

Lucent Technologies
Bell Labs Innovations



Call Accounting System
Cost Allocator Version 2 Enhanced
Rating I

555-006-510

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About This Document

Purpose

This document is intended to guide those who want to understand the Enhanced Rating I option for the Cost Allocator Version 2 (CA V2) system. Complete details for installation and operation of the option are provided.

Intended Audience

This document is written for the following audiences:

- Users and administrators of the CA V2 system
- AT&T installation, maintenance, and other service technicians
- Technical Response Center personnel

How This Document Is Organized

This document describes every function of the CA V2 Enhanced Rating I option. An introductory chapter precedes the installation procedures and function descriptions; an index follows.

- Chapter 1, *Overview*, describes the option's tape interface and volume discounting features.

- Chapter 2, *Installation*, describes the installation procedure.
- Chapter 3, *Operation*, describes the procedures to configure a site to incorporate taped information into the call record database and provide discounts based on the volume of calls.

Document Design

This document is designed to be inserted into the *Cost Allocator Version 2.0 Administration, Operation, and Maintenance* binder. A tab is provided for quick identification of the Enhanced Rating I documentation.

Conventions Used in This Document

The following typographic conventions are used in this document:

- Keys that you press are shown in brackets — for example:
Press <ESC>.
- Two or more keys that you press simultaneously are shown together in brackets — for example:
Press <Ctrl-c>.
- Some commands in a data-entry screen are executed by typing the first letter of the command name (shown in brackets) — for example:
Press <U>pdate.
- The word “enter” in a procedure means to type a value and press <↵> (the carriage return on your keyboard) — for example:
Enter *y* to continue.
- Information displayed on the screen is shown in `constant-width` type — for example:
The message `Rating Running.` appears.
- User entries are shown `constant-width bold` type if they must be typed exactly as shown — for example:
At the `login:` prompt, enter `▼2`

- Variables that you must supply are shown in *italic* type — for example:
Enter the time in *mm:ss* format.

Related Resources

The following documents may provide you with additional or related information:

- *Cost Allocator Version 2 Administration, Operation, and Maintenance* (555-006-506) — for CA V2, describes call-accounting networks and operation in general, and CA V2 functionality and report capability in detail.
- *Cost Allocator Version 2 Installation and Verification* (555-006-111) — for AT&T technicians and/or others interested in understanding or performing an installation.
- CA V2 optional module documentation — In addition to this document, the following documents describe the installation and operation of the CA V2 software options:
 - *Cost Allocator Version 2 Enhanced Reporting Module* (555-006-508)
 - *Cost Allocator Version 2 Integrated Poller* (555-006-509)
 - *Cost Allocator Version 2 Enhanced Rating II* (555-006-511)
 - *Cost Allocator Version 2 Enhanced Rating I* (555-006-512)
- *Call Detail Recording Unit/Small* (555-006-212) — describes installation and administration for the CDRU/S.
- *Call Detail Recording Unit/SE* (555-006-212) — describes installation and administration for the CDRU/SE.
- *UNIX System V/386 Release 3.2.3 Operations/System Administration* — describes administration for the UNIX operating system running on a 6386 WGS processor.
- *UNIX System V/386 Release 3.2.3 FACE User's Administrator's Guide* — describes administration for the 6386 WGS under UNIX System V, using the FACE menu system.

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The Enhanced Rating I option package consists of a disk containing the option software and this manual explaining its installation and use.

The enhancements provided by this option are described in the paragraphs that follow.

Tape Interface

The Enhanced Rating I tape interface allows CA V2 to process records stored on tape. Telephone company services such as Centrex or Automatic Message Accounting (AMA) provide taped records from a wide variety of sources such as credit card calls, mobile phone activity, telegrams, etc., as well as standard call records. Taped records are translated by the interface and stored in the database for use in reports.

Volume Discounting

Volume discounting simulates the costs of calls discounted on the basis of cost volume by AT&T ProWATS. ProWATS applies a discounting formula to the total cost of some long-distance call types (generally OS-OL and IDDD) for a specified period. Enhanced Rating I sets up the discount periods and processing schedule so that your reported ProWATS call costs match the costs in the statements your company receives for its ProWATS service.

Installing the Enhanced Rating 1 option is a simple process described in the steps below.

⇒ **NOTE:**

To perform an option installation, you must access CA V2 using the login created to install your software. Generally CA V2 is installed using the login `ca`. The installation login is part of the information passed on to you (the system administrator) from the account team.

1. Use the installation login to access the application. From the main menu, select `Administration`, then `Software Options and Modules`. A screen display prompts you for the `root password`. After you enter the password, a second prompt asks for the location of the drive containing the software option disk.
2. Identify the drive, insert the option software disk, and press `<↓>`. When the message `Installation complete` displays, remove the disk, and follow the screen messages to return to the menu system.
3. To verify a successful installation, from the main menu, select `Call Rating`. Select each of the items in the list that follows so that you view every function's data-entry screen.
 - `Tape Operations`
 - `Halt Tape`
 - `Load Tape`
 - `Edit Rating Configuration`
 - `List Rating Configuration`
 - `List Control Information`

- Rating and Discounting
 - Schedule Volume Discounting

Press <E>xit to leave a data entry screen. When complete, press <ESC> until you return to the main menu.

4. Select `Exit`, then `Confirm`. Use your application login to reenter CA V2.

If you are unable to access any of the menus or functions, repeat the installation and verification procedures. If problems still exist, call the Technical Support Center at 1-800-442-6622.

This chapter is divided into the sections described below:

- *Halting a Tape* — describes how to stop processing tapes.
- *Loading a Tape* — describes how to set up a site's tape interface.
- *Editing Tape-Rating Configuration* — describes how to identify a record type, call type, and rating configuration for records received on tape.
- *Listing Tape-Rating Configuration* — describes how to list taped record-costing information by site.
- *Listing Control Configurations* — describes how to list tape interface information by site.
- *Scheduling Volume Discounting* — describes how to set up a schedule for ProWATS volume discounting.

Halting a Tape

Use the following procedure to check the status of a tape load and to stop it if necessary.

1. From the main menu, select **Call Rating**, then **Tape Operations**, and finally **Halt Tape**. A screen similar to the one below appears displaying the current status of tape processing.

⇒ **NOTE:**

When you halt a process using a rewinding tape device, it automatically rewinds before resuming operation.

```
COMMANDS: Halt Exit
           Halt reading the call records from tape
-----
                        HALT TAPE
-----

Tape processing is running.
```

2. To stop processing, press <H>alt. Otherwise, press <E>exit to return to the menu system.

Loading a Tape

Use the following procedure to enter, update, or remove configurations for the tape interface and to start tape processing.

1. From the main menu, select **Call Rating**, then **Tape Operations**, and finally **Load Tape**. A screen similar to the one below appears.

```
COMMANDS: Query Next Previous Detail Exit
           Query database for record
-----
                        LOAD TAPE
-----

Site: Headquarters
```

2. Use <Q>query, <N>ext, or <P>revious to display the desired site. Press <D>etail. A screen similar to the one that follows appears.

```

COMMANDS: Query Next Previous Add Update Remove Master Start Exit
          Query database for record
-----
                                LOAD TAPE
-----
                                Site: Headquarters
                                Data Format:
Rewinding Tape Device Name: /dev/rmt/c0s0
Non-rewinding Tape Device Name:
Non-EBCDIC Tape: N
Standard IBM Header and Trailer? N
                                Block Size: 1024
                                Process Size: 0
    
```

The list that follows describes the fields displayed.

- **Data Format.** A CA V2 default tape format indicating the translator to process this data.
- **Rewinding Tape Device Name.** The path name of a tape device that, when halted, automatically rewinds and reprocesses data when operation resumes. Duplicate data may result.
- **Non-rewinding Tape Device Name.** The path name of a tape device that, when halted, resumes processing at the point it stopped.

⇒ **NOTE:**

This screen requires a rewinding device name — a nonrewinding device name is optional.

- **Non-EBCDIC Tape?** <Y>es if tape is in ascii format, <N>ormal if the EBCDIC tape format needs conversion to ascii.
- **Standard IBM Header and Trailer?** <Y>es if the tape's data is separated by file marks and to use a nonrewinding device, <N>o otherwise.
- **Block Size.** The number of bytes, 1-7 digits, per tape block — indicated on the tape label.
- **Process Size.** The number of blocks, 1-7 digits, to read at one time. 0 indicates read the entire tape with a rewinding device. The default is 100.

⇒ **NOTE:**

<0> provides the fastest method of reading the tape but does so without checking the available disk space. Other numerical entries read and check disk space for that number of blocks. Tape processing is halted if the space is insufficient. The tape is reread at a later time from where it stopped (if a nonrewinding device is used) or from the beginning (if a rewinding device is used).

- Start at Beginning of Tape. <Y>es to begin reading at the start of the tape, <N>o to read from another point on the tape using a nonrewinding device.
- 3a. To add information, press <A>dd and enter data from the keyboard, or press <F1> when available to select from a help menu. Press <ESC> when complete.
- 3b. To make changes to displayed information, press <U>pdate and enter data from the keyboard, or press <F1> when available to use a help menu. Press <ESC> when complete.
- 3c. To delete a site's tape interface, use <Q>uery, <N>ext, or <P>revious to display the information of interest, press <R>emove, and follow the screen instructions.
- 4a. To load a tape, press <M>aster to return to the previous menu. Use <N>ext or <P>revious to display the desired site. Press <D>etail.
- 4b. Use <N>ext or <P>revious to display the desired tape information, press <S>tart, and follow the screen instructions. If indicated, tape processing begins running in the background.
- 5. Press <E>xit to return to the menu system.

Editing Tape-Rating Configuration

Use the following procedure to associate a call type and costing scheme to call records received on tapes.

1. From the main menu, select *Call Rating*, then *Tape Operations*, and finally *Edit Rating Configuration*. A screen similar to the one below appears.

⇒ **NOTE:**

Enhanced Rating I supplies a default set of call types for each site. A record type and zero-costing information is associated with each call type.

```

COMMANDS: Query Next Previous Detail Exit
          Query database for record
-----
EDIT TAPE RATING CONFIGURATION
-----
Site: Headquarters
    
```

- Use <Q>uery, <N>ext, or <P>revious to display the desired site. Press <D>etail. A screen similar to the one that follows appears.

```

COMMANDS: Query Next Previous Add Update Remove Master Exit
          Query database for record
-----
EDIT TAPE RATING CONFIGURATION
-----
Site: Headquarters
Record Type: 310101
Call Type: RADIO
Rate Type: N
Rate: $0.00
Cost Inbound Calls? N
Carrier: 0
Carrier Name: FLAT
Source NPA/NXX: /
    
```

The list that follows describes the fields displayed.

- Record Type. A unique number associated with a tape record that links it to a call type and corresponding costing scheme.
- Call Type. The mnemonic (1-5 characters) given to this type of tape record. If the name does not exist, CA V2 adds it to the internal list.
- Rate Type. The method used to cost this record type: per <M>inute, per <C>all, <D>iscard, <T>ariff, or do <N>ot change the cost as reported on the tape.
- Rate. The value used to cost this record type if using a flat rate (\$0.00 to \$320.00).
- Cost Incoming Calls? <Y>es to rate this record type's incoming calls, <N>o otherwise.
- Carrier. 0 if flat rating is used for this record type, 1-4 (1-16 if the Enhanced Rating II option is installed) to refer to one of this site's carriers.

⇒ **NOTE:**

Within your range of carriers, do not select a number associated with a carrier described as operator-assisted.

- Carrier Name (not editable). The code associated with the carrier number above. For example, if the carrier is 0 the name is FLAT.
 - Source NPA/NXX. (not editable). If applicable, the area code and exchange associated with the displayed carrier name.
- 3a. To display existing configurations use <Q>uery, <N>ext, or <P>revious.
 - 3b. To add information, press <A>dd and enter data from the keyboard, or press <F1> when available to select from a help menu. Press <ESC> when complete.
 - 3c. To make changes to displayed information, press <U>pdate and enter data from the keyboard, or press <F1> when available to use a help menu. Press <ESC> when complete.
 - 3d. To delete a site's tape rating configuration, use <Q>uery, <N>ext, or <P>revious to display the information of interest, press <R>emove, and follow the screen instructions.
4. Press <E>xit to return to the menu system.

Listing Tape-Rating Configuration

Use the following procedure to list taped record formats with corresponding call type and costing information by site.

1. From the main menu, select Call Rating, then Tape Operations, and finally List Rating Configuration. A screen similar to the one below appears.

```

COMMANDS: Update Generate Exit
           Update the displayed record
-----
                LIST TAPE RATING CONFIGURATION
-----

Sites Avail: 10
Sites Chosen: 4
Output Method: F Send to File
Output Modifier:
Output File: acctcd.01

                Site Selections
Site Name      I   Site Name  Include?
-----
HQ             I
Site A        I
Site B        I
Site C        I
  
```

The list that follows describes the fields displayed.

- Sites Available (not editable). The number of sites in your CA V2 network.

- Sites Chosen (not editable). The number of sites <I>ncluded or <E>xcluded in this listing.
- Output Method. Output is sent to a <F>ile, default <P>rinter, or device <1> to <9>.
- Output Modifier. The name of a modifier, if any, to invoke before output.
- Output File. If you specify <F>ile as the output method, you must enter a file in this field.
- Site Selection. <I>nclude or <E>xclude up to 10 sites. Wildcard characters can be used.

— ? stands for any single character in that position
 — % stands for any number of characters or no characters

For example, S% selects all sites starting with "S". To limit global selections, enter exception site names, indicating them to be <E>xcluded. To select sites starting with "S" except for "SITE 4," enter:

```
Site Name: S% <I>nclude/<E>xclude: I
Site Name: SITE 4 <I>nclude/<E>xclude: E
```

Or, to select all sites that do not end with "4", enter:

```
Site Name: %4 <I>nclude/<E>xclude: E
```

2. To input information, press <U>pdate and enter data from the keyboard, or press <F1> when available to use a help menu. Press <↓> to move from one data-entry field to another. When complete, press <ESC>.
3. To output the list immediately, press <G>enerate. Or press <E>xit to return to the menu system.

Follow the procedure in *Scheduling Reports* in chapter 6 of *Cost Allocator Version 2 Administration, Operation, and Maintenance (555-006-506)* for complete instructions to run this list at another time. A sample report follows.

```
Today: Sep 23 1992 03:12 PM
Company: Testing Inc.
Site: CHEYENNE CUST 1
```

Page 1

 TAPE RATING TABLE

Record Type	Call Type	Rate Method	Re-Rate Incoming	Rate	Carrier
310101	MTS-N	none	no	\$.00	FLAT
310180	MTS-M	none	no	\$.00	FLAT
310181	MTS-R	none	no	\$.00	FLAT
310201	MTS-I	none	no	\$.00	FLAT
310401	MTS-I	none	no	\$.00	FLAT
310501	MTS-O	none	no	\$.00	FLAT
310106	NDC-N	none	no	\$.00	FLAT
:					
:					
:					
End of Billing Tape Rating Table...					

Listing Control Information

Use the following procedure to list tape interface information by site.

1. From the main menu, select **Call Rating**, then **Tape Operations**, and finally **List Control Configuration**. A screen similar to the one that follows appears.

```

COMMANDS: Update Generate Exit
           Update the displayed record
-----
                        LIST TAPE CONTROL CONFIGURATION
-----

Sites Avail: 10
Sites Chosen: 4
Output Method: F Send to File
Output Modifier:
Output File: acctcd.01

Site Selections
-----
Site Name      Site Name      Include?
-----
HQ           I
Site A      I
Site B      I
Site C      I

```

The list that follows describes the fields displayed.

- **Sites Available** (not editable). The number of sites in your CA V2 network.
- **Sites Chosen** (not editable). The number of sites <I>ncluded or <E>xcluded in this listing.
- **Output Method**. Output is sent to a <F>ile, default <P>rinter, or device <1> to <9>.
- **Output Modifier**. The name of a modifier, if any, to invoke before output.
- **Output File**. If you specify <F>ile as the output method, you must enter a file in this field.
- **Site Selection**. <I>nclude or <E>xclude up to 10 sites. Wildcard characters can be used.

- ? stands for any single character in that position
- % stands for any number of characters or no characters

For example, **S%** selects all sites starting with “S”. To limit global selections, enter exception site names, indicating them to be <E>xcluded. To select sites starting with “S” except for “SITE 4,” for example, enter:

```

Site Name: S%           <I>nclude/<E>xclude: I
Site Name: SITE 4      <I>nclude/<E>xclude: E

```

Or, to select all sites that do not end with "4", enter:

Site Name: %4 <I>nclude/<E>xclude: E

2. To input information, press <U>update and enter data from the keyboard, or press <F1> when available to use a help menu. Press <↵> to move from one data-entry field to another. When complete, press <ESC>.
3. To output the list immediately, press <G>enerate. Or press <E>xit to return to the menu system.

Follow the procedure in *Scheduling Reports* in chapter 6 of *Cost Allocator Version 2 Administration, Operation, and Maintenance (555-006-506)* for complete instructions to run this list at another time. A sample report follows.

```

Today: Aug 21 1992 03:08 PM
Company: Testing Inc.
Site: CHEYENNE CUST 1
Page 1

                TAPE CONTROL TABLE
-----
Device Name (Rewinding) -----
Device Name (Non-Rewinding) -----

Data   EBCDIC   Std. IBM Header   Block   Process   Starting   Current   Last Tape
Format  Tape      & Trailer      Size   Size     Block     Volume   Status
-----  -
/dev/rmt/c0s0
No Non-Rewinding Device Specified
Unknown   NO         NO         1024    0         0         0         YES

End of Billing Tape Control Table...
    
```

Scheduling Volume Discounting

Use the following procedure to identify a date and frequency to evaluate ProWATS call costs for volume-based discounting.

1. From the main menu, select Call Rating, then Rating and Discounting, and finally Schedule Volume Discounting. A screen similar to the one that follows appears.

```

COMMANDS:  Update  Exit
           Update the displayed record
-----
                VOLUME DISCOUNTING
-----
                Site: ██████████
Discounting Start Date: ██████████
                Next Run Date: ██████████
                Frequency: N ██████████
    
```

The list that follows describes the fields displayed.

- `Site` (not editable). The name of a site using ProWATS to cost calls.
 - `Discounting Start Date`. The date, *mm/dd/yy*, to begin a 30-day discount period. (Updated each time a period ends.)
 - `Next Run Date`. The date, *mm/dd/yy*, to perform the discount process. (Updated according to the frequency.)
 - `Frequency`. How often volume discount processes run: `<Y>`early, `<Q>`quarterly, `<M>`onthly, ``iweekly, `<W>`eekly, `<D>`aily, `<H>`ourly, `<O>`nce, `<N>`ever, or a number of days 1-99.
2. To input the discount schedule, press `<U>`pdate and enter data from the keyboard, or press `<F1>` when available to use a help menu. Press `<ESC>` when complete. Call costs begin accumulating for a 30-day period on the day indicated.
 3. Press `<E>`xit to return to the menu system.

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