**CA-Visual Objects
Release 1.0a
Evaluation Version
Release Notes**

April 3, 1995

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This file contains important information about CA-Visual Objects Release 1.0a Evaluation
Version. This information is provided as an update to your printed CA-Visual Objects
documentation.

Using Write to View This Document

If you enlarge the Write window to its maximum size, this document will be easier to read. To do
so, click the Maximize button in the upper right-hand corner of the window. Or, click on the
system menu in the upper left-hand corner of the Write window (or press Alt+Spacebar), and then
choose the Maximize command.

To move through the document, press Page Up or Page Down or click the arrow at the top or
bottom of the scroll bar along the right side of the Write window.

To print the document, choose the Print command from the File menu.

For help using Write, press F1.

To read other on-line documents, choose the Open command from the File menu.

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Read Me First!

Internationalization

CA-Visual Objects release 1.0a evaluation version supports the Microsoft Windows
internationalization standards (as specified from the Windows Control Panel, using the
International icon). The changes to the language are substantial and are not included in your

printed or online documentation. Please see the International Issues document (VOINTL.WRI), which is installed as an item in your CA-Visual Objects program group.

ANSI vs. OEM Databases

As a Windows product accessing databases built in a DOS environment, CA-Visual Objects supports both the ANSI and OEM character sets to the fullest extent possible. The CA-Visual Objects runtime provides for conversion back and forth between the two character sets, allowing you to maintain your OEM-based databases. However, it is strongly recommended that you migrate your databases to ANSI format, unless you have a compelling reason not to do so—the most compelling being the need to share data with a DOS-based application.

Migrating your files to ANSI format is simple and easy and doing so will make your applications more efficient (because no character translation is necessary when reading and writing the files). Simply insure that the SetAnsi() flag is on (the default) when you create new files, and they will be created in ANSI format. For existing files, just copy to a new file with SetAnsi() on. Note also that ANSI is the default for saving files in the DB Server Editor, so that if you perform a File Export, the file will be saved as ANSI (unless you check the OEM box).

If you choose not to migrate your database files and are using CA-RET reports, to provide support for the international character set with OEM databases, you should place (CHARSET=IBMPC) after your database name in the CA-RET select statement, as illustrated in the example below:

```
SELECT ORDERS.*
FROM ORDERS.DBF (CHARSET=IBMPC)
```

Repository Reindex

The Repository reindex utility, CAVORIDX.EXE, is not mentioned in your printed documentation. This utility is designed for correcting repository corruption that is due solely to index damage. CAVORIDX.EXE is installed in your main CA-Visual Objects directory and, if you experience repository corruption (e.g. "Internal error: wrong RID size" or "System detected corrupt index"), you should run it before attempting to repair the damage using the Repository Manager. Be sure to exit CA-Visual Objects first and **do not forget to backup your repository before running this utility.**

Since CAVORIDX itself may have trouble opening the repository you should perform the following file maintenance in your \CAVO\Data directory prior to running it.

        ERASE *.IND
        ERASE *.IDX
        ERASE _CATALOG.VO

When you run CAVORIDX after this maintenance you will receive an "Application catalog destroyed! Rebuild?" message. You should choose **Yes.**

Documentation Issues

The _GetCmdLine() function has been added to the System Library. This function is not documented. It returns a PSZ pointer to the command line parameters used to invoke the application.

The documentation incorrectly refers to the DBFMEMO RDD as DBFBLOB. All references to DBFBLOB in the documentation should read DBFMEMO.

Note that, in general, if you find a discrepancy between the printed documentation and the online help, you should rely on the online help to contain the most recent information.

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Evaluation Version Special Issues

This section contains important information about the limitations of the CA-Visual Objects Evaluation Version.

Evaluation Version Limitations

It is not possible to generate EXE or DLL files using the evaluation version. Applications can be created using all the features and facilities of CA-Visual Objects release 1.0a but those applications can only be executed from within the IDE. Distribution of applications created with the evaluation version is not possible because EXE and DLL files creation has been disabled.

In addition it is impossible to export applications to AEF files, to export application modules to MEF files, or to export program source code to PRG files.

The WATCOM SQL Database Server, the Microsoft Help Compiler sub-system, and the Install Maker are not included with the Evaluation Version of CA-Visual Objects.

Note that these exclusions will preclude you from completing the following lessons in the South Seas Adventure Tutorial manual and the Getting Started Guide:

> * Lesson 2 of the South Seas Adventure Tutorial where it involves
>   Creating and Running an EXE.

> * Lessons 17 and 18 in the South Seas Adventure Tutorial Manual which
>   discuss EXE creation.

> * Lesson 1 : A Tour of the Standard Application, in the Getting Started Guide
>   asks you to open an SQL table (SAMPLE.DB) which is not included with the
>   Evaluation Version because the WATCOM database server and its
>   accompanying files are not available.

> * Lesson 6 in the Getting Started Guide.

In every other respect the evaluation version is the same as the commercial product.

Documentation

All standard online documentation for CA-Visual Objects is included with the evaluation version. The printed documentation is only included with the 3.5 inch diskette format. This consists of the Getting Started Guide and the South Seas Adventure Tutorial Guide.

The CD-ROM format of the evaluation version includes these two guides in PDF format with an accompanying Adobe Acrobat reader. The reader allows viewing of the documents exactly as they appear in printed form.

Refer to the South Seas Adventure section of this document for special changes and documentation errata for the evaluation version of the tutorial.

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Installation Notes

This section contains important information that you may need to properly install CA-Visual Objects.

Installing from a Network Drive

If you have problems when attempting to run the installation program from a network drive, copy the contents of disk 1 to a floppy disk using XCOPY with the /S option and install from the floppy drive. Then, when prompted for the location of the other disks, enter the appropriate network drive and directory.

It is important that the installation procedure run from beginning to end with no problems. Therefore, if your system locks up or suddenly exits from Windows to the DOS prompt during installation, follow the advice given above. Otherwise, you cannot be sure that CA-Visual Objects was installed successfully.

CAVO.INI Settings

Do not set the ExecutablePath and ApplicationsPath entries in the CAVO.INI file to point to the same directory. Doing so will cause problems when importing or running applications. Note that CAVO.INI is installed in your Windows directory. You must also ensure that the ApplicationsPath points to a current version of the CA-Visual Objects repository; otherwise, CA-Visual Objects will fail with an ADAM Initialization message.

Verify the CA-Visual Objects Directory in Your DOS PATH

Before running CA-Visual Objects, verify that C:\CAVO (or the drive and directory you specified during the installation procedure) is included in your DOS PATH because some network operating systems reroute the path during network login.

Remember that anytime you make changes to AUTOEXEC.BAT or CONFIG.SYS, you should reboot your computer for the changes to take effect.

Loading SHARE.EXE in CONFIG.SYS

If you are using Windows version 3.10, it is necessary to load the DOS SHARE.EXE program to install file sharing and locking capabilities on your system. (If you are using Windows version 3.11 or greater, SHARE.EXE is installed automatically.) To do this, include a line similar to the following in your CONFIG.SYS file:

INSTALL=C:\DOS\SHARE.EXE /F:4096 /L:500

The values you specify for the /F and /L options will depend on your system (see your DOS manual for details).

If VSHARE.EXE has been provided by Microsoft as part of Word for Windows it should be used instead of SHARE.EXE.

Remember that anytime you make changes to AUTOEXEC.BAT or CONFIG.SYS, you should reboot your computer for the changes to take effect.

Setting FILES in CONFIG.SYS

The recommended FILES setting is 128, not 100 as stated in *Getting Started*. Remember that anytime you make changes to AUTOEXEC.BAT or CONFIG.SYS, you should reboot your

computer for the changes to take effect.

ODBC Conflicts

You may receive a message during installation about a conflict with ODBC DLLs or Help files. You should choose **Yes** if the file already exists with a more recent date.

CTL3DV2 and ToolHelp Conflicts

You may receive a message during installation about a conflict with CTL3DV2 or ToolHelp DLLs. You should choose **Yes** if the file already exists with a more recent date.

Logitech Mouse Problems

Various problems have been reported with Logitech mice using the serial port. See the Other Release 1.0a Issues section for details.

List of Files Installed

You can verify that all files were installed correctly by referring to the file list in INSTALL.LST.

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Improvements

Since Release 1.0

CA-Visual Objects has been substantially improved since release 1.0. This section lists several, but by no means all, of these improvements.

Internationalization

CA-Visual Objects release 1.0a supports the Microsoft Windows internationalization standards (as specified from the Windows Control Panel, using the International icon). The implementation hinges on several new commands and functions, which are documented in full detail in the International Issues document (VOINTL.WRI), installed as an item in your CA-Visual Objects program group. CA-Visual Objects 1.0a supports all languages supported by Windows, including right-to-left languages, such as Hebrew and Arabic, and double-byte languages, such as Chinese, Japanese, or Korean.

Editors Enhanced to Allow HyperLabel Properties to Be Read from String Table

As part of the overall internationalization of CA-Visual Objects release 1.0a, the visual editors have been enhanced to support reading the HyperLabel properties, Caption, Description, and HelpContext, from a string table. Instead of entering strings for these properties, you can now enter a parameter string enclosed in angle brackets that will generate a lookup operation in a string table based on a unique ID. The string takes on the following form:

<[Default Value], StringID, [Module]>

For example, you might enter the following for the Caption of the File menu:

<"&File", MyFileString, MyLanguage>

The generated code when you use a parameter string includes a call to the LoadResString()

function. For the example given above, the call is:

LoadResString("&File", MyFileString, MyLanguage)

LoadResString() is fully documented in the International Issues document (VOINTL.WRI), which is installed as an item in your CA-Visual Objects program group. The example given there corresponds to this one and will show you the connection between this generated code and the rest of the application, as well as explain the significance of each parameter.

DBFBLOB and DBFMEMO Drivers

These RDDs are now included with CA-Visual Objects. DBFMEMO.RDD is designed for use as an inherited driver to provide BLOB file support for DBF files with memo fields. DBFBLOB.RDD is a standalone BLOB file driver that does not require a database file.

Window Editor Supports all Windows Installed Fonts

The Window Editor now supports all Windows installed fonts. To take advantage of this feature at either the window or control level, choose Font in the Properties Window and click on the Ellipsis icon that appears to the right of the value cell to bring up a standard Windows Font dialog box. In the dialog box, uncheck the Auto check box, select the desired font, style, and size, and choose OK.

New Sample Files

Several new sample applications are installed in your CA-Visual Objects SAMPLES\USERAPP directory. These are user applications that have been supplied to Computer Associates and are being distributed to you as examples of what you can do with CA-Visual Objects. These applications are provided as is and may require slight modifications before they can be compiled or run. For instance, if you install to a directory other than the default, C:\CAVO, you will have to alter the path for bitmaps, icons, and servers accordingly.

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Other Release 1.0a Issues

This section describes undocumented CA-Visual Objects behaviors that may be unexpected.

Printed source code is garbled

Problem: Source code is not displayed clearly when sent to the printer.

Workaround: To successfully print source code, you must specify a Source Code Editor font
                    that is supported by your printer (File, Setup, Fonts, Source Code Editor Fonts
                    command). For example, attempting to use a true type font on a dot matrix
                    printer will not work.

Importing an application may take a long time

Problem: Importing an application may take a long time, especially if the application is
                    large.

Workaround: When you import an application, we advise that you do not choose the Build
                    Application check box. It is faster to import the application first and build it using
                    the Build toolbar button after the import process is complete.

FieldSpec Required property not honored for "disconnected" controls

Problem: In a data window, the FieldSpec Required property is not honored for controls that are not bound to a database field.

Workaround: In the method that you use to move information to the actual database field, provide code to satisfy that the control has been filled in by the user.

Close and QueryClose events are not sent to sub-data windows

Problem: The Close and QueryClose events are not sent to sub-data windows and can, therefore, not be driven by corresponding methods defined for the sub-data window.

Workaround: Put the code to execute in case of a Close or QueryClose event from a sub-data window in the Close() or QueryClose() methods of its owner data window. If you prefer to have Close() and QueryClose() methods defined for the sub-data window itself, simply call those methods from the owner data window's corresponding method.

User-defined functions in order key expressions not recognized by DB Server Editor

Problem: Attempting to import/export an index file in which an order key expression is based on a user-defined function will fail.

Workaround: Instead of importing the index file as part of your data server in the DB Server Editor, manually enter the index and order properties into the DB Server Editor. To manually create such an order, use the DBServer:CreateOrder() or DBServer:CreateIndex() methods.

DBServer:RLockVerify() and DBServer:ConcurrencyControl conflicts using DBFBLOB RDD

Problem: When using the DBServer class for databases with BLOB files to represent memo fields (i.e., using the DBFCDX RDD or otherwise using the DBFBLOB as an inherited driver), the CCOPTIMISTIC setting for the ConcurrencyControl property (and the underlying RLockVerify() method) may not be reliable. In particular, if the **only** changes to the record involve memo fields, RLockVerify() will indicate that it is safe to lock a record when it is not.

Workaround: Use a ConcurrencyControl setting other than CCOPTIMISTIC when BLOB files are involved.

Shift+F1 not functional for data window sub-forms in browse view

Problem: Shift+F1 is not available for data window sub-forms in browse view to get context sensitive help.

Objects created from DrawObject class and descendants must be explicitly destroyed

Problem: Objects created using the DrawObject class or any of its descendants are not subject to garbage collection.

Workaround: When the application is finished with the object, explicitly destroy it using the Destroy() method.

QueryClose() called repetitively when objects of TextBox class and its descendants used

Problem: If you use the TextBox class (or any of its descendants, such as WarningBox or ErrorBox) to display a message from a QueryClose() method, the method will be called repetitively. This will only happen if the QueryClose event is associated with an MDI child window and more than one child window is active.

Workaround: Place a SUPER:QueryClose() call at the beginning of the method before the instantiation of the TextBox.

Resource compilation (RC.EXE) fails due to insufficient disk space

Problem: CA-Visual Objects uses the Microsoft Resource Compiler to compile all resource entities in an application. The resource compilation process may produce a lot of temporary files that take up a large amount of disk space, which will lead to problems if your disk space or the number of available directory entries is limited, as may be the case with a RAM disk.

Workaround: The location of temporary file storage is controlled by the TEMP environment variable. If you are exceeding the available number of directory entries, you can either set the TEMP environment variable to a subdirectory, which lets you create as many files as you want, or increase the number of entries allowed when you set up the RAM disk. If you are running out of actual disk space, you will have to redirect the TEMP environment variable to another location, such as a hard disk with more available space. Note also that it is not advisable to set TEMP to a network drive, since use of this location is intensive and may slow down your system.

Resource compilation (RC.EXE) fails due to conflicts with video and SCSI drivers

Problem: The Microsoft Resource Compiler runs in a DOS box under Windows, and this can conflict with the high memory area on systems using high memory management. Problems have been reported when using CA-Visual Objects on systems with certain video and SCSI (for example, Adaptec) cards that also make use of this area of memory. The problems that occur when there is a conflict can range from mild (brief flickerings or mode changes in the monitor display) to severe (GPFs) and may even cause a system reboot.

Workaround: If you are experiencing problems that you think might be related to high memory conflicts, remove all high memory management from your system configuration, reboot, and see if the problems go away. If so, there are two steps you can take to eliminate the memory conflicts. First, make sure you have the most recent versions of your video or SCSI driver. Then, find out the area of ROM being used by your video or SCSI card (this will be somewhere in the area of C000 to D000) and exclude this area from use by your high memory manager. Consult the documentation produced by the manufacturer of your high memory management system for more specific information on how to do this.

Serial mouse problems

Problem: We have had reports of problems using CA-Visual Objects with a serial mouse (specifically, Logitech).

Workaround: If you experience mouse-related problems (for example, the mouse capability goes away or behaves unpredictably or the application freezes), include the entry

OutPutTo=NUL in the [Debug] section of your SYSTEM.INI.

ADAM Initialization failure starting CA-Visual Objects with a utility active

Problem: Attempting to start CA-Visual Objects when the Install Maker, Repository Manager, or CAVORIDX.EXE is running will result in an ADAM Initialization failure message, followed by a GPF and possible repository corruption.

Workaround: Wait for the utility to finish, then exit the utility before starting CA-Visual Objects.

GPF when closing CA-RET window before report is finished

Problem: If you close the CA-RET window before the report is finished running, you may get a GPF related to the fact that the DDE connection was destroyed.

Workaround: Do not close the CA-RET window until the report is finished.

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CompuServe Facilities

There is a production CompuServe forum (GO VOFORUM) targeted specifically for CA-Visual Objects. You may use this forum to ask questions about your CA-Visual Objects Evaluation Version.

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Operating Systems

CA-Visual Objects release 1.0a currently supports MS-Windows 3.1, 3.10, and 3.11, Windows for Work Groups, Windows for OS/2, and Windows 3.1 running native under OS/2.

At this point, there is only qualified support for Windows NT. Attempts to run CA-Visual Objects under these operating systems may fail with various errors. There is currently no support for Chicago or Windows 95. Problems under NT should be reported on the CompuServe forum.

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The South Seas Adventure Tutorial

The South Seas Adventure is a sample application that is installed as part of the Samples option during the CA-Visual Objects installation process. This section contains brief instructions on setting up and running the South Seas Adventure application. This application is complex, and it contains many useful CA-Visual Objects programming tips and techniques. A written tutorial, designed to work with the South Seas Adventure application, is included with your evaluation version. If you chose the 3.5 inch diskette format you received a printed tutorial manual and if you installed the CD-ROM version the manual is available on the CD-ROM via the Adobe Acrobat Reader which is also included. Please see the *Evaluation Version Special Issues* section for notes on which portions of the tutorial cannot be completed because the evaluation version has these particular features disabled.

After importing and compiling the SSATutor application it is suggested that you exit CA-Visual Objects and then restart it. This suggestion is made because performance optimization measures include keeping a large amount of recently used data in memory. Since the SSA Tutorial is not conducted in the manner of a typical development process much of this information is not needed and will only serve to artificially lower your available memory.

Setting up the Accounting Department Data Source

Using the Microsoft ODBC Administration program located in your Control Panel, set up the ODBC driver for the "Accounting Department" by adding the following configuration:

> CA-VO dBASE (*.dbf) driver
>
> Data Source Name: Accounting
> Description: Accounting Department
> Database Directory: <CAVO dir>\SAMPLES\SSATUTOR
> Create Type: Clipper
> Lock Compatibility: Clipper
> Locking: Record

Importing and Building the Application

Note: The South Seas Adventure is a large application, so importing and building it may take a long time. If you are running a minimally configured system, you may not be able to compile the application successfully. If you have problems, we suggest that you upgrade your system or change your swap file size to the maximum permissible amount.

If you installed CA-Visual Objects in a location other than C:\CAVO, follow these steps to import and build the South Seas Adventures.

1. From the Application Browser, choose File Import.

2. Select SSA.AEF from your CA-Visual Objects SAMPLES\SSATUTOR\FILES directory.

3. Click OK to import the application, **without** checking the Build Application check box.

4. After the import is complete, change the Path for EXE and DLL files application property (choose the Application Properties menu command or click the Application Properties toolbar button) to point to your SAMPLES\SSATUTOR directory. By default, it will point to C:\CAVO\SAMPLES\SSATUTOR.

5. Click OK.

6. Build the application by clicking the Build toolbar button.

If you installed CA-Visual Objects in the default directory, C:\CAVO, follow these steps to import and build the South Seas Adventures:

1. From the Application Browser, choose File Import.

2. Select SSA.AEF from the C:\CAVO\SAMPLES\SSATUTOR\FILES directory.

3. Click OK to import the application, **without** checking the Build Application check box.

4. Build the application by clicking the Build toolbar button.

Running the Application

From within IDE, execute the application by choosing the Execute toolbar button (or Application Execute menu command).

Once the application is running, login using the employee entry:

Login	Password
user	trainee

You can then create an entry in the EMPLOYEE file for yourself.

SSA.INI

The initial screen and login can be bypassed by modifying the entries in SSA.INI (in your CA-Visual Objects SAMPLES\SSATUTOR directory) as follows:

```
[Runtime]
Debug=1
OpeningDialog=No
```

SSA Application Changes

Several bugs have been discovered in the SSA application. For correct operation apply the following three changes to your application.

1.   In NewAdventureWindow:OKButton() method in Adventure:Methods module, move the two lines with self:Owner:BroadcastMessage to just before the comment line that begins "// Launch an edit window" as shown below. This fixes a bug where the selected name was replaced with the name in the last record of CUSTOMER.DBF.

```
self:Pointer := Pointer{ POINTERARROW }
self:Owner:BroadcastMessage(self, #CUSTOMER)
self:Owner:BroadcastMessage(self, #ADVENTURE)

// Launch an edit window
```

2.   Open the Tutorial:Support module and double-click the DUP_CUSTOMER_PHONE FldSpc. Enter @R (999) 999-9999 as the Picture property for this Field and then save and exit the FieldSpec Editor. Repeat this change for the DUP_CUSTOMER_FAX FldSpc. These changes ensure that phone numbers are correctly formatted.

3.   In the CustAdvDialog:ButtonClick method in the Adventure:Reports module add the following four lines immediately after the line beginning "super:ButtonClick(oEvent)". This prevents a data type error in the NameSym CASE statement when the ESC key is pressed .

```
IF oEvent:ControlID == IDCANCEL
        self:EndDialog()
        RETURN NIL
ENDIF
```

Repeat these changes for the CustRptDialog:ButtonClick method in the Customer:Reports module and for the InvcRptDialog:ButtonClick method in the Invoice:Reports module

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Known Problems

This section describes significant issues that we are already aware of in release 1.0a. Included is a brief description of each problem and, if possible, a way to circumvent it.

Please note that if you get a GPF of any level while operating in the IDE (including dynamic execution of an application), you should exit CA-Visual Objects and exit Windows. If you get a GPF while running one of your CA-Visual Objects applications, this practice is also recommended, but not necessarily mandatory.

Menu items on menu bar do not correctly generate an event when selected

Problem: If you create a menu with selectable items on the menu bar using the Menu Editor, selecting such a menu item will not generate an event.

Workaround: This problem is due to an error in the generated source code, which you will have to correct manually for each selectable item on the menu bar. For example, the code generated in the menu's Init() method for a selectable menu bar item named Open would look something like this:

```
self:RegisterItem(IDM_MYMENU_Open_ID,      ;
  HyperLabel{#_Open,                        ;
     "&Open",                               ;
     ,                                      ;
     ,},self:Handle(),0)
```

To correct the code, remove the last two arguments, self:Handle() and 0, from the RegisterItem() method call, as illustrated below:

```
self:RegisterItem(IDM_MYMENU_Open_ID,      ;
  HyperLabel{#_Open,                        ;
     "&Open",                               ;
     ,                                      ;
     ,})                              // Change this line
```

Toolbar button events not passed to owner window

Problem: Menu command events generated by clicking a toolbar button are not propagated to the owner window, although corresponding events generated from equivalent menu selections are.

Workaround: Code a method owned by the child window with the correct name, which simply calls the same method in the owner window. For example, if the File Open toolbar button for a data window should propagate the event to the owner window's FileOpen() method, write a FileOpen() method for the data window that invokes Owner:FileOpen(). Alternatively, you can handle menu command events for the child window using a custom-coded MenuCommandEvent() method.

ComboBox does not scroll when owner window is scrolled

Problem: ComboBoxes may not be properly repositioned when you scroll the owner window.

Workaround: Close the ComboBox before scrolling the owner window.