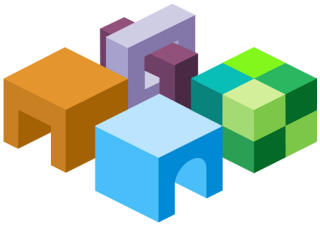

ORACLE® CRYSTAL BALL, FUSION EDITION

RELEASE 11.1.2

NEW FEATURES

ORACLE
ENTERPRISE PERFORMANCE MANAGEMENT SYSTEM

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New Features, Crystal Ball Release 11.1.2.1.000

Subtopics

- Support for Microsoft Excel 2010
- 64-bit Crystal Ball for Compatibility with 64-bit Microsoft Excel 2010
- ARIMA Added to Predictor
- Event Forecasting Added to Predictor
- Crystal Ball Enterprise Performance Management for Enterprise Planning Suite
- More Powerful Crystal Ball API

This section describes the new features introduced in release 11.1.2.1.000 of:

- Oracle Crystal Ball, Fusion Edition (and related classroom products)
- Oracle Crystal Ball Decision Optimizer, Fusion Edition
- Oracle Crystal Ball Enterprise Performance Management, Fusion Edition

For a description of new features introduced in previous related releases, see "New Features, Crystal Ball Release 11.1.2.0.00" on page 3 and "New Features, Previous 11.1.*x* Releases" on page 5.

Support for Microsoft Excel 2010

Crystal Ball release 11.1.2.1.000 now supports Microsoft Excel 2010.

64-bit Crystal Ball for Compatibility with 64-bit Microsoft Excel 2010

A 64-bit version of Crystal Ball is now available for use with the 64-bit version of Microsoft Excel 2010.

ARIMA Added to Predictor

The Predictor feature of Crystal Ball now includes ARIMA (autoregressive integrated moving average), an advanced modeling technique for time-series analysis. Time-series forecasting with classic models like moving average and exponential smoothing becomes difficult when a series exhibits complex trends. ARIMA is a flexible model that can be used for fitting and forecasting many of these series. With the addition of ARIMA, Crystal Ball increases the forecasting power of Predictor to better meet the needs of enterprises that depend on high-quality forecasts.

Event Forecasting Added to Predictor

Predictor time-series forecasting now enables you to capture special events in the data and leverage your knowledge of similar future events to improve forecasts. These events can be one-

time occurrences, such as a major marketing program, or events that repeat on a regular basis, such as quarterly sales promotions. You can also capture events that repeat at irregular intervals, such as assembly-line lockouts.

Crystal Ball Enterprise Performance Management for Enterprise Planning Suite

Related to Crystal Ball EPM, Oracle Crystal Ball Enterprise Performance Management for Oracle Hyperion Enterprise Planning Suite is now available as an option for customers of Oracle Hyperion Enterprise Planning Suite. Oracle Crystal Ball Enterprise Performance Management for Oracle Hyperion Enterprise Planning Suite enables Enterprise Planning Suite customers to run simulations and time-series forecasts against Oracle Essbase, Oracle Hyperion Strategic Finance, Fusion Edition, and Oracle Hyperion Planning, Fusion Edition.

More Powerful Crystal Ball API

You can now add risk analysis, forecasting, and simulation to your corporate applications and extend your enterprise modeling capabilities beyond Microsoft Excel by using the Crystal Ball Application Programming Interface for Microsoft .NET Framework (the Crystal Ball API). The Crystal Ball API has been updated and expanded to include the latest Crystal Ball features and is packaged to be built directly into your Web and Microsoft Windows-based applications.

New Features, Crystal Ball Release 11.1.2.0.00

This section describes features released in Crystal Ball 11.1.2.0.00.

Predictor Integration with Planning and Essbase

With Crystal Ball EPM release 11.1.2.0.00, you can now use the powerful time-series forecasting capabilities of Predictor on historical data from Planning and Essbase. Predictor works within Crystal Ball EPM and Oracle Hyperion Smart View for Office, Fusion Edition to create forecasts and paste them directly into a Planning form or ad hoc queries in Planning or Essbase. Forecasts are then submitted back to the Planning or Essbase server to help create more accurate budgets and rolling forecasts.

Define Assumptions from Forecasts

You can now define an assumption using the data from a forecast. Crystal Ball automatically fits an assumption to the forecast data and selects the best fit, or you can create a custom distribution assumption using the raw data. This feature enables you to quickly use forecasts from Crystal Ball simulations as inputs to a model.

Updated Scenario Analysis Tool

The Scenario Analysis tool was updated with a new wizard interface similar to the ones used for other Crystal Ball tools. Scenario Analysis is a powerful analysis tool that runs a simulation and then sorts and matches all the resulting values of a target forecast with their corresponding assumption values. This tool enables you to investigate which combination of assumption values gives a particular result.

Localized for Spanish and Japanese

The user interface for Crystal Ball release 11.1.2.0.00 was localized into Spanish and Japanese. An installer menu enables you choose the language to use for the installation as well as the Crystal Ball user interface.

Addresses U.S. Section 508 Accessibility

Crystal Ball release 11.1.2.0.00 was designed to address the U.S. Federal government's accessibility standards for Section 508 enabling individuals who rely on assistive technologies such as screen readers and screen magnifiers to more effectively use the software.

Keyboard equivalents for menu commands and dialog controls are available at all times. An additional Accessibility mode activates other features described in Appendix B of the *Oracle Crystal Ball User's Guide*.

The accessibility status of Crystal Ball was documented using the Voluntary Product Accessibility Template (VPAT). The VPAT can be used by U.S Federal contracting and procurement officials to evaluate a product with respect to the provisions contained in Section 508.

Designed for U.S. FDCC Mandate

Crystal Ball release 11.1.2.0.00 was designed to meet the U.S. Federal Desktop Core Configuration (FDCC) mandate. FDCC specifies mandatory configuration requirements for the Microsoft Windows XP Pro and Windows Vista operating systems when used on U.S. Government desktop systems.

Support for New Windows Version

Crystal Ball is now supported on Microsoft Windows 7.

New Features, Previous 11.1.*x* Releases

Subtopics

- New Features, Release 11.1.1.3.00 and 11.1.1.3.01
- New Features in Crystal Ball 11.1.1.0.00 and 11.1.1.1.00

This section describes features released in Crystal Ball 11.1.1.0.00, 11.1.1.1.00, 11.1.1.3.00, and 11.1.1.3.01.

New Features, Release 11.1.1.3.00 and 11.1.1.3.01

The following sections describe features introduced in release 11.1.1.3.00 of Crystal Ball products:

- "New Predictor Interface and Developer Kit" on page 5
- "Other Enhancements" on page 5

Crystal Ball release 11.1.1.3.01 included several bug fixes and translation of the user interface into Spanish.

New Predictor Interface and Developer Kit

Predictor, the time-series forecasting feature of Crystal Ball, was completely rewritten for release 11.1.1.3.00. New features:

- A new Wizard interface for setting up forecasts, previewing forecasts, and viewing results
- Ability to create reports and extract data
- Ability to fill-in missing values before charting historical data
- Ability to adjust outliers before pasting values into worksheets or extracting results
- Updated formulas and algorithms, including autocorrelations
- Developer Kit (API) for programming time-series forecasts. Because Predictor has a different code base, this Developer Kit is no longer compatible with previous releases of CB Predictor; code written with the earlier CB Predictor Developer Kit is not compatible with Predictor release 11.1.1.3.00 or later.

Other Enhancements

Beginning with Crystal Ball version 11.1.1.3.00, right-click context menus are now available for Crystal Ball within Microsoft Excel. In Microsoft Excel 2007 and later, the Crystal Ball ribbon no longer needs to be active to use Crystal Ball. As long as Crystal Ball is loaded, users can access Crystal Ball functionality with the right-click context menu in the spreadsheet.

Crystal Ball EPM—Enterprise Performance Management Simulator enables direct Crystal Ball simulation of queries and forms within Smart View release 11.1.1.3

New Features in Crystal Ball 11.1.1.0.00 and 11.1.1.1.00

Starting with Crystal Ball release 11.1.1.0.00, a new version numbering scheme was implemented with additional digit groups to align with Oracle versioning standards. Crystal Ball versions 11.1.1.0.00 and 11.1.1.1.00 include the following:

- "Updated OptQuest Optimization Feature" on page 6
- "Location Parameter for Lognormal Distribution" on page 6
- "Parameter Locking for Certain Distributions" on page 7
- "New Discrete Distribution Fitting" on page 7
- " P-Value Calculations " on page 7
- "A New Wizard Format for Crystal Ball Tools" on page 7
- "New Data Analysis Tool" on page 8
- "Crystal Ball Licensing Enhancements" on page 8
- "Universal Availability of Predictor and the Crystal Ball Developer Kit" on page 8
- "Smart View and Strategic Finance Integration" on page 8

Updated OptQuest Optimization Feature

The OptQuest optimization feature has been completely rewritten and is now available in Crystal Ball Decision Optimizer, beginning with version 11.1.1.0.00. The new version of OptQuest includes:

- A new Wizard for setting up optimizations, including direct formula entry for constraints and also a simple constraints solution (introduced in version 11.1.1.1.00
- Full integration with Microsoft Excel and Crystal Ball Decision Optimizer, including the ability to control optimizations through the Oracle Crystal Ball Decision Optimizer, Fusion Edition Control Panel
- An updated version of OptQuest's world-class global optimization engine, including:
  - Support for both linear and non-linear constraints
  - More aggressive optimization algorithm
  - New variable types: binary, category, and custom
- Ability to create reports and extract data
- Developer Kit (API) for programming optimizations

Location Parameter for Lognormal Distribution

The lognormal distribution now includes a location parameter to help model shifted lognormal distributions. This three-parameter distribution is available for setting up assumptions and for fitting to datasets.

Parameter Locking for Certain Distributions

You can now lock the values of certain parameters of selected distributions while fitting data to those distributions. The following parameters can be locked in this release:

- Location of lognormal
- Location and shape of gamma
- Location and shape of Weibull
- Degrees of freedom for Student's *t*
- Trials for binomial
- Trials for hypergeometric

New Discrete Distribution Fitting

Distribution fitting now includes discrete as well as continuous distributions and certain parameters can be locked for increased accuracy. You can fit all discrete distributions supported by Crystal Ball, except the Yes-No distribution, to integer data sets. For discrete fitting, you can view the Chi-square statistic and Chi-square p-values. Anderson-Darling and Kolmogorov-Smirnov statistics are not currently available for discrete fitting.

P-Value Calculations

When fitting to continuous distributions, p-value calculations for Anderson-Darling and Kolmogorov-Smirnov have been added for the following distributions:

- Normal
- Exponential
- Minimum Extreme
- Maximum Extreme
- Logistic
- Uniform
- Gamma
- Weibull
- Lognormal

A New Wizard Format for Crystal Ball Tools

The following Crystal Ball Tools have been rewritten with a wizard format for increased ease of use:

- Batch Fit
- Bootstrap
- Decision Table

- 2D Simulation

New Data Analysis Tool

A new tool, Data Analysis, imports data directly into Crystal Ball forecasts, one for each data series. Then, you can analyze the data using any of Crystal Ball's charting, reporting, and data extraction features.

Crystal Ball Licensing Enhancements

You can now use Oracle Crystal Ball, Fusion Edition in evaluation mode for a limited time, usually 15 days, without needing to activate a license. License activation no longer requires an Internet connection with an online licensing server. These enhancements were designed to streamline the installation and licensing procedure.

Universal Availability of Predictor and the Crystal Ball Developer Kit

Predictor and the Crystal Ball Developer Kit are now available to all Crystal Ball users. They are no longer optional products available only in a certain package.

Smart View and Strategic Finance Integration

If you have Crystal Ball EPM version 11.1.1.0.00 or 11.1.1.1.00 with appropriate licensing, you can use Smart View to work with Crystal Ball files in a number of ways. You can use the Smart View Connection Manager to store Crystal Ball EPM models within a central repository. Then, you can load them into Smart View, access data from certain other applications also within the repository, and — using cell references — populate the Crystal Ball EPM models with current EPM data for further analysis. Two of the applications that can also be accessed from within the Oracle Hyperion Smart View for Office, Fusion Edition spreadsheet interface are Oracle Essbase and Oracle Hyperion Planning, Fusion Edition. If you have Crystal Ball EPM version 11.1.1.1.00 with appropriate licensing, you can also create Oracle Crystal Ball Enterprise Performance Management, Fusion Edition worksheets from data in Oracle Hyperion Strategic Finance, Fusion Edition.

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Crystal Ball New Features, 11.1.2

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