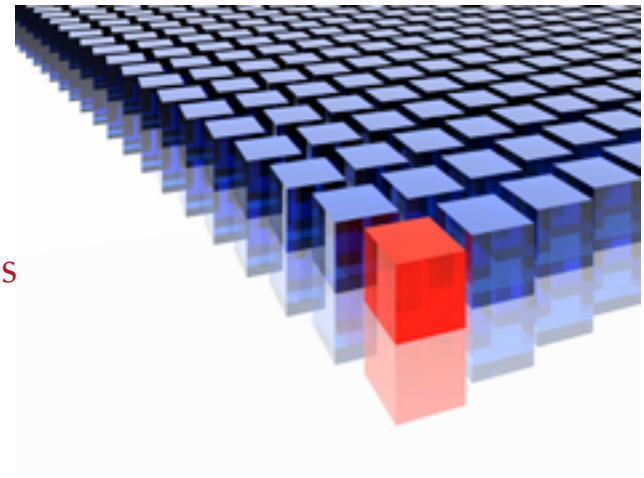
EXSYS®
The Knowledge Automators™



Most frequently asked Exsys Corvid questions:

Installing Exsys Corvid

I get an error message that the Screen Resolution is not high enough.

The Exsys Corvid Editor requires a screen resolution of 1024 x 768 or higher because it has large windows with many options and controls. If you use "Large Fonts" you will probably need to go to even higher resolution to get all information on the screen.

To increase your screen resolution: (Note: If your version of MS Windows does not have these exact options, click on the "Help" option from the start menu and search for "Screen Resolution". That should display the steps for your version of MS Windows.)

1. Click on the 'Start' button in the most bottom left corner of your monitor
2. Select 'Control Panel' (or 'Settings' and 'Control Panel')
3. Select 'Appearance and Themes' (or 'Display')
4. Click on the link 'Change the screen resolution' (or 'Settings' tab)
5. Select the 'Settings' tab
6. In the box labeled 'Screen resolution' (or 'Desktop area'), slide the slider control towards 'More'
7. If it displays correctly, accept the change, or else let it automatically revert back to the original resolution.

Once the screen resolution is 1024 x 768 or higher, click the Apply or OK button and it will automatically perform a test. If the test works, i.e. it does not look like a scrambled cable channel, then accept the new screen resolution. You may have to re-boot, especially if you change the text size. If you change the text size to Large Font, 1024x768 will not be big enough so either use Small Font or select the next higher resolution. If there is limited memory, a higher resolution may limit the number of colors you can display.

I can't access a specific page on the www.exsys.com Web site.

If you typed in any part of the URL after http://www.exsys.com/, then it may be that the letter case is incorrect. The server is a Unix server and is case sensitive in the URL addresses. Check that the upper/lower case of the URL entered matches, or browse to the page starting with **www.exsys.com**.

I get the error message Code did NOT register system, but ...

This message is normal when entering an evaluation version code. Only purchased full activation codes "Register" the system. When you restart the system, the time and node count allowed should be set to the new values. If you got this message when installing a full activation code, contact **Exsys Technical Support**.

I get an error message about the User Level or Administrator privilege.

For Windows NT, 2000 and Vista, Corvid requires that the software be installed by the Administrator or you will get this error message:

> **Some programs will not install correctly if you do not have administrative privileges on this computer. If you know the password to an administrative account, you can use that account to install the program.**

If you did not install as Administrator and you selected the top radio button, then you should get this error message:

> **Error 1925. You do not have sufficient privileges to complete this installation for all users of the machine.**

Log on as an administrator and then retry this installation. The wizard was interrupted before Exsys Corvid could be completely installed.

If Corvid was already installed by the Administrator, then you may see this error message instead:

> **The system administrator has set policies to prevent this installation.**

In this case, contact your system administrator.

Building Systems with the Corvid Editor

I have an evaluation version of Exsys Corvid and it has timed out. What can I do?

If you are evaluating Exsys Corvid for your company or organization, contact sales@exsys.com to get a code to extend your evaluation period.

I get an error message about exceeding the 150-node limit.

You have an evaluation version of the software; or a full purchased version but have not registered it and obtained an activation code. These versions are locked to allow only 150 nodes to be built. A "node" is a line in the Logic or Command block. If you have purchased a full version of Corvid, send in your Registration User Code and you will be sent an Activation Code that will unlock the program and allow unlimited numbers of nodes. If you have the evaluation version, it is limited to 150 nodes. If you are using certain student versions, the node limit may be 250 nodes.

Can I make copies of the Corvid software?

The Exsys Corvid software uses a license manger that limits both the time the program will run and size of systems that can be built. When you purchase a full Corvid license, you will be sent a code that will unlock your copy of Corvid and remove these limitations for a single computer.

Since Corvid always installs with a 30-day / 150-node limitation, we allow you to make copies of the software and to install it on other machines. These "extra" installs will behave as evaluation installations, and only the fully licensed computer will have the limitations removed.

Once you have Corvid installed and registered, you can copy new Corvid.exe and .jar files over the old files without problems, and the license manager will carry your existing license over to the new version. You can also uninstall and reinstall Corvid using the default setting; but you should not delete the Corvid folder, reinstall to a different folder or move the executable files to a different folder. If you do, the license manager will consider this a new copy and will not pick up the previous license.

What HTML codes can I use in my system?

That depends on how a system is delivered to end-users. The Corvid Applet Runtime designs screens using Corvid screen commands. These allow the control of color, font and placement of text and images. In addition, basic <A>, <IMG> and <BR> tags are recognized by the applet. The applet itself is part of an overall HTML page that can contain any HTML commands outside of the APPLET section.

If you are using the Corvid Servlet Runtime user interface screens are designed using HTML templates, which can use the full range of HTML commands. JavaScript, CSS, XML and other extensions to HTML can also be used.

Can I run the system on the server by hitting the Run icon in the Corvid Editor?

It is possible to do this, but requires that several things be setup correctly. You must be connected to the server to have your browser display .html files and you must be able to write files to the server as if it were a disk drive.

- In the Corvid editor, hit the Properties toolbar button and under "Development Tests Run Using" select "Specific Browser". Click the Browse button next to this option and select your browser program's .exe file, or type it in. It is probably something like:

  C:\Program Files\Internet Explorer\lexplore.exe

- Also on the Properties window, checkmark "Specific URL" and enter the URL for the .html file on the server (which must start with http://www.yourserver.com/...). Hit the Done button.

Now, when you hit Run in Corvid, it will start the specified browser with the URL address on the server. If your computer can directly write the .cvR file on the server, then you may also want to use the "Save CVR file in:" option.

If you are editing the CVD file directly on the server, remember that when you run the system, it will build a new standard .html file to use to run the system. This will overwrite your html file if they are the same name.

How do I create an icon that starts Corvid and loads my system?

Create a shortcut by either:

1. Right-mouse clicking on the Exsys Corvid.exe file and select "Create Shortcut"
2. Selecting Exsys Corvid from the Start menu, right click on it and select "Create Shortcut"

Drag the shortcut to where you want to keep it. Right-mouse click on the shortcut, select Properties, then go to the Shortcut tab. In Target, add a space and the name of your expert system. If your expert system has a space in the name, put quotes around the name. Also, in the Start In edit field specify the path to the folder that has the expert system files.

How do I produce system Results that can be printed?

Due to security limitations imposed by Java, applets cannot directly write to the local printer or hard drive. This prevents an applet from being able to print directly.

There are two options. If the system has Results that will all fit within the applet window, the Browser's Print button can be used to print the page containing the applet. This will not work if the applet has scroll bars, and is not displaying all of its contents at one time. The Print Screen option will only print exactly what is on the screen.

To print a larger Results screen, it is necessary to use the SaveReport and getReport commands. SaveReport calls a program on the server that writes the Results to a temporary file there. Java allows an applet to write back to the server. The DisplayReport command displays the Results in a new Browser window. This window is just a normal browser window, not the Corvid Runtime applet, and can be printed with the normal browser print commands, which will print the entire window. In addition, if the report is created using RTF, most browsers will open a word processor (typically MS Word) to display the document. The print functions from the word processor can then be used to print the Results. Using the SaveReport and DisplayReport commands requires that the Corvid server-side programs be installed on the server. See the Corvid documentation on setting these up.

If the system is being run as an application (not an applet), it can write directly to the hard disk. This allows writing temporary files and then calling a text editor (e.g. Notepad) to display and print the text.

Another option is to use the Corvid Servlet Runtime. In that case, all user interface screens are designed with HTML templates. A report page can easily be created and displayed in the user's browser window. This page is a "normal" HTML page, rather than the content of an applet window, and can be directly printed or saved using the Brower functions.

I get the error message "Error creating runtime file - invalid name or file protection".

The file may be “write protected”. This can happen when files are copied from a CD, such as a backup. The CD sets the file to “write protected” and this must be changed when the files are copied back to the disk. Also make sure the "Save" or "Save CVR file in:" is specifying a valid name and path.

How can I prevent the user from going past the Results Screen?

Remove the OK button at the bottom of the screen when the final results are displayed. This is done when designing the Results screen by adding the command "LastScreen". This can be any line in the screen commands. To add it, go to the Screen Command Builder and pull down the dropdown next to "Buttons" and select "Last Screen".

If you were using the default Results Screen which has no commands, build a screen with the two commands "VARIABLES" and "BUTTONS: LastScreen". This will behave like the default screen, but will remove the OK button.

How do I display a "Goodbye" Page at the end of a run, or go to another system?

There are 2 ways to do this. The first uses Corvid Screen commands:

At the end of the run the Corvid applet will display a "System Done" message. This can be replaced with your own screen by selecting to display a screen of Corvid commands. Add a command at the end of your command file. In the Screen Command Builder, click the Results tab and select "Display file of Corvid Screen Commands". Build a screen with any text/images that you wish. Make sure that in the screen the line "BUTTONS: LastScreen" is set. This will eliminate the OK button.

The other way to do it, is to have the HTML page running the applet replaced by another HTML page at the end of the run. This is done by having the system display an HTML page in the same window. Normally, a DISPLAY_HTML command displays the new page in a separate window, but here the idea is to overwrite the current page. Add a command at the end of the Command Block, with a DISPLAY_HTML command (built from the Results tab on the Command Builder) and add "_self" as the target. This would look something like this:

DISPLAY_HTML "your_goodbye_web_page.html,_self"

The command means you are also specifying the window/frame name that the your_goodbye_web_page.html is to be displayed in, and "_self" causes the page to be displayed in the window that the applet was in.

Note: Do this only when the applet is done, since it will close the page running the applet and it cannot continue. If the user hits their Back button to go back to the Web page that holds the applet, the applet will start and run all over again from the beginning. It will not remember anything from the earlier run (unless the expert system wrote data to the database on the server and then retrieves it when it runs the second time).

The same approach can be used to link to a second expert system by calling an HTML page that starts another system. Again, the systems will not share any data unless this is passed via a database.

When using the Corvid Servlet Runtime, the system will go to the specified final screen. Any screen that is not a form or has an action that does not go back to the Corvid servlet, will take the user out of the system. A simple way to do this is to finish a run with a screen that just has a link back to some other place in your Web site.

I can't print my system from the Corvid Editor.

Usually that is caused when the Printer Drivers do not match the Printer model. Printing the tree structure seems to require functions in the printer that most other programs do not call for. For example an HP DeskJet 900 driver may work most of the time for an HP DeskJet 932C but will not work correctly when printing the trees. So go to Start | Settings | Control Panel | Printers and make sure you have the correct driver for your specific printer. Also make sure the correct driver is the default that Exsys Corvid is using. When it is printing, right mouse click on the printer icon (on the task bar near the clock), and go to File | Properties and see if it matches.

How do I determine what Java is using as the CLASSPATH?

Java uses the CLASSPATH to determine where it looks for various parts of the program. This should only be an issue in running as an application and in servlet emulation.

In MS Windows, open a Command prompt (DOS window) and type the command:

set

Look for CLASSPATH. If the text scrolls off the screen too quickly to read type:

set | more

In Unix or Linux, open a console window (terminal window) and type:

Printenv | grep CLASSPATH or export | grep CLASSPATH

When running as an Application, the classpath is specified by the –cp parameter.

What languages can I build my system in?

Exsys Corvid and the Corvid Runtimes use Unicode, which supports all languages. We know of systems built in English, Japanese, Chinese, Korean, Spanish, French, German, Italian, Finnish, Hebrew, Russian, Arabic and Malay. This list keeps growing everyday. We are not aware of any language that cannot be used.

What programs can display RTF documents with formatting?

MS Word, Word Perfect, WordPad (not Notepad), OpenOffice, and others can read and display .rtf files.

How do I determine the IP address of my server?

The IP address of the server is needed to get a license code for Corvid Servlet Runtime.

The Corvid Servlet Runtime will display the IP address unless you have a valid license code. Install the Corvid Servlet Runtime except leave the 'CorvidLicenseCodes.txt' file empty. Run the URL for your expert system. Corvid will display the IP address in the browser instead of running the expert system.

Running Corvid Systems

I get a "Version Mismatch" error when running the system.

The version mismatch error indicates that the version of the Corvid Editor that built the system does not match the version of the Corvid Runtime (ExsysCorvid.jar for applets or CORVID.war for servlets) being used to run the system. This typically happens when the ExsysCorvid.jar gets updated on the development computer, but does not get copied to the server.

The files Corvid produces are upwardly compatible and can always be read and edited by higher versions of the Corvid Editor and Runtimes. However, the Corvid Runtime programs will reject files produced by versions of the Editor that are higher than the Runtime being used. This will produce a ”version mismatch” error.

If the version mismatch is coming from a server and you have recently upgraded your version of the Corvid Editor, move the ExsysCorvid.jar file from the development machine to the server. The .jar file is normally in \Program Files\Exsys\Corvid". If that does not solve the problem, open the system .CVD file with the Corvid Editor, click Run to produce a new .cvR file, and then move the new .cvR and associated ExsysCorvid.jar to the server.

The applet hangs with just a gray window displayed.

If the Corvid applet draws a gray screen and appears to hang, always check the Java Console window and the system Trace to see where it is hanging. For example, a gray screen that appears to hang can be caused by a CGI call that does not get a reply from the server. The CGI call will be the last command in the Trace.

A screen that should be asking a question is empty.

Turn on the Trace function to see that Corvid is actually asking the question. If there is an external source for the variable, it needs to be accessed before the question will be asked. If there is a problem in the external source, the system could be hung up on that.

If the screen shows the OK button, but no question text, check the text color that is set for the question and background. If these are set to the same color, nothing will be visible.

For the Corvid Servlet Runtime, verify the template has a CORVID_ASK section that matches that variable.

I am not able to run systems as Java applications.

Running as an application requires having the Java Runtime Environment installed on your computer. This is NOT the same as the Java VM that comes with some browsers. If you do not have the Java Runtime Environment (JRE), you can download it from Sun Systems at:

http://java.sun.com/en/download/index.jsp

Note: For Windows Vista you must use Java v. 1.6 or higher.

Once it is installed, click on the "Select Java.exe" button on the Properties window under the Test Run Tab. Browse to where java.exe is installed to tell Corvid where it is. Then select to "Run as Application", close the Properties window, and click the blue Run icon.

How do I get the latest version of the Java VM for my Browser?

You can download the JRE (Java Runtime Environment) at:

http://java.sun.com/en/download/index.jsp

How can I determine which version of the Corvid Runtime is being used to run a system?

You can see what version of ExsysCorvid.jar file is being used by your browser by viewing the Java Console or the Trace applet. If you are running your system as a Java application, the version number will be in the Console (DOS-Prompt) window. The Corvid Runtime version will be the first line in the console.

When running as a Servlet, turn on Trace. The version number will be the first few lines of the trace.

I get the error message "Cannot find/read filename".

A Java applet cannot access a file unless it comes from the same location as the HTML page that is running the applet. This is enforced by the Java Security Manager. If you run an applet on a server, you cannot access client hard drive files - even if the client and server are the same computer. If you run an applet from your hard drive, you cannot access files on the server.

It is always best to make sure that any files needed by the application are in the same folder as the .cvR file or a sub-folder. Reference the files with a relative path from the .cvR file, rather than a full path. This will make it much easier to move systems to a server.

For example, if you specified the Metablock spreadsheet file as **"http://..../filename"** but you ran from the local drive, then you would get a "Cannot read" error message. Put the Metablock file in the same location as the .html, .cvR and .jar files, then use the "filename" with no path.

If you used the "Browse" button to locate a file when building the system, and the full path was included, edit the path to make it a relative path. (In most cases Corvid will do this for you automatically once it knows where the system is stored.)

In the Corvid Servlet Runtime, paths are usually either relative to the location of the servlet, or are an address on a server that can be accessed as an **http** address.

My reports don't work.

Setting up server-side programs for reports requires several steps. Java must be installed on the server and programs must be in the correct locations. See the Corvid manual for the details on setting up the programs. Once they are setup correctly, there are several other errors that can cause problems:

1. For reports retrieved from the server using DisplayReport, any images, .css or other referenced files must have their full path because a CGI base path cannot be used with a relative URL path.

2. No JavaScript, VB script, or other script commands are allowed in the report. This is for security reasons. Since the report can be sent from anyone, the report could contain malicious server side script.

3. Microsoft Internet Explorer v. 5 does not allow applets to read files in the root of the drive. Your files will have to be in a sub-folder. You can put a shortcut to the .html file in the root of the drive.

How do I turn on Trace or view the Java Console from the Applet?

To turn on Trace, in the Corvid Editor hit the Properties tool bar button, check the Add Trace Applet checkbox, and hit Run on the tool bar to rebuild the .html file. The new Web page will have the Trace applet on the screen and traces will be written to it as your expert system runs. If you have “Trace To Java Console” on while running as a Java application, the trace text will be written to the Console (Command Prompt) window.

To open the Java Console in Windows, right mouse click on the Java Icon in the System Tray and select Open Console.

In Internet Explorer with Java plugin: Tools ▸ Sun Java console.

In Netscape, click on the Netscape shield icon and Advanced ▸ Enable Java ▸ Done
Or enable console in JCP and restart the browser.

In Firefox on Windows: Tools ▸ Options ▸ Content ▸ Enable Java ▸ Ok
Or enable console in JCP and restart the browser.

In Safari on a Mac: Application ▸ Utilities ▸ Java ▸ JavaPreferences ▸ Advanced and select 'Show console'. Or: Utilitie ▸ Java ▸ Java 1.4.2 Plugin Settings and under the 'General' tab set 'Use Java console'. The next time you go to the web page with the applet, the Console window will automatically appear.

In Linux with Firefox, pull down the 'Tools' menu and enable 'Java Console'.

In Mozilla, pull down 'Tools' and select 'Web Development' and 'Java Console'.

In Opera: Tools ▸ Advanced ▸ Java Console
Or enable console in JCP and restart the browser.

In Mozilla and Sea Monkey on Windows: Edit ▸ Preferences ▸ Advanced ▸ Enable Java ▸ Ok and enable console in JCP and do: Tools ▸ Web Development ▸ Java console

In Linux, run 'Control Panel' which may be in /java/jre1.5.0_04
Under the 'Basic' tab select 'Show Console' and hit 'Apply'

Safari: Safari ▸ Preferences ▸ Security ▸ Enable Java

Konqueror: Settings ▸ Configure Konqueror ▸ Java & Javascript and enable Java

64 bit versions of Linux: be sure you use 64 bit Java

64 bit versions of Windows: use 32 bit Java plugin with 32 bit browser (such as IE or Firefox)

If an error message is displayed, the message in the Java Console will give the most information on the error. The Trace will have the steps leading up to the error.

You can copy the Trace text or the Java Console text and paste it into an email when requesting technical support. (In some browsers you may have to use Ctrl-C to Copy the selected text to the clipboard because the Edit menu may not be accessible.)

I get the error message … Access is denied.

Make sure the disk is not full or “write-protected”, and that the file is not currently in use. In Windows XP this could mean you do not have privileges to access the file. You must install as an Administrator. The text before "Access is denied" should describe the cause of the problem.

How can I run my system as a standalone system?

1. To run locally in a browser, you need at a minimum these 4 files:

   Your_system.html
   Your_system.cvR
   Your_system.cvRu
   ExsysCorvid.jar

   Copy these 4 files to the directory you wish to run from.

   To run the system, open the .html file in your favorite browser. You can either double click on the .html file, or create a shortcut for the .html file by right mouse clicking on it and selecting “Create shortcut”. If your system requires additional files for images, links, etc., make sure to also move these files to the same directory.

2. To run it as a Java application, you must have the Java Runtime environment installed on your computer and then type this in a DOS-Prompt or Console window:

   java -cp ExsysCorvid.jar Corvid.Runtime "C:\path\ " your_expert_system.cvR

   where path is the path to the .cvR file, and **your_expert_system.cvR** is the name of your expert system's .cvR file. Notice that there is a space before the closing quote in **"C:\path\ "** and after the closing quote.

   If you must specify a path to Java, then your command line should be this:

   C:\path\java.exe -cp ExsysCorvid.jar Corvid.Runtime "C:\path\ " your_expert_system.cvR

   If you do not have the Java Runtime Environment (JRE), you can download it from Sun Systems at:

   http://java.sun.com/en/download/index.jsp

How do I deploy an Applet based system to a Web Server?

To put your Corvid expert system on the Web, you must have an .html file on the Web server that contains the Corvid applet. The Corvid editor creates a sample .html file for you with the applet call. You can use it or modify it or create your own.

Move the files: Your_System**.html**, Your_System**.cvR**, Your_System**.cvRu** and the **ExsysCorvid.jar** file to a folder on the server. This should be in a directory that is located to allow the html file to be served via the browser.

NOTE: You do NOT need to move the .CVD file to the server, and for security reasons should not put the CVD file on the server. The CVD file can be opened with a Corvid Editor and allows others to view and edit the logic in your system. The CVD is not required for running the system. Only put the CVR and CVRU files on the server. These cannot be opened with the Corvid Editor.

You may need to move additional files to the server if you are doing the following:

1. Displaying .jpg or .gif files from your expert system
2. The expert system displays other .html files in other browser windows, or frames during the run
3. There are database queries
4. The system saves or displays reports
5. The system uses MetaBlocks to process a spreadsheet file
6. There are external Command Files
7. There are files to hold data for variables or hold the text of variables.

The .cvRu file is your .cvR file uncompressed. It is needed for older browsers that cannot handle compressed files.

Note: It is recommended that you do NOT put the .CVD file on the server because users will be able to download it and have full access to the logic of the system.

If you will put all files in the same folder on the server, then you are done. If they are not in the same folder, you will need to modify the CODEBASE and KBBASE lines. These allow you put the 3 files in 3 folders. Why would you want to do that? When you have multiple expert systems that are not all in 1 folder.

If you have multiple expert systems and they are not all in 1 folder, then you should have the .jar file in a single location otherwise a separate copy will be downloaded for each expert system. If you do so, then you must specify the CODEBASE for the .jar file. The CODEBASE would be the location of the .jar file and would look like this:

http://www.somewhere.com/a_path_if_any

Notice it is only the path and does not include the /ExsysCorvid.jar at the end. You can also use a path from the server's root, such as "/path".

You will need a KBBASE line if your .cvR file is not in the same directory as the .html file. It should contain the URL path of the .cvR file but not include the filename. For example, if your .html file is at this address:

http://www.somewhere.com/thePathToYourHTMLFile/yourfilename.html

and the .cvR file is in a subfolder called KB , then the KBBASE would be like this:

<PARAM NAME="KBBASE" VALUE="http://www.somewhere.com/thePathToYourHTMLfile/KB/">

Notice that the above value ends in a "/" character.

The .cvRu file must always be in the same folder as the .cvR file. It is used only by older browsers that do not support compressed files.

I'm running from a Macintosh and get an "ERROR TYPE 3".

Apple has some information on this, which should help. Take a look at:

http://www.appletechs.com/archives/00000035.html

How can I be sure an earlier .jar file is not being cached by the browser?

To clear the plugin cache:

1. Open the Java Control Panel. In Windows, right mouse click on the Java icon in the System Tray (by the clock) and select 'Open Control Panel'. Or, click the 'Start' button and select 'Control Panel' (or 'Settings' and 'Control Panel') and look for the Java icon. If you do not find it, click on 'Other Control Panel Options' (on the left side) or 'Classic View' and click once on the Java icon. The Java Control Panel will appear.

2. Under the 'General' tab (or 'Cache' tab), click on the 'Settings' button (or 'Clear' button) and click on the 'Delete Files...' button.

When I input a value for a Date Variable, Corvid does not accept it.

Different regions of the world use different formats to represent the date and time. For example, the U.S. uses 3/7/02, Australia uses 2002-Mar-07, the U.S. Military uses 20020307, and Yugoslavia prefers Thursday, 7. March 2002. The end user specifies how they want programs to format the date and time by specifying the format in their Regional Settings, which is in the Control Panel. Normally this is done when they install the Windows Operating System but it can be changed at any time. When Corvid displays a date and/or time to the end user, it will format it as they specified in their Regional Settings.

When Corvid asks the user for the date and/or time, they must enter the date and/or time in the same format that is specified in their Regional Settings. Java supports both "Short" and "Long" forms of dates for each setting. Corvid will try both formats to see if the input strings match. Date formats are quite dependent on the localization of Java.

By default, U.S. users must enter the month number, a slash, the day number, a slash, and the year as 2 digits. For example: 3/7/08. Corvid also allows 4 digit years and leading 0s for month and day. For example: 03/07/2008.

When asking the user to input a Date variable's value, Corvid will expect the date to match their Regional Settings. Corvid also uses the Regional Settings to display Date variables' values.

A problem occurs with Corvid running as an applet when the date value did not come from the end user but came from a database or data file from the server and the format does not match the user's Regional Settings. To solve this problem, use the International data format for all data values not supplied by the user.

The International date format is always the same regardless of your regional settings or locale. It is the format used by many databases such as MySql. It is the format you should use for dates that are not assigned by asking the user. The format is:

YYYY-mm-dd

where "YYYY" is the 4 digit year, "mm" is the two digit month and "dd" is the two digit day. If the month or day is only one digit, insert a leading "0" to make it two digits.

The time can be included using this format:

YYYY-mm-dd hh:MM:ss

where "hh" is the two digit hours and "MM" is the two digit minutes and "ss" is the two digit seconds. You can include milliseconds by using this format:

YYYY-mm-dd hh:MM:ss:mmmm

where "mmmm" is the 4 digit milliseconds.
Always use the International date format for hard coded (literal) dates. For example:

[Valentines_Day] = DATE("2008-02-14")

The DATE function converts the string into a Date which is assigned to the Date variable in a THEN node or compared to the Date variable in an IF node.

Corvid tries to interpret the date from the text representation by trying these in order:

1. The Long date format from Regional Settings
2. The Short date format from Regional Settings
3. International (UN) date style
4. If the value is a number, it is treated as a date specified by the number of miliseconds since Jan 1 1970 GMT

Handling dates in systems that are international can be difficult due to the different date formats. In many cases, if the system does not require an actual date calculation in the logic, it is better to use a String variable rather than a Date variable. The string will accept any format and if it is just being added to a report, the string will work well. In other cases, it is better to use separate variables and controls for day/month/year and then use those to set the value for the Date variable as needed.

How do I distribute my system on CD?

Most systems can be distributed on a CD. The system must not require calling a server directly (e.g. database calls), or the database may be distributed on the CD. In addition, you must have a license that allows you to distribute copies of the ExsysCorvid.jar file with your application. Contact sales@exsys.com for details on the type of license you will need.

When building the CD, the .jar, .cvR, and .cvRu files should NOT be in the root folder of the CD. IE 5.0's Security Manager will not allow the applet to access the files in a root folder. You can put an .html file in the root folder that is an introduction page with no expert system applet. This can be an index page. This introduction page should have a link that goes to an .html file in a subfolder that has the HTML page that runs the expert system applet.

CD's use a slightly different file system structure than Windows (or any other operating system). It restricts the letters used in file names, for example some punctuation characters are not allowed. It has a shorter file name length limit. The first character of the file name cannot be a period.

Since you do not know what operating system the user will be running on, restrict the characters used in file names and folder names to only letters, digits, underscores (_), and a single period used only in file names (not folder names) that separates the extension. The file name or folder

name should not be more than 50 characters and the extension, if any, should not be more than 10. Do not use spaces in the file names or folder names.

Make sure the case of all file names and folders match. Some operating systems are case sensitive. “Case” meaning capital letters vs. lower case letters.

Use only ".html" for your Web page extensions; not ".htm" nor ".HTML", otherwise the operating system may not know to open the file in a browser.

If you are running as an applet in an .html file, you will not be able to call CGI, ASP, JSP, and Servlet programs. This includes Corvid's report commands.

If you are running your system as a Java application, the user must have Java installed on their computer. Java v1.2 or higher is recommended. If Java is not in the path, the user will have to specify the path. Java would need to be installed to run Corvid. Java can be downloaded from java.sun.com or an install file could be included with your system on the CD. Versions of any non-Java operating system specific programs that are required by your system would need to be provided for the operating systems you plan to support.

I get the error message ERROR: External Applet - NULL applet.

Look for a variable where the "Applet Call for Prompt" has some invalid text in it. This could be text that was accidentally entered in the edit box, or an intended applet call that has an incorrect name.

I get the error message Error: java.sql.SQLException: [Microsoft][ODBC Microsoft Access 97 Driver] Too few parameters. Expected 1.

One of your column names in your SQL command does not match any in the database. Check the command syntax with the actual database.

For additional assistance contact
Exsys technical support at: support@exsys.com