Oracle® Crystal Ball, Fusion Edition
Oracle® Crystal Ball Decision Optimizer, Fusion Edition
Oracle® Crystal Ball Enterprise Performance Management, Fusion Edition
Oracle® Crystal Ball Classroom Student Edition, Fusion Edition
Oracle® Crystal Ball Classroom Faculty Edition, Fusion Edition
Oracle® Crystal Ball Enterprise Performance Management for Oracle Hyperion Enterprise Planning Suite

Installation and Licensing Guide
RELEASE 11.1.2
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Before You Begin

This guide describes how to install and license the following Oracle products:

- Oracle Crystal Ball, Fusion Edition (including Classroom Faculty and Student Editions)
- Oracle Crystal Ball Decision Optimizer, Fusion Edition
- Oracle Crystal Ball Enterprise Performance Management, Fusion Edition

Be sure you have completed all appropriate steps before you begin the installation process described in Chapter 2, “Installing and Licensing Crystal Ball.”

System Requirements

The current release of Crystal Ball can run on supported 32-bit (x86) or 64-bit (x64) versions of Microsoft Windows and Microsoft Excel.

The following bit-level compatibilities apply:

- 32-bit levels of Crystal Ball products must be used with 32-bit Microsoft Excel and Windows on 32-bit computers.
- 32-bit Crystal Ball can be used in emulation mode with 32-bit Microsoft Excel on 64-bit computers using all of the 64-bit Crystal Ball platforms as well as 64-bit versions of Microsoft Windows XP Home Edition with Service Pack 3, Microsoft Windows XP Professional with Service Pack 3, and Microsoft Windows Server 2003 with Service Pack 2/R2+.
When running in 32-bit emulation mode, Crystal Ball has the same 1–1.5 GB memory limitations encountered when running on 32-bit Microsoft Windows operating systems. Other 32-bit limitations also apply.

- 64-bit Crystal Ball is compatible with 64-bit versions of Microsoft Excel and Windows.

The computer where you are installing Crystal Ball products should meet these system requirements:

- A compatible version of Microsoft Windows:
  - 64-bit Microsoft Windows (for 32-bit Crystal Ball in emulation mode or 64-bit Crystal Ball)—64-bit versions of Microsoft Windows Vista with Service Pack 1, Microsoft Windows Server 2008 with Service Pack 1+/R2, or Microsoft Windows 7

- A compatible version of Microsoft Excel:
  - 64-bit Microsoft Excel (for 64-bit Crystal Ball)—64-bit version of Microsoft Excel 2010

- Microsoft Internet Explorer 7.0 and 8.0

  **Note:** Other browsers, such as Firefox, can be used to install and work with Crystal Ball. However, other browsers can have compatibility issues caused by security handling and other features.

- Microsoft .NET Framework 2.0 with Service Pack 2 (or 3.0 or 3.5 with Windows XP versions or Vista)

  **Note:** If Crystal Ball will run in a highly secure environment requiring a Federal Information Processing Standards (FIPS) encryption scheme, Microsoft .NET Framework 3.5 or later is required. Note that FIPS is a U.S. government initiative.

- Personal computer with Pentium-equivalent microprocessor (800 MHz or faster)
- At least 512 MB of RAM
- Free hard disk space for Microsoft .NET Framework if not already installed plus approximately 100 MB for Crystal Ball.
- Video graphics adapter and monitor with at least 1024x768 resolution and 16-bit color; a width of 1152 pixels is recommended
- Adobe Acrobat Reader 8.0 or later
Note: Crystal Ball is designed to meet Federal Desktop Core Configuration (FDCC) configuration requirements for Microsoft Windows XP and Vista according to the standards specified on the National Institute of Standards and Technology FDCC Web site, nvd.nist.gov/fdcc/index.cfm. For more information, search the Web for NIST FDCC.

International Support for Crystal Ball

This version of Crystal Ball is supported on non-English versions of Microsoft Windows with Microsoft Office in the same language. This latest release of Crystal Ball is available in English, Spanish, and Japanese. Crystal Ball, Microsoft Windows, and Microsoft Excel should all be installed in the same language. Users of other languages who want to use Crystal Ball with Windows Vista or Microsoft Excel 2007 or later must download and install the English version of Crystal Ball 7.3.x or 11.1.x.

If you are using this version on an English operating system with non-English regional settings, Oracle recommends that you install the Microsoft Multilingual User Interface (MUI) Pack for your version of Microsoft Office. (These are called Language Packs for Microsoft Office 2007 or later.) If you do not install the Microsoft MUI Pack, Microsoft Excel is displayed with the regional formatting and Crystal Ball is displayed with English formatting. For more information about the MUI Pack, see http://www.microsoft.com and search for MUI Pack on the Microsoft Web site.

Note: If you are using Crystal Ball on a non-English version of Microsoft Excel 2007 or later and you save a Crystal Ball model in .xls format to one of the Microsoft Excel 2007 or later formats (.xlsx, .xlsm, or .xlsm), a warning message is displayed. This message explains that the scripts in the workbook are an unsupported feature. Please ignore this message. The Crystal Ball data will be saved. For best results, Crystal Ball should be open when the model is saved.

Tip: If you switch back and forth between English and translated versions of Crystal Ball, preference strings—including folder names in the Distribution Gallery—may be displayed in the language that was previously installed. If this occurs, delete the localized preferences folder. The next time you start Crystal Ball, preferences will be displayed with strings in the current language. To delete the preferences folder, see “Finding Preferences Files” on page 27.

Microsoft .NET Framework 2.0, 3.0 and 3.5

The Microsoft .NET Framework is technology from Microsoft for developing secure and advanced Windows applications. Microsoft .NET Framework 2.0 (or 3.0 or 3.5 for Windows XP or Vista) must be installed on your computer before you can install and license this version of Crystal Ball. Crystal Ball must be locked to one of these supported versions of Microsoft .NET Framework to run properly. See “Using the Application Manager” on page 20.
For more information about the Microsoft .NET Framework, see Appendix B, “Microsoft .NET Framework.”

**Crystal Ball and Microsoft Windows Vista**

Files installed in the Windows Vista Program Files folder are opened as read-only files in Microsoft Excel, even though that property is not set. If you want to modify the Crystal Ball Examples files, save them under another name before attempting to run a simulation on them.

If you are using Windows Vista, familiarize yourself with the locations of folders mentioned in this guide, such as My Documents and Application Data. For example, My Documents is under C:\Users instead of C:\Documents and Settings as in earlier versions of Windows.

**Notes for Users of Earlier Versions of Crystal Ball**

**Important!** When you install this version of Crystal Ball on the same computer where an earlier released version of Crystal Ball 7.x or 11.x is installed, it will automatically be replaced by this version without prompting.

If you have modified Crystal Ball example models and saved them under the same name, they will be replaced by unmodified models. Be sure to rename them before you install this version of Crystal Ball.

For more information about migrating from earlier versions of Crystal Ball, see Appendix C, “Migrating From Earlier Versions.”

**Notes for Users of Crystal Ball Decision Optimizer**

If you have Crystal Ball Decision Optimizer, the Extreme Speed feature is activated by default. Certain models created in earlier versions of Crystal Ball might not run in Extreme speed. In this case, a warning message is displayed with information about the problem. You can downshift into Normal speed and continue with the simulation. For details, see the Extreme Speed appendix of the latest Oracle Crystal Ball User’s Guide.

**Additional Resources**

Oracle offers technical support, training, and additional resources to increase the effectiveness with which you can use Crystal Ball products.

For more information about all of these resources, see the Crystal Ball Web site at:

http://www.oracle.com/crystalball
Guidelines for Installing and Licensing Crystal Ball

Follow these steps to install and license Crystal Ball. The basic process is the same whether you are installing Crystal Ball with a permanent, textbook, classroom, or trial license:

1. Confirm that you have the required hardware and software, listed in “System Requirements” on page 7.
2. Read the information in Appendix B, “Microsoft .NET Framework,” and be sure the appropriate version of Microsoft .NET Framework is installed on your computer.
3. Be sure you have downloaded the correct Crystal Ball installation file, 32-bit or 64-bit. Notice that as you install and use Crystal Ball, some dialogs specify the bit level and some do not. Illustrations in this document show 32-bit dialogs.
4. Follow the instructions in the next section, “Installing Crystal Ball” on page 11 to install Crystal Ball.
5. Follow the instructions in “Licensing Crystal Ball” on page 14 to obtain a username and serial number, and then activate a Crystal Ball license.

Installing Crystal Ball

Note: Installation is similar for 32-bit and 64-bit versions of Crystal Ball products. Figures in this section show screens for 32-bit installation.

To install Crystal Ball products:

1. Log in to the computer that will run the Crystal Ball software.
2. Display the setup launcher for Crystal Ball in one of these ways:
If you have a Crystal Ball installation CD, insert it into your CD-ROM drive.

If you are installing a downloaded version of Crystal Ball, click the file that you downloaded. The file uncompresses its compressed contents.

The CD or the folder where you unzipped a downloaded Crystal Ball installation file (the installation source folder) contains these files:

- **Crystal Ball Installation Guide.pdf**—The *Oracle Crystal Ball Installation and Licensing Guide* in Adobe Acrobat .pdf format; if you need this file in .html format before installing Crystal Ball, you can download it from the Deployment page of the EPM Documentation Library on Oracle Technology Network. To display that page, see “Checking the README File” on page 26.

- **License Key Request Process.html**—The *Oracle Crystal Ball License Key Request Process*, which describes how to obtain and activate a Crystal Ball license code for use after the initial time-limited trial license expires.

- **README.htm**—An overview document that introduces Crystal Ball, describes how to display the latest Crystal Ball README (release notes) file on Oracle Technology Network, and lists third party license and copyright information.

- **A bit-specific setup executable file**—The setup launcher for Crystal Ball

3 In either the CD or the Crystal Ball installation source folder on your computer, double-click the setup executable file.

**Note:** If the installation fails or you see a warning message, there may be a 32-bit/64-bit incompatibility. See “Software and Hardware 32- and 64-Bit Compatibility Issues” on page 25.

4 When requested, select a setup language. The default is English (United States) except in cases where the language selection in Regional and Language Options on the Control Panel corresponds to one of the other installable Crystal Ball language versions.

**Note:** The language selection determines the language of the installation wizard, the product language, and the language of related assemblies (such as the Crystal Ball Application Manager) assuming that the appropriate language versions of Microsoft Windows and Microsoft Excel are used (see “International Support for Crystal Ball” on page 9).

A message appears and states that the installation .msi file is being extracted. This can take several minutes. When extraction is complete, the Crystal Ball installer launches (Figure 1).

**Note:** In rare cases, antivirus programs can slow down the installation and cause other unexpected results including the disappearance of installation dialogs or the display of dialogs with only the Cancel button available. In these cases, the installation is still active and should proceed as usual within 10 minutes.
In the installation wizard Welcome dialog, notice that any existing versions of Crystal Ball will be uninstalled and that Microsoft .NET Framework 2.0, 3.0, or 3.5 is required.

**Note:** If you do not have an acceptable version of Microsoft .NET Framework, or if you’re not sure, click Next. The installer will look for the required Microsoft .NET Framework components. If a required version of Microsoft .NET Framework is not installed, a dialog opens and enables you to access the Microsoft Web site to download it.

6 Click **Next** to continue.

The installer checks for previous versions of Crystal Ball.

7 If you are prompted to uninstall a previous version of Crystal Ball, click **Yes** both to uninstall and to confirm the uninstallation.

If you are prompted to uninstall shared files, select **No To All**. When the uninstallation has successfully completed, click **OK**.

8 In the **Customer Information** dialog, enter your name and organization (such as company or school) and click **Next**.

9 In the **Setup Type** dialog, select either **Complete (Typical)** or **Custom** setup.
   - **Complete (Typical)** installs the Crystal Ball product package plus HTML files of product documentation in the default installation folder.
   - **Custom** enables you to choose a different installation folder.

   **Note:** Oracle strongly recommends that you select **Complete (Typical)** and install to the default installation folder. If you are installing a 32-bit version of Crystal Ball on a 64-bit version of Microsoft Windows, the default installation folder is under C:\Program Files(x86).

10 Click **Next**.

11 In the **Ready to Install the Program** dialog, review the settings you have selected, then click **Install**.

12 **Figure 2** shows the InstallShield Wizard Completed dialog. When it opens, click **Finish**.
Crystal Ball is ready to use.

You can use Crystal Ball for up to 15 days without a license. At that time, you must enter a username and serial number to continue. You can enter the username and serial number when you start Crystal Ball, or you can choose a command from the Help menu or Help group in Microsoft Excel 2007 or later. See the following section, “Licensing Crystal Ball” on page 14.

### Licensing Crystal Ball

You can use Crystal Ball for 15 days without activating a license. During this time, Crystal Ball runs with a trial license. All features are available during the trial. The Crystal Ball Welcome screen is displayed each time you start Crystal Ball and indicates how many days remain on the trial license before it expires.

**Note:** These conditions are also true for Crystal Ball textbook licenses, except they are valid for longer than 15 days, usually 140 days, and must be activated as described in the following text.

To activate a purchased Crystal Ball license, you must obtain an Oracle license code and enter the code into Crystal Ball.

1. **Contact Oracle at licensecodes_ww@oracle.com to request a Crystal Ball license code.**
   
   In your email, include your name, email address, organization, Oracle Customer Support Identifier (CSI), or other unique identifier such as your Oracle customer ID number. If you are eligible for a license, you will receive a user name and serial number (the Crystal Ball license code).
Describe the environment where you will be installing Crystal Ball (desktop only or a multi-user machine). Also, if your corporation has a generic username, indicate this in the email.

2 Check your email for mail from Oracle with your Crystal Ball license code.

The email from licensecodes_ww@oracle.com will include your Crystal Ball user name and serial number.

When you receive your Crystal Ball license code, follow these steps to license Crystal Ball:

1 Locate the username and serial number you received from Oracle and start Crystal Ball.

2 In the Crystal Ball Welcome screen, click Activate License.

3 In the Username box of the Activate a License dialog, enter the username provided by Oracle. This is usually the email address you provided when you downloaded Crystal Ball.

4 In the Serial Number boxes, enter the serial number provided by Oracle.

The easiest way to do this is to copy the serial number from an email and paste it into the first Serial Number box (at the left). It automatically pastes correctly into the other boxes.

5 Click OK.

If you entered the serial number correctly, the license is activated instantly and a confirmation message is displayed. When you click OK in the confirmation message, the Crystal Ball Welcome screen is displayed. You can click Use Crystal Ball to start using Crystal Ball, or click another link. The Oracle Crystal Ball User’s Guide describes the other links. Notice that you can click View Existing Licenses in the Activate a License dialog to review feature and expiration information for your license.

Note: If you license Crystal Ball more than once, any previous licenses for version 11.1.1 or later are removed (although they are archived for display in the Existing Licenses dialog in case a previous license must be restored).

If you need to open the Activate a License dialog after you have either started Crystal Ball or activated your license, select Help, then Crystal Ball, and then Licensing in the Microsoft Excel menu bar. For Microsoft Excel 2007 or later, select Resources, and then Licensing in the Help group at the end of the Crystal Ball ribbon (following the Tools group).

To perform a silent install, see “Installing and Licensing Crystal Ball with a Script” on page 15.

Installing and Licensing Crystal Ball with a Script

When installing Crystal Ball on a number of computers, it can be helpful to install and license using a script.

If you have access to a Crystal Ball .msi installation file, you can use msiexec to run the installation by entering the following statement on one line:
msiexec /i "Oracle Crystal Ball.msi filename" CBUSERNAME="cbusername"
CBSERIALNUMBER=cbserialnumber /qn

- Oracle Crystal Ball.msi filename can be Oracle Crystal Ball (32-bit).msi or Oracle Crystal Ball (64-bit).msi, depending on whether you are installing 32-bit or 64-bit Crystal Ball.
- cbusername and cbserialnumber are the user name and Crystal Ball serial number for the particular individual whose product is being installed and licensed.

**Note:** Enclose *username* in quotes. Do not add spaces within the serial number.

If you only have access to the Crystal Ball setup executable file, possibly through a download from the Web, you can perform a silent installation and license at the same time with this statement:

```
setupfilename /s /v"CBUSERNAME="cbusername" CBSERIALNUMBER=cbserialnumber /qn"
```

- *setupfilename* includes the bit level (32-bit or 64-bit).

Related topics:
- To extract the Crystal Ball msi file from the setup executable file, see “Performing an Administrative Installation” on page 16.
- To automatically license Crystal Ball after Installation, see “Automatically Licensing Crystal Ball After Installation” on page 17.
- To uninstall Crystal Ball manually or using a script, see “Uninstalling Crystal Ball” on page 22.

**Performing an Administrative Installation**

The Crystal Ball installer is currently supplied as a setup executable file instead of an .msi file, required for some scripted installation processes. If you need to use the Crystal Ball .msi file, you can perform an administrative installation and store the extracted .msi file in a specified folder.

1. To perform an administrative installation and store the extracted installation files:
   1. In Microsoft Windows, select Start, and then Run.
   2. Enter `cmd` in the edit box to open a command prompt window.
   3. Use `cd` and `dir` to move to the folder where the Crystal Ball setup executable file is located.
   4. Enter the following at the command prompt: `setup_filename /a`
   5. When prompted for a file location, enter an existing or new folder such as `C:\temp`.

   The contents of the setup executable file, including the Crystal Ball .msi file, are extracted to the folder for review and further use.
Automatically Licensing Crystal Ball After Installation

You can use command line code to call CBLicenseActivator.exe and activate a user name and serial number combination.

To automatically license Crystal Ball:

1. In Microsoft Windows, select Start, and then Run.
2. Enter cmd in the edit box to open a command prompt window.
3. Use the cd command to browse to the bin folder beneath the Crystal Ball installation folder. By default, this is C:\Program Files\Oracle\Crystal Ball\bin.
4. At the prompt symbol, enter the following text:
   CBLicenseActivator.exe "username" serialnumber
   where username is the user name for the provided serial number.

**Note:** Enclose username in quotes and do not add spaces within the serial number.

If the license is activated successfully, a message is displayed beneath the command line. It indicates that the license was successfully activated and is displayed the username, serial number, version, and other information contained in the license, including licensed product features.

If a failure occurs, an exception message is displayed and the exit code for the command line is set to a non-zero value.
Installing and Licensing Crystal Ball
This chapter discusses post-installation steps along with issues you might encounter related to installation, licensing, and startup, and how to handle them.

**Starting Crystal Ball**

To start Crystal Ball, select Start, then All Programs, then Oracle Crystal Ball, then Crystal Ball in the Windows taskbar.

The following sections describe how to use the Crystal Ball Welcome screen and how to start Crystal Ball automatically with Microsoft Excel:

- “Welcome Screen” on page 19
- “Starting Automatically with Microsoft Excel” on page 20

**Welcome Screen**

When you start Crystal Ball, the Welcome screen is displayed. For information about the application type settings, click the button. If you select the Accessibility setting, it activates Accessibility mode for those who need assistive screen-reading technology. The Resources hyperlinks access information about Crystal Ball. Finally, you can click one of the icons to use Crystal Ball, open a Microsoft Excel workbook, or open the Crystal Ball Examples Guide. Click **Use Crystal Ball** to close the Welcome screen and move immediately to Microsoft Excel.

If you are using a trial version or other time-limited version of Crystal Ball, you can learn how many days remain before your license expires. If you already have a username and serial number for a permanent license but have not yet entered it, you can click a button to activate the license for your copy of Crystal Ball.
Starting Automatically with Microsoft Excel

There are several ways to set Crystal Ball so it starts automatically with Microsoft Excel. The following topics describe them:

- “Using the Application Manager” on page 20
- “Using the COM Add-Ins Manager” on page 20
- “Using the Crystal Ball Developer Kit” on page 21

Using the Application Manager

You can set Crystal Ball to start automatically with Microsoft Excel using the Crystal Ball Application Manager. For instructions, see “Working with the Crystal Ball Application Manager” on page 21 and ensure that the first setting, to automatically launch Crystal Ball with Microsoft Excel, is checked.

Using the COM Add-Ins Manager

You can start Microsoft Excel and then load or unload Crystal Ball using the COM Add-Ins Manager. You can also use this Microsoft Excel tool to set Crystal Ball to start whenever you start Microsoft Excel.

To use the COM Add-Ins Manager for these tasks, follow the instructions below for your version of Microsoft Excel:

- “For Microsoft Excel 2002 (XP) and 2003” on page 20
- “For Microsoft Excel 2007 or Later” on page 21

For Microsoft Excel 2002 (XP) and 2003

1. To load Crystal Ball within Microsoft Excel:
   - Follow these steps to display a list of available COM Add-ins:
     - On the View menu, point to Toolbars, and then click Customize.
     - Click the Commands tab.
     - In the Categories box, click Tools.
     - In the Commands box, select COM Add-Ins and drag it to a toolbar, for example, the Microsoft Excel menu bar.
     - On the toolbar, click COM Add-Ins to see a list of available add-ins.
   2. In the COM Add-Ins dialog, select Crystal Ball.
   3. Click OK to close the dialog and open Crystal Ball within Microsoft Excel.

To unload Crystal Ball from within Microsoft Excel, follow step 1 and then clear Crystal Ball in step 2.
For Microsoft Excel 2007 or Later

To load Crystal Ball within Microsoft Excel:

1. Click the Office button, or select the File ribbon.
2. Click the Microsoft Excel Options button, and then click the Add-Ins link.
3. In the Manage list at the bottom of the Add-Ins dialog, select COM Add-Ins and click Go.
4. In the COM Add-Ins dialog, select Crystal Ball.
5. Click OK to close the dialog and open Crystal Ball within Microsoft Excel.

To unload Crystal Ball from within Microsoft Excel, follow steps 1 through 3 and then clear Crystal Ball in step 4.

Using the Crystal Ball Developer Kit

If you are familiar with VBA programming, you can use the Crystal Ball Developer Kit to load and unload Crystal Ball from within Microsoft Excel. For more information, open the Oracle Crystal Ball Developer’s Guide and look up the calls listed in the “Opening and Closing Crystal Ball” section of Chapter 2.

Note: See “Working with the Crystal Ball Application Manager” on page 21 for information about enabling the Developer Kit.

Working with the Crystal Ball Application Manager

Use the Crystal Ball Application Manager for several purposes:

- To start Crystal Ball every time you start Microsoft Excel
- To ensure the appropriate version of the Microsoft .NET Framework is used
- To enable the Crystal Ball Developer Kit

There are separate versions for 32-bit and 64-bit versions of Crystal Ball.

To use the Application Manager:

1. Select Start, then All Programs, then Oracle Crystal Ball, then Application Manager.
2. In the Application Manager (Figure 3), make appropriate Microsoft Excel and Microsoft .NET Framework settings:
To start Crystal Ball each time you start Microsoft Excel, select **When starting Microsoft Excel, automatically launch Crystal Ball.**

If others are using Crystal Ball on the same computer, each of you can have separate startup settings.

- If multiple versions of Microsoft Excel are installed, select which version of Microsoft Excel should start with Crystal Ball.
- If several versions of Microsoft .Net Framework are installed, select **Use Microsoft .NET Framework 2.0, 3.0, or 3.5 (Recommended)** to ensure the appropriate version is used.

3 **Optional:** Microsoft Excel 2010 lists Crystal Ball Developer Kit functions with all of its functions when you use the Formula AutoComplete feature while typing a function name in a cell. If you are using Microsoft Excel 2010, an additional checkbox is displayed: **Load Developer Kit upon launch.** This checkbox is selected by default. Clear it to disable the Developer Kit and remove Crystal Ball functions from the AutoComplete list.

If you have disabled the Crystal Ball Developer Kit, enable it if necessary:

- If you want to use the Crystal Ball Developer Kit
- If Crystal Ball is not installed in the default location and you are experiencing problems with certain Crystal Ball tools
- If otherwise instructed to do so

4 **When settings are complete, click OK.**

**Note:** If you have set Crystal Ball to automatically start each time you set Microsoft Excel and then Crystal Ball fails to load successfully, the first checkbox in the Crystal Ball Application Manager is cleared. You must select the setting again to start Crystal Ball automatically with Microsoft Excel again.

### Uninstalling Crystal Ball

If you already have a version of Crystal Ball earlier than Crystal Ball 7.0, you are prompted to uninstall it. If you are replacing a released version of Crystal Ball 7.x or 11.x, it is automatically
uninstalled before this version of Crystal Ball is installed. However, if you have a beta or other unreleased version of Crystal Ball or if you want to uninstall without running the installer, you can uninstall Crystal Ball manually.

**Note:** You must also uninstall Crystal Ball manually if you are removing your current version of Crystal Ball and changing to an earlier version.

The following topics describe how to uninstall Crystal Ball:

- “Uninstalling Crystal Ball Manually” on page 23
- “Uninstalling Crystal Ball with a Script” on page 23

## Uninstalling Crystal Ball Manually

To uninstall Crystal Ball manually:

1. Log in to the machine that is running the Crystal Ball client software.
   
   You must have local administrator privileges.
2. Select **Start**, then **Settings**, then **Control Panel**, then **Add or Remove Programs**.
3. Select any Crystal Ball products from the list of programs.
4. Click **Change/Remove**.
5. In the confirmation dialog, click **Yes** to proceed with the uninstallation of the Crystal Ball product.
6. If you are prompted to remove shared files during the uninstallation process, select **No To All**. Uninstallation continues.
7. When the uninstallation completes, click **OK**.

## Uninstalling Crystal Ball with a Script

To perform a silent uninstall using the msiexec command:

1. In Microsoft Windows, select **Start**, and then **Run**.
2. In the edit box, enter `cmd`.
3. At the command prompt, type an msiexec uninstall command in this form:

   `msiexec /x <product.msi | {product GUID}> /qn`

   Use the name of the Crystal Ball msi, in place of `product.msi` or use the product GUID for the installed version of Crystal Ball. For more information on msiexec, visit [http://www.microsoft.com](http://www.microsoft.com) or type `msiexec ?` at the command prompt.

For more information about the Crystal Ball msi, see “Installing and Licensing Crystal Ball with a Script” on page 15.
Troubleshooting

Subtopics

- Disabled Add-ins Message
- Antivirus Warning Is Displayed During Installation
- System Clock Message Is Displayed
- Software and Hardware 32- and 64-Bit Compatibility Issues
- Running Crystal Ball from the Start Menu
- Problems with Crystal Ball Tools
- Checking the README File
- Viewing the Installation Log File and Other Log Files
- Finding Preferences Files

The following sections describe some error messages and other problems you might discover while you are installing or uninstalling Crystal Ball. Check here first for help with troubleshooting, then contact Technical Support if your question is not answered.

Disabled Add-ins Message

If Microsoft Excel closes unexpectedly when you are trying to start Crystal Ball, it is possible that Microsoft Excel has disabled the Crystal Ball add-in so that Crystal Ball will not start when you try again.

If you think this happened, select Start, then All Programs, then Oracle Crystal Ball, then Application Manager. Then, close the Application Manager. If Microsoft Excel disabled Crystal Ball, a warning message might open.

To re-enable Crystal Ball as a Microsoft Excel add-in in Microsoft Excel 2003 or earlier:

1. Select Help, then About Microsoft Office Microsoft Excel, then Disabled Items.
2. In the Disabled Items dialog, select crystal ball and click Enable.

To re-enable Crystal Ball as a Microsoft Excel add-in in Microsoft Excel 2007 or later:

1. Click the Office button or select the File ribbon.
2. In the menu window, click Microsoft Excel Options at the bottom of the window.
3. In the Microsoft Excel Options dialog, select Add-Ins.
4. In the Manage dropdown list at the bottom of the Add-Ins panel, select Disabled Items and click Go.
5. In the Disabled Items dialog, select crystal ball and click Enable.
Antivirus Warning Is Displayed During Installation

Crystal Ball uses the Microsoft installer, msiexec.exe, during the installation process. According to knowledgebase articles available on Microsoft’s Web site, certain antivirus applications identify the Microsoft installer as a malicious script.

If a message is displayed, warning that a malicious script is detected, you can select “allow this time only”.

System Clock Message Is Displayed

When you try to start Crystal Ball, you might see an error message that Crystal Ball cannot run because the system clock has been set back. This occurs when the system clock is set to a time and date earlier than when Crystal Ball was last started. If you see this message, set your system clock to the current time and date and try again.

Software and Hardware 32- and 64-Bit Compatibility Issues

The current release of Crystal Ball products can run on 32-bit or 64-bit computers with separate installers for each bit level. See “System Requirements” on page 7 for a discussion of compatible bit levels of Crystal Ball, Microsoft Excel, and Microsoft Windows.

If the bit levels of these applications and your computer are not compatible, silent failures and warning messages can occur. These errors are more likely if you have a 64-bit computer, but can also occur if you attempt to use the 64-bit installer on a 32-bit computer. Possible errors are as follows:

- **32-bit computer**—The installation fails with this message: “This installation package is not supported by this processor type. Contact your product vendor.”
  
  **Cause:** You have probably attempted to use the 64-bit Crystal Ball installer.

  **Solution:** Install again using the 32-bit Crystal Ball installer.

- **64-bit computer**—An “Undetected Excel” warning occurs and installation continues but Crystal Ball does not start.
  
  **Cause 1:** You have used the 32-bit Crystal Ball installer with 64-bit Microsoft Excel and Windows.

  **Solution 1:** Uninstall Crystal Ball and install again using the 64-bit installer.

  **Cause 2:** You have used the 64-bit Crystal Ball installer but have installed a 32-bit version of Microsoft Excel.

  **Solution 2:** Uninstall Crystal Ball and install again using the 32-bit installer.

Running Crystal Ball from the Start Menu

If you have more than one version of Microsoft Excel on your computer and are having trouble starting Crystal Ball with the version of Microsoft Excel you want to use, set the preferred version
with the Crystal Ball Application Manager. For instructions, see “Working with the Crystal Ball Application Manager” on page 21.

Problems with Crystal Ball Tools

“Working with the Crystal Ball Application Manager” on page 21 describes how you can disable the Crystal Ball Developer Kit to remove its functions from the AutoComplete list in Microsoft Excel 2010. If you have disabled the Crystal Ball Developer Kit and are having problems with some of the Crystal Ball tools, use the Application Manager to enable the Developer Kit again.

Checking the README File

For information about other known issues and their solutions, check the Crystal Ball README (release notes) file, available for download from the Enterprise Performance Management Documentation Library, posted on Oracle Technology Network (OTN).

To open or download this file:

1. Go to:

   http://www.oracle.com/technetwork/middleware/epm/documentation/
   index.html

2. Click View Library for version 11.1.2.

3. On the Deployment tab, locate Oracle Crystal Ball, Fusion Edition Readme, and then click the link.

Viewing the Installation Log File and Other Log Files

When you install Crystal Ball, a log of all of the settings and commands run during the installation of Crystal Ball is written to the %temp% folder of the computer with the file name cbmsiinstall.txt. If you have trouble installing Crystal Ball or receive Microsoft errors when using Crystal Ball, send this file to Crystal Ball Technical Support when you request assistance. To open the file, select Start, then Run and enter the following text into the Open dialog:

   %temp%\cbmsiinstall.txt

The log file opens in Notepad. You can save it to the Desktop or My Documents to make it easier to attach to your email.

To find other log files, set hidden folders and files to be visible in Microsoft Windows and then browse to C:\Documents and Settings\<your name>\Application Data\Oracle\Crystal Ball\11.0. If you are using Windows Vista or later, or just want to navigate quickly, enter the following location in My Computer or Windows Explorer: %appdata%\Oracle\Crystal Ball\11.0. Then, open the Logs folder to find the files.
Finding Preferences Files

When you set global preferences, such as run preferences and user-defined folder names in the Distribution Gallery, the settings are stored in preferences files. To locate preferences files, set hidden folders and files to be visible in Microsoft Windows and then browse to C:\Documents and Settings\<your name>\Application Data\Oracle\Crystal Ball 11.0. If you are using Windows Vista or just want to navigate quickly, enter the following location in My Computer or Windows Explorer: %appdata%\Oracle\Crystal Ball\11.0. Then, open the Store folder to find the files.

Learning More About Crystal Ball

If you have questions or concerns about Crystal Ball products, visit the Crystal Ball Web site for current news and contact information:

http://www.oracle.com/crystalball
This appendix answers some frequently asked questions about Crystal Ball 11.1.x installation, licensing, and start-up. Start your trouble-shooting efforts here.

When I try to install Crystal Ball, my antivirus software warns that a malicious script is detected. Why?

Crystal Ball uses the Microsoft installer, `msiexec.exe`, during the installation process. Certain antivirus applications identify the Microsoft installer as a malicious script. If the warning is displayed, you can choose to "allow this time only."

Can I install Crystal Ball with a script?

Yes. You can use the Microsoft installer, `msiexec.exe`. For instructions, see “Performing an Administrative Installation” on page 16.

How has licensing changed since Crystal Ball 7.3.x?

Crystal Ball 7.x versions earlier than version 7.3.2 used an encrypted license file on each user’s machine to determine which features were licensed. Information about each computer was sent back and forth over the Internet before licensing was complete. In Crystal Ball 11.x, an Internet connection is not required and the licensing scheme is different. A license file is no longer stored on your computer.

Who needs a Crystal Ball license?

Everyone needs a license to run Crystal Ball products, except for a trial version. If you are upgrading from a previous version of Crystal Ball, your old license will not work. You will need to activate a new license for Crystal Ball 11.x.

Do I need local administrator privileges to license my Crystal Ball product?

Yes, you still need local administrator privileges to activate a per-machine license. However, you do not need to be an administrator to activate per-user licenses, the most common type.

What is a license serial number?

A license serial number is a unique identifier that indicates the features to include in your Crystal Ball license. If you need to upgrade from a basic Crystal Ball product to one with more features, you need to enter a different serial number so the new features will be available to you. For specific information about how to license Crystal Ball, see “Licensing Crystal Ball” on page 14.
Why do I see the Crystal Ball toolbar but Crystal Ball will not work?

If you are using Microsoft Office XP or Office 2003, the Crystal Ball file can get disabled because of an error upon startup. If Crystal Ball is disabled, the Crystal Ball toolbar is displayed, but Crystal Ball itself is not loaded.

➢ To re-enable Crystal Ball if it is disabled (or to see whether it is disabled in the first place), follow the instructions in “Disabled Add-ins Message” on page 24.
Introduction

The Microsoft .NET Framework is technology from Microsoft for developing secure and advanced Windows applications. This appendix describes the Microsoft .NET Framework and contains an FAQ with information that can help you troubleshoot problems that involve it.

About Microsoft .NET Framework

Microsoft .NET Framework 2.0 (or 3.0 or 3.5 for Windows XP or Vista) must be installed on your computer before you can install and license this version of Crystal Ball. Crystal Ball must be locked to one of these supported versions of Microsoft .NET Framework to run properly. See “Working with the Crystal Ball Application Manager” on page 21.

If a supported version of .NET Framework is not installed, you will have an opportunity to download and install an appropriate version from www.microsoft.com when you install Crystal Ball.

**Note:** Supported versions of Microsoft Windows XP (listed in “System Requirements” on page 7) require Windows XP Service Pack 3.

If a supported version of .NET Framework is not installed, an appropriate version of Microsoft .NET Framework is installed when you install Crystal Ball.

- To see if .NET Framework 2.0, 3.0, or 3.5 is installed on your computer:
  1. Open the Windows Control Panel.
  2. Click the Add or Remove Programs icon.
  3. Look for Microsoft .NET Framework 2.0, 3.0, or 3.5 in the list.
Important! You must have version 2.0 (or 3.0 or 3.5, if you are using a version of Windows XP or Vista). Be sure “Use Microsoft .NET Framework 2.0, 3.0, or 3.5 (Recommended)” is selected in the Crystal Ball Application Manager (“Working with the Crystal Ball Application Manager” on page 21).

Note: You can have more than one version of Microsoft .NET Framework, as long as one of them is a supported version. If you have Microsoft Windows Vista, Microsoft .NET Framework 3.0 or 3.5 is automatically installed. Microsoft .NET Framework 2.0 is included as a part of Microsoft .NET Framework 3.0 on Windows XP and Vista. Also, Microsoft .NET Framework 2.0 and 3.0 are included as a part of .NET Framework 3.5 on Windows XP and Vista.

If a supported version of Microsoft .NET Framework is not installed, follow the steps in the next section to install it.

Note: If you are installing Crystal Ball on a non-English operating system, you should install the .NET Framework Language Pack for your particular language and version of .NET Framework if you want to view any .NET-level error messages in that language. For more information, search on http://www.microsoft.com.

Installing Microsoft .NET Framework 2.0

You can install Microsoft .NET Framework 2.0 from Microsoft’s Web site. It can also be downloaded automatically during installation.

To install from Microsoft’s Web site:

2. Click the Downloads and Trials link, currently in the navigation bar at the edge of the window.
3. Select Download Center.
5. Locate this product in the search results and click the link: .NET Framework Version 2.0 Redistributable Package (x86).

Note: When this guide was prepared, the link displayed directly on the Microsoft Download Center page in a section titled Popular Downloads and could be downloaded without searching.

6. Double-click the downloaded file dotnetfx.exe to install .NET Framework 2.0.

Microsoft .NET Framework FAQs for Crystal Ball 11.1.x

Here are some questions and answers about Microsoft .NET Framework, the Crystal Ball development platform.
What is the Microsoft .NET Framework?

The Microsoft .NET Framework is Microsoft’s integrated services strategy to connect information, people, systems, and devices through software. Integrated across the Microsoft platform, Microsoft .NET technology provides the ability to quickly build, deploy, manage, and use connected, security-enhanced solutions with integrated deployment services. Microsoft .NET-connected solutions enable businesses to integrate their systems more rapidly and in a more agile manner and help them realize the promise of information anytime, anywhere, on any device.

The Microsoft .NET Framework is a general-purpose software development platform, similar to Java. At its core is a virtual machine that turns intermediate language (IL) into machine code. High-level language compilers for C#, VB.NET and C++ are provided to turn source code into IL. C# is a new programming language, similar to Java. An extensive class library is included, featuring all the functionality one might expect from a contemporary development platform - Windows GUI development (Windows Forms), database access (ADO.NET), Web development (ASP.NET), Web services, XML, and so on.

Why does Crystal Ball need the Microsoft .NET Framework to install?

The Microsoft .NET Framework supplies the underlying architecture upon which Crystal Ball is built. Our toolbars and integration components all require the Microsoft .NET Framework to function properly. Crystal Ball will not install without an appropriate version of the Microsoft .NET Framework installed on the host computer.

What versions of the Microsoft .NET Framework are available?

Currently, five core versions of the Microsoft .NET Framework have been released:

- The final versions of the 1.0 SDK and Runtime were made publicly available in January 2002.
- Microsoft .NET Framework 1.1 was released in April 2003, and was mainly bug fixes for 1.0.
- Microsoft .NET Framework 2.0 was released in November 2005 and contains: 64-Bit Platform Support, Access Control List Support, new features in ADO.NET, significant enhancements to all areas of ASP.NET, Authenticated Streams, COM Interoperability Services Enhancements, and more. Please see the Microsoft Web site for further information. Service Pack 1 for the Microsoft .NET Framework 2.0 was released in November 2007.
- Microsoft .NET Framework 3.0 was released in late 2006 - early 2007 and is installed with Microsoft Windows Vista. Service Pack 1 for the Microsoft .NET Framework 3.0 was released in November 2007.
- Microsoft .NET Framework 3.5 was released in November 2007.
What version of Microsoft .NET Framework is required?

Crystal Ball versions 11.1.x require .NET Framework 2.0, 3.0, or 3.5.

Can different versions of the Microsoft .NET Framework exist on the same machine?

Yes, different versions of the Microsoft .NET Framework can exist on the same machine. In the case of multiple versions of the .NET Framework, you need to run the Crystal Ball Application Manager and directly lock Crystal Ball to the appropriate version of the .NET Framework. To access the Crystal Ball Application Manager, select Start, then All Programs, then Oracle Crystal Ball, then Application Manager (see “Working with the Crystal Ball Application Manager” on page 21).

How can I tell if Microsoft .NET Framework is installed on my computer?

Start by checking the Add/Remove Programs dialog in the Windows Control Panel. Look for Microsoft .NET Framework followed by a version number. If you have Windows Vista installed, you also have Microsoft .NET Framework 3.0.

What if I try to install Crystal Ball and the correct version of Microsoft .NET Framework is not installed?

A dialog opens and enables you to access the Microsoft Web site: http://www.microsoft.com

You can search for Microsoft .NET Framework and download it from a Microsoft link.
Introduction

This appendix is for Crystal Ball users who are migrating from earlier versions of Crystal Ball or Microsoft Excel. It contains information about converting your models and troubleshooting conversion issues.

Migrating From Crystal Ball Versions Earlier Than 7.0

If you load a model built in Crystal Ball 4.x or 2000.x (5.x), this version of Crystal Ball converts it the first time it is loaded and run.

Note: If you open a workbook created in Crystal Ball 2000.x (5.x) in Microsoft Excel 2007 or later with Crystal Ball loaded and either load the Crystal Ball data (for example, with the Define, then Select... command) or attempt to save the workbook, the data is converted to the current Crystal Ball format. To preserve the Crystal Ball data in 5.x format, avoid opening the workbook in Microsoft Excel 2007 or later.

Every effort will be made to convert data into an equivalent form. Where this is not possible, an error message is displayed stating that data in the specified worksheet could not be converted. An error log is written to the same folder where the model is stored. The log is named worksheet name.xls.CB.txt. The log file can be opened in a text editor for review.

The following are some potential causes of incompatibility:

- Models are protected and must be unprotected with a Crystal Ball Developer Kit macro: CB.WorksheetProtection(ByVal aPassword As String, ByVal aTurnOn As Boolean). Instead, you could be sure the worksheet is unprotected by selecting Tools, then Protection, then Unprotect Sheet before you load it into Crystal Ball or run a simulation.
Forecasts can no longer be defined in the same cell as assumptions and decision variables and will be discarded when converting data.

Some distributions have different input parameters or are otherwise changed: the beta distribution Scale parameter is changed to the Minimum and Maximum parameters, the hypergeometric distribution Probability parameter is changed to the Success parameter, the extreme distribution is split into the minimum extreme and maximum extreme distributions, and the lognormal distribution has an additional parameter, Location.

**Note:** The Location parameter was added to the lognormal distribution in Crystal Ball version 11.1.1.x, so compatibility issues with this distribution can occur with all Crystal Ball 7.x versions as well as earlier versions. If a Crystal Ball model with a non-zero lognormal distribution Location parameter is opened in a Crystal Ball version prior to 11.1.1.x, the Location is handled as if it were zero.

Some Developer Kit calls or constants are obsolete, have changed data types, or are not implemented for this release.

Some Crystal Ball spreadsheet functions are not implemented for this release.

In addition, models might not run because they reference CB.xla or CB7.xla instead of cbdevkit.xla in VBA. For details, see “Developer Kit Issues” on page 39. If you still want to use the model in an earlier version of Crystal Ball, save it in this version of Crystal Ball with a different name and check the reference to CB.xla before you load it back into the earlier version.

**Note:** Be aware also that models created or saved in the current version of Crystal Ball cannot be opened and used in versions of Crystal Ball earlier than Crystal Ball 7.0. Also, preferences saved in Crystal Ball 11.1.x or later will not be applied to Crystal Ball 7.3.x and earlier versions.

If you are using Crystal Ball with Microsoft Excel 2007 or later and share files with users of earlier versions of Microsoft Excel, there can be other file compatibility issues. You must remember to save files in .xls format for use with Microsoft Excel 2003 and earlier.
Other Compatibility Issues

Subtopics

- Extreme Speed
- Data Conversion
- Distribution Fitting
- Starting Crystal Ball Automatically
- Crystal Ball Microsoft Excel Functions
- Converting Models with CB.Get... Functions Defined as Forecasts
- User-Defined Macros
- Developer Kit Issues
- Backward Compatibility in Microsoft Excel 2003 and Earlier Versions of Microsoft Excel

Extreme Speed

If you have Crystal Ball Decision Optimizer with Extreme Speed, this feature is activated by default. Certain models created in earlier versions of Crystal Ball might not run in Extreme speed. If so, a warning message is displayed with information about the problem. You can downshift into Normal speed and continue with the simulation. For details, see the Extreme Speed appendix of the latest Oracle Crystal Ball User’s Guide.

Data Conversion

If you load a model from an earlier version of Crystal Ball, every effort is made to convert data into the current form if conversion is necessary. Where this is not possible, an error message is displayed stating that data in the specified worksheet could not be converted. An error log is written to the same folder where the model is stored. The log is named worksheet name.xls.CB.txt. For example, if a conversion error occurs in Model2.xls, the log file is named Model2.xls.CB.txt and can be opened in a text editor for review.

Distribution Fitting

If a model created in a version of Crystal Ball earlier than 11.1.1.0.00 is loaded into Crystal Ball version 11.1.1.0.00 or later, previous default settings (All Continuous and Anderson-Darling) are converted into current default settings (AutoSelect and AutoSelect).

Starting Crystal Ball Automatically

To set automatic startup for Crystal Ball 7.2.x and earlier versions of Crystal Ball 7.x, users were required to use the Crystal Ball Application Manager. Using Tools, then Add-Ins in Microsoft Excel no longer worked for those versions.

You can use the Application Manager with this version of Crystal Ball. However, this version also supports the use of Microsoft Excel commands and the Crystal Ball Developer Kit to load
and unload Crystal Ball into Microsoft Excel. For more information, see “Starting Automatically with Microsoft Excel” on page 20 and the current version of the Oracle Crystal Ball Developer’s Guide.

Crystal Ball Microsoft Excel Functions

To view Crystal Ball distributions and macros implemented as Microsoft Excel functions in this version of Crystal Ball, select Insert, then Functions. Then, open the Crystal Ball function category. The currently-implemented functions display, starting with CB. The probability distribution functions are described in Appendix A of the Oracle Crystal Ball User’s Guide and the Crystal Ball online help. The remaining functions, beginning with CB. and ending in FN, such as CB.GetAssumPercentFN, are described in the current Oracle Crystal Ball Developer’s Guide.

Note: Displaying Crystal Ball functions in Microsoft Excel 2010 works somewhat differently. For more information, see “Working with the Crystal Ball Application Manager” on page 21.

Converting Models with CB.Get... Functions Defined as Forecasts

Users of Crystal Ball 7.0 or earlier versions occasionally used the CB.Get... functions in forecast cells to include current data, for example, in an optimization. If you try to use one of these models in Oracle Crystal Ball Decision Optimizer, Fusion Edition with Extreme Speed, the model will generate compatibility errors.

To change these models so they are compatible with Extreme Speed, remove the CB.Get... functions from forecast cells. Instead, use the Auto Extract tab in the expanded Define Forecast dialog or Forecast Preferences dialog to automatically extract forecast data to another cell following a simulation. Then you can reference that cell in a forecast formula to retain compatibility while using current data.

If you do not want to make these changes but still want to run the model in Normal speed, you will need to uncheck Stop On Calculation Errors in the Run Preferences dialog to continue running despite the calculation errors (#VALUE’s) that will occur for many of the returned statistics in the first 5 to 10 trials of the simulation.

User-Defined Macros

Global settings to identify user-defined macros no longer exist in Crystal Ball 7.x or 11.x. If users want to run certain macros for all simulations, they need to make sure that the workbook containing those macros is open in Microsoft Excel. This change means that users can run specific macros only for certain models and are no longer required to turn the macros on and off depending on the model that is being run. For details, see the section on user-defined macros at the end of Chapter 5 of the current Oracle Crystal Ball User’s Guide.
Developer Kit Issues

Some models created in versions of Crystal Ball earlier than 7.0 might not run because they reference CB.xla instead of cbdevkit.xla in VBA. To fix this, in the VBA editor, set the reference to cbdevkit.xla (in the main Crystal Ball installation folder -- by default, C:\Program Files\Oracle\Crystal Ball) and uncheck the reference to CB.xla.

For Predictor, now shipping as part of Crystal Ball 11.1.x, the new file to reference is CBCOMDevKit.tlb. For information about necessary code changes, see the current Oracle Crystal Ball Developer’s Guide.

Backward Compatibility in Microsoft Excel 2003 and Earlier Versions of Microsoft Excel

If a file supports features that are not available in previous versions of Crystal Ball 7.x or 11.x, those features will be ignored in the earlier version, but the file will still open and run using available features.

For example, if you try to load Crystal Ball 7.3.x or later results into an earlier version of Crystal Ball, an error message might display explaining that the Crystal Ball data contained in the selected result set cannot be loaded. One reason this message could appear is that a new chart type, scatter charts, was added in Crystal Ball 7.3. Or, the error message might be triggered by the betaPERT distribution, new in Crystal Ball 7.3. In these cases, it could be helpful to load the entire model, not just saved results. If you load a model containing scatter charts or the betaPERT distribution into an earlier version of Crystal Ball, the model runs and the new charts or distribution are ignored.

Microsoft Excel 2007 and Later Compatibility and Conversion Issues

Starting with Microsoft Excel 2007, workbooks can be saved in several file formats that are radically different from those for previous versions of Microsoft Excel. This version of Crystal Ball has been carefully designed to preserve Crystal Ball data in existing workbooks as long as you follow a few simple rules when opening and saving files created in previous versions of Microsoft Excel.

The following information is for those who are using Crystal Ball 7.3 or later versions of Crystal Ball with Microsoft Excel 2007 or later. Crystal Ball 7.2.2 and earlier versions of Crystal Ball are not supported on Microsoft Excel 2007 or later.

New Microsoft Excel 2007 File Types

Starting with version 2007, Microsoft Excel supports three main new XML-based file formats:

- XLSX—Office Open XML format without support for VBA or macros
- XLSM—Office Open XML format including support for VBA or macros
- XLSB—Office Open binary format (in an XML structure that contains binary data instead of XML data)

By default, any new workbooks created in Microsoft Excel 2007 or later are created in one of these file formats. There are other formats for add-ins and templates, but these are the only relevant Microsoft Excel 2007 or later formats for workbooks.

You can also open older Microsoft Excel 97-2003 workbooks with file extension XLS in Microsoft Excel 2007 or later. These older workbooks are opened in a special compatibility mode (identified by "[Compatibility Mode]" after the filename in the window title) so you can operate on them in much the same manner as with newer file formats. You cannot, however, use any of the new Microsoft Excel 2007 or later features such as the expanded grid size, new chart types, and so on.

You can use the Save As command in Microsoft Excel 2007 or later to convert your older XLS files to one of the new file formats or, optionally, to convert the new formats to XLS.

**New Crystal Ball Data Format**

Beginning with Crystal Ball 7.3.x, Crystal Ball stores its data in a new format within Microsoft Excel 2007 or later files. Older Crystal Ball data formats are converted to the new format the first time you perform a Save or Save As command in Microsoft Excel 2007 or later. Crystal Ball must be loaded when you save the file.

Before converting older XLS files to one of the new Microsoft Excel 2007 or later formats, Oracle recommends that you keep backup copies of your older workbooks for safekeeping.

**Portability of Analysis Toolpak Functions in Microsoft Excel 2007 or Later**

With Microsoft Excel 2003 and earlier, a model created on an English-language version of Windows with English Analysis Toolpak functions was not portable to other language environments since the function name would not be recognized. This is no longer a problem in Microsoft Excel 2007 or later since the Analysis Toolpak is a part of the core XLL.

**Microsoft Excel 2007 or Later Compatibility with Earlier Versions of Crystal Ball**

Crystal Ball 7.2.2 and earlier cannot read data created by this version of Crystal Ball in the new Microsoft Excel 2007 or later formats. To maintain compatibility with users of Crystal Ball 7.2.2 or earlier versions running in Microsoft Excel 2002 (XP) or 2003, you should keep your workbooks as XLS files (Microsoft Excel 97-2003 format).

If you open a Microsoft Excel 2007 or later file in Crystal Ball 7.2.2 and attempt to define assumption data, this error message is displayed:
You must first save your workbook ‘name’ in a new file format (Microsoft Excel 97 or later).

Crystal Ball 7.2.2 users cannot create the specified XLS file themselves. Instead, you must obtain a version of the file saved in XLS format from a Crystal Ball 7.3 user.

Be sure Crystal Ball 7.3 or later is open whenever you save a Microsoft Excel 2007 or later model with Crystal Ball data as an XLS file to share with 7.2.2 users.

**Note:** Warning! If you are saving to .xls format, be sure it is Microsoft Excel 97-2003 format and not the earlier version. If you accidentally save it to Microsoft Excel 5.0 or Microsoft Excel 95 .xls format when Crystal Ball is NOT open, data is lost.

### Converting to Microsoft Excel 2007

To convert your XLS workbooks to one of the new file formats, Oracle recommends that you first create a backup copy of the XLS workbook and then follow these steps:

1. Run Microsoft Excel 2007 with Crystal Ball loaded.
2. Open an XLS workbook.
3. Select **Save As** from the Office button. The Save As command has a submenu where you can select a different file format, or you can use the Save As dialog to select the file format.

   After you save the file to one of the new file formats, the Crystal Ball data is converted to the Microsoft Excel 2007 format.

If you saved your XLS workbooks to one of the new file formats without Crystal Ball 7.3.x or later loaded, you may see the following warning message:

This workbook contains one or more of the following features that are not supported by the selected file format:

* Script objects

To save the workbook without these features, click OK.

To keep using these features, click Cancel, and then select a file format that supports these features.

This message is normal and you should click OK to proceed with the operation. Crystal Ball will convert its data to the Microsoft Excel 2007 or later format the next time you save the file with Crystal Ball 7.3.x or later loaded.
Note: Pre-7.0 Crystal Ball data is converted in Microsoft Excel 2007, even if you save it back to an .xls file. If you open a workbook created in Crystal Ball 2000.x (5.x) in Microsoft Excel 2007 with Crystal Ball loaded, the data is converted to the current Crystal Ball format. Even if you save it back to a workbook with .xls extension, the Crystal Ball data remains in the current Crystal Ball format. To preserve the Crystal Ball data in pre- 7.0 format, avoid opening the workbook in Microsoft Excel 2007. However, if you open a workbook created in Crystal Ball 2000.x (5.x) in Microsoft Excel 2007 without Oracle Crystal Ball, Fusion Edition loaded, and then save it to a Microsoft Excel 2007 or later format, the Crystal Ball data is lost.

Using the Microsoft Excel 2007 Convert Command

You can also convert XLS workbooks to the new Microsoft Excel 2007 or later formats using the Convert command under the Office button in Microsoft Excel 2007. Crystal Ball data is converted to the current format as soon as the workbook is saved.

The Convert command, however, has a side effect of removing the older XLS file in the process. Oracle recommends that you use the Save As command to maintain a backup copy of the XLS file.

Rare Data Loss Scenarios

In a few rare cases, there is potential to lose Crystal Ball data during a series of conversion processes.

To avoid virtually all problems, have Crystal Ball 7.3.x or later open whenever files with Crystal Ball data is opened and saved.

If you do this, you will probably never experience these difficulties. However, you should be aware of the following cases so you can avoid them.

Forward, Then Backward Save

Avoid this situation because data loss could occur if you:

1. Run Microsoft Excel 2007 or later without Crystal Ball 7.3.x or later loaded.
2. Save an XLS workbook to one of the Microsoft Excel 2007 or later file formats.
3. In a separate session, run Microsoft Excel 2007 or later without Crystal Ball 7.3.x or later loaded again.
4. Open the workbook that was created in step 2 and resave it back to the XLS format.

Save and Resave in Microsoft 2003 or Earlier

Avoid this situation because data loss could occur if you:

1. Save an XLS workbook to one of the Microsoft Excel 2007 or later file formats.
2 Open the workbook that was created in step 1 and resave it either in the same file format or back to XLS.

If one of these scenarios occurs, contact Customer Support for further assistance. For contact information, see http://www.oracle.com/crystalball