Purpose

This document includes important, late-breaking information about this release of Oracle Crystal Ball, Fusion Edition. Review this Readme thoroughly before installing Oracle Crystal Ball.

It is our goal to make Oracle products, services, and supporting documentation accessible to the disabled community. Oracle Hyperion Enterprise Performance Management System supports accessibility features, which are described in Appendix F of the Oracle Crystal Ball User’s Guide. This readme file is accessible in this release in HTML format.

New Features

See the Oracle Crystal Ball New Features Guide, available on the Introduction tab for the current Oracle EPM documentation library at the following URL:

Translation Support

The user interface of this version of Oracle Crystal Ball is translated into Spanish and Japanese. Documentation is not currently translated.

Installation Information

Installation instructions are included in the Oracle Crystal Ball Installation and Licensing Guide. Also see License Key Request Process.html for information about obtaining and applying a Crystal Ball license code. Review this information thoroughly before installing Oracle Crystal Ball.
Known Issues

The following issues are the noteworthy known issues of this release.

Crystal Ball Issues

- **Only Microsoft .NET Framework 2.0, 3.0, or 3.5 can be used**
- **Extreme Speed issues**
- **Restored results are not resaved with simulation results**
- **If an assumption's input parameter refers back to the assumption cell, the reference is static**
- **“System clock set back” errors**
- **Restored results with capability metrics**
- **Crystal Ball with custom menus and toolbars**
- **Incompatibilities when running models in early versions of Crystal Ball 7.x**
- **Using Crystal Ball with multiple versions of Microsoft Excel installed**
- **Distribution change note**
- **Issues concerning Crystal Ball for EPM integration with Smart View and Workspace**
- **Issues concerning Crystal Ball for EPM integration with Oracle Hyperion Strategic Finance**
- **Other known issues**

**Only Microsoft .NET Framework 2.0, 3.0, or 3.5 can be used**

If you have Microsoft .NET Framework 1.x installed as well as .NET Framework 2.0, 3.0, or 3.5, warning messages might appear when you try to start this version of Crystal Ball. You might also find that Crystal Ball does not load at all when you start it. If this happens, choose Start, then [All] Programs, then Oracle Crystal Ball, and then Application Manager. Be sure this setting is checked in the Crystal Ball Application Manager: "Use Microsoft .NET Framework v2.0, 3.0, or 3.5 (Recommended)." Then, click OK and restart Crystal Ball.

Notice that errors can result if you try to check the .NET Framework setting in the Application Manager and do not have the required permissions to make that change.

If you have not yet installed Microsoft .NET Framework 2.0, 3.0, or 3.5, follow the instructions in the current Oracle Crystal Ball Installation and Licensing Guide, located in a subfolder of the folder where Crystal Ball is installed (by default, the path to open this Guide is C:\Program Files\Oracle\Crystal Ball\Docs\Crystal Ball Installation Guide\index.html). If you have not yet installed Crystal Ball, you can view a copy of the guide online. Browse to this URL online: http://www.oracle.com/technology/documentation/epm.html.

Then, click View Library for the current version of Oracle Crystal Ball, select the Deployment tab, and then click either the pdf or html hyperlink for Oracle Crystal Ball, Fusion Edition Installation and Licensing Guide.

If you attempt to install Crystal Ball and a supported version of Microsoft .NET Framework is not installed, a message may display to warn you of a download error. If this occurs, go to http://www.microsoft.com to download a supported version of the Microsoft .NET Framework: Microsoft .NET Framework 2.0 with Service Pack 2 (or Microsoft .NET Framework 3.0 or 3.5 with Windows XP versions or Vista). For more information, refer to the Microsoft .NET Framework sections in the current Oracle Crystal Ball Installation and Licensing Guide (9385253).

**Note:** Microsoft .NET Framework 3.0 or 3.5 is installed as part of Microsoft Windows Vista.

**Extreme Speed issues**

If it is available to you, Extreme Speed is switched on by default. While Crystal Ball simulations run 10 to 100 times faster at Extreme Speed, there are a few compatibility issues to consider.
For more information on Extreme Speed, see the appropriate appendix of the current Oracle Crystal Ball User's Guide or search for Extreme Speed in online help. The following Extreme Speed issues are not discussed in the User's Guide:

- As reported in the current Oracle Crystal Ball User’s Guide, Crystal Ball supports LOOKUP and OFFSET functions in both Normal and Extreme speed. However, if you use more than a thousand in a model, this can slow down the initial parsing time and cause the simulation to run slowly. Other unexpected errors in models using OFFSET functions in Extreme speed can be fixed by replacing OFFSET functions with INDEX functions (7402278).

- Currently, non-English names of the Analysis Toolpak functions are not supported in Extreme Speed simulations in versions of Excel older than Excel 2007. In Excel 2007, the Analysis Toolpak is included as part of Excel.

- In rare situations, unexpected errors can occur when running in Extreme Speed (7402278, 7406022) and creating reports with Excel charts in Microsoft Excel 2007 running on Windows Vista (7407372). **Workaround:** Run the model at Normal speed and use Crystal Ball charts when creating reports.

- Results for the IRR, NPV, XIRR and XNPV functions in Extreme Speed may be slightly different from the built-in Excel 2007 functions that are used in Normal Speed because of a fix for leap-year dates (8682173).

**Restored results are not resaved with simulation results**

If restored results are used with results from the current simulation – in an overlay chart, for example – the restored results are not resaved with Analyze, Save Results. When the saved results are later restored, only the results from the current simulation are restored.

Likewise, if preferences – for example, chart preferences – are set for the restored results, those preference settings are not saved either.

**If an assumption's input parameter refers back to the assumption cell, the reference is static**

If a cell reference refers to an assumption cell, the cell reference is replaced by the base value (value at the start of the simulation) for the duration of the simulation. This makes the cell reference static.

"System clock set back" errors

If a computer's system clock is set back at some point to a date earlier than the current date, Crystal Ball's licensing system recognizes this. When you try to start Crystal Ball with a time-limited license under these conditions, startup fails and a "system clock set back" message appears. Set the clock to the current time and try again. If your Crystal Ball license has not expired and the problem still occurs, contact technical support.

**Restored results with capability metrics**

The following rules apply when you calculate capability metrics, store the results in a .cbr file, and then restore the results:

1. The restored results use the preference settings on the machine where the results are restored, which might be different from the settings when the original simulation was run and stored.
2. Crystal Ball refits the data when the results are restored, so results might differ somewhat from the original results.

**Crystal Ball with custom menus and toolbar**

If you create custom menus and toolbars for Excel in folders Excel loads at startup, the Crystal Ball menus and toolbars are removed. You can still use the Crystal Ball Developer Kit to run Crystal Ball but the standard user interface cannot be restored and used unless the custom files are specially set up to allow this.
Incompatibilities when running models in early versions of Crystal Ball 7.x

Certain Crystal Ball distribution types are not compatible with pre-7.1 versions of Crystal Ball 7.x or 11.x. For example, if you create a model in Crystal Ball 7.2 or later that includes linked custom distributions, #NUM! appears in the assumption cells when you run a simulation in Crystal Ball 7.0 at Normal Speed with the following custom distribution types: continuous range, discrete range, sloping continuous range, and sloping discrete range.

Using Crystal Ball with multiple versions of Microsoft Excel installed

Crystal Ball always runs against the default version of Microsoft Excel, which is typically the most recently installed version. To run Crystal Ball with another version of Excel, choose Start, then [All] Programs, then Oracle Crystal Ball, and then Application Manager. Then, choose the correct version of Excel in the dropdown list and click OK.

Distribution change note

In Crystal Ball 7.3.x, fitting routines were changed for some distributions (gamma, lognormal, Weibull and Student's t) to calculate better distribution parameters for a range of data points within a reasonable time. These changes might affect the fitting results for your data. The new routines have been tested and give results that are close to the previous results and compare favorably with other commercial applications.

The fitting routine for the Student's t distribution has been changed to improve performance with simulations greater than 3000 trials. If the number of data points is more than 3000, the new algorithm randomly samples 3000 points from the original set and runs the fitting routine on that. For simulations with more than 3000 trials, accuracy can drop slightly because the full dataset is not used in fitting.

Issues concerning Crystal Ball for EPM integration with Smart View and Workspace

Starting with Oracle Crystal Ball Enterprise Performance Management (Crystal Ball EPM) version 11.1.1.0.00, Crystal Ball EPM has areas of integration with Oracle Hyperion Smart View for Office (Smart View). Also, a listing of Crystal Ball for EPM files in the Enterprise Performance Management central repository can be viewed within Oracle Enterprise Performance Management Workspace (Workspace). Note that Crystal Ball currently cannot be installed from within Workspace, although some documentation suggests that it can. For more information about Crystal Ball EPM integration with Smart View and Workspace, including recommended software versions, see the Oracle Crystal Ball Enterprise Performance Management Integration Guide.

The following defects are currently logged in the Crystal Ball tracking system against the integration of Smart View and Workspace with Crystal Ball for EPM:

- For best results, do not use the Crystal Ball Define, Cell Preferences command on Smart View worksheets (8676929).
- In Crystal Ball EPM, the Enterprise Performance Management connector is inactive by default and must be explicitly activated through the appropriate Crystal Ball More Tools command (8604284).
- If users expand a Smart View grid in a spreadsheet so that a given database intersection is displayed more than once, only the last instance (from a top/down, left/right viewpoint) is actually a valid connection. If Crystal Ball assumptions are defined on each visible intersection, only the last one actually results in a valid submit and return from the server (9189483).

Issues concerning Crystal Ball for EPM integration with Strategic Finance

Starting with Oracle Crystal Ball Enterprise Performance Management (Crystal Ball EPM) version 11.1.1.1.00, Crystal Ball EPM has areas of integration with Oracle Hyperion Strategic Finance (Strategic Finance). For more information about Crystal Ball EPM integration with Strategic Finance, including recommended software versions, see the Oracle Crystal Ball Enterprise Performance Management Integration Guide.
The following substantive defects are currently logged in the Crystal Ball tracking system against the integration of Strategic Finance with Crystal Ball for EPM:

- If the Strategic Finance Setup wizard is used to create a Strategic Finance Worksheet, and then a Crystal Ball simulation is run with charts minimized and worksheets suppressed, it is not possible to stop the simulation manually. However, the Crystal Ball Control Panel, Crystal Ball toolbar buttons, and Run menu can be used to control the simulation when the charts and worksheets are maximized and visible (7475110).

- If the Strategic Finance Setup wizard is used to create a Strategic Finance Worksheet using a server-based entity, the actual URL for the server is not listed. Only the user-specified name for the server appears on the Setup wizard's Entity Selection panel (7482940).

- If the Strategic Finance Setup wizard is used to create a Strategic Finance Worksheet using a server-based entity, only entities at the “parent” level are available for selection (9197703).

**Other known issues**
The following are other important known issues in Oracle Crystal Ball version 11.1.2.0.00:

- The Correlation Matrix tool cannot run on more than 255 assumptions (256 if formatting is not requested) (7403337).

- Crystal Ball dialog boxes remember their position on the screen. This can cause trouble when users change resolution or undock from an external monitor, particularly if dialogs have been moved or minimized. If you're using dual monitors, be certain that all dialogs, charts, and so on are visible on the primary monitor before shutting off the secondary monitor (7399612).

- If users change values in cells referenced by assumption or decision variable parameters, any cell comments for that cell will indicate the old value. Workaround: Users should recreate those assumptions or decision variables to ensure that cell comments are updated (7398136).

- In rare cases, range names disappeared when a Crystal Ball workbook was reopened in Microsoft Office Excel 2007. This was fixed by installing one of the following Microsoft updates, available at [http://www.microsoft.com](http://www.microsoft.com): Microsoft Security Update for Microsoft Office Excel 2007 (KB969682), Release Date: 6/8/2009 or Microsoft Security Update for Microsoft Office Excel 2007 (KB973593), Release Date: 11/9/2009 (9074866).

- In OptQuest, the formatting of the right hand side of the requirements expression is based on the format of the associated forecast cell. For example, if you refer to a forecast that has x.yy formatting (decimal value with 2 points to the right of the decimal and you want to handle the requirement value of 0.00665 without truncation, you would need to change the cell format for that forecast cell to be x.yyyyy (decimal value with 5 points to the right of the decimal). Without that formatting change, the value displays as 0.00000 and precision is lost (9053653).

- In the Spanish version of OptQuest, the Exclude checkbox is not visible on the Objectives and Constraints wizard panels. The English and Japanese versions are complete (9396179).

- Predictor hangs and causes Excel to become unresponsive when the date series in the input data range is formatted YYYY-MM. **Workaround:** Set the date series to a format that lists the month before the year, such as MM/DD/YY or DD-Mmm-YY (9472301).

**Crystal Ball Developer Kit Issues**

**CB.ExtractDataND can now extract multiple data types**
You can now use CB.ExtractDataND to extract more than one type of data. To do this, use cbExtDataType followed by the type of data, and then follow that by a boolean Value2 parameter.

For example, the following lines of code extract both statistics and values:

```plaintext
CB.ExtractDataND cbExtDataType, cbDatStatistics, True
CB.ExtractDataND cbExtDataType, cbDatValues, True
CB.ExtractDataND cbExtOK
```
**Issues with CB.DefineAltParms and CB.GetAssum**

There are problems in defining and updating assumptions with lognormal distributions with alternate parameter sets created by the CB.DefineAltParms call. For example, if you are defining a lognormal distribution assumption with the log mean and log standard deviation, the low cutoff value or high cutoff value is being assigned to the mean and standard deviation. Workarounds are to avoid cell references; pass in the actual values for the parameters rather than cell references. Also, consider using the DefineAssumND call to define means and standard deviations.

**Always use English list separators**

Always use the English list separator character (,) and the English decimal separator (.) (7407256).

**CB.Get...FN calls have worksheet size limitations**

When used in Microsoft Excel 2007 format worksheets (XLSX, XLSB, XLSM, and so on), these calls do not handle more than 256 columns and 65536 rows (9215237).

**Unexpected errors can occur when closing Excel and Crystal Ball from an external application**

When code in an external application closes Excel and Crystal Ball, an unexpected error and an Excel crash can occur. This issue can occur with VBA code as simple as calling `Application.Quit` on a workbook without Crystal Ball data. If this error occurs, the workaround is to call either:

```
Application.COMAddins("SecureCBAddin.Connect").Connect = False
```

or

```
CB.Shutdown (if you have the CBDevKit.xla referenced)
```

before calling `Application.Quit` (9438957).

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**Defects Fixed in This Release**

The following user-reported defects were fixed in Crystal Ball 11.1.2.0.00.

<table>
<thead>
<tr>
<th>Defect Number</th>
<th>Defects Fixed In This Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>7198126</td>
<td>The Smart View Data Source Manager was unable to add an open file to the Crystal Ball repository.</td>
</tr>
<tr>
<td>7198129</td>
<td>Smart View displayed an ObjectNotFoundException if a file was deleted from the Crystal Ball repository and another user refreshed the repository folder in the Data Source.</td>
</tr>
<tr>
<td>7400557</td>
<td>When more than 20 assumptions were included in a Tornado Chart tool analysis, there was a problem in the setting of the upside and downside values for assumptions at the end of the assumption list.</td>
</tr>
<tr>
<td>7401484</td>
<td>Crystal Ball did not retain the workbook name and Crystal Ball data locations in the Scenario Analysis tool between Crystal Ball sessions.</td>
</tr>
<tr>
<td>7404692</td>
<td>An HRESULT unexpected error occurred when trying to create a report before the Scenario Analysis results spreadsheet was complete.</td>
</tr>
<tr>
<td>7405196</td>
<td>An Extreme Speed simulation could run more slowly if you used many SUMIF functions. Also, if the cell ranges passed into the functions were too large (greater than 100 cells) Extreme Speed might not be able to evaluate the functions in vectorization mode, which</td>
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<td>increased simulation time.</td>
<td></td>
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<tr>
<td>740534</td>
<td>Unexpected errors occurred with certain models when restoring simulation results from .cbr files.</td>
</tr>
<tr>
<td>740594</td>
<td>Non-target forecasts could be “frozen” in the Scenario Analysis tool, which yielded inaccurate results.</td>
</tr>
<tr>
<td>8214275</td>
<td>If Excel values were deleted from assumption cells after running Predictor, an unexpected error occurred when running Predictor again.</td>
</tr>
<tr>
<td>8532495</td>
<td>When a Crystal Ball EPM simulation was run against a Strategic Finance worksheet, the wrong input values for future forecast values were being pulled in when the &quot;Forecast period input values are constant for all periods&quot; setting was selected.</td>
</tr>
<tr>
<td>8654188</td>
<td>Crystal Ball data cell definitions could be cleared on Smart View worksheets, but could not be copied or pasted.</td>
</tr>
<tr>
<td>8665701</td>
<td>Any script that might have been selected on the EPM Preferences, Calculations tab was cleared (set back to None) if the sheet on which the calculation script was defined was renamed, or if a sheet with an ad-hoc analysis was moved to a new workbook, the reference to a defined calculation script was lost.</td>
</tr>
<tr>
<td>8689320</td>
<td>Non-English preferences files were not populated to a locale-specific folder when migrating to a more recent version of Crystal Ball.</td>
</tr>
<tr>
<td>8737914</td>
<td>Extreme Speed simulations were setting #N/A values in forecast cells to a value of 0 rather than leaving them undefined.</td>
</tr>
<tr>
<td>9056747</td>
<td>The CB.GetCertaintyFN spreadsheet function logged an error if the forecast was frozen.</td>
</tr>
<tr>
<td>9185769</td>
<td>When running OptQuest at Extreme Speed with all decision variables equal to zero, the mean statistic was not calculated correctly.</td>
</tr>
</tbody>
</table>

## Documentation Updates

### Accessing Oracle EPM Product Documentation

The most recent version of each Oracle EPM product guide is available for download from the Documentation area of the Oracle Technology Network (OTN) Web site (http://www.oracle.com/technology/index.html). Deployment-related documentation is also available from the Oracle E-Delivery Web site (http://edelivery.oracle.com/EPD/WelcomePage/get_form).

Individual product guides are available for download on the Oracle Technology Network (OTN) Web site only.

### Copying and Pasting Code Snippets from PDFs

When you cut and paste code snippets from a PDF file, some characters can be lost during the paste operation, making the code snippet invalid. Workaround: Cut and paste from the HTML version of the document.
Forecast Statistics Screenshots

The Base Case value (original cell value) has been added after the Trials value in Statistics view for forecast, assumption, and overlay charts. This value is also displayed in reports and, optionally, in extracted data. Screenshots that include Statistics view do not yet display this statistic (9056951).

Documentation of Support for Optimization in Crystal Ball/Strategic Finance Integration

Although the Oracle Crystal Ball Enterprise Performance Management Integration Guide might suggest that OptQuest optimizations are supported for Crystal Ball EPM/Strategic Finance models, they are not (9373277).