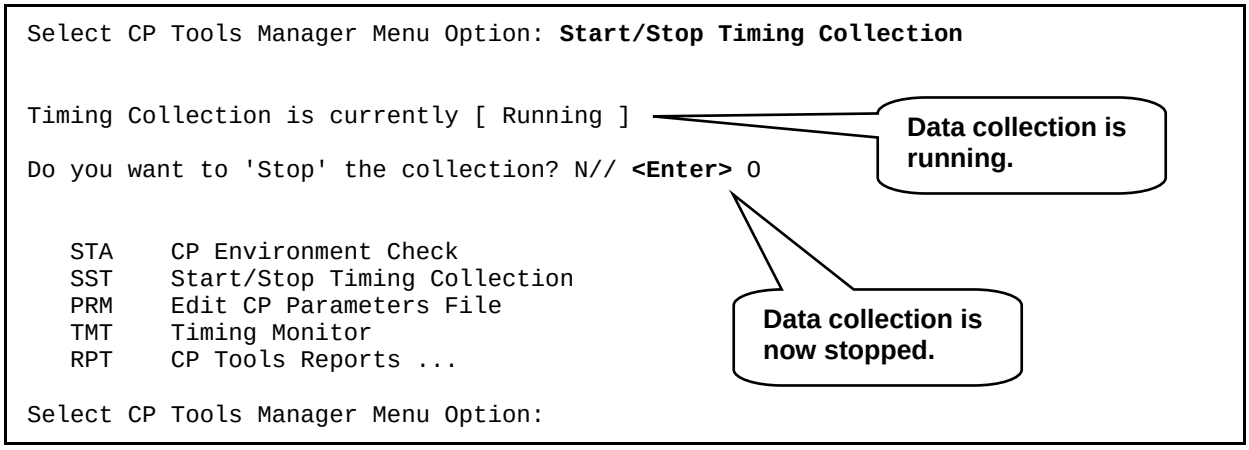

Figure 3-22. Stopping timing collection—User prompts

Edit CP Parameters File (Synonym: **PRM**)	**[KMPD PARAM EDIT]**

The Edit CP Parameters File option [KMPD PARAM EDIT] is located on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] (Figure 3-4). It allows editing of the Capacity Planning (CP) parameters in the CP PARAMETERS file (#8973).

REF: For more information on the CP Environment Check option, please refer to the "CP Environment Check" topic in this chapter.

This option allows users to edit the following parameters:

Parameter	Field Name (Number) (in File #8973)	Description
Purge HL7 Data After	HL7 WEEKS TO KEEP DATA field (#3.11)	HL7 Monitor Program—This is the number of weeks that HL7 data will be retained in the CM HL7 DATA file (#8973.1) before purging. Enter a whole number between 2 and 19 (i.e., 2 weeks minimum and 19 weeks maximum). However, it is recommended that 2 weeks of data be retained.
Purge RUM Data After	RUM WEEKS TO KEEP DATA field (#2.11)	RUM Monitor Program—This is the number of weeks that RUM data will be retained in the RESOURCE USAGE MONITOR file (#8971.1)) before purging. Enter a whole number between 2 and 20 (i.e., 2 weeks minimum and 20 weeks maximum). However, it is recommended that 2 weeks of data be retained.

Parameter	Field Name (Number) (in File #8973)	Description
Purge Timing Data After	TIMING WEEKS TO KEEP DATA field (#4.11)	Timing Monitor Program—This is the number of weeks that Timing data will be retained in the CP TIMING file (#8973.2) before purging. Enter a whole number between 2 and 40 (i.e., 2 weeks minimum and 40 weeks maximum). However, it is recommended that 4 weeks of data be retained.
Timing Monitor Alert - Seconds	MONITOR ALERT - SECONDS field (#19.02)	Timing Monitor Program—When the Timing Monitor is running, if the average time-to-load a CPRS Coversheet exceeds this value, an alert will appear on the Timing Monitor screen. Enter a whole number between 10 and 999.
Timing Monitor Update Rate - Min	MONITOR UPDATE RATE - MINUTES field (#19.01)	Timing Monitor Program—When the Timing Monitor is running, this is the number of minutes between automatic updates. Enter a whole number between 5 and 60.
Scheduled Down Time Start	SCHEDULED DOWN TIME START (#5.01)	VistA Monitor Program—This parameter was added with CM Tools Patch KMPD*2.0*5. It is the date and time that the system scheduled down time is to begin. You *cannot* enter a value in the Scheduled Down Time Stop field unless this field has an entry.
Scheduled Down Time Stop	SCHEDULED DOWN TIME STOP (#5.02)	VistA Monitor Program—This parameter was added with CM Tools Patch KMPD*2.0*5. It is the date and time that the system scheduled down time is to end. You *cannot* enter a value in this field unless the Scheduled Down Time Start field has an entry.
Reason for Down Time	REASON FOR DOWN TIME (#5.03)	VistA Monitor Program—This parameter was added with CM Tools Patch KMPD*2.0*5. It is the reason for the scheduled down time. The text in this field must be from 1 to 65 characters in length.

Table 3-6. CP parameters/fields, stored in the CP PARAMETERS file (#8973)

The following examples (see Figure 3-23, Figure 3-24, and Figure 3-25) show the prompts and user responses for the Edit CP Parameters File option:

```
   CPG    Capacity Planning Mail Group Edit
   RUM    RUM Manager Menu ...
   TLS    CP Tools Manager Menu ...
   VPM    VAX/ALPHA Capacity Management ...
          Move Host File to Mailman
          Response Time Log Menu ...

Select Capacity Planning Option: CP Tools Manager Menu


   STA    CP Environment Check
   SST    Start/Stop Timing Collection
   PRM    Edit CP Parameters File
   TMT    Timing Monitor
   RPT    CP Tools Reports ...

Select CP Tools Manager Menu Option: Edit CP Parameters File
```

After selecting the option and pressing the Enter key, the user is automatically placed into a ScreenMan form, (see Figure 3-24 and Figure 3-25).

Figure 3-23. Running the Edit CP Parameters option—User prompts

After selecting the Edit CP Parameters File option, the user is automatically placed into the following ScreenMan form:

```
                        CM Tools Parameters Edit
                        N. FLORIDA/S. GEORGIA HCS

Current Version: 2.0              Version Installed: MAR 11,2004@10
  Current Patch: **1,2,3,4,5**      Patch Installed: MAY 11,2006@15

   Purge HL7 Data After: 2   Weeks   Timing Monitor Update Rate - Min:
Purge Timing Data after: 4   Weeks     Timing Monitor Alert - Seconds:
   Purge RUM Data After:     Weeks


 Scheduled Down Time Start:
  Scheduled Down Time Stop:
      Reason for Down Time:



_____________________________________________________________________________
Exit     Save     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND:                                  Press <PF1>H for help    Insert
```

Site name from INSTITUTION file (#4)

CP parameters default values.

Figure 3-24. Edit CP Parameters File option (ScreenMan)—User Prompts (*default* values)

This screen (Figure 3-24) allows users to edit the parameter vlaues that are stored in the CP PARAMETERS file (#8973), see Table 3-6.

Data Purges and Timing Monitor

The following figure shows the parameters *after* the user has entered new values for data purges and the Timing Monitor:

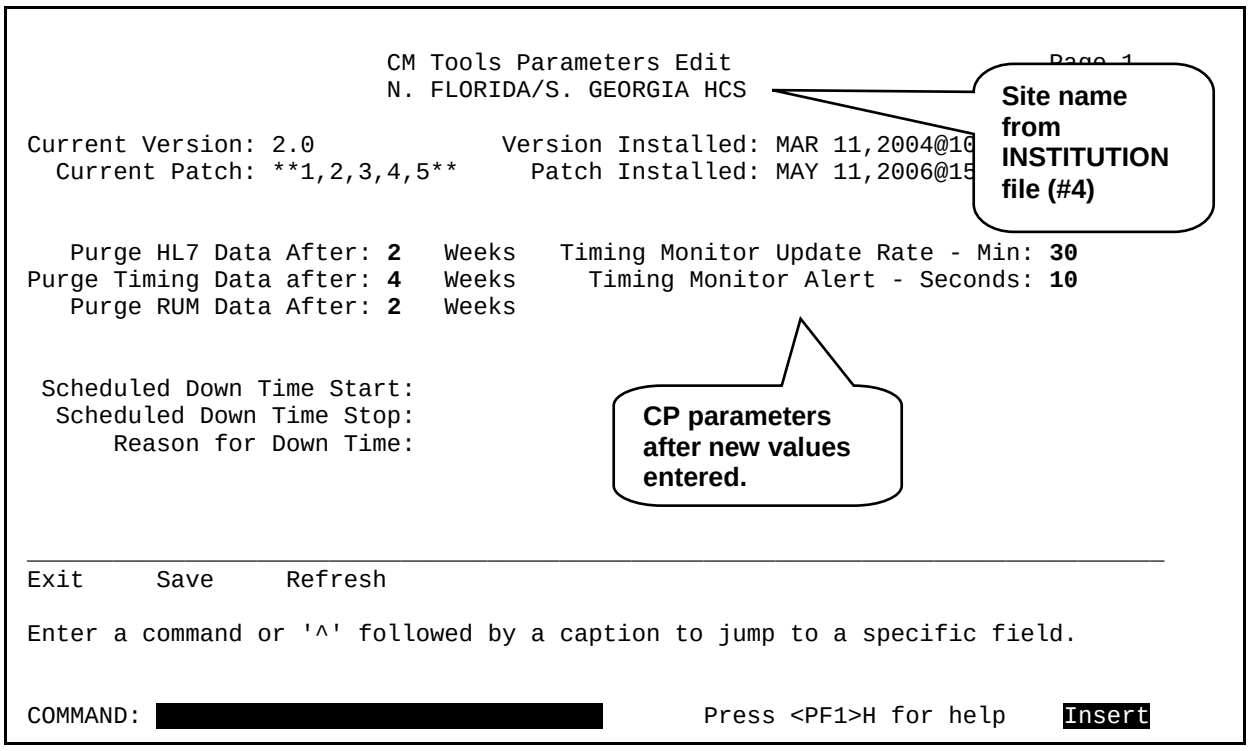

Figure 3-25. Edit CP Parameters File option (ScreenMan)—User Prompts when scheduling data purges and Timing Monitor (*updated* values)

In this example (Figure 3-25), the user has made entries for the data purge and Timing Monitor parameters only. In most cases, the recommended value was entered (see Table 3-6). Specifically, the user made the following entries:

- Purge HL7 Data After: **2** weeks (default)
- Purge Timing Data after: **4** weeks (default)
- Purge RUM Data After: **2** weeks (recommended)
- Timing Monitor Update Rate - Min: **30**
- Timing Monitor Alert - Seconds: **10**

After making the entries, the user saved and exited the screen.

Vista Monitor

Added with CM Tools Patch KMPD*2.0*5, the VistA Monitor allows Health Systems Implementation Training and Enterprise Support (HSITES) to determine if a site is down (not operating). The process is as follows:

1. A message is sent from the Capacity Planning National Database to each site every 20 minutes, regardless of whether or not a reply is received back from the site.

   NOTE: The current 20 minute time frame for polling a site was determined by the Capacity Planning (CP) Service. It is subject to change at the discretion of the CP Service and/or VHA management.

2. The message is received at the site via the CP Echo Server server-type option [KMPD ECHO].

   The following is a sample message that is sent from the Capacity Planning National Database to the KMPD ECHO server option at a site:

```
Subj: CP ECHO~5/15/06-30~WEST-HAVEN.VA.GOV  [#8198307] 05/15/06@10:02  1 line
From: MASTER CP ECHO SERVER  In 'IN' basket.   Page 1
---------------------------------------------------------------------------
ECHO FROM ALBANY TO WEST-HAVEN.VA.GOV

Enter message action (in IN basket): Ignore//
```

Figure 3-26. Sample message sent by the Capacity Planning National Database to the KMPD ECHO server option at the site

3. The KMPD ECHO server option at the site then triggers a bulletin that sends an e-mail message back to the Capacity Planning National Database.

   The following is a sample bulletin returned from a site to the Capacity Planning National Database:

```
Subj: CP ECHO~5/15/06-31~N. FLORIDA/S. GEORGIA VHS (573)~  [#63014754]
05/15/06@10:03  2 lines
From: ECHO BACK FROM N. FLORIDA/S. GEORGIA VHS  In 'IN' basket.   Page 1  *New*
---------------------------------------------------------------------------
START=
STOP=

Enter message action (in IN basket): Ignore//
```

Here, the START and STOP fields are blank, so no scheduled down time is indicated.

Figure 3-27. Sample bulletin sent by the KMPD ECHO server option at the site to the Capacity Planning National Database

   The START and STOP entries in the message body represent the values stored in the SCHEDULED DOWN TIME START (#5.01) and SCHEDULED DOWN TIME STOP (#5.02) fields in the CP PARAMETERS file (#8973). In this example (Figure 3-27), both fields are blank.

4. If the Capacity Planning National Database has *not* received a return message from the site after a certain period of time (e.g., one hour) and there are no entries in the SCHEDULED DOWN TIME

START (#5.01) and SCHEDULED DOWN TIME STOP (#5.02) fields (see Figure 3-27), then a routine on the Capacity Planning National Database runs in the background and determines that the site is down or late reporting. When the site is considered to be in an unscheduled down time state, the Capacity Planning National Database automatically sends a message (alert) to a mail group notifying members of the situation and to take appropriate action.

NOTE: The current time frame used to determine when a site is considered in an unscheduled down time state is set by the Capacity Planning (CP) Service. It is subject to change at the discretion of the CP Service and/or VHA management.

The following figure shows the parameters *after* the user has entered new values for scheduled down time:

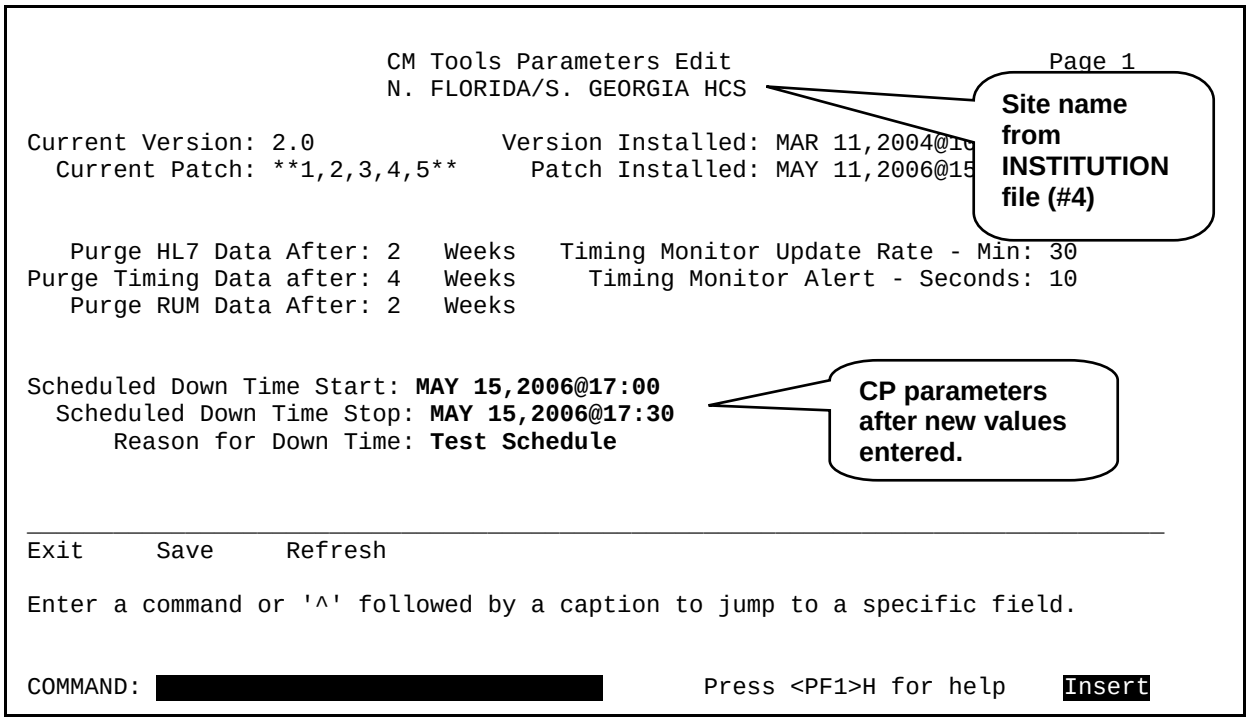

Figure 3-28. Edit CP Parameters File option (ScreenMan)—User Prompts when scheduling system down time (*updated* values)

In this example (Figure 3-28), the user has made entries for the scheduled down time parameters only. Specifically, the user made the following entries:

- Scheduled Down Time Start: **MAY 15,2006@17:00**
- Scheduled Down Time Stop: **MAY 15,2006@17:30**
- Reason for Down Time : **Test Schedule**

After making the entries, the user saved and exited the screen.

The next bulletin returned from a site to the Capacity Planning National Database would show the following:

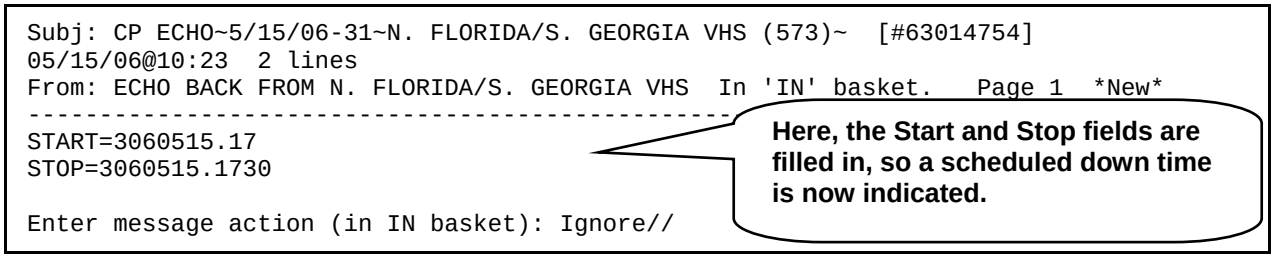

Figure 3-29. Sample bulletin sent by the KMPD ECHO server option at the site to the Capacity Planning National Database

Since this is a scheduled down time for the site, no other additional alert message needs to be sent out.

Timing Monitor (Synonym: **TMT**)	**[KMPD TMG MONITOR]**

The Timing Monitor option [KMPD TMG MONITOR] is located on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] (Figure 3-4). This option updates itself automatically and displays the average number of seconds it takes Computerized Patient record System (CPRS) coversheets to load in a period of time. Data is displayed in a bar graph. The x-axis of the bar graph indicates the hours of the day (from 0 up to 24) and the y-axis indicates the average number of seconds it takes to load CPRS coversheets. This option can be left running on a terminal continuously collecting data.

The Timing Monitor displays data for each hour of the day and each new hour as it comes up (i.e., 0 – 24 hours). It updates the data according to the value in the MONITOR UPDATE RATE - MINUTES field (#19.01) in the CP PARAMETERS file (#8973). If there is no entry in Field #19.01, the default is every 10 minutes. The CPRS coversheet load data is displayed in a bar graph for each hour the Timing Monitor is running. If the Timing Monitor is run continuously, the cycle repeats every 24 hours overlaying/replacing previous data and adjusting the bar graph accordingly. The bar graph is also adjusted for the latest information gathered based on the value in the MONITOR UPDATE RATE - MINUTES field (#19.01) in the CP PARAMETERS file (#8973).

The Timing Monitor also displays an Alert Message near the bottom of the screen if the average number of seconds to load a CPRS coversheet exceeds the value of the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973). If there is no entry in Field #19.02, the default is 30 seconds. Both of these parameters can be edited using the Edit CP Parameters File option [KMPD PARAM EDIT].

```
   STA    CP Environment Check
   SST    Start/Stop Timing Collection
   PRM    Edit CP Parameters File
   TMT    Timing Monitor
   RPT    CP Tools Reports ...

Select CP Tools Manager Menu Option: tmt <Enter>  Timing Monitor


                          Timing Data Monitor

       *** There is currently no data in global ^KMPKMPUTMP("KMPDT","ORWCV") ***
```

Figure 3-30. Running the Timing Monitor option—User prompts and report, *no* data

```
                          Timing Data Monitor


       This option displays CPRS Coversheet time-to-load data, as a
       bar graph, for the current day.  This option can be left
       running on a terminal (if desired).  The monitor is updated
       every 10 minutes (site configurable through the [KMPD PARAM
       EDIT] Edit CP Parameters File option), and displays current
       average time-to-load data starting at midnight.  An alarm
       message is displayed if the average time-to-load exceeds 30
       seconds (site configurable through the [KMPD PARAM EDIT] Edit

       CP Parameters File option).


Continue? YES// <Enter>

Compiling timing stats.......
```

Figure 3-31. Running the Timing Monitor option—User prompts, *with* data

The following figure (Figure 3-32) shows a snapshot in time of average CPRS coversheet loads at a site over a 13-hour time span. The data is displayed in a bar graph format (bar graph colors have been enhanced for clarity in the display):

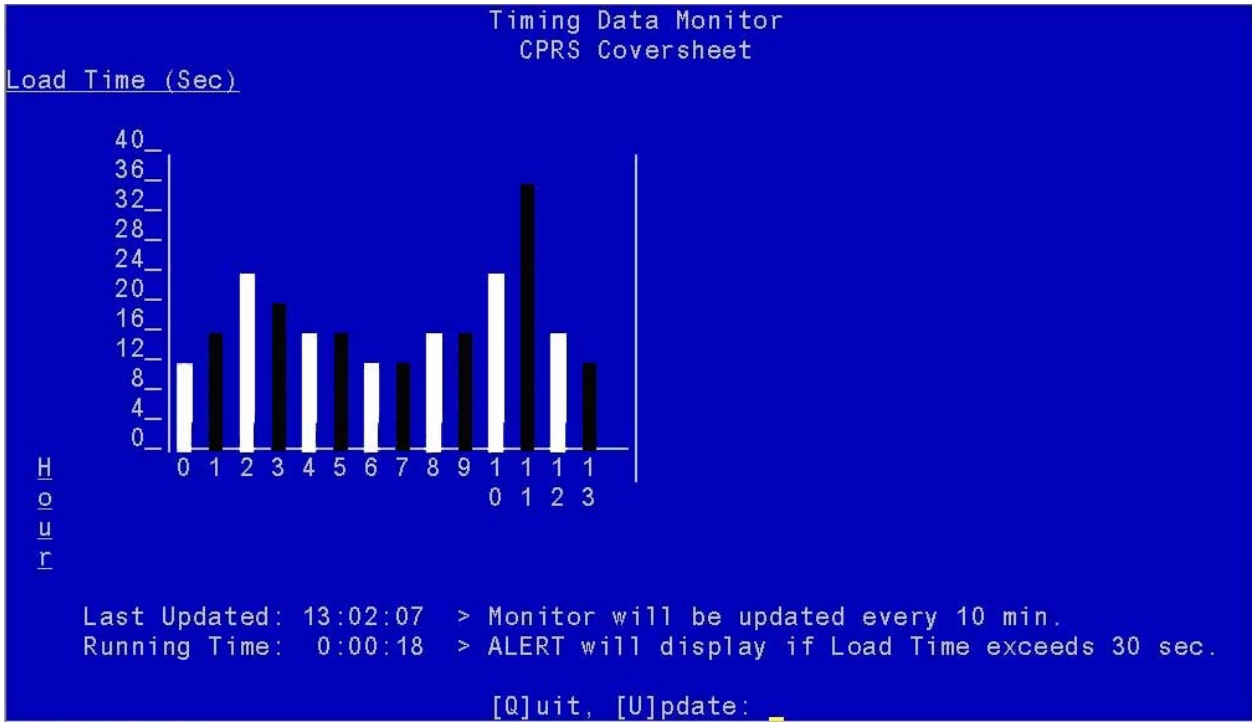

Figure 3-32. Running the Timing Monitor option—Report, *no* alert
(bar graph colors have been enhanced for display purposes only)

In this example (Figure 3-32), the Timing Monitor option has been running for 13+ hours at a site. Thus, the sample graph displays the average CPRS coversheet loads from midnight (0 hour) to 1:00 p.m. (13 hour). If the Timing Monitor is left running, eventually a full 24-hour range of data would be displayed.

For this example, the site has set the Timing Monitor Alert - Seconds parameter (i.e., MONITOR ALERT - SECONDS field [#19.02] in the CP PARAMETERS file [#8973]) to 30 seconds. The graph shows that the average CPRS coversheet loads did not exceed the 30 second threshold except at the 11th hour. During the 11th hour the average CPRS coversheet load was approximately 36 seconds. If the user had checked the monitor at the 11th hour he/she would have gotten an alert message displayed at the bottom of the screen.

REF: For an example of an alert message due to coversheet loads exceeding the Timing Monitor Alert - Seconds parameter, please refer to Figure 3-33.

Sites can set the Timing Monitor Alert - Seconds parameter from 10 to 999 seconds via the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973).

To quit/stop the Timing Monitor, enter a "**Q**" after the "[Q]uit [U]pdate" prompt. To refresh the data/bar graph, enter a "**U**" after the "[Q]uit [U]pdate" prompt.

REF: For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic and Table 3-6 in this chapter.

The following example shows a sample report with an alert message displayed:

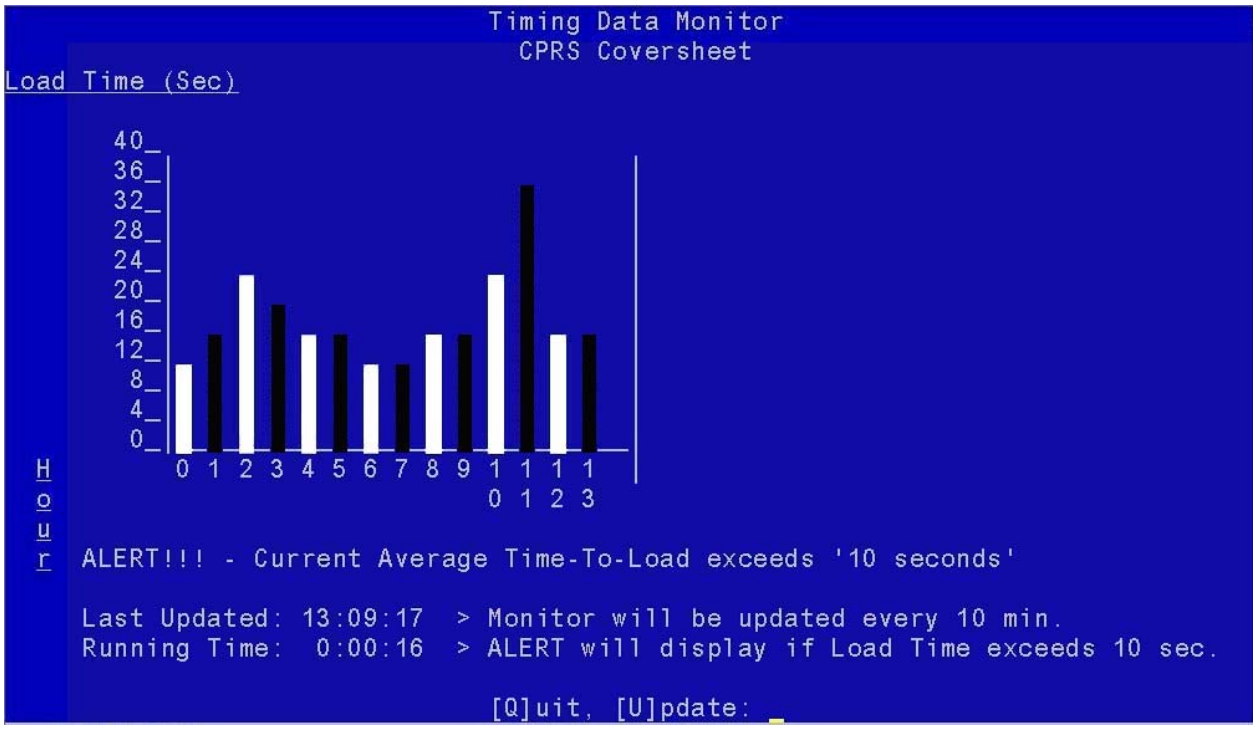

Figure 3-33. Running the Timing Monitor option—Report, *with* alert

In this example (Figure 3-33), the Timing Monitor option has been running for 13+ hours at a site. Thus, the sample graph displays the average CPRS coversheet loads from midnight (0 hour) to 1:00 p.m. (13 hour).

For this example, the site has set the Timing Monitor Alert - Seconds parameter (i.e., MONITOR ALERT - SECONDS field [#19.02] in the CP PARAMETERS file [#8973]) to 10 seconds. The graph shows that the average CPRS coversheet loads exceeded the 10 second threshold during the 1st through the 13th hour. Since the user is checking the monitor at the 13th hour, where the CPRS coversheet load took approximately 15 seconds, he/she saw the alert message displayed at the bottom of the screen:

ALERT!!! – Current Average Time-To-Load exceeds '10 seconds'

Sites can set the Timing Monitor Alert - Seconds parameter from 10 to 999 seconds via the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973).

REF: For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic and Table 3-6 in this chapter.

CP Tools Reports (Synonym: **RPT**)	**[KMPD CM TOOLS REPORTS]**

The CP Tools Reports menu [KMPD CM TOOLS REPORTS] is available on the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU], as shown below:

```
Select CP Tools Manager Menu Option: CP Tools Reports

   TMG    Timing Reports ...

Select CP Tools Reports Option:
```

Figure 3-34. Accessing the CP Tools Reports—Menu option

The CP Tools Reports menu [KMPD CM TOOLS REPORTS] contains a report option that generates report information for a variety of Computerized Patient Record System (CPRS) event statistics accumulated within the CP TIMING file (#8973.2).

The CP Tools Reports menu contains the following sub-menu option:

```
   TMG    Timing Reports ...                                    [KMPD TMG REPORTS]
```

Figure 3-35. CP Tools Reports—Menu option

This sub-menu option is discussed in greater detail in the topic that follows.

Timing Reports (Synonym: **TMG**)	**[KMPD TMG REPORTS]**

The Timing Reports menu [KMPD TMG REPORTS] is located under the CP Tools Reports menu [KMPD CM TOOLS REPORTS]. It contains the following report options:

```
Select CP Tools Reports Option: Timing Reports


   AVD    Average Daily Coversheet Load                          [KMPD TMG AVG TTL]
   AVH    Average Hourly Coversheet Load                        [KMPD TMG HRLY TTL]
   DTD    Detailed Daily Coversheet Load                  [KMPD TMG DLY TTL DETAIL]
   DTH    Detailed Hourly Coversheet Load                [KMPD TMG HRLY TTL DETAIL]
   TAL    Threshold Alert                                      [KMPD TMG TTL ALERT]
   RTA    Real-Time Threshold Alert                         [KMPD TMG TTL ALERT RT]
   RAV    Real-Time Average Hourly Coversheet Load           [KMPD TMG HRLY TTL RT]

Select Timing Reports Option:
```

Figure 3-36. Timing Reports—Menu option

The options on this menu generate report information for a variety of Computerized Patient Record System (CPRS) event statistics accumulated within the CP TIMING file (#8973.2). These options report on the CPRS coversheet load times, which is the main CPRS page. This main page is a screen of the CPRS patient chart that displays an overview of the patient's record.

Each of these options is discussed in greater detail in the topics that follow.

Average Daily Coversheet Load (Synonym: **AVD**)	**[KMPD TMG AVG TTL]**

The Average Daily Coversheet Load option [KMPD TMG AVG TTL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the daily average time-to-load value for the coversheet at a site. Average time-to-load values are given for either daily prime time or non-prime time periods.

The following example shows the prompts and user responses for the Average Daily Coversheet Load option:

```
Select Timing Reports Option: Average Daily Coversheet Load


              Average Coversheet Time-to-Load (TTL) Report

       This report displays the daily average time-to-load value for
       the coversheet at this site.  Average time-to-load values are
       given for either daily prime time or non-prime time periods.


Select End Date:  (9/20/2003 - 10/19/2003): Oct 19, 2003// <Enter>  (OCT 19, 2003)
Select # of Days Review:  (1-30): 7// <Enter>

     Select one of the following:

          1         Prime Time
          2         Non-Prime Time


Select Time Frame: 1// <Enter>  Prime Time

Device: HOME// <Enter>  TELNET DEVICE

Compiling timing stats.....................
..............
```

Here the user chose the end date and number of days data upon which to report up to that end date.

Prime time is 8 a.m. to 5 p.m. Monday through Friday, *excluding* holidays. Non-prime time hours are all other hours (i.e., weekends, nights and holidays).

Figure 3-37. Average Daily Coversheet Load option—User prompts

The following example shows the actual report generated from the Average Daily Coversheet Load option:

```
                  Average Coversheet Time-to-Load (TTL) Report
                                Prime Time
                          Oct 13, 2003 - Oct 19, 2003        Printed: 10/20/03

            |---------------Seconds---------------|
Date        Average TTL   Minimum TTL   Maximum TTL   # of CV Loads
-------------------------------------------------------------------------------
10/13/03              0             0             0              0
10/14/03             14             3           500         16,465
10/15/03             14             3           615         18,674
10/16/03             14             3           288         18,123
10/17/03             12             3           436         16,955
10/18/03              0             0             0              0
10/19/03              0             0             0              0

            Incomplete:   0

  CV  = Coversheet
  TTL = Time-to-Load

Press RETURN to continue:
```

Figure 3-38. Average Daily Coversheet Load option—Report

This report provides the following data regarding coversheet loads at a site for a specified number of days:

- Date—Specific day that the coversheet load began.
- Average TTL—Average time-to-load (in seconds) for each day.
- Minimum TTL—Minimum time-to-load (in seconds) for each day.
- Maximum TTL—Maximum time-to-load (in seconds) for each day.
- # of CV Loads—Total number of coversheet loads for each day.
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

Sites can use this report to track average coversheet load times. It also indicates the shortest and longest coversheets time-to-load. If some of the longer load times are extreme, sites can run any of the other Timing Report options to find out more specific information. For example, sites can then run the Detailed Hourly Coversheet Load report option [KMPD TMG HRLY TTL DETAIL] to see how many loads were over 90 seconds, etc, and also run the Threshold Alert report option [KMPD TMG TTL ALERT] to get a breakdown of which user/client/IP address had slow times.

REF: For more information on the Detailed Hourly Coversheet Load report option [KMPD TMG HRLY TTL DETAIL], please refer to the "Detailed Hourly Coversheet Load" topic in this chapter.

For more information on the Threshold Alert report option [KMPD TMG TTL ALERT], please refer to the "Threshold Alert" topic in this chapter.

For this report, the user chose to report on the last 7 days of coversheet load data from 10/13/03 to 10/19/03. From the report, on 10/15/03, for example, there were a total of 18,674 coversheets loaded with an average time-to-load for each coversheet of 14 seconds. On that same day the shortest coversheet time-to-load took only 3 seconds and the longest coversheet time-to-load took 615 seconds (10 minutes and 15 seconds). Zeroes under the "Average TTL," "Minimum TTL," "Maximum TTL," and "# of CV Loads" columns indicates that the coversheets took less than one second to load (see report data for 10/13/03, 10/18/03, and 10/;19/03).

Average Hourly Coversheet Load (Synonym: **AVH**)	**[KMPD TMG HRLY TTL]**

The Average Hourly Coversheet Load option [KMPD TMG HRLY TTL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the hourly average time-to-load value for the coversheet at a site over a 24-hour period.

The following example shows the prompts and user responses for the Average Hourly Coversheet Load option:

```
Select Timing Reports Option: Average Hourly Coversheet Load


               Hourly Coversheet Time-to-Load (TTL) Report

       This report displays the hourly average time-to-load value for
       the coversheet at this site over 24 hours.


Select End Date:  (9/20/2003 - 10/19/2003): Oct 19, 2003// <Enter>  (OCT 19, 2003)
Select # of Days Review:  (1-30): 1// <Enter>

Device: HOME// <Enter>  TELNET DEVICE

Compiling timing stats......
```

Here the user chose the end date and number of days data upon which to report hourly up to that end date.

Figure 3-39. Average Hourly Coversheet Load option—User prompts

The following example shows the actual report generated from the Average Hourly Coversheet Load option:

```
                  Hourly Coversheet Time-to-Load (TTL) Report
                          Oct 19, 2003 - Oct 19, 2003        Printed: 10/20/03

                    |---------------Seconds---------------|
Date         Hour    TTL Average   TTL Minimum   TTL Maximum   # of CV Loads
-------------------------------------------------------------------------------
10/19/03      00             14             6            79            52
              01             16             5            83            90
              02             16             5           100           131
              03             10             5            39            69
              04             26             5           150            77
              05             14             5            86            98
              06             13             5            65            77
              07             11             5            44           134
              08             10             4            42           167
              09              9             4            55           161
              10             10             4            53           254
              11             10             5            69           225
              12             11             4           166           210
              13              9             4            43           203
              14             12             4            59           245


Enter RETURN to continue or '^' to exit: <Enter>


                  Hourly Coversheet Time-to-Load (TTL) Report
                          Oct 19, 2003 - Oct 19, 2003        Printed: 10/20/03

                    |---------------Seconds---------------|
Date         Hour    TTL Average   TTL Minimum   TTL Maximum   # of CV Loads
-------------------------------------------------------------------------------
              15             11             4            60           213
              16             11             5            38           137
              17             10             5            67           217
              18             12             4            64           172
              19             11             5            58           154
              20             11             5            43           112
              21             13             5            72           139
              22             12             5            58            94
              23             12             5            58           132
                                                                   ----------
                                                                      3,563

            Incomplete:   0

  CV  = Coversheet
  TTL = Time-to-Load

Press RETURN to continue:
```

Hours are represented in military time:

00 = midnight
12 = noon
23 = 11:00 p.m.

Figure 3-40. Average Hourly Coversheet Load option—Report

This report provides the following data regarding coversheet loads at a site for each hour of the specified number of day(s):

- Date—Specific day that the coversheet load began.
- Hour—Specific hour that the coversheet load began (00 - 23).
- TTL Average—Average time-to-load (in seconds) for each hour of a day.
- TTL Minimum—Minimum time-to-load (in seconds) for each hour of a day.
- TTL Maximum—Maximum time-to-load (in seconds) for each hour of a day.
- # of CV Loads—Total number of coversheet loads for:
  - Each hour of the day.
  - Grand total for the entire day.
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

This report allows sites to identify times of the day when the most coversheet loads are taking place, and when the longest times to load are taking place. Sites can run any of the other Timing Report options to find out more specific information.

For this report, the user chose to report on 24 hours of coversheet load data for a single day, 10/19/03. From the report, at 12:00 p.m. to 12:59 p.m. on 10/19/03, for example, there were a total of 210 coversheets loaded with an average time-to-load for each coversheet of 11 seconds. At that same hour the shortest coversheet time-to-load took only 4 seconds and the longest coversheet time-to-load took 166 seconds (2 minutes and 46 seconds).

Detailed Daily Coversheet Load (Synonym: **DTD**)	**[KMPD TMG DLY TTL DETAIL]**

The Detailed Daily Coversheet Load option [KMPD TMG DLY TTL DETAIL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the daily time-to-load values for the coversheet at a site. The report breaks the time-to-load metrics into ten second groupings.

The following example shows the prompts and user responses for the Detailed Daily Coversheet Load option:

```
Select Timing Reports Option: Detailed Daily Coversheet Load


           Daily Coversheet Time-to-Load (TTL) Detailed Report

       This detailed report displays daily time-to-load values for the
       coversheet at this site.  The report breaks the time-to-load
       metrics into ten second groupings.


Select End Date:  (9/20/2003 - 10/19/2003): Oct 19, 2003// T-3 <Enter>  (OCT 17,
2003)
Select # of Days Review:  (1-28): 1// <Enter>

     Select one of the following:

          1         Prime Time
          2         Non-Prime Time

Select Time Frame: 1// <Enter>  Prime Time

Device: HOME// <Enter>  TELNET DEVICE

Compiling timing stats..................
```

Here the user chose the end date and number of days data upon which to report up to that end date. However, since the user chose to start a few days back (T-3), the maximum number of day's data possible for this report is only 28 days (assuming 4 weeks of data accumulation before purging).

Figure 3-41. Detailed Daily Coversheet Load option—User prompts

The following example shows the actual report generated from the Detailed Daily Coversheet Load option:

```
                              Prime Time
                        Oct 17, 2003 - Oct 17, 2003        Printed: 10/20/03

Date        TTL Seconds     # of CV Loads   CV Percent
-------------------------------------------------------------------------------
10/17/03     0 to <10            8,682            51.2%
            10 to <20            6,273            37.0%
            20 to <30            1,238             7.3%
            30 to <40              374             2.2%
            40 to <50              175             1.0%
            50 to <60               77             0.5%
            60 to <70               51             0.3%
            70 to <80               30             0.2%
            80 to <90               18             0.1%
            90 or greater           37             0.2%
                              ----------      ----------
                                16,955             100%

            Incomplete               0

  CV  = Coversheet
  TTL = Time-to-Load

Press RETURN to continue:
```

Figure 3-42. Detailed Daily Coversheet Load option—Report

This report provides the following data regarding detailed daily coversheet load data at a site in 10-second intervals for the specified day(s):

- Date—Specific day that the coversheet load began.
- TTL Seconds—Time-To-Load 10-second interval ranges.
- # of CV Loads—Total number of coversheet loads in the specified day(s) within each 10-second time interval.
- CV Percent—Total percentage of coversheet loads in the specified day(s) within each 10-second time interval.
- Total—Grand total of coversheet loads for the specified day(s).
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

If the report indicates an "excessive" time-to-load for a large percentage of coversheets, sites can run any of the other Timing Report options to get more specific information. What is considered "excessive" is site-specific (e.g., over 60 seconds or over 90 seconds, etc.).

For this report, the user chose to report detailed daily coversheet load data for a single day, 10/17/03 during prime time hours. The report shows that 51.2% (i.e., 8,682 coversheets) took less than 10 seconds to load. The report also shows that on that same day .2% (i.e., 37 coversheets) took 90 seconds or more to load. Overall, the report further shows that 95.5% of the coversheets loaded in less than 30 seconds.

Detailed Hourly Coversheet Load (Synonym: **DTH**)	**[KMPD TMG HRLY TTL DETAIL]**

The Detailed Hourly Coversheet Load option [KMPD TMG HRLY TTL DETAIL] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the hourly time-to-load values for the coversheet at a site. The report breaks the time-to-load metrics into ten second groupings.

The following example shows the prompts and user responses for the Detailed Hourly Coversheet Load option:

```
Select Timing Reports Option: Detailed Hourly Coversheet Load


           Hourly Coversheet Time-to-Load (TTL) Detail Report

       This detail report displays the hourly time-to-load values
       for the coversheet at this site.  The report breaks the
       time-to-load metrics into ten second groupings.


Select End Date:  (9/20/2003 - 10/19/2003): Oct 19, 2003// <Enter>  (OCT 19, 2003)
Select Hour(s) to Review:  (0-23): 8// <Enter>

Device: HOME// <Enter>  TELNET DEVICE

Compiling timing stats...
```

Here the user chose the day and hour of the day upon which to report.

Figure 3-43. Detailed Hourly Coversheet Load option—User prompts

The following example shows the actual report generated from the Detailed Hourly Coversheet Load option:

```
              Hourly Coversheet Time-to-Load (TTL) Detail Report
                        Oct 19, 2003 - Oct 19, 2003        Printed: 10/20/03

Date        Hr  TTL Seconds     # CV Loads      CV Percent
-------------------------------------------------------------------------------
10/19/03    8   0 to <10               104            62.3%
                10 to <20               53            31.7%
                20 to <30                6             3.6%
                30 to <40                3             1.8%
                40 to <50                1             0.6%
                50 to <60                0             0.0%
                60 to <70                0             0.0%
                70 to <80                0             0.0%
                80 to <90                0             0.0%
                90 or greater            0             0.0%
                                    ----------      ----------
                                       167             100%
                Incomplete               0



  CV  = Coversheet
  TTL = Time-to-Load

Press RETURN to continue:
```

Figure 3-44. Detailed Hourly Coversheet Load option—Report

This report provides the following data regarding detailed hourly coversheet load data at a site in 10-second intervals for the specified hour(s):

- Date—Specific day that the coversheet load began.
- HR—Specific hour that the coversheet load began.
- TTL Seconds—Time-To-Load 10-second interval ranges.
- # CV Loads—Total number of coversheet loads in the specified hour(s) within each 10-second time interval.
- CV Percent—Total percentage of coversheet loads in the specified hour(s) within each 10-second time interval.
- Total—Grand total of coversheet loads for the specified hour(s).
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

As with all Timing Report options, sites can run any of the other Timing Report options to find out more specific information.

For this report, the user chose to report detailed hourly coversheet load data for a single hour, 8:00:00 a.m. to 8:59:59 a.m. on 10/19/03. The report shows that within that hour 62.3% (i.e., 104 coversheets) took less than 10 seconds to load. The report also shows that within that hour on the same day .6%

(i.e., 37 coversheets) took less than 50 seconds to load. Overall, the report further shows that 97.6% of the coversheets loaded in less than 30 seconds within that hour. Finally, the report shows that no coversheet took more than 50 seconds total to load within that hour.

Threshold Alert (Synonym: **TAL**)	**[KMPD TMG TTL ALERT]**

The Threshold Alert option [KMPD TMG TTL ALERT] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the particular coversheet loads that had excessive time-to-load values. This report searches for a particular person, client name, or Internet Protocol (IP) address. There is no upper limit on the Time-To-Load Threshold.

The following example shows the prompts and user responses for the Threshold Alert option:

```
Select Timing Reports Option: Threshold Alert


               Coversheet Time-to-Load (TTL) Alert Report

       This alerting report shows the particular coversheet loads
       that had excessive time-to-load values. This report will
       search for a particular person, a particular client name or
       IP address.


Select End Date:  (9/20/2003 - 10/19/2003): Oct 19, 2003// T-3 <Enter>  (OCT 17,
2003)
Select Hour(s) to Review:  (0-23): 8// <Enter>
Select Time-To-Load Threshold (Seconds): 60// <Enter>

     Select one of the following:

          1         User Name
          2         Client Name
          3         IP Address
          4         Any Occurrence

Search By: 4// <Enter>  Any Occurrence

Device: HOME// <Enter>  TELNET DEVICE

Compiling timing stats.....
```

Here the user chose the day, hour of the day, and threshold amount (in seconds) upon which to report. There is no upper limit on the Time-To-Load Threshold.

Here the user chose to report on any occurrence: user name, client name, and IP address.

Figure 3-45. Threshold Alert option—User prompts

The following example shows the actual report generated from the Threshold Alert option:

```
                  Coversheet Time-to-Load (TTL) Alert Report
                         Oct 17, 2003 - Oct 17, 2003        Printed: 10/20/03
                               Any Occurrence:
                            Threshold: 60 seconds

Date      Time  User Name        Client Name      IP Address       Time-to-Load
-------------------------------------------------------------------------------
10/17/03  08:11 KMPDUSER,THREE   xxx-xx57738.v08  99.99.99.16            71
          08:21 KMPDUSER,FOUR    xxx-xx56313.v08  99.99.9.108            63
          08:29 KMPDUSER,FIVE    xxx-xx45760.gai  99.99.9.19             78
          08:30 KMPDUSER,SIX     xxx-xx59283.v08  99.99.99.54            76
          08:32 KMPDUSER,SEVEN L xxx-xx57703.v08  99.99.99.33            64
          08:35 KMPDUSER,EIGHT   xxx-xx48247.gai  99.99.9.225            63
          08:37 KMPDUSER,NINE    xxx-xx57710.v08  99.99.9.229            87
          08:38 KMPDUSER,NINE    xxx-xx57710.v08  99.99.9.229            87
          08:39 KMPDUSER,TEN C   xxx-xx02.gaines  99.99.9.14             64
          08:40 KMPDUSER,11      xxx-xx43202.gai  99.99.99.237          104
          08:43 KMPDUSER,12      xxx-xx56231.v08  99.99.9.114            65
          08:52 KMPDUSER,12      xxx-xx56231.v08  99.99.9.114           123
          08:56 KMPDUSER,12      xxx-xx56231.v08  99.99.9.114           117



Press RETURN to continue:
```

Figure 3-46. Threshold Alert option—Report

This report provides the following data regarding threshold alert data at a site listing only those coversheet loads exceeding the threshold interval chosen by the user for the specified hour(s) on the specified day(s):

- Date—Specific day that the coversheet load began.
- Time—Specific time that the coversheet load began (hours and minutes).
- User name—Name of the person signed on to the client workstation loading the coversheet.
- Client Workstation—Name of the client workstation that loaded the coversheet.
- IP Address—Internet Protocol (IP) address of the client workstation that loaded the coversheet.
- Time-To-Load—Total elapsed time to load the coversheet; loads that went beyond the threshold interval.

This report allows sites to find "out of line" load times. They can then track down the problem (e.g., network problem, individual CPRS setting problems, etc.). Again, as with all Timing Reports, sites can run any of the other Timing Report options to find out more specific information.

For this report, the user chose to report on coversheet loads that exceeded 60 seconds between 8:00:00 a.m. and 8:59:59 a.m. on 10/17/03. The report shows that the longest coversheet load took 123 seconds at 8:52 a.m. KMPDUSER,12 signed onto the client workstation identified as "xxx-xx56231.v08" with an IP address of 99.99.9.114 and loaded that particular coversheet.

Real-Time Threshold Alert (Synonym: **RTA**)	**[KMPD TMG TTL ALERT RT]**

The Real-Time Threshold Alert option [KMPD TMG TTL ALERT RT] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the particular coversheet loads that have excessive time-to-load values for TODAY (real-time). This report searches for a particular person, client name, or Internet Protocol (IP) address.

The following example shows the prompts and user responses for the Real-Time Threshold Alert option:

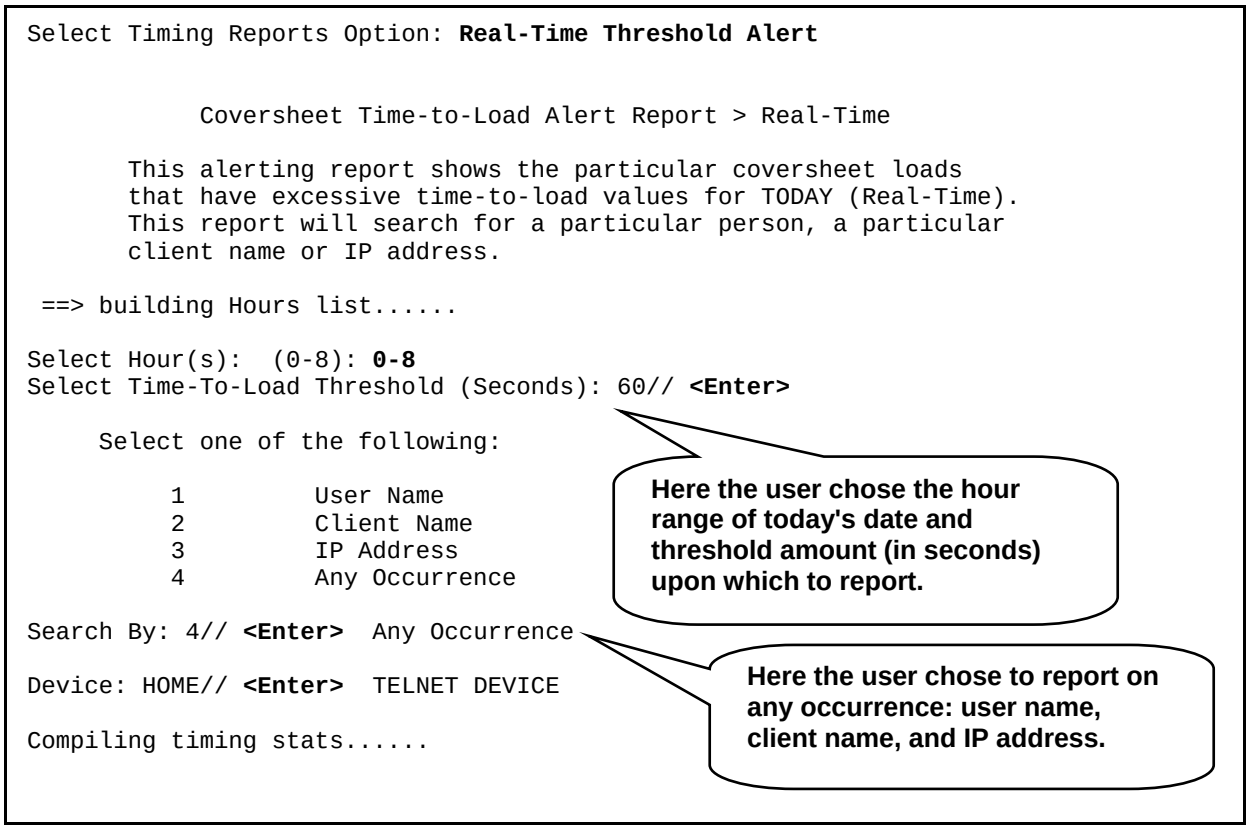

Figure 3-47. Real-Time Threshold Alert option—User prompts

This is a real-time report option. Thus, if it's 8:30 a.m. when the site runs this report option, the data will only be available from midnight to 8:00 a.m. However, if the option is run at 2:00 p.m. the data will be available from midnight to 1400 hours.

The following example shows the actual report generated from the Real-Time Threshold Alert option:

```
                Coversheet Time-to-Load Alert Report > Real-Time
                          Hour(s): 0,1,2,3,4,5,6,7,8,        Printed: 10/20/03
                                Any Occurrence:
                             Threshold: 60 seconds

Date      Time  User Name        Client Name      IP Address       Time-to-Load
-------------------------------------------------------------------------------
10/20/03  00:24 KMPDUSER,13      xxx-xx57694.v08  99.99.99.238           70
          00:41 KMPDUSER,TEN C   xxx-xx02.gaines  99.99.91.14            72
          00:57 KMPDUSER,TEN C   xxx-xx02.gaines  99.99.9.14             78
          00:59 KMPDUSER,14      xxx-xx45112.gai  99.99.9.59            143

          02:01 KMPDUSER,15      xxx-xx50691.gai  99.99.9.232            69

          03:45 KMPDUSER,13      xxx-xx50606.gai  99.99.9.154            74
          03:51 KMPDUSER,16      xxx-xx.v08.      99.99.99.17            65
          03:57 KMPDUSER,16      xxx-xx.v08.      99.99.99.17            61

          04:02 KMPDUSER,17      xxx-xx45098.gai  99.99.99.15           161
          04:10 KMPDUSER,18      xxx-xx55788.v08  99.99.9.120           437


Enter RETURN to continue or '^' to exit: <Enter>


                Coversheet Time-to-Load Alert Report > Real-Time
                          Hour(s): 0,1,2,3,4,5,6,7,8,        Printed: 10/20/03
                                Any Occurrence:
                             Threshold: 60 seconds

Date      Time  User Name        Client Name      IP Address       Time-to-Load
-------------------------------------------------------------------------------
10/20/03  04:19 KMPDUSER,19      xxx-xx47466.gai  99.99.99.82            113
          04:22 KMPDUSER,23 S    xxx-xx50606.gai  99.99.9.154             82
          04:39 KMPDUSER,16      xxx-xx.v08.      99.99.99.17            68
          04:56 KMPDUSER,19      xxx-xx55831.gai  99.99.99.86            75

          05:19 KMPDUSER,16      xxx-xx.v08.      99.99.99.17            62

          07:07 KMPDUSER,THREE   xxx-xx57738.v08  99.99.99.16            98
          07:18 KMPDUSER,20      xxx-xx51177.gai  99.99.999.33           64
          07:43 KMPDUSER,21      xxx-xx57678.v08  99.99.9.55             72
          07:59 KMPDUSER,22      xxx-xx50903.v08  99.99.99.13            96

          08:01 KMPDUSER,24      xxx-xx55771.v08  99.99.9.157           108


Enter RETURN to continue or '^' to exit: <Enter>
```

```
                Coversheet Time-to-Load Alert Report > Real-Time
                          Hour(s): 0,1,2,3,4,5,6,7,8,        Printed: 10/20/03
                                Any Occurrence:
                             Threshold: 60 seconds

Date      Time  User Name        Client Name      IP Address       Time-to-Load
-------------------------------------------------------------------------------
10/20/03  08:04 KMPDUSER,25      xxx-xx57600.v08  99.99.99.18            91
          08:06 KMPDUSER,26      xxx-xx45092.v08  99.99.99.111          111
          08:10 KMPDUSER,27      xxx-xx56195.v08  99.99.9.106           203
          08:11 KMPDUSER,28 A    xxx-xx45078.gai  99.99.9.153            73
          08:14 KMPDUSER,27      xxx-xx56195.v08  99.99.9.106            82
          08:15 KMPDUSER,29      xxx-xx45753.gai  99.99.9.93            156
          08:16 KMPDUSER,30 L    xxx-xx55831.gai  99.99.99.86            75
          08:17 KMPDUSER,28 A    xxx-xx45078.gai  99.99.9.153            61
          08:18 KMPDUSER,31      xxx-xx57094.v08  99.99.99.91            70
          08:19 KMPDUSER,FOUR    xxx-xx57656.v08  99.99.9.17             95
          08:20 KMPDUSER,32      xxx-xx59301.v08  99.99.9.234            66
          08:20 KMPDUSER,24      xxx-xx55771.v08  99.99.9.157            63
          08:21 KMPDUSER,33 M    xxx-xx57893.v08  99.99.9.134           193


Enter RETURN to continue or '^' to exit: <Enter>


                Coversheet Time-to-Load Alert Report > Real-Time
                          Hour(s): 0,1,2,3,4,5,6,7,8,        Printed: 10/20/03
                                Any Occurrence:
                             Threshold: 60 seconds

Date      Time  User Name        Client Name      IP Address       Time-to-Load
-------------------------------------------------------------------------------
10/20/03  08:25 KMPDUSER,NINE    xxx-xx57710.v08  99.99.9.229            69
          08:26 KMPDUSER,34 N    xxx-xx53033.gai  99.99.999.244          68
          08:27 KMPDUSER,FIVE    xxx-xx45760.gai  99.99.9.19             61
          08:28 KMPDUSER,22      xxx-xx50903.v08  99.99.99.13            72
          08:31 KMPDUSER,25      xxx-xx57600.v08  99.99.99.18            68
          08:32 KMPDUSER,33 M    xxx-xx57893.v08  99.99.9.134           273
          08:33 KMPDUSER,35      xxx-xxrx.gaines  99.99.9.54             61
          08:35 KMPDUSER,26      xxx-xx45092.v08  99.99.99.111          162
          08:37 KMPDUSER,36      xxx-xx56665.v08  99.99.9.91             65
          08:39 KMPDUSER,37      xxx-xx51734.gai  99.99.999.110          69
          08:40 KMPDUSER,38      xxx-xx54233.gai  99.99.99.82            70
          08:41 KMPDUSER,39      xxx-xx50701.gai  99.99.9.71             66
          08:44 KMPDUSER,12      xxx-xx56231.v08  99.99.9.114           117


Enter RETURN to continue or '^' to exit: <Enter>
```

```
                Coversheet Time-to-Load Alert Report > Real-Time
                          Hour(s): 0,1,2,3,4,5,6,7,8,        Printed: 10/20/03
                                Any Occurrence:
                             Threshold: 60 seconds

Date      Time  User Name        Client Name      IP Address       Time-to-Load
-------------------------------------------------------------------------------
10/20/03  08:45 KMPDUSER,40      xxx-xx57078.v08  99.99.9.129           106
          08:47 KMPDUSER,41 L    xxx-xx50888.gai  99.99.99.86            61
          08:49 KMPDUSER,42      xxx-xx49015.gai  99.99.9.181           84
          08:51 KMPDUSER,43      xxx-xx59924.v08  99.99.9.219           71



   Total Count:  50

Press RETURN to continue:
```

Figure 3-48. Real-Time Threshold Alert option—Report

This report provides the following data regarding threshold alert data at a site listing only those coversheet loads exceeding the threshold interval chosen by the user for the specified hour(s) on the day the report was run (real-time):

- Date—Today's date that the coversheet load began (real-time).
- Time—Specific time that the coversheet load began (hours and minutes, real time).
- User name—Name of the person signed on to the client workstation loading the coversheet (real-time).
- Client Workstation—Name of the client workstation that loaded the coversheet (real-time).
- IP Address—Internet Protocol (IP) address of the client workstation that loaded the coversheet (real-time).
- Time-To-Load—Total elapsed time to load the coversheet; loads that went beyond the threshold interval (real-time).
- Total—Grand total of report line items listed (real-time).

As with the Threshold Alert report option [KMPD TMG TTL ALERT], problems can be identified. However, because this is real-time report, sites can track what is going on throughout the day.

REF: For more information on the Threshold Alert report option [KMPD TMG TTL ALERT], please refer to the "Threshold Alert" topic in this chapter.

For this report, the user chose to report on coversheet loads that exceeded 60 seconds between the hours of 00:00:00 a.m. and 8:59:59 a.m. on 10/20/03. The report shows that the longest coversheet load took 437 seconds at 4:10 a.m. KMPDUSER,18 signed onto the client workstation identified as "xxx-xx55788.v08" with an IP address of 99.99.9.120 and loaded that particular coversheet.

Real-Time Average Hourly Coversheet Load (Synonym: **RAV**)	**[KMPD TMG HRLY TTL RT]**

The Real-Time Average Hourly Coversheet Load option [KMPD TMG HRLY TTL RT] is located on the Timing Reports menu [KMPD TMG REPORTS]. It produces a report that displays the hourly average time-to-load value for the coversheet at a site over a 24-hour period.

The following example shows the prompts and user responses for the Real-Time Average Hourly Coversheet Load option:

```
Select Timing Reports Option:  Real-Time Average Hourly Coversheet Load


          Real-Time Hourly Coversheet Time-to-Load (TTL) Report

       This report displays the hourly average time-to-load value for
       the coversheet at this site over 24 hours.


Device: HOME// <Enter>  TELNET DEVICE

Compiling timing stats......
```

Figure 3-49. Real-Time Average Hourly Coversheet Load option—User prompts

This is a real-time report option. Data is only available from midnight to 8:00 a.m.

The following example shows the actual report generated from the Real-Time Average Hourly Coversheet Load option:

```
             Real-Time Hourly Coversheet Time-to-Load (TTL) Report
                              Oct 20, 2003              Printed: 10/20/03

                    |---------------Seconds---------------|
Date         Hour    TTL Average   TTL Minimum   TTL Maximum   # of CV Loads
-------------------------------------------------------------------------------
10/20/03     00             15             6           143            73
             01             14             6            52           103
             02             16             5            69            97
             03             17             5            74            93
             04             25             5           437            78
             05             10             5            62           139
             06             11             4            59           270
             07             12             4            98           963
             08             16             5           273         2,028
                                                                  ----------
                                                                       3,844

             Incomplete:   68


  CV  = Coversheet
  TTL = Time-to-Load

Press RETURN to continue:
```

Figure 3-50. Real-Time Average Hourly Coversheet Load option—Report

This report provides the following data regarding coversheet loads at a site for each hour of the specified number of day(s):

- Date—Today's date that the coversheet load began (real-time).
- Hour—Specific hour that the coversheet load began (00 - 23, real-time).
- TTL Average—Average time-to-load (in seconds) for each hour of the day (real-time).
- TTL Minimum—Minimum time-to-load (in seconds) for each hour of the day (real-time).
- TTL Maximum—Maximum time-to-load (in seconds) for each hour of the day (real-time).
- # of CV Loads—Total number of coversheet loads for:
  - Each hour of the day.
  - Grand total for the entire day.
- Incomplete—Total number of coversheets where the report option was unable to determine the coversheet end load time, so it was unable to calculate the time to load the coversheet.

For this report, the user chose to report on the current day (10/20/03, midnight to 8:00 a.m.) of coversheet load data (real-time). The report shows that at 08:00 a.m. on 10/20/03, for example, there were a total of 2,028 coversheets loaded with an average time-to-load for each coversheet of 16 seconds. At that same hour the report also shows that the shortest coversheet time-to-load took only 5 seconds and the longest

coversheet time-to-load took 273 seconds (4 minutes and 55 seconds). Also, the report shows that there were a total of 68 coversheets that did not load to completion.

CM Tools Background Driver [KMPD BACKGROUND DRIVER]

On a nightly basis, the CM Tools Background Driver option [KMPR BACKGROUND DRIVER] does the following:

- Moves the data within the ^TMP("KMPDH",$J) collection global. to the CM HL7 DATA file (#8973.1).
- Moves the data within the ^KMPTMP("KMPDT") collection global to the CP TIMING file (#8973.2)

Upon completion, the data within both the ^TMP("KMPDH",$J) and ^KMPTMP("KMPDT") temporary collection globals is purged.

Every Sunday night, the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] monitors and trims (records deleted) the following files to ensure that the correct maximum number of day's data is maintained as determined by the appropriate CP parameters:

- CM HL7 DATA file (#8973.1)—The maximum amount of data collected is determined by the Purge HL7 Data After CP parameter.
- CP TIMING file (#8973.2)—The maximum amount of data collected is determined by the Purge Timing Data After CP parameter.

Also, each Sunday night, the CM Tools Background Driver option automatically compresses the information contained within the CM HL7 DATA file (#8973.1) into weekly statistics. These weekly statistics are converted into an electronic mail message that is automatically transferred via network mail (i.e., VistA MailMan) and merged into a Capacity Planning National Database where this data is used for evaluation purposes.

The CM Tools Background Driver option [KMPD BACKGROUND DRIVER] is *not* assigned to any menu. This option is scheduled through TaskMan to start the Capacity Management Tools software's background driver routine.

This option should be (re)scheduled with TaskMan's Schedule/Unschedule Options [XUTM SCHEDULE] located under the Taskman Management menu [XUTM MGR], see Figure 3-51.

NOTE: The installation of the CM Tools software automatically sets the Background Driver job to run daily at 1:30 a.m. It does the same thing as TaskMan's Schedule/Unschedule Option, which saves the installer the job of having to set up the Background Driver job later.

This option lets users set the following TaskMan parameters in the OPTION SCHEDULING file (#19.2, see Figure 3-52 and Figure 3-53):

Parameter	Field Name (Number) (in File #19.2)	Description
QUEUED TO RUN AT WHAT TIME	QUEUED TO RUN AT WHAT TIME field (#2)	This is the date and time the user wants this option to be started by TaskMan. It should be scheduled to run every day at 1:30 a.m.
DEVICE FOR QUEUED JOB OUTPUT	DEVICE FOR QUEUED JOB OUTPUT field (#3)	The field is the name of the device on which the specified option will be queued to print by TaskMan. At the time of queueing, If TaskMan cannot identify a device by this name, the job will not be run. Only enter a device if the job needs an output device.
QUEUED TO RUN ON VOLUME SET	QUEUED TO RUN ON VOLUME SET field (#5)	This field is used to let the Task Manager know where to run the queued job. It is the Volume set [:node] upon which the user wants the job to run. Answer must be 2-15 characters.
RESCHEDULING FREQUENCY	RESCHEDULING FREQUENCY field (#6)	This is the frequency at which the user wants the job to automatically run. For the CM Tools Background Driver, this should be set to "1D" so that it will run every day. If this field is left blank, then the job will run only once.

Table 3-7. TaskMan parameters/fields, stored in the OPTION SCHEDULING file (#19.2)

REF: For more information on TaskMan, please refer to the *Kernel Systems Manual*.

CAUTION: Capacity Planning Service *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- **^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as prescribed by the Purge HL7 Data After CP parameter, which is stored in the HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].**
- **^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as prescribed by the Purge Timing Data After CP parameter, which is stored in the TIMING WEEKS TO KEEP DATA field (#4.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].**

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.

The following examples show typical displays when using TaskMan's Schedule/Unschedule Options option:

```
Select Systems Manager Menu Option: Taskman Management


          Schedule/Unschedule Options
          One-time Option Queue
          Taskman Management Utilities ...
          List Tasks
          Dequeue Tasks
          Requeue Tasks
          Delete Tasks
          Print Options that are Scheduled to run
          Cleanup Task List
          Print Options Recommended for Queueing


Select Taskman Management Option: Schedule/Unschedule Options

Select OPTION to schedule or reschedule: KMPD BACKGROUND DRIVER <Enter>   CM Tools
Background Driver
         ...OK? Yes// <Enter> (Yes)
      (R)
```

At this point users are automatically placed into a ScreenMan form, see Figure 3-52.

Figure 3-51. Running TaskMan's Schedule/Unschedule Options option to set up the CM Tools Background Driver—User prompts

After selecting the specific option in TaskMan's Schedule/Unschedule Options option, the user is automatically placed into the following ScreenMan form:

```
                          Edit Option Schedule
    Option Name: KMPD BACKGROUND DRIVER
    Menu Text: CM Tools Background Driver                    TASK ID:
  ____________________________________________________________________________

  QUEUED TO RUN AT WHAT TIME:

DEVICE FOR QUEUED JOB OUTPUT:

 QUEUED TO RUN ON VOLUME SET:

      RESCHEDULING FREQUENCY:

              TASK PARAMETERS:

             SPECIAL QUEUEING:

_____________________________________________________________________________




COMMAND:                                    Press <PF1>H for help    Insert
```

Figure 3-52. Sample TaskMan's Schedule/Unschedule Options option (ScreenMan)—User prompts, *before* scheduling the CM Tools Background Driver

```
                          Edit Option Schedule
    Option Name: KMPD BACKGROUND DRIVER
    Menu Text: CM Tools Background Driver                    TASK ID: 2156701
  ____________________________________________________________________________

  QUEUED TO RUN AT WHAT TIME: OCT 2,2003@01:30

DEVICE FOR QUEUED JOB OUTPUT:

 QUEUED TO RUN ON VOLUME SET:

      RESCHEDULING FREQUENCY: 1D

              TASK PARAMETERS:

             SPECIAL QUEUEING:

_____________________________________________________________________________




COMMAND:                                    Press <PF1>H for help    Insert
```

Figure 3-53. Sample TaskMan's Schedule/Unschedule Options option (ScreenMan) —User prompts, *after* scheduling the CM Tools Background Driver

Glossary

CAPACITY PLANNING	The process of assessing a system's capacity and evaluating its efficiency relative to workload in an attempt to optimize system performance. (Formerly known as Capacity Management.)
CM TOOLS	**C**apacity **M**anagement Tools. A fully automated support tool developed by Capacity Planning (CP) Service, which entails the daily capture of VistA HL7 workload information from participating sites.
COVERSHEET	The Computerized Patient Record System (CPRS) coversheet, which is the main CPRS page. This main page is a screen of the CPRS patient chart that displays an overview of the patient's record.
PRIME TIME HOURS	Prime time hours are 8 a.m. to 5 p.m. Monday through Friday, *excluding* holidays. Non-prime time hours are all other hours (i.e., weekends, nights and holidays).

REF: For a comprehensive list of commonly used infrastructure- and security-related terms and definitions, please visit the ISS Glossary Web page at the following Web address:

http://vista.med.va.gov/iss/glossary.asp

For a comprehensive list of acronyms, please visit the ISS Acronyms Web site at the following Web address:

http://vista/med/va/gov/iss/acronyms/index.asp

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