DBMaker

JAVA Query Tool Guide



CASEMaker Inc./Corporate Headquarters 1680 Civic Center Drive Santa Clara, CA 95050, U.S.A. www.casemaker.com www.casemaker.com/support

©Copyright 1995-2008 by CASEMaker Inc. Document No. 645049-233134/DBM51-M09302008-JSQL

Publication Date: 2008-09-30

All rights reserved. No part of this manual may be reproduced, stored in a retrieval system, or transmitted in any form, without the prior written permission of the manufacturer.

For a description of updated functions that do not appear in this manual, read the file named README.TXT after installing the CASEMaker DBMaker software.

Trademarks

CASEMaker, the CASEMaker logo, and DBMaker are registered trademarks of CASEMaker Inc. Microsoft, MS-DOS, Windows, and Windows NT are registered trademarks of Microsoft Corp. UNIX is a registered trademark of The Open Group. ANSI is a registered trademark of American National Standards Institute, Inc.

Other product names mentioned herein may be trademarks of their respective holders and are mentioned only form information purposes. SQL is an industry language and is not the property of any company or group of companies, or of any organization or group of organizations.

Notices

The software described in this manual is covered by the license agreement supplied with the software.

Contact your dealer for warranty details. Your dealer makes no representations or warranties with respect to the merchantability or fitness of this computer product for any particular purpose. Your dealer is not responsible for any damage caused to this computer product by external forces including sudden shock, excess heat, cold, or humidity, nor for any loss or damage caused by incorrect voltage or incompatible hardware and/or software.

Information in this manual has been carefully checked for reliability; however, no responsibility is assumed for inaccuracies. This manual is subject to change without notice.

Contents

1	Int	roduction	1-1
	1.1	Additional Resources	1-3
	1.2	Technical Support	1-4
	1.3	Document Conventions	
2	JS	QL Basics	2-1
	2.1	JSQL Workspace	2-1
		Title Bar	
		Menu Bar	
		Toolbar	
		Command Entry Area	
		Command Result Area	
		Status Bar	
3	Usi	ing JSQL	3-1
	3.1	Database Login	3-2
		Connecting to a Database	
		Disconnecting from a Database	
	3.2	Files	3-4
		Saving Commands	
		Loading Commands	

	3.3	Executing Commands	3-6
		Execute SQL	
		Execute Batch	
	3.4	Options	3-8
		Preference	
4	Ме	nu Items and Toolbar Refere	nce 4-1
	4.1	Pull-Down Menu Commands	
	4.2	Toolbar Commands	4-3
Ine	dex .		. Index-1

Introduction

Welcome to the JSQL (*Java Version Query Tool*) User's Guide. DBMaker is a powerful and flexible *SQL Database Management System (DBMS)* that supports an interactive Structured Query Language (SQL), a Microsoft Open Database Connectivity (ODBC) compatible interface, and Embedded SQL for C (*ESQL/C*). The unique open architecture and native ODBC interface adds the freedom to build custom applications using a wide variety of programming tools, or to query a database using ODBC compliant applications.

JSQL is a graphical user interface (GUI) that hides the complexity of the DBMS and query language behind an intuitive, easy to understand, and convenient interface. It allows users to quickly manage and manipulate the database without the trouble of entering formal commands using SQL.

This manual gives systematic instructions on how to use JSQL tool to log in to a database, to run an SQL query, and view query results by table mode or plain text mode. Users should have some SQL language knowledge before using JSQL.

JSQL has a wide variety of features that enable users to effectively manage databases:

- Run multiple query commands simultaneously
- View query results by plain text mode/table mode
- Load/save SQL commands

- Execute by batch file
- Multiple query results viewed for table mode

1.1 Additional Resources

DBMaker provides a complete set of DBMS manuals in addition to this one. For more information on a particular subject, consult one of the books listed below:

- For an introduction to DBMaker's capabilities and functions, refer to the *"DBMaker Tutorial"*.
- For more information on designing, administering, and maintaining a DBMaker database, refer to the *"Database Administrator's Guide"*.
- For more information on DBMaker management, refer to the *"JServer Manager User's Guide"*
- For more information on DBMaker configurations, refer to the *"Configuration Tool Reference"*
- For more information on DBMaker functions, refer to the *"DBA Tool User's Guide"*
- For more information on the dmSQL interface tool, refer to the "dmSQL User's Guide"
- For more information on the DCI COBOL Interface, refer to the "DCI User's Guide".
- For more information on the ESQL/C programming, refer to the "ESQL/C User's Guide".
- For more information on the native ODBC API, refer to the "ODBC Programmer's Guide".
- For more information on error and warning messages, refer to the "Error and Message Reference".

1.2 Technical Support

CASEMaker provides thirty days of complimentary email and phone support during the evaluation period. When software is registered an additional thirty days of support is included. This extends the total support period for software to sixty days. However, CASEMaker continues to provide email support for any bugs reported after the complimentary support or registered support expires (free of charge).

Additional support is available beyond the sixty days for most products and you can purchase additional support for twenty percent of the retail price of the product. Please contact <u>sales@casemaker.com</u> for details and prices.

You can locate CASEMaker support contact information for your area (by snail mail, phone, or email) at: <u>www.casemaker.com/support</u>. CASEMaker recommends that you search the current database of FAQ's before contacting CASEMaker support staff.

Please have the following information available when phoning support for a troubleshooting enquiry or include the information with a snail mail or email enquiry:

- Product name and version number
- Registration number
- Registered customer name and address
- Supplier/distributor where product was purchased
- Platform and computer system configuration
- Specific action(s) performed before error(s) occurred
- Error message and number, if any
- Any additional information deemed pertinent

1.3 Document Conventions

This book uses a standard set of typographical conventions for clarity and ease of use. The NOTE, Procedure, Example, and Command Line conventions also have a second setting used with indentation.

CONVENTION	DESCRIPTION
Italics	Italics indicate placeholders for information that you must supply, such as user and table names. The word in italics is not typed, but replaced by the actual name. Italics also introduce new words, and occasionally for emphasis in text.
Boldface	Boldface indicates filenames, database names, table names, column names, user names, and other database schema objects. It is also used to emphasize menu commands in procedural steps.
KEYWORDS	All keywords used by the SQL language appear in uppercase when used in normal paragraph text.
SMALL CAPS	Small capital letters indicate keys on the keyboard. A plus sign (+) between two key names indicates to hold down the first key while pressing the second. A comma (,) between two key names indicates to release the first key before pressing the second key.
NOTE	Contains important information.
• Procedure	Indicates that procedural steps or sequential items will follow. Many tasks are described using this format to provide a logical sequence of steps for the user to follow
Example	Examples are given to clarify descriptions, and commonly include text, as it will appear on the screen. Other forms of this convention include Prototype and Syntax.
Command Line	Indicates text, as it should appear on a text-delimited screen. This format is commonly used to show input and output for dmSQL commands or the content in the dmconfig.ini file

Table 1-1Document Conventions

2 JSQL Basics

This chapter introduces the layout of the *JSQL* Workspace and contains general information its components.

2.1 JSQL Workspace

The following graphic displays the important features of the Workspace. Users can input SQL query commands in the Command Entry Area, and view the results in the Command Result Area. The Command Result Area supports two formats, plain text mode and table mode. Use the tabbed panel to control the result format. This tool uses dmSQL, but does not support loading/unloading of host variables.

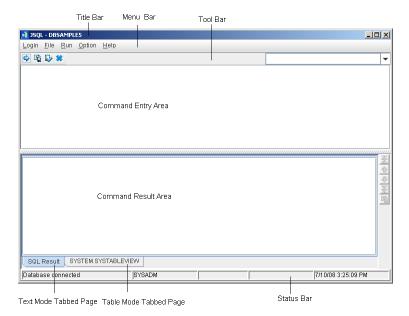


Figure 2-1: JSQL Tool Workspace

Title Bar

The title bar displays the program name "*JSQL*" and the *Minimize*, *Maximize*, and *Close* buttons.

Menu Bar

The menu bar displays JSQL's pull-down menus. Each menu contains a list of related commands.

Toolbar

The toolbar is a palette of command buttons and drop-down list boxes for many commonly used functions.

Command Entry Area

The Command Entry Area is the main window in the JSQL Workspace. You can use the Command Entry Area to enter commands.

You can input more than one command to execute, but separate each command with a semicolon. You can also input or load from external files to the command window. Press F5 or click **RUN** button to execute multiple SQL commands.

For more information on the SQL language used in *JSQL*, refer to the *SQL command* and function references.

Command Result Area

The results display as a plain text (like *dmSQL* tool), or a table below the command window When exectute queries.

Whether or not the command executes successly, the success or error message should displays in result area.

S Example:

1. Enter a command into the **Command Entry Area**. For example:

Select * from JSQLTEST;

- Press F5 or click the Run button (Separate multiple commands with a semicolon. The query results display in the Command Result Area.
- **3.** Press **F4** or click the **Clear** button $(\stackrel{\scriptstyle{\blacktriangleright}}{\scriptstyle{\frown}})$ to cancel the command.

剤 JSQL - DBSAMPLE5				>
Login <u>File</u> <u>Run</u> <u>Option</u> <u>Help</u>				
💠 🗳 🔛 🗱		select * from s	systable ;	
select * from systable;				
•				
HISTORY				<u> </u>
PATIENT				1
LARGETYPE				<u> </u>
ORDINARYTYPE				
UNICODETYPE				
				=
10 row(s) selected				
Execution time : 156 ms				-
4				
Image: A state of the state				
SQL Result SYSTEM.SYSTABL	.EVIEW			

Figure 2-2: Command Result Area-I

	- DBSA	MPLE5								_ [])
<u>L</u> ogin	<u>F</u> ile <u>F</u>	<u>R</u> un <u>O</u> ption	<u>H</u> elp								
o 📭	🐶 🗱						select * from	systable ;			
select*	from sy	/stable;									
4											
•											
TADLE	N10 T		TODUC		0.01040.055					_	
TADEE.	_INA T	ABLE_OW	TABLE_	_TYPE L	UCKMUDE.	CACHEMO	TS_NAME	TABLE_	OID NUM_0	D	12
		ABLE_OW	TABLE_	IYPE L		CACHEMO T		TABLE_1 0.63.2	OID NUM_0 6) •	4
NEWS	- F	ULLTEXT		- R			DEFTABLE		-		
NEWS BOOKS	- F	ULLTEXT SAMPLE	TABLE	- R		т	DEFTABLE DEFTABLE	0.63.2	6	> ▲	
NEWS BOOKS CARD	F 9	ULLTEXT SAMPLE SAMPLE	TABLE TABLE	- R		T T	DEFTABLE DEFTABLE DEFTABLE	0.63.2	6	>> 	dal a la la
NEWS BOOKS CARD EMPLO	F S S	ULLTEXT SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE	R R		T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4	6 6 5	>>	in had a bab
NEWS BOOKS CARD EMPLO EMPLO	F S S YE S YE S	ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE	R R R R		T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5	6 6 5 3 7		Imbad a la ka
NEWS BOOKS CARD EMPLO EMPLO HISTOF	F 9 9 YE 9 YE 9	ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE TABLE	R R R R R		T T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5 0.63.6	6 6 5 3 7 3		l miad a la b
NEWS BOOKS CARD EMPLO EMPLO HISTOF PATIEN	YE 9 YE 9 YE 9 YE 9	ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE TABLE TABLE	R R R R R R		T T T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5 0.63.6 0.63.7	6 6 5 3 7 3 2		
NEWS BOOKS CARD EMPLO EMPLO HISTOF PATIEN LARGE	YE F YE S YE S YE S T S T S	ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE TABLE TABLE TABLE TABLE	R R R R R R R		T T T T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5 0.63.6 0.63.7 0.63.8 0.63.9	6 6 5 3 7 3 2 5		
NEWS BOOKS CARD EMPLO EMPLO HISTOF PATIEN LARGE ORDIN/		ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE TABLE TABLE TABLE TABLE TABLE	R R R R R R R		T T T T T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5 0.63.6 0.63.6 0.63.7 0.63.8 0.63.9 0.63.9 0.63.10			
NEWS BOOKS CARD EMPLO EMPLO HISTOF PATIEN LARGE ORDIN/		ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE TABLE TABLE TABLE TABLE	R R R R R R R		T T T T T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5 0.63.6 0.63.6 0.63.7 0.63.8 0.63.9 0.63.9 0.63.10	6 6 5 3 7 3 2 5		
NEWS BOOKS CARD EMPLO EMPLO HISTOF PATIEN LARGE ORDIN/ UNICOI		ULLTEXT SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	TABLE TABLE TABLE TABLE TABLE TABLE TABLE TABLE TABLE	R R R R R R R R		T T T T T T T T	DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE DEFTABLE	0.63.2 0.63.3 0.63.4 0.63.5 0.63.6 0.63.6 0.63.7 0.63.8 0.63.9 0.63.9 0.63.10			

Figure 2-3:Command Result Area-II

NOTE Selecting the check box next to Show query result table from the Option menu. The SQL command executing results will show at table mode.

- **4.** Use the up and down arrows to adjust record's order or view the remaining records in table when viewing a large number of records.
- **5.** Click the **Save table** button to save the request result into an external file. A **Save** dialog box appears.

🗾 Save				×
保存: 📑 5.1		•	a 🔒	
include 📑 ud	nplates [_templates ADME.TXT			
lib samples				
File <u>n</u> ame:				
File of types: *.bxt				•
			Save	Cancel

- **6.** Enter a name and location for the file in the dialog box.
- 7. Click Save.

Status Bar

The status bar describes the current activity in the Workspace and displays the total time to execute commands.

3

Using JSQL

This chapter describes JSQL functions, including:

- Run multiple query commands simultaneously
- View query results by plain text mode/table mode
- Load/save SQL commands
- Execute by batch file
- Multiple query results viewed for table mode

The menu bar contains the following, it has login, connect, disconnect, file, exit, save, load, run, execute, execute batch, option, preference option.

The tool bar part of the *JSQL* tool allows you to run commands, save commands, load commands, and clear commands.

3.1 Database Login

This section provides instructions for connecting and disconnecting from databases.

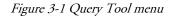
Connecting to a Database

Connect to any single-user database on a local computer or a client/server database running on a remote computer.

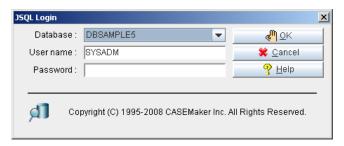
To connect to a database:

1. Select **Connect DataBase** from the **Login** menu.

ji 15QI	🛐 JSQL - DBSAMPLE5					
<u>L</u> ogin	<u>F</u> ile <u>R</u> un <u>O</u> ption <u>H</u> elp					
<u>C</u> onn	ect Database					
<u>D</u> isco	nnect Database					
<u>E</u> xit						



2. The **Connect** dialog box appears.



- Figure 3-2 Query Tool Login menu
- **3.** Select a database from the **Database** menu in the JSQL tool login window.

- **4.** Enter you user ID in the **User name** field.
- **NOTE** If a default user ID has already been set, then the default user ID automatically displays in the User Name field.
- **5.** If you require a password to connect to the database, enter it in the **Password** field.
- 6. Click OK. The JSQL graphical user interface displays.

剤 JSQL - DBSAMPLE5		
Login <u>File R</u> un <u>O</u> ption <u>H</u> elp		
♀ ℝ ▷ ★		•
		· · · · · · · · · · · · · · · · · · ·
1	II	
		<u> </u>
		2
		~ (~)~ (~)~ (?) () () () () () () () () () () () () () (
SQL Result		
Database connected	SYSADM	

Figure 3-3 Query Tool Interface

Disconnecting from a Database

Use the Menu command to disconnect from a single database.

- **To disconnect from a database:**
 - **1.** Select **Disconnect** from the **Database** menu. You disconnect from a database.

🗾 JSQI	JSQL - DBSAMPLE5					
<u>L</u> ogin	<u>F</u> ile <u>R</u> un <u>O</u> ption	n <u>H</u> elp				
<u>C</u> onn	ect Database					
<u>D</u> isco	innect Database					
<u>E</u> xit						

3.2 Files

You can save SQL commands to an external file or load SQL commands into the command window from external file.

Saving Commands

You can save query result data into an external file.

To save SQL commands:

1. Select **Save Command** from the **File** menu. The **Save command** dialog box displays.

Save Command		×
Save command to :		
Choose encoding method :	Default	-
<u></u> 0K	🗱 <u>C</u> ancel	<mark>∲ H</mark> elp

Figure 3-4: Save command dialog

- **2.** The **Save command to** field specifies the path to which command files are placed.
- **3.** You can identify a new location for the command file directory by entering a directory path in the field or by selecting a path using the browse button (.....).
- **4.** Selecting the browse button opens the **Save as** dialog box.

🗾 Save as		×
Look <u>i</u> n:	5.1	- 6 6 6 8 5
📑 bin	📑 templates	
📑 include	📑 udf_templates	
ire 🔁 jre	🗋 README.TXT	
dil 🛅		
📑 samples		
📑 shared		
File <u>n</u> ame:		
File of types:	*.txt	•
		Save as Cancel

- **a**) Enter a name and location for the file in the dialog box
- **b**) Click the **Save as** button.
- Choose an encoding method from the Choose encoding method drop down list. JSQL supports three encoding methods to save the command: Default, Unicode Little, or Unicode Big.
- 6. Click OK.

Loading Commands

You can also load SQL commands into the command window from external files.

- **To load commands:**
 - 1. Choose Load command from the File menu. The Open dialog appears.

1 Open			
Look in: 📑 5.1		- R A A C	
📑 bin	📑 templates	🗋 dmconfig.I_K	🗋 R
📑 include	📑 udf_templates	🗋 dmconfig.t_P	🗋 ur
📑 jre	COPYRIGHT	🗋 DMSQL.INI	🗋 u
📑 lib	🗋 DBMaker.lic	EVALUATION	
📑 samples	🗋 dmconfig.bak	🗋 grammar.sql	
📑 shared	🗋 dmconfig.ini	🗋 jsyscom_dbmake	r.xml
4			1
File <u>n</u> ame:			
File of types: All file	es (*.*)		•
		Open	Cancel

- **2.** Select the location of the file from the **Look in** field.
- **3.** Click the **Open** button. A confirmation dialog box appears.

Information	×
Load file successful !	
<u> </u>	

- 4. Click OK. The load command appears in the SQL command entry area.
- **5.** Press **F5** or click the **Run** button () to execute the SQL command.

3.3 Executing Commands

You can use JSQL tool to run a batch file directly without loading the command.

Execute SQL

Use Execute SQL to execute SQL commands. You can perform the same by pushing **F5** or clicking the **Run** button (

Execute Batch

You can run a batch file directly without load commands to the command window.

- **T**o execute batch commands:
 - 1. Select Execute Batch from the Run menu. The Choose Encoding of input file dialog box appears.

Choose encoding of input file	e X
Please select an input file :	
Please select an output file :	
Choose encoding method :	Default
Qk	🗱 Cancel 🥂 🤗 Help

Figure 3-5: Choose convert file windows

- **2.** Enter a directory for the input file in the **Please select an input file** field or by using the accompanying browse button (....).
- **3.** Enter a directory for the result to save in the **Please select an output file** field or by using the browse button (____).
- 4. Select an encoding method from the Choose encoding method drop down list. Four methods are supported for encoding file: Default, Auto, Unicode Little, or Unicode Big.
- **5.** Click **OK**. The input command saves into the output file using the selected encoding method.

3.4 Options

JSQL Tool allows you to set preferences for the user interface. The following settings are available in the user preference window.

Max history command: sets the number of history records to save in the database.

Show query result table: the query result will show as table mode below command window.

Max number of Records: sets the number of records to retrieve from a table at one time when viewing a large number of records.

Preference

Preferences include the number of max history commands, show query result table, max number of records option.

Preference

1. Select **Preference** from the **Option** menu on the menu bar.



Figure 3-6: Query Tool Option Menu

2. The **Setup Preference** window will appear with the **General** page displayed.

9	Setup Preferences	×
Í	General Table	
	Language choice :	English
	Max history command:	20
☑ Show query result table		,
L		
	🦲 🦉 OK 🔰 🗱 Cancel	Y Help

Figure 3-7: General page

- **3.** To change the **Max history command**, click the field and enter a new value, or using the upward and downward arrow to adjust the value.
- **4.** Selecting the check box next to **Show query result table**. A check mark in the box indicates the query result will show as table mode.
- 5. Clicking the Table tab in the Setup Preference window opens the Table page.

Setup Preferences	×
General Table	
Max number of Records:	50
<u>Ф</u> ОК 🔰 🗱 <u>С</u> а	ncel 🥂 🥐 Help

Figure 3-8: Table page

- **6.** To change the **Max number of Records**, click the field and enter a new value, or using the upward and downward arrow to adjust the value.
- 7. Click OK.

4 Menu Items and Toolbar Reference

This chapter describes the commands contained in JSQL's pull-down menus and toolbars.

4.1 Pull-Down Menu Commands

Menu	COMMAND	DESCRIBE
Login Menu	Connect DB	Connect to a database on a local computer or a client/server on a remote computer.
	Disconnect DB	Disconnects the current database session.
Save	Save command	Save query result to an extern file.
	Load command	Load SQL command into command window from external file.
Run	Execute SQL	Execute SQL command.
	Execute Batch	Run a batch file directly without load command at the plain command window.
Menu	COMMAND	DESCRIBE
Option	Preference	Set preferences for the user interface.

This section describes each of the items in JSQL's pull-down menus.

Table 4-1JSQL pull down menu

4.2 **Toolbar Commands**

Several commonly used commands are also available as buttons and drop-down list boxes in the JSQL toolbar.

ICON	DESCRIBE
¢	Run SQL Command Shortcut key: F5
1	Save Command
	Load Command
*	Clear Command Shortcut key: F4

The following table lists the icons appear in the JSQL tool's toolbar.

Table 4-2 Query Toolbar icons list

Index

Additional Resources, 1-3 Basics, 2-1 Cmmand Entry Area Command Result Area, 2-3 Connecting to a Database, 3-2 Command Entry Area, 2-3 Document Conventions, 1-5 Database Login, 3-2 Disconnecting from a Database, 3-4 Execute SQL, 3-8 Execute Batch, 3-8 Files, 3-5 Introduction, 1-1 – 1-2 Java Run Time Environment, 2-1 – 2-6 JSQL, 2-1 Loading Commands, 3-6 Menu Bar, 2-2 Menu Items, 4-1 Options, 3-10 Preference, 3-10 Pull-Down, 4-2 Status Bar, 2-6 Saving Commands, 3-5 Tablespaces, 3-2 - 4-3 Technical Support, 1-4 Title Bar, 2-2 Toolbar, 2-3 Toolbar Commands, 4-3 Using, 3-1

©Copyright 1995-2008 CASEMaker Inc.