

# PC2AUDIX Billing Reports

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## Overview

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This chapter describes the following:

- How to use PC2AUDIX to produce standardized billing reports for the voice mail system using downloaded subscriber traffic data
- How to use the billing package to see how your subscribers are using the voice mail system

The PC2AUDIX subscriber billing feature generates billing reports for subscribers and organizations based on actual monthly usage of the voice mail system.

The billing process consists of the following steps:

1. Define the billing price breakdown — You can specify the cost of the voice mail system services such as session length, number of accesses, filesystem space used, and individual feature usage.
2. Calculate the monthly billing — This option calculates the monthly billing for any selected month which has data available on the PC.
3. Generate the billing reports — A menu displays report format selections for billing and bill summaries.

Each of these steps is described in this chapter.

You may also use the PC2AUDIX billing feature to find out how subscribers use the voice mail system. For example, to encourage sending voice mail (and thus increasing productivity), you could use the billing package to generate a report showing who sent the most voice mail messages and who sent the fewest (or none). Another example is to use the billing package to find out who gets the most call answer calls. This information can help you determine who in your organization might need further training on using the voice mail system to become more productive.

## Organization Codes

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A key element of the subscriber billing feature is the organization code, which allows you to define a reporting order for groups and departments in your organization. The organization code is assumed to be hierarchical (for example, code 9901 reports to code 990, which reports to code 99). PC2AUDIX assumes that the relationship between organizations can be determined by scanning organization codes left to right.

If you ask for a report for organization 99, then all subscribers that have organization codes starting with 99 are included. If you request a summary report showing the cost breakdown within an organization, then all organization codes directly reporting to the specified organization code are included. For example: an organizational breakdown for organization code 99 might include organization codes 991, 992, and 993. Organization codes can be any combination of letters or numbers.

## Prerequisites

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To generate billing reports, PC2AUDIX requires monthly subscriber traffic data for the month you are generating the report. This process is described in [Chapter 4, "PC2AUDIX Data Retrieval"](#), or [Chapter 8, "Scheduling PC2AUDIX Data Retrieval"](#).

If you use organization codes, you must assign these codes to individual subscribers using either the PC2AUDIX site-specific Org. Code data field described in [Chapter 8, "Scheduling PC2AUDIX Data Retrieval"](#), or the misc field in subscriber records on the voice mail system. If you use the misc field for this purpose, you must assign it as such in PC2AUDIX Setup Parameters.

## Starting the Billing Process

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Perform the following steps to initiate the PC2AUDIX subscriber billing feature. Note that you must retrieve appropriate data from the voice mail database before reports can be produced.

1. At the DOS prompt C>, enter **cd** machine\_name to change to the directory for the voice mail system for which you wish to produce billing reports.
2. Enter **pc2audix** to call PC2AUDIX software.

3. At the PC2AUDIX Root Menu, select 3) Customer Billing.

The following screen appears:

The screenshot shows a terminal window titled "Customer Billing". In the center, there is a rectangular box containing three menu options: "1> Generate Reports", "2> Define Price Breakdown", and "3> Do Monthly Bill Calculation". Below the box, the text "Selection? \_" is displayed. At the bottom of the screen, three function key prompts are visible: "F7 PREU FORM", "F9 ROOT FORM", and "F10 HELP".

4. Select the option for the billing function you wish to perform. These options are individually described on the next several pages.

## Define Price Breakdown

This option specifies how the billing calculations are made. The screen displays current defaults; a zero in any category indicates that item is not considered for billing purposes.

You can modify any field. Modifications are not permanent until after you press the **F8** (CHANGE/RUN) key. All input fields are numeric. In order to see the changes made by altering this form, you must recalculate monthly bills by using the Do Monthly Bill Calculation option.

Perform the following steps to define billing price breakdowns:

1. At the Customer Billing menu, select 2) Define Price Breakdown.

The following screen appears:

**Billing Price Breakdown** PAGE 1/3

Flat fee . . . . .	\$	0.00	per mon.
Avg space used . . . . .	\$	0.0000	per sec.
Max space used . . . . .	\$	0.0000	per sec.
Space allowed . . . . .	\$	0.0000	per sec.
Guaranteed space . . . . .	\$	0.0000	per sec.

  

PRIME SHIFT USAGE	USER ACCESS	CALL ANSWER	
Sessions	\$ 0.0000	\$ 0.0000	per call
Session usage	\$ 0.0000	\$ 0.0000	per sec.
text serv hdrs created	\$ 0.0000	\$ 0.0000	per header
Messages received			
local	\$ 0.0000	\$ 0.0000	per call
remote	\$ 0.0000		per call
undel notifications	\$ 0.0000		per call
Messages created			
total messages	\$ 0.0000		per call

(CONTINUED ON NEXT PAGE)

**STATUS:**

F6 **NEXT PG**    F7 **PREU FORM**    F8 **CHANGE/RUN**    F9 **ROOT FORM**    F10 **HELP**

2. Press (F6) (NEXT PG) to display page 2 of the Billing Price Breakdown screen.

The following screen appears:

**Billing Price Breakdown** PAGE 2/3

broadcast messages	\$	0.0000	per call
log-in announcements	\$	0.0000	per call
priority messages	\$	0.0000	per call
private messages	\$	0.0000	per call
Messages delivered			
local messages	\$	0.0000	per call
remote messages	\$	0.0000	per call

  

NON-PRIME SHIFT USAGE	USER ACCESS	CALL ANSWER	
Sessions	\$ 0.0000	\$ 0.0000	per call
Session usage	\$ 0.0000	\$ 0.0000	per sec.
text serv hdr created	\$ 0.0000	\$ 0.0000	per header
Messages received			
local	\$ 0.0000	\$ 0.0000	per call
remote	\$ 0.0000		per call

(CONTINUED ON NEXT PAGE)

**STATUS:**

F6 **NEXT PG**    F7 **PREU FORM**    F8 **CHANGE/RUN**    F9 **ROOT FORM**    F10 **HELP**

- Press **F6** (NEXT PG) to display page 3 of the Billing Price Breakdown screen. The following screen appears:

Billing Price Breakdown		PAGE 3/3
undel notifications	\$ 0.0000	per call
Messages created		
total messages	\$ 0.0000	per call
broadcast messages	\$ 0.0000	per call
log-in announcements	\$ 0.0000	per call
priority messages	\$ 0.0000	per call
private messages	\$ 0.0000	per call
Messages delivered		
local messages	\$ 0.0000	per call
remote messages	\$ 0.0000	per call

STATUS :

**F6** NEXT PG    **F7** PREU FORM    **F8** CHANGE/RUN    **F9** ROOT FORM    **F10** HELP

- Press **F6** (NEXT PG) again to redisplay page 1 of the Billing Price Breakdown screen.
- Enter values as appropriate on page 1, page 2, or page 3 of this screen.
- Press **F8** (CHANGE/RUN) to define the billing price breakdown.

You are now ready to calculate the monthly billing as described later in this chapter.

### Billing Price Breakdown Data Fields

Data fields on the three pages of the Billing Price Breakdown screen determine what types of voice mail system usage to bill for and the respective billing rates. A zero in any field indicates that field is not included in billing criteria.

Data fields are as follows:

- The Flat fee field establishes a flat monthly usage fee for all subscribers on the voice mail system regardless of system usage.
- The remaining fields are all directly from the DEFINITY AUDIX List Measurements Subscriber Month screen or the R1 AUDIX traffic : subscriber : month screen. Use these fields to establish billing values for the voice mail system subscribers based on actual system usage.

Refer to the DEFINITY AUDIX List Measurements Subscriber Month screen in the DEFINITY AUDIX System — Forms Reference, 585-300-207, or the AUDIX Traffic : Subscriber : Month screen in the AUDIX Release 1 Version 8 Forms Reference, 585-306-204, for information about the types of data collected for each of these fields. Then assign billing rates for system usage as appropriate for your organization.

## Examples

The following examples illustrate how you can set billing price breakdown data fields to provide specific types of information.

### Example #1: Charge for 800-number access.

1. If there are remote subscribers who use an 800 number either to receive messages or to pick up messages, you can access the charges for that cost by entering a value in the Session usage fields under PRIME SHIFT USAGE and NON-PRIME SHIFT USAGE.
2. If the 800 number costs 11 cents a minute (.183 per second), enter **.183** under both the USER ACCESS and CALL ANSWER columns.
3. Run the monthly bill calculation.
4. Either separately print out those subscribers who use the 800 number, or use an organization code to get bills for all subscribers who use the 800 number.

### Example #2: Reward for voice mail usage.

1. To get a list (ordered from most to least) of who uses voice mail and who does not, fill in the Messages created, total messages fields under PRIME SHIFT USAGE and NON-PRIME SHIFT USAGE. You can use any value, such as 1.0.
2. Run the monthly bill calculation.
3. Use the List Subscribers With Bills Over Specified Amount option (described in [Chapter 7, "PC2AUDIX Database Searches"](#)) to list voice mail users in descending order based on volume.

### Example #3: Find your heaviest users.

1. Enter a value in the Session usage fields under the USER ACCESS column for both PRIME SHIFT USAGE and NON-PRIME SHIFT USAGE, such as 0001.
2. Run the monthly bill calculation.
3. Use the List Subscribers With Bills Over Specified Amount option (described in [Chapter 7, "PC2AUDIX Database Searches"](#)) to find the heaviest users.

## Monthly Bill Calculation

This option performs monthly bill calculations using values that were previously defined on the Billing Price Breakdown form. Bill calculation is done for each subscriber based on monthly subscriber traffic data collected from the voice mail system.

### ⇒ NOTE:

Monthly bill calculation can take from one to five seconds per subscriber, depending on how many non-zero entries you have in the Bill Price Breakdown form. In other words, at worst case this procedure can take five seconds for each of 4000 subscribers, which is 5-1/2 hours.

You may remove billing data the Delete Data From Fixed Disk menu option described in [Chapter 10, "PC2AUDIX Database Management Tools"](#).

Perform the following steps to calculate monthly billing:

1. At the Customer Billing menu, select 3) Do Monthly Bill Calculation.

The following screen appears:

```
Monthly Billing Calculation

Monthly Subscriber Traffic Data (available for billing)
  Oldest Data:  01/70  <MM/YY>
  Latest Data:  01/70  <MM/YY>

Billing Data from Previous Calculations
  Oldest Month: 01/70  <MM/YY>
  Latest Month: 01/70  <MM/YY>

<re>Calculate Billing for Month 01/70  <MM/YY>
```

STATUS:

F7 PREU FORM

F8 CHANGE/RUN

F9 ROOT FORM

F10 HELP

The oldest and most current dates of monthly subscriber traffic data on the PC display. Additionally, dates for billing data left over from previous billing calculations display.

You must specify the month for which you wish to calculate bills. The default provided by this screen is the most current date of monthly subscriber traffic data on this PC.

2. Choose from the following:
  - Press **F8** (CHANGE/RUN) to calculate monthly bills for the displayed default billing period.
  - Enter a different month to calculate bills for (from within the displayed range of current monthly subscriber traffic data), and press **F8** (CHANGE/RUN).

Billing calculations are made for the specified month and the number of subscribers processed appears on the STATUS line. You are now ready to generate billing reports as described next in this chapter.

## Generate Billing Reports

This option generates monthly billing reports. Note that you must complete Monthly Billing Calculation for the selected month before you can generate reports.

Perform the following steps to produce monthly billing reports:

1. At the Customer Billing menu, select 1) Generate Reports.

The following screen appears:

**Customer Billing Reports**

1> **Organizational Summary Reports**

2> **Individual Bill Totals for an Organization**

3> **Detailed Individual Report by Organization**

4> **Detailed Individual Report by Subscriber Name**

Selection? \_

**F7** **PREU FORM****F9** **ROOT FORM****F10** **HELP**

2. Select the appropriate option for the billing report you wish to generate. These options are individually described on the next several pages.

## Generate Organizational Summary Report

This option generates a series of summary reports for the organizational level specified and each level below it down to the second level. If you do not use organization codes, these reports provide no useful information. If you have the graphics package installed, the you can display the output in the form of a pie chart. (You can change the type of chart from the default if you let the output go to the PC screen.)

Each summary shows the billing breakdown for the levels just below the level being reported. You can specify that reports be generated for all organizations reporting to the level selected.

### ⇒ NOTE:

The first time you generate an organizational report for new billing data, a you must create a temporary database showing the interrelation between all organization codes. This can take 10 minutes or longer.

The following is an example of the Organizational Summary Report in table format:

#### OUTPUT FOR FILE <output.dbf>

AUDIX DRMFBI3  
ORGANIZATION EVERYONE EXPENSES  
MAY 1995

ORGANIZATION	# SUBSCRIBERS	BILL TOTAL
NO_ORG_NO	215	\$ 0.00
65193	1	\$ 0.00
stuff	1	\$ 0.00
TOTALS	217	\$ 0.00

STATUS:

F5 PRINT PAGE F6 PRINT ALL F7 PREV PAGE F8 NEXT PAGE F9 QUIT F10 HELP

Perform the following steps to generate the Organizational Summary Reports:

1. At the Customer Billing Reports menu, select 1) Organizational Summary Reports.

The following screen appears:

**Organizational Summary Report**

Generate Report for Organization #: **ALL**

Include **1** <1 or 2> Levels Below This Org #

Date for Report: **05/95** <MM/YY>

Include Pie Chart With Each Report: **N** <Y/N>

Send output to:

**STATUS:**  
**F7** **PREV FORM**      **F8** **CHANGE/RUN**      **F9** **ROOT FORM**      **F10** **HELP**

Defaults on this screen are as follows:

- The organization field defaults to ALL, which generates reports for all organizations on the voice mail system.
  - The number of levels to include defaults to 1.
  - The Date for Report field is set to the last month for which data has been collected.
  - Graphical output in the form of a pie chart defaults to N (no).
  - The default output device is the printer defined in the PC2AUDIX Setup Parameters. You can display the report on the PC screen by making the field blank, or copy the report to a file by entering a file name. If you do not define a printer in PC2AUDIX Setup Parameters, this field is blank by default and the report appears on the PC screen. You can copy the report to a file by entering a file name.
2. Choose from the following:
    - Press **F8** (CHANGE/RUN) to generate the reports using the default specifications.
    - Change any or all of the default specifications, and press **F8** (CHANGE/RUN) to generate the reports as specified.

The following messages (status and error) may appear when the organization code relations database is being built:

- Organizational relations between subscribers needs construction.

Continue (Y) or cancel this operation (N):

- Do you want to see the graphical view of this data (Y/N)?

Enter **Y** (yes) or **N** (no) for these questions as appropriate.

If the data does not exist, an error message appears; select Do Monthly Bill Calculation under Customer Billing to create billing data needed to generate this report.

## Generate Individual Bill Totals for an Organization

This option prints out individual billing totals for each member in the specified organization formatted as one-line totals grouped by first-level organizational codes. Organization numbers are assumed to be hierarchical (for example, code 9901 reports to code 990, which reports to code 99). If you specify an organization code above the first level, this generates reports for each first-level organization code related to the specified code. Bill totals are sorted alphabetically by last name for all employees with the same organization code.

The following is an example of the Individual Bill Totals for an Organization Report:

### OUTPUT FOR FILE <output.dbf>

#### SUBSCRIBER BILLING SUMMARY FOR MAY 1995, ORGANIZATION ALL.

NAME	EXT	ORG_CODE	AMOUNT
ca65100.drmb13-g1		65100	\$ 0.00
ca65101.drmb13-g1		65101	\$ 0.00
ca65102.drmb13-g1		65102	\$ 0.00
ca65103.drmb13-g1		65103	\$ 0.00
ca65104.drmb13-g1		65104	\$ 0.00
ca65105.drmb13-g1		65105	\$ 0.00
ca65106.drmb13-g1		65106	\$ 0.00
ca65107.drmb13-g1		65107	\$ 0.00
ca65108.drmb13-g1		65108	\$ 0.00
ca65109.drmb13-g1		65109	\$ 0.00
ca65110.drmb13-g1		65110	\$ 0.00
ca65111.drmb13-g1		65111	\$ 0.00
ca65112.drmb13-g1		65112	\$ 0.00
ca65113.drmb13-g1		65113	\$ 0.00
ca65114.drmb13-g1		65114	\$ 0.00
ca65115.drmb13-g1		65115	\$ 0.00
ca65116.drmb13-g1		65116	\$ 0.00

STATUS:

F5 PRINT PAGE F6 PRINT ALL F7 PREU PAGE F8 NEXT PAGE F9 QUIT F10 HELP

Perform the following steps to generate Individual Bill Totals for an Organization:

1. At the Customer Billing Reports menu, select 2) Individual Bill Totals for an Organization.

The following screen appears:

**Individual Bill Totals for an Organization**

<b>Generate Report for Organization #:</b> ALL
<b>Date for Report:</b> 05/95 <MM/YY>
<b>Send output to:</b> _____

**STATUS:**  
F7 **PREV FORM**      F8 **CHANGE/RUN**      F9 **ROOT FORM**      F10 **HELP**

Defaults on this screen are as follows:

- The organization field defaults to ALL, which generates reports for all organizations on the voice mail system.
  - The Date for Report field is set to the last month for which data has been collected.
  - The default output device is the printer defined in the PC2AUDIX Setup Parameters. You can display the report on the PC screen by making the field blank, or to copy the report to a file by entering a file name. If you do not define a printer in the PC2AUDIX Setup Parameters, this field is blank by default and the report appears on the PC screen.
2. Choose from the following:
    - Press **F8** (CHANGE/RUN) to generate the report using the default specifications.
    - Change any or all of the default specifications, and press **F8** (CHANGE/RUN) to generate the report as specified.

The report is generated and sent to the specified output device.

If the data does not exist, an error message appears; select Do Monthly Bill Calculation under Customer Billing to create billing data needed to generate this report.

## Generate Detailed Individual Report by Organization

This option prints the entire bill calculation for each individual member of the specified organization. Reports are sorted by last name within organization codes. Organization numbers are assumed to be hierarchical (for example, code 9901 reports to code 990, which reports to code 99). If you specify an organization code above the first-level, this generates reports for all first-level organization codes related to the specified code.

The following is an example of the Detailed Individual Report by Organization:

OUTPUT FOR FILE <output.dbf>

DETAILED BILLING INFORMATION FOR MAY 1995

NAME: vm48097	EXT: 48097	ORG:
DESCRIPTION	# UNITS TOTAL	\$ AMOUNT 0.00

DETAILED BILLING INFORMATION FOR MAY 1995

NAME: vm48098	EXT: 48098	ORG:
DESCRIPTION	# UNITS TOTAL	\$ AMOUNT 0.00

DETAILED BILLING INFORMATION FOR MAY 1995

NAME: vm48099	EXT: 48099	ORG:
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STATUS:

F5 PRINT PAGE F6 PRINT ALL F7 PREU PAGE F8 NEXT PAGE F9 QUIT F10 HELP

Perform the following steps to generate Detailed Individual Billing Reports by Organization:

1. At the Customer Billing Reports menu, select 3) Detailed Individual Report by Organization.

The following screen appears:

**Detailed Individual Reports**

<b>Generate Report for Organization #:</b> ALL
<b>List One Subscriber per Page</b> N <Y/N>
<b>Date for Report:</b> 05/95 <MM/YY>
<b>Send output to:</b>

**STATUS:**  
F7 PREU FORM      F8 CHANGE/RUN      F9 ROOT FORM      F10 HELP

Defaults on this screen are as follows:

- The organization field defaults to ALL, which generates reports for all organizations on the voice mail system.
  - List subscribers per page is set to N (no), which prints reports in sequence without regard to paging; change this to Y (yes) to print one report per page.
  - The Date for Report field is set to the last month for which data has been collected.
  - The default output device is the printer defined in the PC2AUDIX Setup Parameters. You can display the report on the PC screen by making the field blank, or to copy the report to a file by entering a file name. If you do not define a printer in PC2AUDIX Setup Parameter, this field is blank by default and the report appears on the PC screen. You can copy the report to a file by entering a file name.
2. Choose from the following:
- Press **F8** (CHANGE/RUN) to generate the reports using the default specifications.
  - Change any or all of the default specifications, and press **F8** (CHANGE/RUN) to generate the reports as specified.

The reports are generated and sent to the specified output device.

If the data does not exist, an error message appears; select Do Monthly Bill Calculation under Customer Billing to create billing data needed to generate these reports.

## Generate Detailed Individual Report by Subscriber Name

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This option is used to inspect the itemized billing record for one subscriber.

Perform the following steps to display Detailed Individual Billing Reports by Subscriber Name:

1. At the Customer Billing Reports menu, select 4) Detailed Individual Report by Subscriber Name.

The following screen appears:

```
                VIEW DETAILED MONTHLY BILLING DATA
The following dates are valid for billing data:
Volume in drive C has no label
Directory of C:\DRMFB13

BILLSPEC.DBF          1,518 05-05-95   2:04p
BILL0595.DBF         12,531 05-11-95   1:44p
 2 file(s)              14,049 bytes
                        48,087,040 bytes free
```

```
What month <MMYY or non-digit to quit>: 0595
```

2. The BILLmmy.DBF files are the billing files available for display. Enter the month to display billing data for. If the month is not specified (press **(RETURN)**), data for the most recent billing cycle appears. (Disregard the **BILLSPEC.DBF** file name.)

The following screen appears:

DETAILED BILLING INFORMATION FOR May 1995			PAGE 1/1				
NAME: <b>jm48099</b>	EXT: <b>48099</b>	ORG:					
DESCRIPTION	# UNITS TOTAL	\$	AMOUNT 0.00				
STATUS:							
F3 <b>NEXT PAGE</b>	F4 <b>NEXT MATCH</b>	F5 <b>PRINT</b>	F6 <b>PREV REC</b>	F7 <b>PREV FORM</b>	F8 <b>CHANGE/ RUN</b>	F9 <b>ROOT FORM</b>	F10 <b>HELP</b>

3. Enter the name or extension of the subscriber you want to display, and press **F8** (CHANGE/RUN)

The billing record for the specified subscriber appears.

4. You then can select any of the previous options or choose from the following additional options:
  - Press **F3** (NEXT PAGE) to display additional pages (if any) for the displayed subscriber.
  - Press **F4** (NEXT MATCH) to display the next sequential record in the file with the same name.
  - Press **F5** (PRINT) to print the subscriber record on your printer.
  - Press **F6** (PREV REC) to display the previous sequential record in the file. If the NAME field is highlighted, the previous name appears; if the EXT field is highlighted, the previous extension appears.